

Grow our existing business,

Realize our potential,

Overcome barriers, and

Move ahead in a HORIBA way.

This determination is incorporated in

our new message

AHEAD

Keeping this concept in mind, HORIBA takes a step toward

New domains, New regions and New stages.

Everything begins with measurement

HORIBA, since its foundation, has achieved continuous growth providing "measuring technologies."

We will continue to grow by keeping our Corporate Philosophy in mind.

Corporate Philosophy

HORIBA's Corporate Motto "Joy and Fun"

Originates from the belief that if we take interest and pride in the work that occupies most of the active time in our lives, in the place where we spend the large part of each day, then as a result our satisfaction with life will increase, and we will be able to enjoy our lives even more. Taking interest and pride in our work leads us to "Joy and Fun."

Business Operations

Our mission is to contribute to the progress of science and technology, and the preservation of the global environment and resources through the provision of highly original products, analytical and measurement solutions, and engineering services.

Net sales — Operating income

Results up to 1977 are on a nonconsolidated basis and results from 1978 on are consolidated

We maintain a philosophy of pursuing cutting edge technology in order to supply products and services that consistently satisfy customers' requirements.

Responsibility to Shareholders and Investors

We recognize that maximizing the returns to shareholders by consistently raising HORIBA's long-term corporate value is one of the priority objectives of management. Our basic policy is to target total returns (the combination of dividend payments and share buybacks) to shareholders to be at a certain ratio of HORIBA's consolidated net income, and consistently deliver them.

Employees

We are proud of the entrepreneurial spirit that has led to the creation of HORIBA Group companies. Each group employee is made aware of this heritage and we actively encourage ideas and innovations from individual employees.

Masahiro Oura

becomes

president

the second

1978

Masao Horiba establishes **HORIBA RADIO** LABORATORY

HORIBA, Ltd. is established Masao Horiba becomes the first president

OLSON-HORIBA, INCORPORATED, a joint venture company, is established in the U.S.

HORIBA begins overseas expansion

Listed in the Second Section of the Osaka Securities **Exchange**

Listed in the Second Section of the Tokyo Stock Exchange **Established Standard Technology** Co., Ltd. (now HORIBA STEC , Co., Ltd.)

HORIBA pioneers the first made-in-Japan glass electrode pH meters



1964

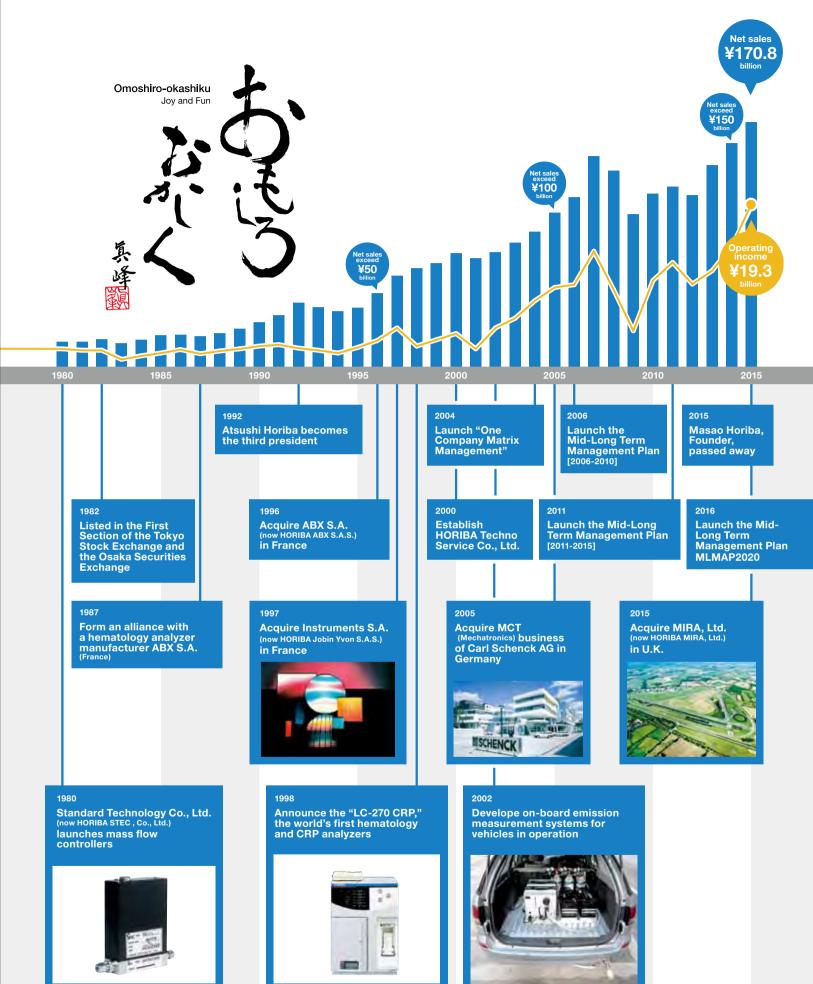
Launch "MEXA," a global brand for automotive exhaust gas analyzers



Establish COS Co., Ltd. Deliver emission gas analyzers to the United States Environmental Protection

Agency (EPA)







Editorial policy

Notation of HORIBA and HORIBA, Ltd.

In this HORIBA Report, the HORIBA Group of companies is described as "HORIBA" and the parent company as "HORIBA, Ltd."

Disclaimer Regarding Future Plans and Forecasts

This HORIBA Report contains certain statements describing future plans, strategies, and performance forecasts of HORIBA, Ltd. and its affiliated companies. These statements reflect forecasts based on management's assumptions and beliefs based on the available information as of February 9, 2016 when business results were announced. Actual performance may differ due to unforeseen circumstances in the operating environment.

Index

Process & Environmental Instruments & Systems Medical-Diagnostic Instruments & Systems

ONE STEP AHEAD	P01	Value creation based on	P31
Message from the CEO	P07	"Invisible Values" Organizational structures / Human resources / Technologies / Customers / Brands	
New Mid-Long Term Management Plan MLMAP2020	P11	Corporate Governance	P41
Synergies with HORIBA MIRA, Ltd.	P15	Financial data Eleven-year summary	P45
Message from the CFO	P17	Corporate data	P82
Business outline Overview by region and by segment Automotive Test Systems	P19	Corporate Philosophy	P 83



Notation of owners

HORIBA fully recognizes the importance of its shareholders and frequently calls them owners.

Change of Fiscal Year-End

HORIBA unified its fiscal year-end as December 31, effective from fiscal 2006. As a result of this change, the following irregular fiscal periods were recorded: Fiscal 2006 for HORIBA, Ltd. and HORIBA Advanced Techno Co., Ltd. comprised the 9 months and 11 days from March 21, 2006 to December 31, 2006; and fiscal 2006 for HORIBA STEC, Co., Ltd. comprised the 9 months from April 1, 2006 to December 31, 2006. The fiscal yearend of other consolidated HORIBA subsidiaries was December 31. Their 2006 fiscal periods remained unchanged at 12 months. Please note that when comparing results by fiscal year.

Prior to the fiscal year-end change, the fiscal year ended March 21, 2006 was described as 2005, the fiscal year ended March 21, 2005 as 2004, the fiscal year ended March 21, 2004 as 2003.



We will move "ONE STEP AHEAD" into the future in 2016, the first year of a new Mid-Long Term Management Plan. My role is to keep increasing corporate value for HORIBA. By continuously investing in human resources and technology, we will make our invisible values (page 31) glow.

Sales and profits reached all-time highs in 2015

In 2015 (ended December 31, 2015), HORIBA posted its second consecutive year of record-high sales and profits, with consolidated net sales of ¥170.8 billion (up 11.7% yearon-year) and operating income of ¥19.3 billion (up 12.5% year-on-year). The Semiconductor Instruments & Systems segment was the main earnings driver, with its contribution driven by robust capital expenditure by the semiconductor industry in Asia and an increase in our global market share for mass flow controllers, our mainstay product (from 52% in 2014 to 55% in 2015). Meanwhile, the Automotive Test Systems segment recorded a decrease in operating income due to one off increases in expenses associated with a major acquisition and a move to a new base in Shiga Prefecture which is next to Kyoto Prefecture. The Scientific Instruments & Systems segment and the Medical-Diagnostic Instruments & Systems segment both recorded a year-on-year increase in operating income, but the Process & Environmental Instruments & Systems segment recorded a decrease in operating income.

Our previous business plan, through 2015, built a base for a major advance

In the previous plan (Mid-Long Term Management Plan [2011-2015]), our targets were ¥150 billion in sales, ¥20 billion in operating income and ROE of 11% or more. In 2015, partly due to the impact from the depreciation of the yen, sales significantly exceeded the target but the actual operating income and ROE

(10.2%) fell slightly short. The major reason was concurrent investments: construction of a new facility, HORIBA BIWAKO E-HARBOR, and the acquisition of U.K.-based HORIBA MIRA, Ltd. By business segment, the Semiconductor Instruments & Systems segment significantly exceeded the plan and three segments - Automotive Test Systems, Process & Environmental Instruments & Systems, and Scientific Instruments & Systems largely achieved the targets. However, the Medical-Diagnostic Instruments & Systems segment recorded operating income of ¥2.4 billion in the final year, which was far behind the initial target of ¥6.0 billion.

I am also pleased to report that we have made satisfactory progress in the previous plan's strategies: namely, full implementation of "One Company Matrix Management;" investment in highly profitable businesses; expansion of the business model so as to be better driven by customer viewpoints; and acceleration of global product development and production. However, profitability of the Medical-Diagnostic Instruments & Systems business and speedy improvement in profitability of the acquired businesses remain major challenges. In addition, a higher depreciation burden, caused by capital expenditure and business acquisitions, is emerging as a new challenge.

Launch of the new Mid-Long Term Management Plan MLMAP*2020, "ONE STEP AHEAD"



The MLMAP2020, which began in 2016 under the slogan "ONE STEP AHEAD," incorporates our determination to move one



step ahead of our existing business and to cross over a barrier by acquiring new perspectives. We have chosen a "drone" as our plan's symbol, as the drone represents ability to flexibly control itself, break stereotypes, and add an entirely new dimension to the concept of flight. Even though one of five rotors (our five business segments) of the drone may temporarily decelerate, the remaining four rotors should enable the drone to keep flying. This resonates with the core of HORIBA's wellbalanced management that aims for growth in all five business segments, and ensures growth even when one segment temporarily lags.

The MLMAP2020 priority measures call for application of HORIBA technology in new business fields and new markets. for growth by a Super Dream Team based on balanced management, matrix organization and the HORIBA Stained Glass Project, and raising capital efficiency and maximizing corporate value. We have set numerical targets for 2020: sales of ¥250 billion, operating income of ¥30 billion, and ROE of 10% or more. The targets in operating income ratio are 20% for the Semiconductor Instruments & Systems segment and 10% for all other business segments.

In order to realize the MLMAP2020, it is critical that the Automotive Test Systems and Semiconductor Instruments & Systems segments, our two major businesses, remain earnings drivers. The Automotive Test Systems segment we plan to maintain its top share in emission gas analyzers and seek to generate return on the investments made in HORIBA BIWAKO E-HARBOR and HORIBA MIRA. The Semiconductor Instruments & Systems segment should also maintain its high share in mass flow controllers and at the same time expand in many aspects. In addition, we will apply HORIBA analysis and measurement technology to new fields, so that we can create a third business pillar.

We have made investments for the future

In July 2015, we acquired U.K.-based MIRA, Ltd. by investing ¥15.5 billion, a record-high amount for HORIBA. Having been in business since 1946, MIRA was a distinguished company hosting R&D bases of 30 automotive-related companies and employing about 500 engineers within its research facilities. HORIBA plans to transfer its cutting-edge analysis and measurement technology to MIRA so as to accelerate its business growth in development of next-generation mobility.

After investing approximately ¥10 billion, HORIBA BIWAKO E-HARBOR started full operation in May 2016. By means of consolidating gas measurement technology development, design, and production teams and launching an integrated production line with production partner companies, we aim to improve the time-to-market of new products and double our production volume. The SKY ATRIUM, a soaring staircase area in the middle of the building, is designed to help facilitate communication among employees'. When we eliminate the barriers between development, design and production teams and partner companies, and when each other's work or know-how becomes more evident to others, I am confident that new value will emerge.

HORIBA BIWAKO E-HARBOR plays a role in the transfer of our core technology, diligently accumulated in Kyoto over a period of 70 years, into the hands of a new generation of engineers, who will spearhead the fostering of new development capabilities. This facility also has an R&D laboratory to be used to demonstrate the latest automotive measurement equipment and other experiments. Moreover, we are planning to enable customer training, demonstration and application development. We thus aim to create a place where we can create value together with our customers.

*MLMAP...Mid-Long Term Management Plan



Yuichi Muroga

Senior Corporate Officer President of HORIBA Techno Service Co., Ltd. (Japan)

Sunao Kikkawa

Senior Corporate Officer General Manager of Finance & Control Division

Takashi Nagano

Director General Manager of Sales Division President of HORIBA Korea Ltd. (South Korea)

Dr. Masayuki Adachi

Senior Managing Director General Manager of Research & Development Division Chairman of supervisory board of HORIBA Jobin Yvon S.A.S. (France)

Atsushi Horiba

Chairman, President & CEO

We will enhance our capital efficiency and cash flow management

We will emphasize capital efficiency and cash flow in the MLMAP2020. Historically we have emphasized ROA as one of our Key Performance Indicators (KPI), but this time we are setting capital efficiency targets for each group company and each business segment, and emphasizing cash flow management. In January 2016, we expanded our ERP (Enterprise Resource Planning) system worldwide. This will facilitate our close management of the balance sheet and cash flow for each business segment. We anticipate positive impacts to be generated in inventory management and reduction in time to recover return on our investments. At the same time the new system will enable us to quickly respond when a problem occurs. I believe establishing the system will eventually lead to quicker management judgments and more thorough implementation of efficient operations in all divisions, which include not only development, production, and other functional divisions but also administrative divisions. Ultimately we will improve our corporate value.

Our "Super Dream Team" will help accelerate corporate growth

We have promoted the "balanced management" of operating multi-businesses, which helps alleviate the impact from change in the economic cycle and enables us to make continuous investment, and "matrix organization," which facilitates agile execution of strategies by using two axes of business segment and region. Moreover, quality and operating efficiency have been improved by introducing the "Blackjack Project", which began in 1997 with the objective of changing the awareness and activities of employees. Then we began the "HORIBA"

Stained Glass Project" in 2014 so as to create an environment that values diversity. There is no doubt that implementing these initiatives have led to motivation of our employees to become more capable and more responsible team members. What I envision as ideal is an organization in which people with diversity can make the best of their strength and talents and exercise strength as a team. We have named it the "Super Dream Team." HORIBA's philosophy to respect each other, and our corporate culture of "Joy and Fun", have inspired and been integrated into our overseas group companies. I think an accurate understanding of HORIBA's corporate culture by our newly-joined group companies is invaluable for their management and business development. I firmly believe that the "Super Dream Team," when realized, will materialize significant potential for enhancing corporate value.

We are proud to be a company that supports many industries

None of HORIBA's business segments, while generating sales of tens or hundreds of billion yen, are big in size. Nevertheless, we are proud that we are part of the foundation for global industrial development by providing cutting-edge analysis and measurement instruments, or "mother tools" that support, in particular, the automotive and semiconductor industries. I am convinced that we should never stop challenging ourselves by entering new markets or developing and applying new technology. We must continue gaining market share and increasing profitability for each business, which inevitably result in expanding our corporate scale. I believe that will be HORIBA's ideal path.

We will deepen our dialogue with all stakeholders

In its business activities HORIBA, since its origin, has been fully committed to owners (shareholders), customers, employees,



Juichi Saito

Executive Vice President Strategy Division

Fumitoshi Sato

Managing Director General Manager of Corporate & Segment General Manager of General Administration Division

Dr. Jai Hakhu

Executive Corporate Officer Chairman, President & CEO of HORIBA International Corporation (U.S.) Chairman of HORIBA Instruments Inc. (U.S.) President of HORIBA ABX S.A.S. (France)

Hideyuki Koishi

Senior Corporate Officer President of HORIBA STEC Co., Ltd. (Japan)

Dr. George Gillespie

Senior Corporate Officer CEO of HORIBA MIRA, Ltd. (U.K.)

Balanced management

Flexibly utilize management resources Select and focus on business for investment

Matrix organization

Engage in thorough discussions on a business segment basis and on a regional basis Speedily implement strategies Promote shared services

HORIBA Stained Glass Project

Inherited venture spirit Challenge spirit Embody "Joy and fun"

All players perform their special roles

Super Dream **Team**

and society, and has been engaged in dialogue with stakeholders in various ways. In 2011 we signed the United Nations Global Compact, a set of universally accepted principles in the areas of human rights, labor, environment, and anti-corruption. We ensure that when we conduct business we are rooted in each country and region, together with local employees, and understand the relevant diverse cultures, customs and values to ensure that we make a positive social contribution wherever we do business. I welcome opportunities to engage in constructive dialogue with stakeholders and explain our business strategies to them. This HORIBA Report and our website introduce not only our business and financial information, but also our "Invisible Values," (page 31) which are not shown in the financial statements, so that HORIBA's corporate values are well understood.

Our basic policy on returning profits to owners (shareholders) is to target total returns to shareholders at 30% of HORIBA's consolidated net income (the combination of dividend payments and share buybacks), allocating the remainder to reserves for capital and strategic investment in human resources and

technology. In fiscal 2015, we paid a record-high annual dividend per share of ¥70 and bought back 218,000 shares (¥999 million; 0.5% of shares outstanding). For fiscal 2016, we are currently forecasting an increase of annual dividend per share to ¥75.

I am proud that all of our business activities are contributing to the realization of a comfortable and sustainable society. This has not been changed as our company culture has been inherited from our very foundation to the present, and is consistent with our fundamental way of thinking regarding Corporate Social Responsibility. We are committed to working with a sense of challenge and the "Joy and Fun" spirit, raising the satisfaction of owners (shareholders), customers, suppliers, employees, and all other stakeholders, and contributing to society in order to improve our corporate value. I sincerely hope that you all agree with our management policy and will continue to support us for many years to come.

Chairman, President & CEO Atsushi Horiba



Upon completion of the Mid-Long Term Management Plan [2011-2015], HORIBA has formulated a new Mid-Long Term Management Plan, MLMAP2020,

MLMAP2020 **Outline**

for the five-year period from fiscal 2016 to fiscal 2020.



Applying HORIBA Technology in new business fields and new markets and to move "ONE STEP AHEAD"

Priority measures

- 1 Applying HORIBA technology in new business fields and markets and becoming a true partner in analysis and measurement
- 2 Accelerating corporate growth by its Super Dream Team based on balanced management, matrix organization, and the HORIBA Stained Glass Project
- 3 Raising capital efficiency to maximize corporate value

Net sales

250billion yen

Operating income

30billion yen

Assumed exchange rates for 2020: 115 yen per U.S. dollar; 125 yen per euro

Review of the previous **Mid-Long Term Management Plan** [2011-2015]

2015	Previous plan targets	Results	Achievement rate
Net sales	150 billion yen	170.8 billion yen	+13.9%
Operating income	20 billion yen	19.3 billion yen	-3.1 %
ROE	11.0%	10.2%	- 0.8 p

What we did

Achievements

Fully implemented One Company Matrix Management

Invested in highly profitable businesses **Expanded business model driven by** customer viewpoint

Accelerated establishment of global product development and production systems

Completed implementation of shared services* five segments and regions

Aggressively invested in the Automobile business (BÍWAKO new facility; HORIBA MIRA, Ltd.)

Expanded capacity of reagent plants in the Medical-Diagnostic business (China, India, and Brazil)

Fully implemented ERP (Enterprise Resource Planning) systems in all group companies

Strengthened R&D and production systems in the Semiconductor business (Kyoto, Aso, Fukuchiyama)

Business acquisition in the U.S. [P&E]; Photon Technology International, Inc. [Scientific])

Challenges

Improve profitability in the Medical business / Speed up improving profitability of the acquired businesses / Manage an increase in depreciation burden caused by large-scale investments

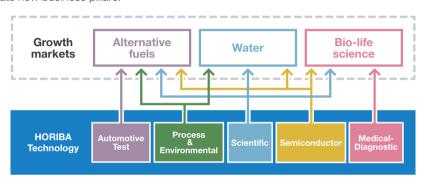
^{*} Shared services is to centralize specific work of more than one division of the company or group with the aim of raising productivity and cost reduction.

MLMAP2020 Priority Measures

Applying HORIBA technology in new business fields and markets and becoming a true partner in analysis and measurement

The company intends to achieve strategic growth in each business by promoting combined use of technology and sales network of each business segment, while further growing the Automotive Test Systems and Semiconductor businesses. HORIBA will also actively make new investments and pursue M&A opportunities into business fields and markets with great growth potential, including fuel cells and other alternative energy sources, the bio-life science field, and the water analytical and measurement field. HORIBA thus plans to achieve targets of each business segment and to create new business pillars.

Apply HORIBA's analytical technology into growth markets, by promoting mutual use of technology and sales network of each business segment



Accelerating corporate growth by its Super Dream Team based on balanced management, matrix organization and HORIBA Stained Glass Project

In keeping with the management principle of the "HORIBA Group is One Company," HORIBA has implemented well-balanced matrix management and has achieved a high order of integrated group operation during the previous mid-long term plan.

In order to further advance this organization, we will continue to promote diversity, through the HORIBA Stained Glass Project, to realize the Super Dream Team of its human resources with diversity and to accelerate renovation in existing business and creation of new businesses (see details on page 33, "Invisible Values: Organizational Structures".



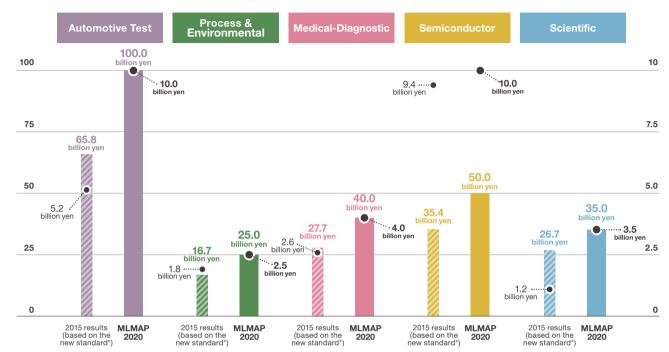
Raising capital efficiency to maximize corporate value

Under the previous plan, HORIBA made numerous investments towards future growth, established new facilities and acquired businesses. In order to make effective use of those assets, each group company and each business segment will set its capital efficiency targets and make efficient management so as to realize strategic growth.

MLMAP2020 Targets by Business Segment

All business segments aim to achieve growth in sales and operating income

■ Sales (left, billions of yen) ● Operating income (right, billions of yen)



^{*} Due to the new standard from fiscal 2016, reflecting change in accounting for revenue recognition, the results in fiscal 2015 are calculated based on the retrospectively-restated amounts for reference only.

Expanding the water measurement business

HORIBA aims to expand the water measurement business by eliminating barriers between three business segments that are engaged in water analysis and measurement business (the Process & Environmental, Semiconductor, and Scientific segments) and by promoting mutual use of their technology and sales network. Resources in Japan will be integrated in HORIBA Advanced Techno Ltd., an expert in water and liquid

measurement, which will respond to all water-related customer demand, from domestic-use water to industrial-use precision water and pollution testing.

By integrating business segments and adding the flexible capacity of a group company focused on a specific field, HORIBA plans to double sales in the water measurement business from approximately ¥10 billion in 2015 to ¥20 billion by 2020.

HORIBA's water analysis and measurement technology can improve productivity in water treatment processes.

This is a value unique to HORIBA.

HORIBA Advanced Techno Ltd. -Core player in water measurement-



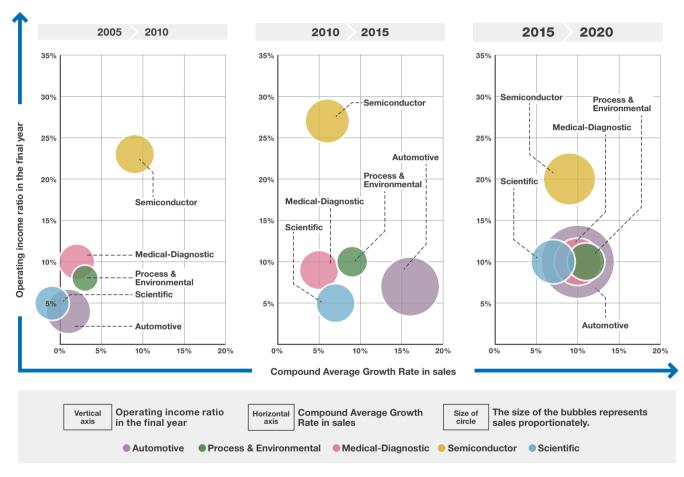
^{*} Aggregate sales of water-related businesses in the Process & Environmental, Semiconductor, and Scientific segments

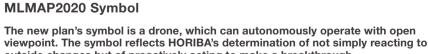


Business Portfolio Target

Looking back at the business segment growth in 2010-2015, all segments' sales grew and generated operating income. In particular, the Semiconductor Instruments & Systems and Automotive Test Systems segments grew significantly but sales and operating income of the Medical-Diagnostic Instruments & Systems segment fell short of expectations.

The business portfolio target for 2020, under the MLMAP 2020, envisions well-balanced growth and profitability in all business segments. In addition to seeking business growth of each segment, we will promote mutual use of technology and sales network of each business segment, which also means challenging new businesses and new applications. The operating income ratio of 10% or more in all business segments is also a part of the new plan's targets.





outside changes but of proactively acting to make a breakthrough.



-2005

A rocket launch, symbolizing HORIBA's development, sales and other functions being unified and rising to great heights



2006-2010

A balloon floating upward in the sky, symbolizing HORIBA's business growth and asset



2011-2015

A yacht moving forward by capturing winds, symbolizing HORIBA's growth driven by five business chances



2016-2020

MIRA Ltd. joined the HORIBA Group, signaling expansion of operations into a new business field

HORIBA





In July 2015 HORIBA acquired MIRA Ltd. (now HORIBA MIRA, Ltd.), the United Kingdom vehicle engineering consultancy and testing services provider. By including MIRA in the group, HORIBA's business has expanded from analysis and measurement equipment to the automobile engineering field, offering technical development services, testing and certification services, and advanced facilities.

Outline of HORIBA MIRA, Ltd.

Business line Incorporated

Number of

employees

Engineering services for vehicle development (ECT*)

1946

Head office Nuneaton, Warwickshire, U.K.

533 (as of December 2015)

* ECT: Engineering Consultancy & Testing



Key points

Based in the Midlands, the center of the U.K. automotive industry

- · 32 automotive manufacturers are in the region
- · Historically an area of strength in advanced vehicle technology

No affiliation to any specific Automotive manufacturer group The U.K. government strongly supports the automotive industry and regional revitalization

Major customers

Automotive manufacturers in the U.K., Japan and South Korea, Automotive component manufacturers and tire manufacturers

- · · · · Automotive manufacturers
- O ...Formula 1 teams
- ... Major automotive industry zone

Into the engineering business

Outline of ECT Business



1 Vehicle development engineering

- Performance testing (vehicle driving, braking, electromagnetic compatibility, collision safety)
- Engineering development services for designing of hybrid systems, etc.
- Self-driving vehicle development services utilizing autonomous driving and remote control technology



Testing engineering

- Testing and homologation services for collision safety, emission gas, etc., using 35 testing facilities and vehicle test tracks
- Type approval testing, delegated by public authorities in the U.K. and other European countries



3 Lease and management of R&D facilities

- Lease to 30 automotive research companies
- Granted Enterprise Zone* status by the U.K. government

*Enterprise Zones are a part of the UK government's long-term economic plan. Companies in Enterprise Zones have access to a number of benefits, including tax concessions and grants.



Synergies with HORIBA



HORIBA



Creating added value in the exhaust emissions and MCT* business

Broader scope of business by expansion to overall vehicle development services Incorporation of leading-edge testing systems in each business

Global expansion

Broader economies of scale in sales

Business development of next-generation mobility solutions such as autonomous, self driving vehicles

New opportunities to use the proprietary analysis technology of HORIBA's five business segments

* MCT: Mechatronics

HORIBA MIRA's management and leaders of HORIBA's Automotive Test System segment



At the training center "FUN HOUSE" in Shiga Prefecture in November 2015

Growth through acquisition

Accelerating market expansion and corporate value creation

Mainly with the aim of acquiring business resources (human resources and technologies), HORIBA's investment has targeted companies that were not able to fully utilize their creative resources. They include companies that have application or technology that are complementary to those of HORIBA, and companies that are underinvested in R&D or human resources. During the process of acquisition, we respect the corporate culture of the company to be acquired and work to find a way to grow together. After acquisition, we encourage adoption of HORIBA's motto, "Joy and Fun," by our new associates.

Characteristics of HORIBA's M&A strategy

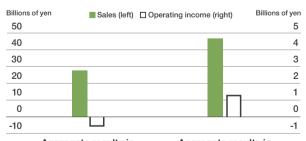
Acquire companies with whom HORIBA is familiar and have a good relationship.

Do not take what seems to be an easy path of seeking better economics of scale or improved efficiency through restructuring

Make certain that HORIBA's employees are directly involved in the investment process such as due diligence in assessment of enterprise value

Improved post-acquisition performance of companies and business lines HORIBA acquired

HORIBA acquired ABX S.A. (now HORIBA ABX S.A.S.) in 1996, Jobin Yvon S.A. (now HORIBA Jobin Yvon S.A.S.) in 1997, and the MCT (Mechatronics) Business from Carl Schenck AG in Germany in 2005. Comparing results from their first year after acquisition to those of 2015 indicates steady growth. While the time spent from acquisition to profit generation is less than satisfactory, we will continue to pursue growth opportunities via acquisition in all business segments.



Aggregate results in the year after acquired ABX S.A.

ABX S.A. Jobin Yvon S.A. MCT Business Aggregate results in fiscal 2015 HORIBA ABX S.A.S. HORIBA Jobin Yvon S.A.S. MCT Business



HORIBA has achieved a higher ROE through earnings growth and efficient use of assets

Sunao Kikkawa Senior Corporate Officer and General Manager of Finance & Control Division

Aim for both business growth and shareholder return

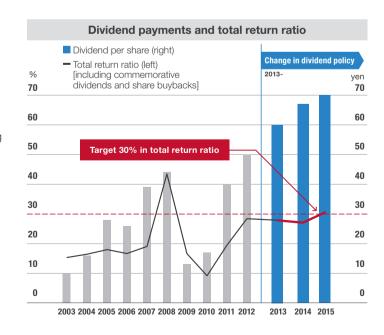
Since its foundation, HORIBA has regarded shareholders as one of its most important stakeholders. In 1974, when a majority of companies paid fixed dividends, we were the first listed Japanese company to start paying shareholder dividends based on a payout ratio and have continued this practice without interruption for over 40 years (See Corporate Philosophy on page 83). We are determined to continue returning profits to our owners (shareholders) and at the same time stay aggressive in investing to raise corporate value.

Dividend Payments and Total Return Ratio

In 2013, when we were implementing the previous Mid-Long Term Management Plan [2011-2015], we changed the dividend policy from one targeting 30% of nonconsolidated net income to one targeting total returns (the combined amount of dividend payments and share buybacks) to shareholders at 30% of consolidated net income. If we recalculate the 10-year dividend payment record up to fiscal 2012, when the dividend policy targeted a payout of 30% of nonconsolidated net income, using the new dividend policy of the total return ratio based on consolidated net income, our payout ratio would have been 20.8%. Thus, we believe that our new dividend policy has allowed us to return more to our owners (shareholders). In fiscal 2015, we paid a record-high dividend per share of ¥70 and conducted a share buyback worth ¥999 million. In fiscal 2016, we are projecting a dividend per share of ¥75, based on our net income forecast of ¥10.8 billion as of February 9, 2016. We intend to continually increase rewards to owners (shareholders) by growing earnings per share(EPS).

Framework to pursue higher capital efficiency and higher profitability

In recent years, we have established large-scale production bases and have acquired businesses abroad so as to build a strong global base for further growth. We are now promoting a framework for each group company and each business segment to set a capital efficiency target for efficiently generating earnings by effective use of assets. From January 2016, the ERP (Enterprise Resource Planning) system, that consolidates 85% of group companies, was launched. This is allowing us to make management judgments faster. By making best use of the system, we aim to achieve higher earnings growth driven by efficient use of assets.



Basic capital policy

Achieve higher ROE by consistently raising corporate value on the basis of our long-term strategy

To return profits on investments made by shareholders HORIBA gives priority to raising corporate value over the long term. As stated in our MLMAP2020 we aim to achieve ROE of 10% or more by 2020. ROE is one of our most important management metrics.

Link shareholder return to earnings growth.

HORIBA targets total returns (the combination of dividend payments and share buybacks) to shareholders at 30% of consolidated net income. This target reflects due consideration given to ensuring a stable business base and retaining earnings for business development.

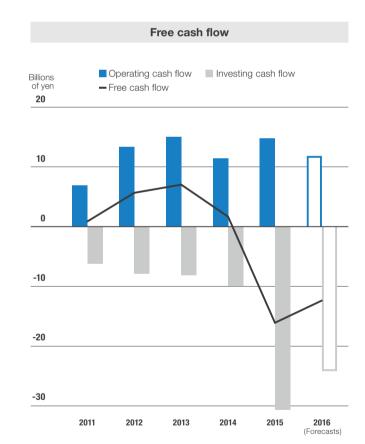
Flexibly manage fundina

HORIBA finances investment for business growth to optimally benefit long-term corporate value enhancement, with overall consideration given to investment project, cost of capital, funding environment and terms, equity ratio, liquidity in hand, and other factors.

Challenges in MLMAP 2020

HORIBA consistently invests in equipment, ERP, R&D, and human resources from a long-term perspective, without depending on performance of a single fiscal year. In the previous Mid-Long Term Management Plan [2011-2015], we invested mainly in overseas R&D facilities and reagent production facilities (new construction and capacity expansion). From 2014 our focus was shifted to setting up bases in Japan. In 2015 we invested the highest amount for one production base, in building HORIBA BIWAKO E-HARBOR, and the highest amount for an acquisition, U.K.-based MIRA Ltd., now HORIBA MIRA Ltd. These are the primary reasons that our investing cash flow increased significantly in 2015, compared to previous years, resulting in negative free cash flow.

In 2016 our plan is to aggressively invest in the Automotive Test Systems and Semiconductor Instruments & Systems segments. Investment in HORIBA MIRA, which owns test tracks and testing facilities, will be resumed after having been flat prior to our acquisition. For 2016 we are projecting to generate negative free cash flow as we did in 2015. We recognize that higher depreciation burden, caused by the many capital expenditure under MLMAP2020, and improvement in capital efficiency of HORIBA MIRA and other businesses are among our challenges. We will focus on enhancing capital efficiency of each group company and each business segment and raising return on investment.



Sunao Kikkawa

Senior Corporate Officer and General Manager of Finance & Control Division

Sunao Kikkawa joined HORIBA, Ltd. in 1974. He was assigned to HORIBA Instruments Incorporated (U.S.) in 1982 and returned to HORIBA, Ltd. in 1988. He was appointed General Manager of the Accounting Department in 1996 and Senior Corporate Officer in 2007. He has been a key person in globalizing HORIBA's accounting operations along with the Group's globalization and maintaining compliance with international accounting standards. At present he is engaged in raising efficiency in capital strategy and group administrative operations as Senior Corporate Officer and General Manager of the Finance & Control Division.

Automotive Test Systems

Process & Environmental Instruments & System

Emission measurement systems
Automotive emission analyzers
Onboard emission measurement systems
Driveline test systems
Engine test systems
Brake test systems
Drive recorders
Vehicle development engineering
Testing engineering
Lease and management of R&D facilities



Stack gas analyzers
Water quality analysis and examination systems
Air pollution analyzers
Environmental radiation monitors



Principal products

HORIBA's automotive EMS (Emission Measurement Systems) are adopted as the primary standard by national certification bodies in many countries and have an 80%* global market share. HORIBA provides the EMS and other measurement systems for automotive development and vehicle development engineering, enhancing the R&D efforts and quality control of automotive manufacturers and automotive component manufacturers around the world.

* HORIBA's estimate

HORIBA provides environmental measurement solution technologies associated with environmental regulations throughout the world. Together with providing process measurement technologies, which fulfill analytical needs in manufacturing development, we ensure better public safety, security, and health.

Major risk factors

The global automotive industry's shifting R&D investments

Demand fluctuation following changes in environmental regulations

Major customers

Automotive manufacturers, automotive component manufacturers, multipurpose motor manufacturers, government regulatory agencies, oil companies, automotive maintenance and repair centers, vehicle and engine development companies, finished vehicle testing companies, in-use vehicle testing companies

Manufacturers, government agencies, electric power companies

Product applications

Development of new gasoline, diesel and hybrid powertrains, vehicle certification and quality control, in-use vehicle inspections

Measurement of gaseous emissions, wastewater and water supplies, environmental pollution monitoring, environmental radiation measurement equipment

Sales by business segment

37%

10%

Sales by region

31% Japan

2

6% Asi

U.S. dollars

With the aim of realizing sustainable growth, HORIBA pursues balanced management without overly relying on a particular region or currency.

Medical-Diagnostic Instruments & Systems

Semiconductor Instruments & System

Scientific Instruments & System

Equipment for blood sample analysis

- ·Hematology analyzers
- ·Equipment for measuring immunological responses
- ·Clinical chemistry analyzers
- ·Blood alucose measurement systems



HORIBA medical products are primarily blood testing instruments and reagents for the in-vitro diagnostics market, with over ¥5 trillion in global annual sales. We have strength in small-sized blood testing instruments are used near the site where patients are located such as a surgery ward, a hospital ward, or a clinic for outpatients.

Mass flow controllers Chemical concentration monitors Reticle/mask particle detection systems Residual gas analyzers



HORIBA contributes to the semiconductor industry by supplying mass flow controllers, which are devices that control gas and liquid flows in the semiconductor, solar cell, and LED (light-emitted diode) manufacturing processes, and other monitoring systems.

pH meters Particle-size distribution analyzers X-ray fluorescence analyzers Spectrometers . Raman spectrometers Gratings



HORIBA provides over 500 types of instruments for use at the leading edge of scientific technology and commands leading market shares in niche markets. The Scientific Instruments & Systems segment develops basic analytical and measurement technologies, which play key roles in providing new technologies to HORIBA's other business segments.

Changes in medical insurance systems in different countries

Significant fluctuation in demand caused by the "silicon cycle" in the semiconductor industry and investments related to solar cells, LEDs, and other energy sources

Investment trend of national government agencies and other institutions Demand fluctuation following changes in environmental regulations

Medical testing centers, small to mediumsized hospitals, medical practitioners

Semiconductor production equipment manufacturers, semiconductor device makers, semiconductor cleaning equipment manufacturers

Manufacturers, research institutions, universities, government agencies, electric power companies

Health and diagnostic testing, disease diagnosis

Flow control of gases and liquids, monitoring of cleaning fluid concentrations in semiconductor manufacturing processes, semiconductor and LCD quality control inspections

R&D, product quality testing, criminal forensics

16%



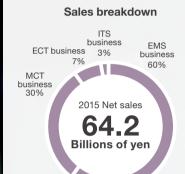
19% Americas

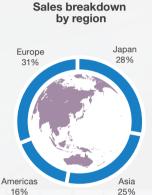


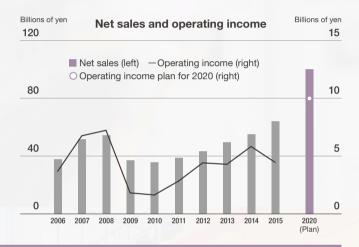
Europe



Automotive Test Systems VEHICLE EMS







Providing powerful support to the automotive development industry

HORIBA's automotive EMS (Emission Measurement Systems) are used by national certification bodies throughout the world and command an installed base market share of 80%. HORIBA provides complete test and measurement solutions for automotive development to the world's leading automotive manufacturers, including test systems for chassis, engines, power trains, and brakes. In July 2015 HORIBA acquired MIRA Ltd. (now HORIBA MIRA, Ltd.), the U.K. registered vehicle

2015 results: Acquisition of MIRA led to an increase in sales and one off expenses.

2016 forecasts: Aiming for higher productivity with full operation of the new Biwako facility.

In keeping with an increase in capital and R&D investment by automakers, sales of emission measurement systems increased in Japan in 2015. In addition, the acquisition of HORIBA MIRA also boosted sales compared to the previous year. Segment operating profit, however, decreased year-on-year due in part to one off expenses related to the acquisition of HORIBA MIRA and the relocation to HORIBA BIWAKO E-HARBOR, construction of which was completed in Shiga Prefecture.

In 2016 segment sales are expected to increase due to a full-year contribution of sales of HORIBA MIRA. In addition, the EMS and MCT (Mechatronics) businesses are projected to be robust. HORIBA BIWAKO E-HARBOR started full operation in May 2016 and strive to raise productivity so as to help improve profitability.

engineering consultancy and testing services provider. By including HORIBA MIRA in the group, HORIBA's business has expanded from analysis and measurement to the Engineering Consultancy & Testing (ECT) business. We are now able to respond to diverse customer demands related to automotive development including vehicles performance autonomous vehicle development and general vehicle R&D.

* Estimate by HORIBA

Mid-long term strategy: Emphasis shift away from a provider of products for automotive development and towards a development partner with engineering capability

By capitalizing on synergies between the new ECT business and the existing automotive testing operations in the EMS, MCT, and Intelligent Transport Systems (ITS) businesses, HORIBA aims to expand its business competencies. In Europe, the Real Driving Emissions (RDE) regulation, on-road emissions testing of light vehicles with mandatory limits, will start in September 2017. Leveraging its 80% global share in emission measurement systems for laboratory testing, HORIBA will use its brand recognition to achieve a high market share in the RDE regulation business area.

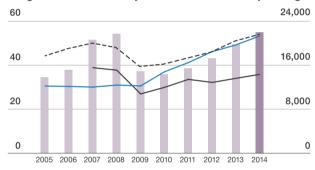
Automotive Test Systems: Market size and growth areas

HORIBA business divisions	Gasoline & diesel	Hybrid	Electric and fuel cells	Market size (Billions of yen) HORIBA's estimate
ECT business	Vehicle development engineering Testing engineering Lease of R&D facilities		2,000~	
EMS business	Emissions measurement		40~50	
	Engine perform	mance testing		100~120
MCT business	Vehicle body, w	rind tunnel balance	e, brake testing	15~20
		Driveline testing		30~40
ITS business		Safety and ITS		10~15

HORIBA's Automotive Test Systems segment sales and major automakers' R&D spending

- HORIBA's automotive segment sales (left: Billions of yen)
- Aggregate R&D spending by 3 German automakers (right: Million Euro)
- Aggregate R&D spending by 2 U.S. automakers (right: Million US\$)
- -- Aggregate R&D spending by 3 Japanese automakers (right; 100 Million yen)

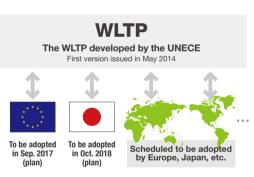
Source: HORIBA's survey based on companies' disclosed materials



Trend of automobile-related regulations

1. Global harmonized light duty vehicle regulation measurement of emissions introduced by the **United Nations**

The United Nations Economic Commission for Europe (UNECE) has developed the Worldwide harmonized Light Vehicles Test Procedure (WLTP) provide a global common technical regulation for measurement of exhaust emissions and fuel consumption for light duty vehicles. This will eventually replace the current test methods used in each country or region: the EU, Japan, and other countries will adopt the WLTP in the future.



Region/country standard Testing method 2. Progression of emission standards by region/country **Europe** Post new long-term regulations **Japan** U.S. Federal Tier 3 California LEV III China Beijing V India rat stage VI 2011 2012 2013 2014 2015 2017 2018 2019 2020 2021 2016 Present

Major products and market shares

Emission measurement systems





These systems continuously and simultaneously measure a wide range of gaseous and particle components in emission gases over a broad range of concentrations. They are widely used in R&D and engine/vehicle certification in the automotive industry. The systems include large-scale systems installed inside a laboratory, in

laboratory, in which HORIBA holds an 80% global share, and on-board types for road tests.





Driveline test systems



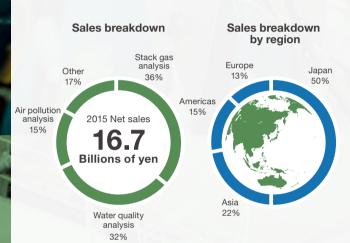


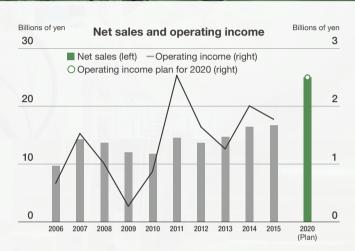
The driveline is an extremely important part of the overall powertrain that transmits energy from engines or motors to the vehicles' tires. HORIBA's driveline test systems use the latest simulation technology for a wide range of powertrain and driveline testing applications. HORIBA's strength is demonstrated by providing flexible systems based on custom and open solutions.



Process & Environmental

Instruments & Systems





HORIBA helps develop measurement technology for global environmental preservation and production and quality management processes

We supply a broad range of analysis and measurement instruments for analyzing air pollution, water quality and soil quality. We play an important role in gas measurement and monitoring of industrial liquid waste in the energy and heavy chemical industries, including the electric power, steel, and chemical industries; purified water management for medical

and semiconductor use; and constant monitoring and control of water quality in the pharmaceutical, food, and cosmetics fields. In essence, HORIBA's contribution supports public safety, security, and health in addition to global environmental preservation.

2015 results: Robust sales of stack gas analyzers in Japan

2016 forecasts: Focus on sales to plant engineering companies

In 2015 sales of sales of stack gas analyzers for thermal power plants and factories were robust in Japan. In addition, an increase in capital expenditures in the gas plant market in North America and the depreciation of the yen against the U.S. dollar contributed to an increase in sales in the Americas. However, the relocation to the HORIBA BIWAKO E-HARBOR incurred expenses, resulting in a year-on-year increase in segment sales but a decrease in operating profit.

In 2016 we expect sales of stack gas analyzers to continue to be firm in Japan. In addition, using process measurement equipment business in North America as a foothold, we plan to increase sales to plant engineering companies and expand overseas.

Mid-long term strategy: Value creation in the context of environmental regulations and process measurement equipment

In the environmental and analytical instrument markets in emerging nations, HORIBA will develop business by utilizing its accumulated know-how and experience in Japan, Europe, and the Americas. We also aim to increase market share in the global water quality measurement business, by collaborating with the water-related business of our other business segments. As to our process measurement equipment business, we aim to expand business in the petroleum refining and petrochemical industries and intend to increase the recognition given to the HORIBA brand in Japan and overseas.

Major products

Stack gas analyzers



HORIBA has a leading market share in Japan in continuous emission monitoring systems used in plants and other facilities that generate gaseous emissions and soot. Our instruments have established a widely recognized credibility for robust and reliable sampling systems, which are essential in continuous measurement of a variety of gases. The analyzers are used in applications for power generation, petrochemicals, steel, paper, foods and pharmaceuticals.

Air pollution analyzers



HORIBA's air pollution analyzers have won high acclaim in the field as highly reliable analyzers that demonstrate excellent precision and long-term stability at ppb* concentrations. They are used in over 50 countries to monitor air quality by municipal governments and private industries. Demand has been expanding for PM2.5-related monitoring.

* ppb: parts per billion. One part per billion denotes one part per 1,000,000,000 parts. This notation is mainly used for describing low concentration measurements.

Water quality analyzers



HORIBA's products are used for monitoring and control in water treatment processes. We have a wide-ranging water quality product line to measure pH, the basic water quality indicator, as well as chemical oxygen demand (COD), total nitrogen, and total phosphorous. Our products have been highly evaluated in the water quality analysis field by companies in the electric power, gas, petrochemical, steel, paper, food, and pharmaceutical industries.

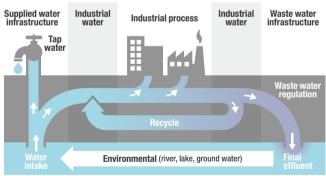
North American process measurement equipment business is steadily growing

The process measurement equipment business we acquired in the U.S. in 2013 turned to black in operating income and generated ¥1.5 billion in sales in 2015. We aim to grow this business in various industries, based on our business achievements with customers in the petrochemical refining and petrochemical fields, particularly in Texas, U.S.



Target markets in water quality measurement business

Water quality measurement is critically important in the water process cycle, to ensure environmental preservation and to support public safety, security, and health. The target markets include water quality management of drinking water, industrial water, and water used in plants, as well as waste water discharged from plants. By engaging in water quality measurement, HORIBA plans to create value from the reduction of total costs and the process improvement.



		Areas	HORIBA's Sales breakdown in 2015
	ronmental surement	Water quality measurement and monitoring in lakes, river, and other environmental areas. HORIBA develops products that satisfy the needs of each country and contributes to environmental preservation.	30%
	rocess nagement	HORIBA plays an active role in water quality management of the electric power, chemical, and pharmaceutical industries. Our products give prompt and accurate measurement capabilities that contribute to high quality product manufacturing and efficient plant management.	10%
Clea	an water	HORIBA is actively engaged in clean water management in water treatment plants. Our high-sensitivity analysis contributes to continuous operation of water measurement equipment and reduction in electric power costs in these facilities.	20%
Se	ewage	Monitoring of activated sludge treatment process, in the sewage treatment plants and industrial wastewater. By making the water quality measurement equipment more durable we contribute to simplify and economize maintenance management processes of facilities.	40%

Major products and market shares

Stack gas analyzers





These analyzers provide highly sensitive and precise measurements of NOx, SO₂, CO, CO₂, and O₂ constituents in gases emitted by boilers and furnaces in thermal power stations and refuse incineration facilities. A single unit can simultaneously and continuously. simultaneously and continuously measure all five gases. HORIBA has a leading market share in this competitive market in Japan and seeks sales growth in the global market.



H-1 series of industrial water quality analyzers

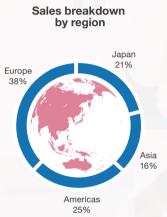


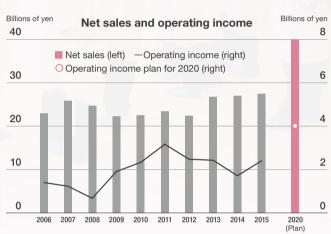


perform in a wide range of applications from pure water for semiconductor and food to water treatment to sewage and industrial wastewater. They confirm progress in wastewater treatment processes and control water treatment equipment. Moreover, we have developed pH electrodes that resist damage in harsh pH electrodes that resist damage in narsh environment by strengthening their toughness, thereby reducing the frequency of electrode replacement and maintenance operations. By responding to expanding worldwide needs for remote monitoring services in water and sewage quality management and process. quality management and process monitoring, HORIBA pursues sales growth in the global market.



Sales breakdown Service and maintenance 8% 2015 Net sales 27.4 Billions of yen Medical diagnostic instruments 40%





Contributing to a healthy life through in-vitro testing equipment

In the global market of in-vitro diagnostic; HORIBA provides instruments and reagents for blood sample testing throughout the world. The segment's business model is based on recurring revenues generated from sales of reagents. We aim to ensure stable earnings by expanding our installed base of medical

diagnostic instruments. In particular, HORIBA's strength is in small and medium-sized blood cell counters in the diagnostic market for Point of Care Testing (POCT), such as small to medium sized hospitals, specialty clinics, test centers and surgery centers.

2015 results: Robust sales of new products in Japan 2016 forecasts: Accelerate product development for the global market

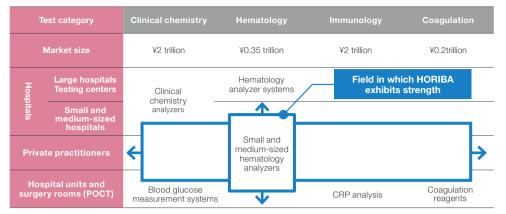
In 2015 the yen's appreciation against the euro resulted in a decrease in the value of European sales expressed in yen. However, sales of the hematology and C-Reactive Protein (CRP) analyzers, which were launched in March 2015 in Japan, were favorable. As a result, segment sales and operating income increased year-on-year.

In 2016 we will continue to focus on expanding sales of hematology and CRP analyzers in Japan. In addition, R&D investment will continue in Europe for launching new medium- to large-sized products, which are currently under development. Mid-long term strategy: Increase sales by launching new products and expanding into new areas

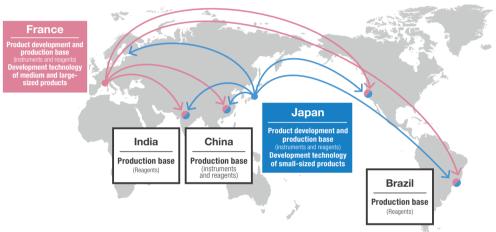
At present, HORIBA's strengths reside in having development bases in Japan and France and a local supply infrastructure of testing reagents in China, India, and Brazil, with their high expected demand for reagents. We aim to globally introduce small- and medium-size hematology and CRP analyzers, which are highly regarded in Japan, and to launch at an early date new medium- to large-sized products. Moreover, we are interested in cooperating with other companies through M&A and OEM arrangements, so as to expand into new areas in the in-vitro testing market.

Business development by test category

HORIBA aims to be positioned as a clinical solution partner by strengthening the data management and automation areas and expanding product development either by ourselves or through collaboration with other companies.



Global product development and supply system



ilistruments		
Small-sized products	Expand sale of our hematology and CRP analyzer globally	
Medium-sized	Introduce products by integrating technologies in	

Accelerate product development to expand market

Medium and large-sized products shares in Europe and Americas

The local supply systems have resulted in cost reductions for distribution and inventory management, thereby improving profitability.

Expand the biochemical testing equipment line-up, with the aim for growth in Europe and Americas

In February 2016 we entered a sales alliance agreement with JEOL, Ltd. (Japan) This enables us to expand our product line-up for biochemical testing in Europe and the Americas, which represent 70% of the world's in-vitro testing market. We aim to increase sales to ¥40 billion (up 40% from 2015), the target set in the MLMAP2020.



Yumizen New global grand "Yumizen"

We launched a new brand "Yumizen" in 2015. The name Yumizen is created by combining Yumi (symbolizing You & Me and the Japanese word yumi (bow)) and Zen(front, virtue), and incorporating our wish to provide accurate and rapid test results for medical professionals through HORIBA's analysis and measurement technology and ultimately for patients. In June 2015, we introduced small-sized hematology analyzers, Yumizen H500, for emerging markets. We will accelerate development in Japan and France, promote this new brand, and thereby expand business.

Major products and market shares

Hematology analyzers





Blood tests are essential for diagnosis and health assessment of people and animals. These analyzers check red and white blood cell counts as well as hemoglobin concentrations and platelet counts.



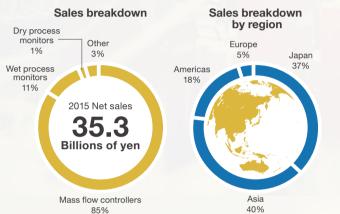
Hematology and CRP analyzers

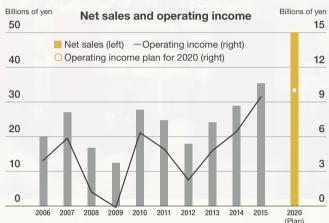




This is the first analyzer in the world to simultaneously measure blood cell counts and C-Reactive Protein (CRP), which the body produces in response t internal inflammation, thus facilitating faster and more accurate diagnosis.







Contributing to yield enhancement and technology innovation in semiconductor manufacturing processes with HORIBA's flow control and measurement technologies

HORIBA's main products are mass flow controllers, which are devices that control gas and liquid flows in the semiconductor manufacturing process (front-end process). They have a leading global market share*, largely on the strength of their flow control technology that enables yield enhancement and

miniaturization in the semiconductor manufacturing process. HORIBA, which also provides chemical concentration monitors, aims to contribute to the semiconductor industry by providing customers with high-level solutions that support technical advances in process technology.

* Based on HORIBA's survey

2015 results: Robust investment demand by semiconductor manufacturers in Asia 2016 forecasts: Maintain market shares in Asia and North America

Due to an increase in capital expenditure by semiconductor manufacturers, particularly in Asia, sales to semiconductor production equipment (SPE) manufacturers surged in Asia and North America. In addition, the yen's depreciation against the U.S. dollar resulted in an increase in the value of sales in the U.S. expressed in yen. As a result, segment sales and operating income recorded all-time highs.

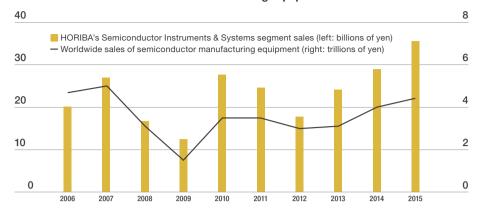
While capital spending by the semiconductor industry is expected to remain at a high level in the first half of 2016, we believe we have to cautiously monitor their capital spending outlook in the second half of the fiscal year and respond promptly to the needs of our customers.

Mid-long term strategy:Enhance market positioning of mainstay products

We will further enhance our flow control technology, which has been accumulated primarily in mass flow controllers. We also aim to grow sales of chemical concentration monitors, used in semiconductor wafer cleaning processes. In addition, we will combine our flow control technology and analysis and measurement technology so as to enhance development of new products that satisfy customer needs.

Meanwhile, we intend to apply our flow control technology to other industries by promoting product development for energy, petrochemical, pharmaceutical, food and other markets.

HORIBA's Semiconductor Instruments & Systems segment sales compared to worldwide sales of semiconductor manufacturing equipment



Enhancing semiconductor-related development capability and responding to customer needs

In April 2015 HORIBA Advanced Technology Center (Japan) opened within the site of HORIBA STEC, which plays a leading role in the Semiconductor Instruments & Systems segment. The Center aims to raise the level of precision and quality of HORIBA's overall analysis and measurement equipment, not merely for the Semiconductor segment, by accelerating development of semiconductor sensors used in many of HORIBA's products.

In addition, by utilizing HORIBA STEC Kyoto Fukuchiyama Technology Center, which is engaged in development of next-generation advanced material control equipment, and an R&D facility in Reno, Nevada in the U.S., we are establishing a structure for promptly accommodating the needs of our customers.



HORIBA Advanced Technology Center



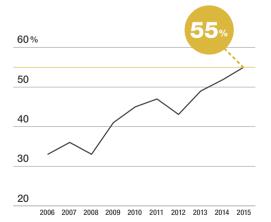
HORIBA STEC Kyoto Fukuchiyama Technology Center



R&D base in Reno, Nevada (U.S.)

HORIBA's global market share for mass flow controllers

HORIBA has maintained more than 40% of the global mass flow controller market share since 2009. It is noteworthy that our market share has expanded since the 2009 economic downturn, by successfully meeting our customers' needs through new product introductions and expanded production capacity. In our view, this is due to the success of our balanced management, which enabled us to maintain the capacity for new product development and production capacity during a downturn in demand. Our higher global market share has been driven by growth in sales of new products using pressure control process that respond to miniaturization of the semiconductor manufacturing process.



Major products and market shares

Note: Market shares quoted are estimates by HORIB.

Mass flow controllers





These high-precision gas and liquic controllers regulate flow rates in semiconductor manufacturing processes, typically in thin-film formation processes. They are indispensable components for high quality semiconductor and LED production.





Chemical concentration monitors





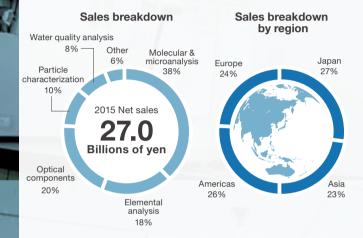
These compact units are used in semiconductor manufacturing to monitor concentrations of chemical cleaning agents. They ensure cleaning fluids are precisely delivered and properly used, thereby optimizing the cleaning process and boosting production yields.

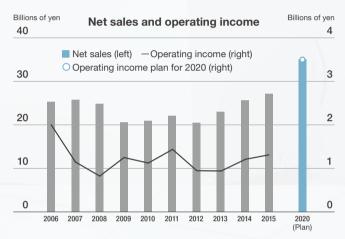


Scientific

Instruments & Systems







HORIBA provides over 500 types of instruments for use at the leading edge of scientific technology

HORIBA provides solutions for data acquisition and analysis in niche markets to support advanced research that ventures into unknown territory in the quest for products and processes of the future. HORIBA's analyzers are widely used not only in basic research, but also in foreign-object examination and defect analysis for pharmaceuticals, food,

and electronic components, forensic science, archaeological surveys and others. Additionally, the Scientific Instruments & Systems segment develops basic analytical methods and core measurement technologies, which play key roles in providing new technologies to the four other business segments of HORIBA.

2015 results: Robust sales for R&D applications to universities in China

2016 forecasts: Aim to increase sales for R&D applications to private companies

In 2015 sales of instruments and systems for R&D applications to universities and other institutions in China were robust and the yen's depreciation against the dollar resulted in an increase in sales in the Americas in yen terms. Consequently, segment sales and operating income increased year-on-year.

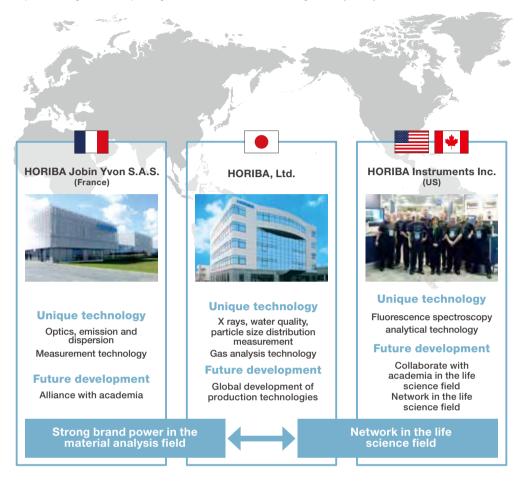
In 2016 we anticipate sales growth following an earnings recovery by private companies, mainly in Japan. We also aim to further boost our fluorescence spectroscopy business in North America and promote sales of these instruments for medical research, drug discovery, biotechnology, and other sectors.

Mid-long term strategy: Incorporate customers' views in product development and hence market creation

Our challenge is new value creation in analysis and measurement business, such as in energy, automobile, biotechnology, and drug discovery. We will not only remain active in sales in niche markets but expand applications of our products. In order to better understand issues of our customers and utilize such understanding for product development, we will accelerate development of customized products on the basis of joint projects with customers. We have already responded to customer needs by developing a custom-made instrument for a manufacturer of precious metals and a special device for a university laboratory engaged in advanced research.

Globally spread the technology of three bases: Japan, France, and the U.S.

Historically, segment growth was driven by product development utilizing strengths of our bases in Japan and France. Since we acquired Photon Technology International, headquartered in Canada, in 2014, our R&D capability in the Americas has improved. Going forward, we plan to grow business in life science and drug discovery, mainly in North America.



Aim to create new markets

HORIBA's analysis and measurement technologies are available globally and play an important role R&D and process management worksites in all industries. As we believe our technologies still have considerable potential, we will promote more development and expansion into growth markets by utilizing industry-government-university cooperative programs. Our ultimate aim is to create new markets.

New technologies

In-line/On-line analysis Nano-analysis (electron beams, AFM Raman) Spectro-analysis, new sensor technology

New markets

Water analysis **Bio-life science Energy and functional materials Next-generation automobiles**

ONE STEP AHEAD

Current products

pH meter, particle characterization instrument, X ray analyzer Metal analyzer, grating, Raman spectrometer Fluorescence spectroscopy, Ellipsometer, GDS

Major products and market shares

Raman spectrometers





Raman spectroscopy is a spectroscopic technique that provides information about the molecular structure of molecules by measuring the vibrational modes of a molecule. The vibrational modes of a molecule act as a molecular fingerprint offering a quantitative measurement which can be used to identify the chemical under analysis. In recent years, Raman spectroscopy has attracted attention for new applications in material research. Raman has a very weak light scattering mechanism, so a highly-sensitive and optimal optical design is necessary. HORIBA Jobin Yvon's outstanding know-how in optics-related technology has been successfully applied in the core development of our extremely high performance Raman spectrometers.



pH meters





HORIBA is recognized as one of the top pH meter brands beginning with a history of its development of Japan's first glass electrode pH meter in the 1950's. HORIBA offers a full pH product line to satisfy diverse customer needs ranging from desktop models to support laboratory research to rugged instruments for field applications measuring river water, groundwater, and waste water.





Value creation based on "Invisible Values"

Thought behind "Invisible Values"

The number of fruits and the value of the harvest are important but it is more important that the roots are strong

Creating value by utilizing our "Invisible Values" is one of HORIBA's important management themes. Of course, the "fruit" (earnings) and the "trunk with branches and leaves" (the balance sheet), are both visible and important values. However, we believe that the essence of good management is to grow strong thick roots, the invisible values in the rich soil of our corporate culture. We do not believe that management's emphasis on maximizing short-term earnings and neglecting investment in invisible values will foster sustainable growth or increased corporate value.

Soil

Corporate Culture

Organizational structures

HORIBA operates five business segments in 27 countries. We believe it is important that our human resources in each business and each region promote their business. With that aim, we are spreading our "Joy and Fun" corporate motto into our global operation and promoting balanced management, matrix organization, and the HORIBA Stained Glass Project to build a Super Dream Team.

Brands

HORIBA works on growing "Invisible Values," such as human resources, technology, and its corporate culture. "Invisible Values" are essential in generating future earnings and enabling enterprise continuity, while achieving numerical targets for net sales, profits, and other indicators.

We believe that our persistent and continuous efforts on increasing the other four invisible assets, namely "human resources," "technologies," "organizational structure," and "customers," have greatly helped us to establish our brands, representing trust in HORIBA placed by our customers.

Customers

HORIBA helps improve people's quality of life in a sustainable society by supplying products and providing services to customers. We think it is important to provide solutions in addition to supplying hardware (instruments). In order to achieve this goal, we collaborate with suppliers and group companies in Japan and overseas to improve the quality of our products and services.

Human resources

At HORIBA, employees are considered not simply "employees" but "human resources" in the sense of resources that are assets. In order for all employees to achieve self-realization through "Joy and Fun," we have set forth, shared, and been striving to realize HORIBA's five "Omoi" shown below. HORIBA's strong organizational power is generated from the compelling desire of all highlydiversified HORIBA employees to practice HORIBA's five "Omoi".

HORIBA's five "Omoi"

- 1.To be a part of a collaborative community, at the forefront of new ideas and creations.
- 2.To achieve goals and make life memorable by fostering the highest intellectual potential.
- 3. To reach across the globe to expand learning that captures key business developments, wherever they occur.
- 4. To be proud of sharing what I do and what HORIBA delivers.
- 5. I want to participate all around and where I can be of help.

Technologies

Technological development is one of the most important drivers for value creation and the lifeline of a manufacturer such as HORIBA. To make an analogy, technical capability is a form of basic physical fitness, which cannot be maintained without continual training and exercise. Using this analogy. HORIBA needs to keep training in order to maintain the power to make a dash forward in a recovery phase of the economy.

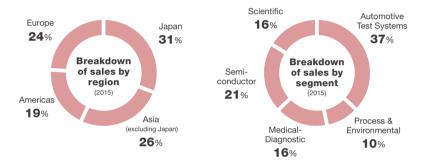


Organizing a Super Dream Team

Under the slogan of "HORIBA Group is One Company" since 2004, HORIBA has promoted "balanced management" and "matrix organization" to manage the Group companies as a single integrated entity. With the aim of further developing this system, we are using the "HORIBA Stained Glass Project" to promote diversity, organize a Super Dream Team of people with diverse abilities and characteristics, and accelerate the reinvention of our existing businesses and the creation of new businesses in keeping with the new mid - long term management plan MLMAP2020.

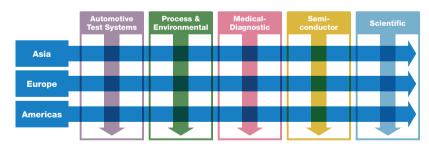
Balanced management

We aim for a well-balanced management as a single, integrated entity, without excessive dependence on any one segment or region, in order to achieve sustainable growth of our five business segments. Even if the business environment of one business segment becomes stagnant, we are able to achieve sustainable growth by flexibly utilizing our management resources and ensuring a good balance in business investment



Matrix organization

HORIBA uses matrix management across its five business segments and three operating regions. This is a global organizational framework for executive decisions on strategies and plans by business segment that removes barriers such as separation of countries, regions, or group companies. This framework has enabled a globally-integrated business operation. We will continue to exploit the benefits of the multiplier effect from successful examples and strengths in one segment or one region to others and improve HORIBA's corporate values.



HORIBA Stained Glass Project

In January 2014, we launched the Stained Glass Project. Its mission is to make HORIBA stronger by the continual creation of new value through HORIBARIANs' diverse talents and skillsets, regardless of their gender, age, nationality, disability, or other differences. Together with maintaining our balanced management and matrix organization, HORIBA aims to become a stronger organization that can promptly respond to any challenge in the environment, by relying on HORIBA-style diversity.

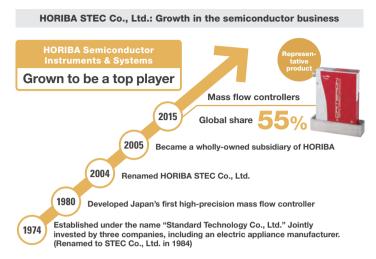


Encouraging group companies to enhance their technological prowess and distinctiveness to raise our market share

In recent years, core group companies in each business segment have been greatly contributing to HORIBA's overall growth. Our basic policy in managing group companies is to respect each company's distinctiveness and characteristics and give each a certain level of discretion.

One good example is HORIBA STEC Co., Ltd. which develops our world-leading mass flow controllers. As a result of dedication to developing products mainly for semiconductor manufacturing equipment companies, HORIBA STEC is playing a central role in R&D for flow volume measurement and control technology. It is the driver behind and a leader of our growth in the Semiconductor Instruments & Systems.

By encouraging individual group companies to grow and by uniting them all as the HORIBA Group, we aim to achieve sustainable growth.



Blackjack Project

The Blackjack Project, which began in 1997 with the objective of changing the awareness and activities of employees, has resulted in the submission of 806 suggestions and proposals for change in 2015. In addition to improvement in operational efficiency and cost reduction, personnel development and enhancement of organizational strength are among popular proposals, demonstrating one aspect of HORIBA's corporate culture: organizational reform by employees.

We hold an internal World Cup competition among candidate proposals from each country where we operate and have employees. This competition also provides an opportunity to demonstrate to management and employees how we make our belief a reality. The Blackjack Project has the important function of sharing corporate culture, experience and knowledge and is one of our important initiatives to realize a Super Dream Team.

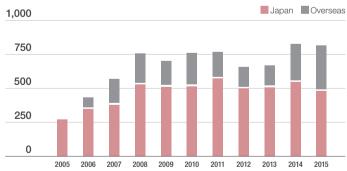


Blackiack Award World Cup 2015 winners

Proposals submitted in 2015 e.g. HORIBA, Ltd.



Number of proposals





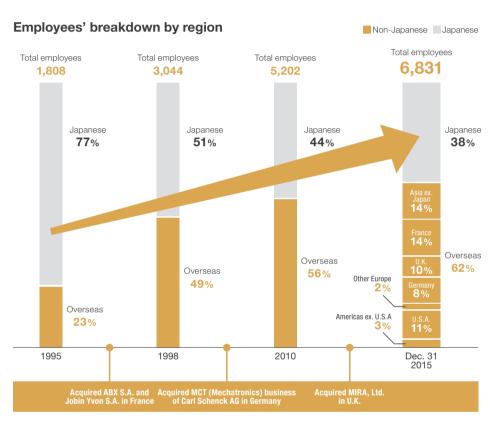






Diversity is a driver of corporate growth

HORIBA aims to be a company in which the diversity of its people can make the best of their strength and talents, regardless of their gender, age, nationality, special abilities, and other differences. At the end of 2015, the number of our employees reached 6,831. As our business has become more globalized and we have acquired more overseas companies, our people have also become more diverse. HORIBA's Japanese employee ratio has declined to 38% of the total. This is not a result of shifting production offshore in order to use low-cost labor but rather a consequence of our growing need for highly skilled workers and specialists who embody special technology or know-how. This type of overseas expansion is quite unique among Japanese companies.







HORIBA Stained Glass Project: What we did in 2015

The theme for 2015: "Reinvent how you work"

The main theme in 2014, the first year after launching the Project, was "Female employees' performance."

In 2015, under the campaign named "Reinvent how you work," we focused on how to balance ease of work with enhancement of productivity. Workshops and seminars were held at various locations in Japan. The workshops featured the topic of systems that may allow people to use diverse ways of working and at the same time enable productivity to improve. Seminars included a lecture on the successful examples at other companies. The number of participants in workshops and seminars totaled 750 in 2015, providing our executives and employees with a good opportunity to think about HORIBA's way to "Reinvent how you work." As one of the outcomes, the "paid absence by hour" system was adopted on an experimental basis by some group companies in Japan.











Promoting women's career activities

In Japan, the Act concerning Promotion of Women's Career Activities (PWCA) came into force on April 1st, 2016. HORIBA, Ltd. thereupon formulated an action plan for promotion of women's career activities in 2016. We aim to achieve our target through HORIBA Stained Glass Project and other initiatives.

Target

Raise the ratio of women participating in the decision making process of the entire company and each business segment to 20% or more

Reference on HORIBA, Ltd. Female employee ratio = 19.8% (January 2016) Average ratio of female employees to participate in the training course for selecting executives = 15% (most recent three-year average) Average ratio of female employees to participate in the global strategic meetings or budget meetings = 12.9% (2015)









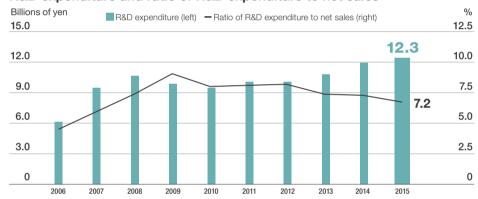


Accelerating investments in basic analytical and measurement technologies and application development

The development of analytical technology and engineering technology is vital to HORIBA as an analytical and measurement equipment manufacturer. We have maintained R&D investment at the level of 7-8% of sales, even during economic downturns when our competitors reduced their investments. This strategy has helped to boost our market share during subsequent upturn phases. In 2009, during the global economic recession triggered by the financial crisis, the Semiconductor Instruments & Systems segment recorded losses. However, supported by stable earnings of the Medical-Diagnostic and Scientific Instruments & Systems segments, we were able to maintain the same level of overall R&D investment in the Semiconductor segment, which has resulted in the segment's favorable operating performance today.

We firmly believe this investment policy will contribute to our future growth and profitability improvement. HORIBA aims to improve the efficiency of our R&D investments and realize a higher operating income ratio.

R&D expenditure and ratio of R&D expenditure to net sales



From core technology to product development

HORIBA strives to effectively allocate its R&D resources to specific analytical technologies, apply them to product development in five different business segments, and achieve product releases efficiently.

and cont	s major analysis rol technologies scale of sales)	Automotive Test Systems	Process & Environmental	Scientific	Medical- Diagnostic	Semi- conductor
Infrared measurement	Technology for real-time analysis of elements in gases		•			
Gas flow control	Technology to measure and instantly control the flow of gases		•			
Particle-size distribution analysis	Technology to measure particle diameter and particle distribution		•			
Spectroscopic analysis	Technology for analysis of visible light					
Liquid ion analysis	Technology to measure pH, sodium, potassium, and other ions		•			

Creating competitive technologies and ensuring superiority by patents

Based on a variety of analysis and measurement technologies, HORIBA continues its research for optimal methods to satisfy customer needs and develop new technology. Our numerous unique technologies and intellectual assets have propelled our business growth. We firmly believe that technology development and its resultant intellectual property are the essential element of the HORIBA brand.

As an example, OBS-ONE, a portable emissions measurement system designed for engine/vehicle certification under real road conditions, which was launched in 2014, has utilized our proprietary technologies. We have protected our intellectual assets and have achieved performance other companies cannot imitate.

Patent filings to protect original technology



OBS-ONE

(some filings) Improved equipment performance (gas sampling method, data display,

Improved physical applicability Flexible system configuration

HORIBA BIWAKO E-HARBOR, a new facility, began operation To lead global development and production, and achieve efficiency

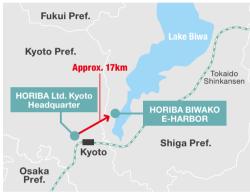




Efficient production line



Office as spacious as 100 meter in width



Full operation started in May 2016

HORIBA's gas measurement technology is used in major products such as our emission gas analyzers, which have become the world's top brand, and stack gas analyzers. We are aiming to improve the time-to-market of new gas measurement products and efficiency of production by an organic integration of development, design and production to our new facility HORIBA BIWAKO E-HARBOR from our Kyoto headquarters.

Together with our suppliers, we are active on the global stage, leveraging "craftsmanship unique to Japan"

One of our important "Invisible Values" is to maintain strong ties with our regular production partner companies. One reason we have been able to increase our market share in the past, even when there has been a strong surge in demand, is our strong relationship with suppliers which has enabled us to respond very quickly to customer demand. In HORIBA BIWAKO E-HARBOR, our suppliers will work together with us on the same premises. Through this arrangement, we expect reductions in time and product transportation costs, by eliminating back-and-forth transportation of products during assembly process and others. We are steadfast in dedication to "craftsmanship unique to Japan" and to expand globally with our suppliers.



Conventionally, products move back and forth between HORIBA and partners.

When we are all in the same premises, we can reduce costs and time requirements.

"Technology Translocation (Sengu)"

We intend to transfer our core technologies, accumulated in Kvoto over a period of 70 years, into the hands of a new generation of engineers that will lead to new development capabilities and the expansion of production capacity. We named it "Technology Translocation," making it a driver toward technological innovation. The Japanese word "Sengu" translated as "translocation" refers to the tradition to passing on of skills to build a shrine from one generation of carpenters to the next.

Naming of HORIBA BIWAKO E-HARBOR

"E" of E-HARBOR stands for the capital letter of Engineering, Environment, Energy system, Engagement and Enhancement, and thus representing various aspects of our work. HORIBA aims to utilize expertise and insight from all over the world, and function as a center for generation of valuable information.



ngineering

nvironment

ngagement

nhancement

nergy system



A true partner to our customers

Analytical Technology Centers, with enhanced services, opened in 2016

With the aim of raising customer satisfaction with more appropriate analysis technology proposals, the analysis service department of HORIBA, Ltd. was transferred to HORIBA Techno Service Co., Ltd., specialized in services and maintenance, and began operation there as the Analytical Technology Centers. At present, the Centers are located in Kyoto and Tokyo.

Promptly responding to customers' requests

The Analytical Technology Center conducts contracted analysis of samples for our customers as well as demonstrations for a large selection of instruments. It also develops and sells standard samples, which are indispensable for stable operation of parts and instruments. Having obtained the ISO17025 accreditation, which testifies to its competence in providing accurate measurement and calibration results, the Center possesses the quantitative determination technology that forms a base for testing and calibration required by our customers. Together with the environmental measurement attestation services provided to third parties, such as testing of soil, industrial waste and quality of river water or factory waste water, HORIBA has strengthened its system to better satisfy a wide range of needs of our customers.

Aiming for higher customer satisfaction

By consolidating our human resources with solid analytical skills and professional knowledge on advanced analytical chemistry at the Analytical Technology Center, we are enhancing our analysis and measurement technologies which forms a base of our overall business. With our consolidated know-how and optimal services, we strive to become a true partner with our customers.

Analytical Technology Center

Analytical services

Surface analysis, structure analysis
Contracted analysis such as elemental analysis
Demonstrations.

Calibration services

Calibration of analytical and measurement instruments and systems

Contracted services

Data sales, Measurement certification, Training, Contracted maintenance, etc.

Standard sample services

Standard solution development Sales of standard samples and catalysts, etc.

A true partner in analysis and measurement to our customers

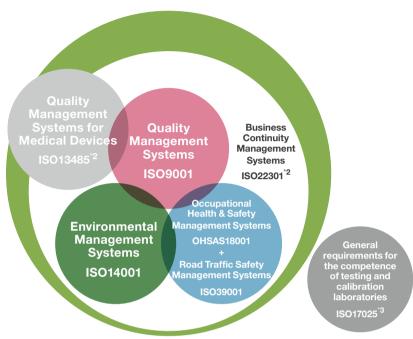




Using the Integrated Management System for realizing sustainability

With the aim of providing our customers with highquality, reliable products, HORIBA, Ltd. has adopted the Integrated Management System (IMS*1), which is a combination of the Quality Management System ISO9001, Environmental Management System ISO14001 and Occupational Health & Safety Management System OHSAS18001, and became the first Japanese company in the analysis and measurement industry to acquire "JQA INTEGRATED MANAGEMENT SYSTEM Certificate of Implementation" (JQA-IG0001-08) in 2004. These management systems have been put into place by HORIBA, Ltd. and its domestic subsidiaries since 2011. In 2014. HORIBA. Ltd. and a domestic subsidiary also acquired certification for Business Continuity Management System ISO22301² in the medical and semiconductor areas and established a system for a stable supply of products even in the wake of an earthquake, accident, or various diverse risk events. Since ISO9001 and ISO14001 were revised in 2015, we began to operate our process based on risk based thinking. We are committed to continual enhancement of IMS for customer satisfaction, in order to further improve our corporate value.





- *1: IMS (Integrated Management System) is an integrated management system of more than one ISO and OHSAS.
- *2: Medical Devices Quality Management Systems ISO13485 and Business Continuity Management System ISO22301 were acquired by HORIBA and HORIBA STEC CO., Ltd.
- *3: General requirements for the competence of testing and calibration laboratories ISO17025 were acquired by HORIBA Ltd. and HORIBA Techno Service Co., Ltd.

Development of long-life. energy conservation "eco-friendly products"

In order to provide customers with products that reflect consideration of their life cycle, such as long usable life and minimization of energy consumption, we have developed certain products as "eco-friendly products" if they have satisfied certain environmentally friendly standards. With social and economic matters, such as the rise in energy costs, we use quantitative measurement to determine how products represent a reduction in energy requirements or a reduction in materials used. Our "eco-friendly products" target a 25% reduction compared to our conventional models.

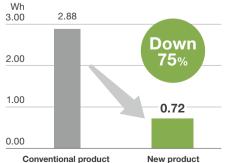
An "eco-friendly product" Color monitor HU-200CL



This product is a process water measurement system designed to automatically measure chromaticity and turbidity in drinking water distribution plants. Chromaticity is an objective specification of the quality of a color. The product is used for water quality monitoring in the tap water purification process, based on the regulations on the Tap Water Testing Methods of the Water Supply Act, set by the Ministry of Health, Labour and Welfare.

By improving a measurement part and combining the rotary-type washer with a wiper, maintenance has become easier, resulting in a significant extension of the maintenance cycle. In addition, the physical construction is now less susceptible to temperature change; this has greatly reduced electricity consumption required for temperature adjustment (see figure on the right).

Comparison of electricity consumption (watt-hours) when in use for 24 hours



Basic Policy on Corporate Governance

Based on the corporate philosophy "Open and Fair," HORIBA has pledged to establish an organizational structure that promptly responds to changes in business environments, to improve its managerial monitoring of performance and to enhance compliance-related arrangements, with the aim of establishing a world-class governance structure. At the same

time, we are committed to establishing good relationships with all stakeholders, including shareholders, customers, employees, and local communities. In addition to proper information disclosure, we promote constructive dialogue with our shareholders, contributing to our sustainable growth and mid-long term improvement in corporate value.

Corporate Governance System

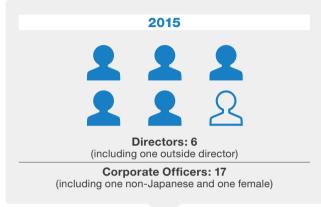
HORIBA has adopted the type of organization defined as a "Corporate with Board of Corporate Auditors," in the Companies Act. As of April 2016, the Board of Directors is comprised of eight members, including three independent outside directors, one of which is a woman. In fiscal 2015, the Board met 12 times to make decisions more promptly than in the past and augment managerial capability by a small number of members. To avoid managing with an introverted approach, HORIBA has, since the company's origin in 1953, always appointed at least one director and one corporate auditor from outside the company.

In addition, HORIBA introduced a corporate officer system in 1998 to make smooth and agile executions of operations under the supervision and guidance of directors. At present (April 2016), 20 corporate officers, including one female and four non-Japanese, play an active role in Japan and overseas. As of April 2016, the Board of Corporate Auditors is comprised of three corporate auditors, including two independent outside auditors. The Board of Corporate Auditors held 14 meetings in fiscal 2015. It performs objective and appropriate auditing and monitoring of executions by the Board of Directors, in cooperation with independent auditors, internal auditing (Group Internal Audit Office, which is positioned directly under the President), and independent outside directors. (See the list of directors, corporate officers, and corporate auditors on page 43).

Relationship with owners (shareholders)

Open general meeting of shareholders

Since its initial stock listing in the Second Section of the Osaka Securities Exchange in 1971, HORIBA has encouraged all shareholders to attend the annual general shareholders meeting. This annual meeting is held on a Saturday to facilitate public attendance. An informal get-together event is held afterwards to enable shareholders to talk directly with management.





Implementing shareholder return linked to earnings growth

HORIBA was the first listed Japanese company to start paying shareholder dividends based on a predetermined payout ratio in 1974. Since fiscal 2013, HORIBA has changed the base amount of profit returns to shareholders (the combined amount of dividend payments and share buybacks) from 30% of HORIBA, Ltd. nonconsolidated net income to 30% of HORIBA, Ltd. consolidated net income, so that shareholder returns are more directly linked to consolidated performance. In fiscal 2015, we paid an annual dividend per share of ¥70 and bought back 218,400 shares worth ¥999 million.

Anti-takeover measures

HORIBA has not adopted anti-takeover measures. HORIBA reviewed the "Basic Policy on the Persons to Control Decisionmaking over the Financial and Business Policies of HORIBA". which is announced on our website stated below.

http://www.horiba.com/jp/investor-relations/ir-news/article/40961/ (Japanese only)

Constructive dialogue with owners

HORIBA abides by the "Basic Policy for Constructive Dialogue with Shareholders" as announced on our website (see below). We make efforts to explain our corporate policy, financial condition, and corporate culture to our owners, and ask for their understanding and continued support.

http://www.horiba.com/jp/investor-relations/ir-policy/ (Japanese only)

Directors' compensation

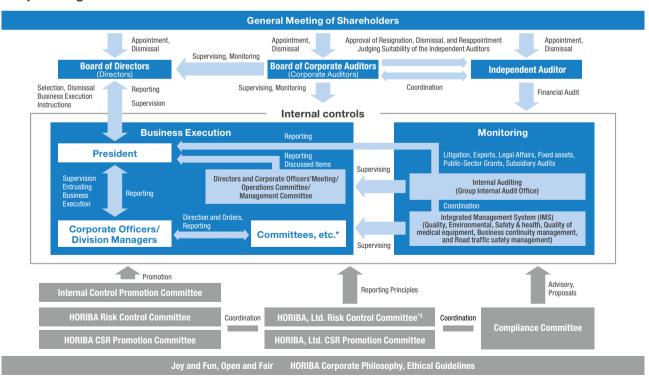
Compensation for directors consists of base compensation (regular fixed-amount salary), earnings-based salary (bonus) linked to the earnings results of each fiscal year, and stock options (retirement allowance) linked to medium to long-term earnings performance. Compensation for outside directors, however, consists strictly of base compensation (fixed-amount salary), excluding compensation linked to earnings performance, given the nature of their assignment. The limits for compensation for directors and for outside directors are approved as a separate matter at the annual general shareholders meeting. The directors (not including outside directors) compensation of 2015 was ¥681 million in total.

Breakdown of directors' compensation

(excluding outside directors)



Corporate governance structure chart



^{*1} Committees, etc. refer to committees and conferences that are established and registered based on the "Regulations concerning conferences and committees," such as the Group Promotion Committee for Management of Public Subsidies and the Safety and Health Committee.

^{*2} The HORIBA, Ltd. Risk Control Committee discusses and approves issues and measures concerning risk control.

Board of directors and corporate auditors (as of April 1, 2016)

Chairman, President and CEO

Atsushi Horiba

- 1971 Joined Olson Horiba Inc. (U.S.)
- 1972 Joined HORIBA, Ltd. and held positions such as General Manager of Overseas Technology Department and General Manager of Overseas Headquarters
- 1982 Appointed as HORIBA's Director
- 1992 Appointed as President and CEO
- 2005 Appointed as Chairman, President and CEO up to the present

Executive Vice President

General Manager of Corporate & Segment Strategy Division

Juichi Saito

- 1982 Joined HORIBA, Ltd. and held positions such as General Manager of Engine Measurement Planning & Development Department and President of HORIBA Instruments Inc. (U.S.)
- 2005 Appointed as HORIBA's Director
- 2008 Appointed as Vice President of HORIBA STEC Co., Ltd.
- 2013 Appointed as HORIBA's Executive Vice President
- 2016 Appointed as HORIBA's Executive Vice President and Representative Director up to the present

Senior Managing Director

General Manager of Research & Development Division

Dr. Masayuki Adachi

- 1985 Joined HORIBA, Ltd. and held positions such as General Manager of Emission Analysis, Research & Development Division and General Manager of Engine Measurement System Management Division
- 2006 Appointed as HORIBA's Corporate Officer
- 2007 Appointed as President of HORIBA International Corporation (U.S.)
- 2014 Appointed as HORIBA's Director
- Appointed as President of HORIBA Jobin Yvon S.A.S. (France)
- 2016 Appointed as Chairman of supervisory board of HORIBA Jobin Yvon S.A.S. (France) up to the present
 - Appointed as HORIBA's Senior Managing Director up to the present

Managing Director, General Manager of General Administration Division, and Tokyo Branch Manager

Fumitoshi Sato

- 1976 Joined the Bank of Japan and held positions such as Aomori Branch Manager and Fukuoka Branch Manager
- 2004 Joined HORIBA, Ltd. and was appointed as Senior Corporate Officer
- 2005 Appointed as Managing Director up to the present

Director,

General Manager of Sales Division

Takashi Nagano

- 1985 Joined HORIBA, Ltd. and held positions such as General Manager of Engine Measurement Planning & Development Department, General Manager of Engine Measurement System Management Division and President of HORIBA Europe GmbH (Germany)
- 2005 Appointed as Corporate Officer
- 2013 Appointed as CEO of HORIBA Europe GmbH (Germany)
- 2014 Appointed as President of HORIBA KOREA Ltd. (South Korea)
- 2016 Appointed as Chairman of HORIBA KOREA Ltd. (South Korea) up to the present Appointed as HORIBA's Director up to the present

Director (Outside), Independent Director

Masahiro Sugita

- 1967 Joined the Bank of Japan and held positions such as Matsumoto Branch Manager and Director-General of the International Department
- 1998 Appointed Director of Overseas Investment Research
 - Institute, the Export-Import Bank of Japan
- 1999 Appointed as Auditor of the Bank of Japan
- 2003 Appointed as Outside Auditor (full-time) of Banyu Pharmaceutical Co., Ltd. (now MSD K.K.)
- 2006 Appointed as HORIBA's Outside Director up to the present
- 2010 Appointed as Auditor of MSD K.K. up to the present
- 2013 Appointed as Outside Director of 77 Bank Ltd. up to the present

Director (Outside), Independent Director

Jiko Higashifushimi

- 1966 Joined Saitama Bank (now Resona Bank, Limited)
- 1988 Appointed as Higashi-Kurume Branch Manager
- 1993 Entered Shorenin Religious Corporation and held a position as its Head Deacon
- 2003 Appointed as the Representative Presiding Director and Head Priest of the Shorenin Religious Corporation up to the present
- 2016 Appointed as HORIBA's Outside Director up to the present

Director (Outside), Independent Director

Dr. Sawako Takeuchi

- 1984 Visiting Researcher, Institute of Applied Mathematical and Economic Sciences, France
- 1988 Appointed as Deputy Director, Master of International Business (MIB) Graduate Program, Ecole Nationale des Ponts et Chaussées, France
- 1994 Appointed as Senior Researcher, Long-Term Credit Bank of Japan Research Institute of Japan
- 1998 Appointed as Assistant Professor, School of Engineering, University of Tokyo Graduate School
- 2002 Appointed as Professor, Faculty of Economics, Toyo University
- 2004 Appointed as Urban Development Sector (China Manager), Asia-Pacific Division, World Bank
- 2005 Appointed as Special Assistant to the Ministry of Foreign Affairs of Japan, and as Visiting Professor, Graduate School of Engineering, Kyoto University
- 2011 Appointed as Director, Japan Cultural Institute in Paris (Japan Foundation)
- 2016 Appointed as HORIBA's Outside Director up to the present

Corporate Auditor

Toshihiko Uno

- 1974 Joined HORIBA, Ltd. and held positions such as General Manager of Hardware Development and General Manager of Production Center
- 2002 Appointed as HORIBA's Corporate Officer
- 2004 Appointed as Senior Corporate Officer
- 2011 Resigned as Senior Corporate Officer
- 2012 Appointed as HORIBA's Corporate Auditor up to the present

Corporate Auditor (Outside), Independent Auditor

Kanji Ishizumi

- 1971 Joined the Ministry of International Trade and Industry
- 1975 Registered as Attorney at Law
- 1981 Appointed as representative partner of the Chiyoda Kokusai Law Offices up to the present
- 1995 Appointed as HORIBA's Corporate Auditor up to the present

Corporate Auditor (Outside), Independent Auditor

Keisuke Ishida

- 1978 Appointed as Representative Director and CEO, SHASHIN KAGAKU CO., LTD.
- 2000 Appointed as Representative Director, Chairman of the Board, CEO, SHASHIN KAGAKU CO., LTD. up to the present
- 2001 Appointed as Chairman of the Board, SK-Electronics Co., Ltd. up to the present
- 2005 Appointed as HORIBA's Corporate Auditor up to the present

Corporate officers (as of April 1, 2016)

Executive Corporate Officer

Dr. Jai Hakhu Chairman, President & CEO of HORIBA International

Corporation (U.S.)

Chairman of HORIBA Instruments Inc. (U.S.) President of HORIBA ABX S.A.S. (France)

Senior Corporate Officer

Sunao Kikkawa General Manager of Finance & Control Division Hideyuki Koishi President of HORIBA STEC Co., Ltd. (Japan)

Yuichi Muroga President of HORIBA Techno Service Co., Ltd. (Japan)

Dr. George Gillespie CEO of HORIBA MIRA, Ltd. (U.K.)

Corporate Officer

Hiroshi Kawamura President of HORIBA Europe Holding S.A.S. (France)

CEO of HORIBA Europe GmbH (Germany)

Atsushi Nakamine Division Manager of IT & BPR Center

Narihiro Oku Deputy General Manager of Research & Development

Division (Medical)

James Thepot President of HORIBA Jobin Yvon S.A.S. (France) **Christian Dubuc** Senior Director of HORIBA ABX S.A.S. (France)

Junior Corporate Officer

Seiji Usui Executive Managing Director of HORIBA STEC CO., Ltd.

Hiroo Chihara General Manager of Production Division

President of HORIBA Instruments (Shanghai) Co., Ltd. Tadao Nakamura

President of HORIBA (China) Trading Co., Ltd.

Tsukasa Satake Division Manager of Quality Management Center

Yasuo Yamashita Deputy General Manager of General Administration Division Kenichi Obori

Liaison for Academia and Government of Research &

Development Division

Hideyuki Nishibun Deputy General Manager of Sales Division (International

Sales)

Haruko Nozaki Principal of HORIBA COLLEGE, CSR

Yoshimasa Tanaka Deputy General Manager of Research & Development Division

President of HORIBA Advanced Techno Co., Ltd. Toshiya Higashino

With the aim of augmenting managerial capability, the General Meeting of Shareholders, held in March 2016, resolved to increase the number of outside directors from one to three and elect them.



Photo from left: Mr. Jiko Higashifushimi, Mr. Masahiro Sugita, and Dr. Sawako Takeuchi

Financial Data

		2006.3	2006.12	2007.12	2008.12	2009.12	
For the Year:							
Net sales		¥105,665	¥116,099	¥144,283	¥134,248	¥104,538	
Operating costs and exper	nses	94,390	104,392	127,753	123,290	99,394	
Operating income		11,275	11,707	16,530	10,958	5,144	
Net income		6,473	6,510	8,691	6,039	3,161	
Capital expenditures		5,664	5,059	9,336	6,645	4,534	
Depreciation and amortizat	ion	3,173	3,246	4,161	4,955	4,573	
Research and developmen	t expenses	6,553	6,136	9,474	10,662	9,831	
At Year-End:							
Total assets		¥119,976	¥129,236	¥154,367	¥133,279	¥129,580	
Cash and cash equivalents	3	14,884	15,673	20,565	22,660	27,590	
Trade notes and	Affiliated companies	-	-	-	63	6	
accounts receivable	Other	37,408	42,485	45,873	37,330	34,505	
Inventories		27,273	30,947	33,734	29,802	23,363	
Property, plant and equipment, net		20,223	21,700	24,071	23,115	23,602	
Trade notes and	Affiliated companies	45	44	53	40	52	
accounts payable	Other	13,017	14,917	16,792	11,063	10,515	
Liabilities with interest		13,866	16,224	25,177	20,984	18,348	
Shareholders' equity		65,446	72,371	80,377	76,829	79,906	
Share price at end of fiscal	period (¥)	3,690	4,400	4,100	1,237	2,250	
Number of employees (cor	nsolidated)	4,461	4,697	4,976	5,146	5,133	
Per Share Information:							
Net income - basic		¥154.27	¥154.23	¥205.01	¥142.76	¥74.77	
Net income - diluted		146.97	153.70	204.39	142.71	74.68	
Net assets		1,548.08	1,710.75	1,892.64	1,816.96	1,889.58	
Cash dividends		28.00	26.00	39.00	44.00	13.00	
Financial Ratios:							
Operating income to net sa	ales (%)	10.7	10.1	11.5	8.2	4.9	
Return on assets (%)		5.9	5.2	6.1	4.2	2.4	
Return on equity (%)		11.0	9.4	11.4	7.7	4.0	
Shareholders' equity ratio (%)	54.6	56.0	52.1	57.6	61.7	
Consolidated dividend pay	out ratio (%)	18.1	16.9	19.0	30.8	17.4	
Nonconsolidated dividend	payout ratio (%)	33.8	30.0	30.1	30.0	30.0	

Notes:

The stated amounts are rounded down to the nearest million yen from the year, ended December 31, 2009, but are rounded (up or down) to the nearest million yen prior to that year.

^{1.} The U.S. dollar amounts are provided solely for convenience at the rate of ¥120.61 to US\$1.00, the rate prevailing on December 31, 2015.

^{2.} Effective from the year ended December 31, 2006, HORIBA adopted the revised accounting standard for presentation of net assets in the balance sheet. The amounts in prior years have not been restated.

^{3.} For the year ended December 31, 2006, the accounting term for HORIBA, Ltd. and HORIBA Advanced Techno Co., Ltd. was only 9 months and 11 days and that for HORIBA STEC Co., Ltd. was only 9 months as a result of a change in the fiscal year-end to December 31.

2015.12	2015.12	2014.12	2013.12	2012.12	2011.12	2010.12
Thousands of U.S. dollars	Millions of yen					
\$1,416,947	¥170,898	¥153,065	¥138,136	¥117,609	¥123,456	¥118,556
1,256,330	151,526	135,851	124,402	105,857	108,549	106,256
160,616	19,372	17,214	13,733	11,751	14,906	12,299
106,807	12,882	10,589	8,999	7,396	8,664	7,927
135,220	16,309	11,001	7,680	7,882	4,670	4,033
50,659	6,110	4,905	4,279	3,743	4,146	4,523
102,321	12,341	11,986	10,774	10,092	10,060	9,480
Thousands of U.S. dollars	Millions of yen					
\$1,915,529	¥231,032	¥207,335	¥189,269	¥153,836	¥144,649	¥137,290
396,807	47,859	51,109	49,246	38,858	35,767	34,459
16	2	149	25	4	126	1
454,099	54,769	52,097	47,386	37,516	39,249	36,425
296,136	35,717	34,838	33,085	28,101	26,288	24,843
472,415	56,978	39,441	33,326	28,179	22,924	22,516
-	-	20	-	-	0	60
146,239	17,638	15,385	16,409	11,829	13,196	13,423
374,985	45,227	28,412	24,577	18,083	18,358	17,128
1,074,380	129,581	123,924	114,209	99,248	90,232	84,019
U.S. dollars 38.92	4,695	4,015	3,590	2,489	2,320	2,303
	6,831	5,965	5,787	5,530	5,448	5,202
U.S. dollars	Yen					
\$2.53	¥305.73	¥250.28	¥212.76	¥174.87	¥204.88	¥187.46
2.52	304.36	249.28	212.01	174.37	204.41	187.11
25.52	3,078.40	2,928.82	2,699.88	2,346.45	2,133.44	1,986.77
0.58	70.00	67.00	60.00	50.00	40.00	17.00
	11.3	11.2	9.9	10.0	12.1	10.4
	5.9	5.3	5.2	5.0	6.1	5.9
	10.2	8.9	8.4	7.8	9.9	9.7
	56.1	59.8	60.3	64.5	62.4	61.2
	22.9	26.8	28.2	28.6	19.5	9.1
	35.1	38.5	48.9	37.5	30.5	30.3

Computations:

Shareholders' equity = net assets - subscription rights to shares - minority interests

Net income per share (¥) = (net income - projected bonuses to directors and corporate auditors)* / (average number of shares issued and outstanding in the fiscal period, corrected for treasury stock)

Net assets per share (¥) = (shareholders' equity - projected bonuses to directors and corporate auditors)* / (number of shares issued and outstanding, corrected for treasury stock)

Operating income to net sales (%) = 100 x operating income / net sales

Return on assets (ROA, %) = 100 x net income / average total assets in prior fiscal period

Return on equity (ROE, %) = 100 x net income / average shareholders' equity in prior fiscal period

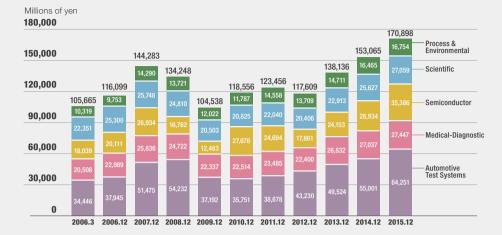
Shareholders' equity ratio (%) = 100 x shareholders' equity / total assets

Consolidated dividend payout ratio (%) = 100 x dividends paid / net income (consolidated)

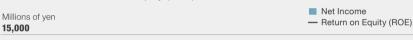
Nonconsolidated dividend payout ratio (%) = 100 x dividends paid / net income (nonconsolidated)

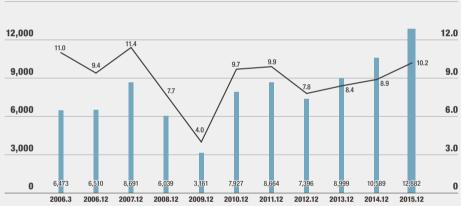
Eleven-Year Summary

Net Sales by Segment



In 2015, in addition to the positive impact from capital expenditures by semiconductor manufacturers, the yen's depreciation boosted overseas sales when translated in yen. The acquisition of MIRA, Ltd. (U.K.) also helped increase sales of the Automotive business. As a result, HORIBA posted its second consecutive year of record-high sales.



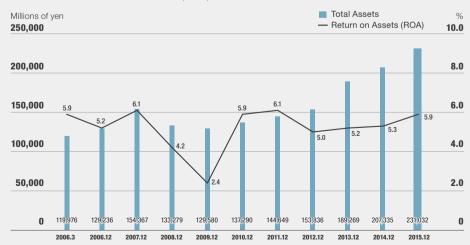


HORIBA posted record high net income in 2015 due to an increase in operating income and other reasons. The company also conducted a share buyback worth ¥999 million in March 2015. This resulted in ROE rising by 1.3 percentage points from a year ago to 10.2%.

15.0

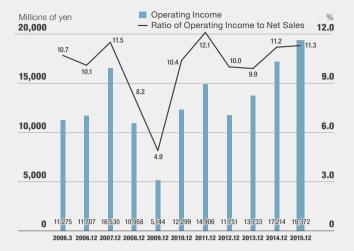
Total Assets and Return on Assets (ROA)

Net Income and Return on Equity (ROE)

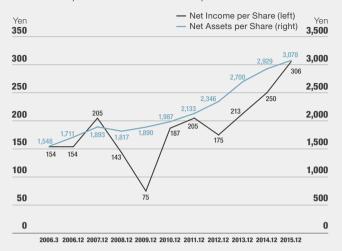


In 2015, HORIBA's assets increased mainly due to the acquisition of MIRA, Ltd. (U.K.) and a completion of its new facility HORIBA BIWAKO E-HARBOR in Japan. The record high net profit for the year contributed to an increase in ROA by 0.6 percentage points from a year ago.

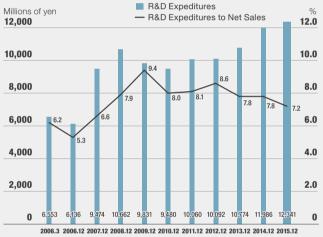
Operating Income and Ratio of Operating Income to Net Sales



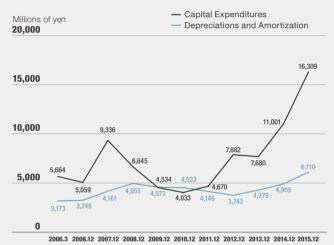
Net Income per Share and Net Assets per Share



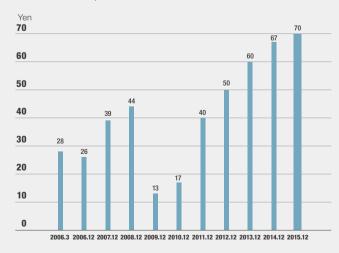
R&D Expenditures and R&D Expenditures to Net Sales



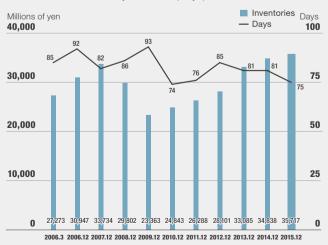
Capital Expenditures and Depreciations and Amortization



Cash Dividends per Share



Inventories and Inventory Turnover (Days)



HORIBA, Ltd. and Consolidated Subsidiaries | Consolidated Financial Review

With regard to the global economy in the fiscal year ended December 31, 2015, the United Stated continued its economicrecovery due to growth in private consumption and other factors on the back of an improved employment environment. In Europe, despite debt problems and geopolitical risks, a moderate economic recovery continued. Among emerging markets, Chinese economy decelerated moderately with weakness in fixed asset investment and exports. Southeast Asia experienced a slowdown in the economy due to influence of Chinese economic slowdown and the drop in commodity prices. In Brazil, the difficult economic conditions resulted in a currency depreciation and deteriorated the economy. In Japan, despite some signs of weakness, the economy continued its moderate recovery on the back of improved corporate earnings, with a continued recovery in corporate capital investment and a steady improvement in employment and wage environment.

The annual average exchange rates for 2015 were 121.10 yen against the U.S. dollar and 134.31 yen against the euro, representing year-on-year depreciation of 12.6% against the U.S. dollar and appreciation of 4.5% against the euro. In the analytical and measurement equipment industry, semiconductor-related investment remained at a high level throughout fiscal year 2015, and demand for semiconductor production equipment expanded. In the automotive industry as well, capital and R&D investment by domestic and overseas automakers continued its robust trend since fiscal year 2014. Moreover, in the background of rising awareness regarding exhaust gas emission regulations around the world and other factors, demand related to emission measurement systems showed a growth trend. In the scientific analysis equipment industry, demand for leading-edge scientific analysis equipment in China also grew.

Under such operating environment, HORIBA, Ltd. ("the Company") and its consolidated subsidiaries (together "the HORIBA Group" or "HORIBA" as a consolidated group), implemented several measures to strengthen each segment in current fiscal year.

In the Automotive Test Systems segment, sales of new mainstay emission measurement systems launched in 2013 increased steadily. As for MCT (Mechatronics) business, which was acquired from Carl Schenck AG (Germany) in 2005, HORIBA also succeeded in capturing demand in various countries beyond Europe, the base for development and production, which led to a substantial increase in sales. Furthermore, HORIBA acquired ECT* (the engineering and testing business related to automobile development in general)

business from MIRA Ltd. (U.K.) in 2015. Based on this initiative, HORIBA will take a step forward from the analysis and measurement field in the automobile development sector and promote expansion into business fields that include the development of next-generation mobility.

*ECT: Engineering Consultancy & Testing

In the Process & Environmental Instruments & Systems segment, HORIBA actively promoted opinion exchanges with local universities and other institutions in order to strengthen its proposal capability for analytical instruments and systems which cater for the reinforcement of environmental regulations in China and other Asian countries. Furthermore, in the process analytical product line which HORIBA acquired from the U.S. corporation Cameron in 2013, HORIBA pursued business expansion in the oil refining market, including shale gas and oil.

In the Medical-Diagnostic Instruments & Systems segment, the Company launched new hematology and C-Reactive Protein (CRP) analyzers, which boast high market share based on HORIBA's unique technology. In France, HORIBA completed a new development center aiming at accelerating product development speed.

In the Semiconductor Instruments & Systems segment, the HORIBA Advanced Technology Center in Kyoto, whose construction had began from 2013 with the aim of accelerating product development speed and enhancing the efficiency of production in semiconductor-related businesses, started operation in 2015.

The Scientific Instruments & Systems segment responded to the increasing demand for products such as Raman spectrometers in China.

Furthermore, in Japan, HORIBA has commenced the relocation to HORIBA BIWAKO E-HARBOR, a new Biwako factory in Shiga prefecture Japan. It had been under construction to reinforce development and production capabilities in the gas measurement field for the Automotive Test Systems segment and the Process & Environmental Instruments & Systems segment, and is under preparations for its full-scale operation in May 2016. The HORIBA Group also completed the global introduction of its new enterprise resource planning system (GEO System) aiming at speeding up its decision making and promoting common operational process, and has begun its operation in 85% of Group companies from January 2016.

As a result of such measures and sales efforts, both of consolidated net sales and profits increased from a year ago.

Net Sales

In the fiscal year ended December 31, 2015, consolidated net sales increased by ¥17,833 million, or 11.7%, year-on-year to ¥170,898 million. The average foreign exchange rate applied in book closings was ¥121.10 to the U.S. dollar, compared with ¥105.79 for the previous year, and ¥134.31 to the euro, compared with ¥140.35 for the previous year. Using the exchange rates for the previous year, consolidated sales for fiscal 2015 would have been ¥165,188 million. Thus, ¥5,710 million in increased sales can be attributed to the depreciation of the yen.

Cost of Sales, SG&A Expenses, and Operating Income

Consolidated cost of sales increased by ¥11,684 million to ¥99,568 million. The cost of sales ratio increased by 0.9 percentage points from a year ago to 58.3%, due mainly to, one-time expenses related to the acquisition of ECT business and the relocation to HORIBA BIWAKO E-HARBOR, which was completed in Shiga Prefecture, despite the yen's depreciation against the dollar.

Excluding ¥1,776 million from fluctuations in foreign exchange rates, however, the actual increase in cost was ¥9,907 million rather than the nominal increase of ¥11,684 million.

Selling, general and administrative (SG&A) expenses increased by ¥3,991 million from the previous year to ¥51,958 million. The ratio to net sales improved by 1.0 percentage points to 30.4%, due mainly to the yen's depreciation against the dollar and sales to semiconductor production equipment manufacturers surged. Excluding ¥1,136 million from fluctuations in foreign exchange rates, however, the actual increase in SG&A expenses was ¥2,855 million rather than the nominal increase of ¥3,991 million.

As a result, consolidated operating income increased by ¥2,157 million, or 12.5%, year-on-year to ¥19,372 million. The operating income ratio was 11.3%, up 0.1 percentage points from 11.2% for the previous year.

Business Segments

The operating results of each business segment are summarized as follows.

(Automotive Test Systems)

Along with an increase in capital and R&D investment by automakers, sales of emission measurement systems increased in Japan. In addition, sales in the Americas increased after conversion to yen because of the yen's depreciation against the dollar. Also, the acquisition of ECT business also increased sales. As a result, segment sales

increased by 16.8% year-on-year to 64,251 million yen. Segment operating profit, however, decreased by 23.7% to 4,448 million yen due in part to one-time expenses related to the acquisition of ECT business and the relocation to HORIBA BIWAKO E-HARBOR, a new Biwako factory, which was completed in Shiga Prefecture.

(Process & Environmental Instruments & Systems)

Sales of stack gas analyzers for power plants and factories were robust in Japan and China, while sales in the Americas increased after conversion to yen because of the yen's depreciation against the dollar. On the other hand, expenses associated with the relocation to HORIBA BIWAKO E-HARBOR, a new Biwako factory, incurred. As a result, segment sales increased by 1.8% year-on-year to 16,754 million yen while operating income decreased by 11.6% to 1,773 million yen.

(Medical-Diagnostic Instruments & Systems)

The yen's appreciation against the euro resulted in a decrease in the amount of European sales expressed in yen.

However, sales of the hematology and C-Reactive Protein (CRP) analyzers, which were launched in March 2015 in Japan, were favorable. As a result, segment sales increased by 1.5% year-on-year to 27,447 million yen and operating income rose by 39.9% to 2,403 million yen.

(Semiconductor Instruments & Systems)

Due to high level of capital investment by semiconductor manufacturers, sales to semiconductor production equipment manufacturers surged. As a result, segment sales increased by 22.3% year-on-year to 35,386 million yen and operating income rose by 46.2% to 9,439 million yen.

(Scientific Instruments & Systems)

Sales of instruments and systems for R&D applications to universities and other institutions in China were robust and the yen's depreciation against the dollar resulted in an increase in sales in the Americas in yen terms. Consequently, segment sales rose by 5.6% year-on-year to 27,059 million yen and operating income rose by 8.4% to 1,307 million yen.

Net Income

Other income (expenses) resulted in decreasing its expenses by ¥591 million from fiscal 2014 mainly due to absence of the equity in losses of affiliates, which was recorded in fiscal 2014. In fiscal 2015, other income (expenses) resulted in loss of ¥358 million. This result was mainly because HORIBA posted interest

HORIBA, Ltd. and Consolidated Subsidiaries | Consolidated Financial Review

expense and foreign exchange losses, despite posting of reversal of provision for loss on dissolution of the employees' pension fund and, interest and dividend income. Nevertheless, because of the increase in operating income, income before income taxes and minority interests increased by ¥2,748 million, or 16.9%, to ¥19,013 million, and net income increased by ¥2,293 million, or 21.7%, to ¥12,882 million.

Financial Position

As of December 31, 2015, total consolidated assets were \$\frac{2}{2}31,032\$ million, up \$\frac{2}{3},697\$ million from December 31, 2014. The main factor contributing to the increase of total assets was an increase in property, plant and equipment of \$\frac{2}{1}7,536\$ million due to the acquisition of the ECT business in July 2015. Total consolidated liabilities increased by \$\frac{2}{1}7,961\$ million from the previous year to \$\frac{2}{1}00,982\$ million. The increase in total liabilities was due mainly to an increase of \$\frac{2}{1}4,616\$ million in long-term debt due to funding for the acquisition of the ECT business. Total consolidated net assets amounted to \$\frac{2}{1}30,050\$ million, up \$\frac{2}{5},735\$ million from a year ago, due mainly to an increase of \$\frac{2}{9},836\$ million in retained earnings, despite a decrease of \$\frac{2}{3},793\$ million in foreign currency translation adjustments due mainly to the appreciation of the yen against the euro.

Cash Flows

(Cash Flow from Operating Activities)

Net cash provided by operating activities amounted to ¥14,770 million, compared to ¥11,455 million provided in the previous year. Factors contributing to this amount included posting of income before tax and depreciation and amortization expense.

(Cash Flow from Investing Activities)

Net cash used in investment activities amounted to ¥30,642 million, compared to ¥9,875 million used in the previous year, due mainly to payments for transfer of business in the ECT business and payments for purchases of property, plant and equipment, such as construction of HORIBA BIWAKO E-HARBOR, a new Biwako factory.

(Cash Flow from Financing Activities)

Net cash provided by financing activities amounted to ¥12,843 million, compared to ¥273 million used in the previous year. This was mainly attributable to an increase of long-term debt, despite an increase of a total shareholder return combined with the amounts of dividend payments and share repurchase from a year earlier.

As a result, there was a net decrease of ¥3,250 million in cash and

cash equivalents to ¥47,859 million as of December 31, 2015.

Dividend Policy

The Company believes that the distribution of profits to shareholders is one of its priority issues while giving due consideration to ensuring a stable management base and internal reserves for business expansion. The basic policy regarding profit returns to shareholders is to maintain a total shareholder return ratio of around 30% of consolidated net income, combined with the amount of dividend payments and the amount of share buyback. In addition, the Company will appropriate internal reserves as basic funds for working capital for business expansion, capital expenditure, investment in research and development, and the reinforcement of the financial strength, making returns to shareholders through the development of businesses for the future.

Major Risks

1. Business Risks

(1) Risks Associated with International Business Activities HORIBA conducts business activities in many countries around the world, including the U.S. and countries in Europe and Asia. Major risks associated with the entry into these overseas markets and conducting business there include sudden shifts in economic conditions or in product supply and demand, sudden changes in retail prices due to competition, changes in laws, regulations and tax systems and social disruptions such as terrorism and war. These risks could affect HORIBA's financial position and business results. To protect against fluctuations in foreign currency exchange rates, HORIBA promotes local production and supply. HORIBA also employs foreign exchange forward contracts within the limits of its transaction amounts of foreign currency denominated receivables and payables to import and export transactions to minimize foreign exchange risks. However, fluctuations in foreign exchange rates could still have an impact when financial statements prepared in local currencies are translated into Japanese yen for the consolidated financial statements, and a major change in foreign exchange rates beyond our estimates could affect our financial condition and business performance.

(2) Changes in Performance or Financial Position Associated with Acquisitions and Alliances

HORIBA has actively promoted corporate acquisitions and alliances to enhance the efficiency and effectiveness of its business operations. HORIBA conducts complete and diligent investigations when making acquisitions and forming alliances

in order to avoid any negative impact on earnings and cash flows. However, it is possible that HORIBA's financial condition and business performance could be affected if an acquisition or alliance did not proceed in accordance with initial plans.

(3) Repair of Facilities Following Natural Disasters and Associated Delays in Delivery, etc.

The HORIBA Group's manufacturing bases are located in diverse areas, including Japan (Kyoto, Shiga and Kumamoto Prefectures), Europe (France, Germany and the Czech Republic), Americas (the U.S. and Brazil) and Asia (China, South Korea and India). However, it is possible that HORIBA's financial condition and business performance could be affected in the case of a major earthquake or other natural disasters, as HORIBA's manufacturing facilities could be damaged and require expensive repairs or an interruption to HORIBA's supply chain could affect HORIBA's production and/ or distribution.

(4) Risks Associated with Contracts and Transactions

HORIBA enters into various contracts with customers, suppliers and other stakeholders and conducts its business activities based on these contracts. Nevertheless, there is a possibility of claims for damages arising from different views of performance or different understandings of business terms between parties. It is possible that such circumstances could result in HORIBA facing a claim for compensation.

(5) Other Business Risks

In addition to the above-mentioned risks, other risks include a risk of breakdown or malfunction of information systems, threats related to information security and risks associated with laws and regulations imposed on businesses. HORIBA is taking preventive measures against these risks but they could affect HORIBA's financial position and business results.

2. Risks Associated with Development and Production

(1) Compensation for Product Liability

HORIBA conducts optimum quality control for its products and services and strives to maintain the highest standards of reliability. Nevertheless, there is always the possibility of recalls or litigation arising from unforeseen defects. HORIBA carries insurance for product liability, but there can be no guarantee that this insurance would cover the full amount of any unforeseen damages. Such circumstances could have an affect on HORIBA's financial condition and business performance.

(2) Delays in Development of New Products

The measuring instruments business in which HORIBA operates is extremely specialized and requires high levels of technical capability. HORIBA, therefore, invests large sums in product development. However, it is possible that expected returns of this investment will not be realized due to unforeseen circumstances.

(3) Risks Concerning Intellectual Property Rights

HORIBA possesses a wide range of intellectual property rights related to the products it manufactures, including patents, trademarks and expertise, which give it superiority in terms of competitiveness. HORIBA exercises all possible caution regarding the management and protection of these intellectual property rights. However, in the case of infringement by a third party, it is possible that HORIBA will be unable to attain its expected earnings. There is also a possibility of disputes over intellectual property rights with other companies. Such disputes could significantly affect HORIBA's financial condition and business performance.

(4) Risks Associated with Fluctuations in Raw Material Prices

HORIBA takes into account the risk of fluctuations in purchasing prices and makes arrangements such as advance purchasing to manage this risk when it is deemed necessary. However, it may require some time for an increase in purchasing prices to be passed on and reflected in selling prices. Such circumstances could significantly affect HORIBA's financial condition and business performance.

3. Financial Risks

(1) Impairment Loss on Securities

Based on an overall consideration of business strategy, enhancement of relations with business partners, and maintenance of good relationship with communities, HORIBA holds securities in order to raise its medium- to long-term corporate value. Each year, HORIBA's Board of Directors reviews and evaluates its investments by comprehensively taking into account the investment amount, potential gains associated with the holding of securities, and other factors. If the market value of securities held by HORIBA declines, there is a possibility that an impairment loss on the relevant securities will be recorded and that HORIBA's financial condition and business performance will be negatively affected.

HORIBA, Ltd. and Consolidated Subsidiaries | Consolidated Financial Review

(2) Impairment Loss on Fixed Assets

If the market value of land, buildings, or other assets held by HORIBA declines significantly or segment losses were generated for two consecutive fiscal years in the future, there is a possibility that an impairment loss will be recorded and that HORIBA's financial condition and business performance will be negatively affected.

(3) Reversal of Deferred Tax Assets Resulting From Changes in Systems or Accounting Policies

It is possible that changes in systems or accounting policies (e.g., reductions in tax rates) could require HORIBA to reverse its deferred tax assets at the end of the fiscal year.

(4) Dissolution of Employees' Pension Fund

The Kyoto Machinery and Metal Employees' Pension Fund (general type), of which the Company and a domestic consolidated subsidiary are members, resolved to adopt Japanese government policy to carry out a special dissolution at the representative assembly. Accordingly, HORIBA posted an estimated loss in association with the dissolution as "Provision for loss on dissolution of the employees' pension fund". However, it expects to be approved for dissolution in early 2018. It is possible that an estimated loss will change, due to changes in the operating environment for the Fund, and in case of such as voluntary withdrawals, closures and bankruptcies of the Fund members other than HORIBA.

4. Risks by Business Segment

HORIBA operates in five business segments: Automotive Test Systems, Process & Environmental Instruments & Systems, Medical-Diagnostic Instruments & Systems, Semiconductor Instruments & Systems and Scientific Instruments & Systems. HORIBA can achieve balanced growth by overcoming each segment's weakness with complementary strengths among all the business segments. Nevertheless, each business segment carries risks associated with fluctuations in its respective operations.

(1) Automotive Test Systems

Emission measurement systems, the main products of the Automotive Test Systems segment, are used by automobile manufacturers, automotive component manufacturers and government agencies. The setting of legal limits on exhaust emissions affects the demand for these measurement systems. It is possible, therefore, that the financial condition and business performance of HORIBA will be significantly

affected by future regulations. Furthermore, capital expenditures related to shifts in the automation of automotive test systems could have a significant impact on HORIBA's financial condition and business performance. In addition, HORIBA holds a large amount of fixed assets in the ECT business. If the capacity utilization rate of the fixed assets declines, due to automobile manufacturers' R&D trends and other factors, this could have a significant impact on HORIBA's financial condition and business performance.

(2) Process & Environmental Instruments & Systems

Demand for environmental-related products such as analyzers for air pollution and water quality may be affected by changes in environmental regulations. Changes in the demand for these products could have a significant impact on HORIBA Group's financial condition and business performance.

(3) Medical-Diagnostic Instruments & Systems

The main products in the Medical-Diagnostic Instruments & Systems segment are hematology analyzers, which are smalland medium-sized equipment used by small- and medium-sized hospitals and medical practitioners, the target market. Price competition for these products that is beyond our expectations could have a significant impact on HORIBA's financial condition and business performance.

(4) Semiconductor Instruments & Systems

The main products in this segment are fluid control products for semiconductor manufacturing processes and products that support R&D and quality testing by semiconductor manufacturers. To minimize fluctuations in the semiconductor market, HORIBA makes efforts to shorten the lead time for these products and quickly respond to customers' needs. Nevertheless, sharp fluctuations in the demand for semiconductors and the investment of semiconductor manufacturers could affect the financial condition and business performance of HORIBA.

(5) Scientific Instruments & Systems

Scientific analysis instruments are the main products of the Scientific Instruments & Systems segment and are used for R&D and product quality testing. There is a risk that the demand for these products could be affected by the R&D budgets of government agencies and the R&D investment and production of private enterprises and have a significant impact on HORIBA Group's financial condition and business performance.

Consolidated Balance Sheets

HORIBA, Ltd. and Consolidated Subsidiaries Thousands of For the years ended December 31, 2014 and December 31, 2015 U.S. dollars (Note 1) yen 12/2015 12/2015 **ASSETS** Current assets: ¥47,859 \$396,807 Cash and cash equivalents...... ¥51,109 Trade notes and accounts receivable (Note 4,7) Affiliated companies..... 16 454,099 (6,541) 54,769 Other 52 097 (789) Allowance for doubtful receivables..... (1.023)11,698 1.411 Marketable securities (Note 4.5) 2 102 35.717 Inventories (Note 6) 34 838 296.136 33,173 Deferred tax assets (Note 15)..... 3,635 4,001 Other current assets..... 6,772 8,042 66,677 151,015 1,252,093 Total current assets..... Property, plant and equipment (Note 18): Land (Note 8).. 9 908 10,647 88,276 Buildings and structures.... 31,321 46,321 384,056 17.939 148,735 Machinery, equipment and vehicles (Note 8)..... 16.619 4 739 39 291 Construction in progress..... 3817 139,524 15.702 16.828 Other property, plant and equipment..... 77.369 96,476 799.900 Total Accumulated depreciation.... (39,497) (327,476)56,978 472,415 Net property, plant and equipment..... Investments and other noncurrent assets: Investment securities (Note 4,5)..... 7.069 8,265 68,526 Investments in nonconsolidated subsidiaries and affiliates...... 69 572 1 993 13,854 Deferred tax assets (Note 15) 1.671 Net defined benefit asset (Note 9)..... (50) (414) Allowance for doubtful accounts..... (44)Other investments and other assets..... 23,074 2.785 2,783 105,621 Total.... 12.739 Intangibles: Goodwill (Note 18)..... 418 576 4,775 4,134 4,851 40,220 Software... Other intangibles..... 40,378 85,382 1.801 4.870 10 298 Total 6.353 ¥231,032 ¥207,335 \$1,915,529 Total assets... LIABILITIES AND NET ASSETS Current liabilities: Short-term loans (Note 4,8)..... ¥9,888 ¥12,225 \$101,359 Current portion of long-term debt (Note 4,8)..... 848 7,030 Trade notes and accounts payable (Note 4) Affiliated companies..... 20 15 385 17 638 146 239 Other.. Accounts payable - other (Note 4)..... 122.601 14.457 14.787 31,473 Accrued income taxes (Note 4)..... 5.220 3.796 Deferred tax liabilities (Note 15)..... 754 88 7,860 Accrued bonuses to employees...... Accrued bonuses to directors and corporate auditors..... 63 522 1,525 1,605 13,307 Reserve for product warranty..... Other current liabilities... 10.340 10.422 86,410 Total current liabilities...... 59 003 62,429 517.610 Long-term liabilities: Long-term debt (Note 4,8) 17 419 32.153 266.586 Deferred tax liabilities (Note 15)..... 1,181 9,791 174 2,264 1.947 16,142 Net defined benefit liability (Note 9)..... 1,267 10,504 Provision for loss on dissolution of the employees' pension fund (Note 9)...... 1,870 Other noncurrent liabilities... 2,287 2,002 16,598 Total long-term liabilities...... 24 017 38.552 319,641 Total liabilities. 83.020 100,982 837,260 Contingent liabilities (Note 13) Net assets (Note 10): Shareholders' equity: 12,011 12,011 99,585 Common stock. Authorized - 100,000,000 shares Issued and outstanding - 42,312,201 shares (excluding treasury stock) at 12/2014 Issued and outstanding - 42,093,731 shares (excluding treasury stock) at 12/2015 18,717 18,717 155,186 Retained earnings. 86.218 96,055 796,409 Treasury stock - 220,551 shares at 12/2014 and 439,021 shares at 12/2015.... (730)(1.730)(14,343)Total shareholders' equity..... 125.053 1.036.837 116 216 Accumulated other comprehensive income: Unrealized gains (losses) on available-for-sale securities..... 2,041 2.624 21,756 Deferred gains or losses on hedges (Note 14)..... (0) (0) 18 5,630 1,836 15,222 Foreign currency translation adjustments..... 547 Remeasurements of defined benefit plans (Note 9)...... 66 7 707 4 527 37.534 Total accumulated other comprehensive income...... Subscription rights to shares (Note 11).... 389 469 3,888 Minority interests in consolidated subsidiaries.... 0 0 0

See the notes to the consolidated financial statements.

Total net assets...

Total liabilities and net assets...

130.050

¥231.032

124 314

¥207,335

1.078.268

\$1,915,529

Consolidated Statements of Income

For the years ended December 31, 2014 and December 31, 2015		_	Thousands of U.S. dollars
	Millions o	12/2015	(Note 1) 12/2015
	12/2014	12/ 2013	12/2013
Net sales (Note 18)	¥153,065	¥170,898	\$1,416,947
Operating costs and expenses (Note 18): Cost of sales	87,884	99,568	825,536
Selling, general and administrative expenses		51,958	430,793
Total operating costs and expenses		151,526	1,256,330
Operating income (Note 18)	17,214	19,372	160,616
Other income (expenses):			
Interest and dividend income	337	420	3,482
Interest expense		(816)	(6,765)
Foreign exchange gains (losses), net		(328)	(2,719
Gain on sales of property, plant and equipment		8	66
Loss on sales of property, plant and equipment		(13)	(107
Loss on disposal of property, plant and equipment		(10)	(82
Impairment loss (Note 16,18)		(170)	(1,409)
Gain on sales of investment securities (Note 5)		44	364
Loss on sales of shares of subsidiaries and associates Equity in losses of affiliates		_	
Subsidy income		160	1.326
Reversal of provision for compensation losses		2	1,020
Provision for loss on dissolution of the employees' pension fund		-	
Reversal of provision for loss on dissolution of the employees' pension fund	. , .	439	3,639
Business structure improvement expenses		(135)	(1,119
Other, net		41	339
Total other expenses, net		(358)	(2,968
ncome before income taxes and minority interests	16,265	19,013	157,640
ncome taxes (Note 15):			
Current	6,662	6,013	49,854
Deferred	(985)	117	970
Total income taxes	5,676	6,131	50,833
ncome before minority interests	10,588	12,882	106,807
Minority interests in earnings (losses) of consolidated subsidiaries	(0)	_	-
Net income	¥10.589	¥12,882	\$106,807
			U.S. dollars
	12/2014	12/2015	(Note 1) 12/2015
Per share information:			(Note 1)
Per share information: Net income – basic	12/2014	12/2015	(Note 1) 12/2015
Net income - basic	12/2014 ¥250.28		(Note 1) 12/2015 \$2.53
	12/2014 ¥250.28	12/2015 ¥305.73	(Note 1) 12/2015 \$2.53 2.52
Net income - basic	12/2014 ¥250.28 249.28	12/2015 ¥305.73 304.36	(Note 1) 12/2015
Net income - basic	12/2014 ¥250.28 249.28	12/2015 ¥305.73 304.36	(Note 1) 12/2015 \$2.53 2.52 0.58
Net income - basic	12/2014 ¥250.28 249.28	12/2015 ¥305.73 304.36	(Note 1) 12/2015 \$2.53 2.52 0.58
Net income – basic	12/2014 ¥250.28 249.28	¥305.73 304.36 70.00	(Note 1) 12/2015 \$2.53 2.52
Net income - basic	12/2014 ¥250.28 249.28 67.00	¥305.73 304.36 70.00	(Note 1) 12/2015 \$2.53 2.52 0.58 Thousands of U.S. dollars
Net income - basic	12/2014 ¥250.28 249.28 67.00	¥305.73 304.36 70.00	(Note 1) 12/2015 \$2.53 2.52 0.58 Thousands of U.S. dollars (Note 1)
Net income - basic	12/2014 ¥250.28 249.28 67.00 Millions of 12/2014 ¥10,588	12/2015 ¥305.73 304.36 70.00 of yen 12/2015 ¥12,882	(Note 1) 12/2015 \$2.53 2.52 0.58 Thousands of U.S. dollars (Note 1) 12/2015 \$106,807
Net income – basic	12/2014 \$250.28 249.28 67.00 Millions of 12/2014 \$10,588 (254)	12/2015 ¥305.73 304.36 70.00 of yen 12/2015 ¥12,882 582	(Note 1) 12/2015 \$2.53 2.52 0.58 Thousands of U.S. dollars (Note 1) 12/2015 \$106,807
Net income – basic Net income – diluted	12/2014 ¥250.28 249.28 67.00 Millions of 12/2014 ¥10,588 (254) 15	12/2015 ¥305.73 304.36 70.00 of yen 12/2015 ¥12,882 582 (19)	(Note 1) 12/2015 \$2.53 2.52 0.58 Thousands of U.S. dollars (Note 1) 12/2015 \$106,807
Net income – basic	Millions of 12/2014 Millions of 12/2014 ***********************************	12/2015 ¥305.73 304.36 70.00 of yen 12/2015 ¥12,882 (19) (3,793)	(Note 1) 12/2015 \$2.53 2.52 0.58 Thousands o U.S. dollars (Note 1) 12/2015 \$106,807 4,825 (157 (31,448
Net income - basic	12/2014	12/2015 ¥305.73 304.36 70.00 of yen 12/2015 ¥12,882 582 (19)	(Note 1) 12/2015 \$2.53 2.52 0.58 Thousands o U.S. dollars (Note 1) 12/2015 \$106,807 4,825 (157 (31,448
Net income – basic	12/2014 ¥250.28 249.28 67.00 Millions of 12/2014 ¥10,588 (254) 15 2,132 29	12/2015 ¥305.73 304.36 70.00 of yen 12/2015 ¥12,882 (19) (3,793) 50	(Note 1) 12/2015 \$2.53 2.52 0.58 Thousands o U.S. dollars (Note 1) 12/2015 \$106,807 4,825 (157 (31,448 414
Net income – basic	12/2014 ¥250.28 249.28 67.00 Millions of 12/2014 ¥10,588 (254) 15 2,132 29 29	12/2015 ¥305.73 304.36 70.00 of yen 12/2015 ¥12,882 (19) (3,793) 50 - (3,180)	(Note 1) 12/2015 \$2.53 2.52 0.58 Thousands o U.S. dollars (Note 1) 12/2015 \$106,807 4,825 (157 (31,448 414
Net income – basic	12/2014 ¥250.28 249.28 67.00 Millions of 12/2014 ¥10,588 (254) 15 2,132 29 29	12/2015 ¥305.73 304.36 70.00 of yen 12/2015 ¥12,882 (19) (3,793) 50	(Note 1) 12/2015 \$2.53 2.52 0.58 Thousands of U.S. dollars (Note 1) 12/2015 \$106,807 4,825 (157 (31,448,414
Net income – basic Net income – diluted Cash dividends Consolidated Statements of Comprehensive Income HORIBA, Ltd. and Consolidated Subsidiaries For the years ended December 31, 2014 and December 31, 2015 Income before minority interests Other comprehensive income (Note 17) Unrealized gains (losses) on available—for—sale securities Deferred gains or losses on hedges Foreign currency translation adjustments Remeasurements of defined benefit plans Share of other comprehensive income of affiliates accounted for using equity method	12/2014	12/2015 ¥305.73 304.36 70.00 of yen 12/2015 ¥12,882 (19) (3,793) 50 - (3,180)	(Note 1) 12/2015 \$2.53 2.52 0.58 Thousands of U.S. dollars (Note 1) 12/2015 \$106,807 4,825 (157 (31,448,414

See the notes to the consolidated financial statements.

Consolidated Statements of Changes in Net Assets

HORIBA, Ltd. and Consolidated Subsidiaries			Thousands of
For the years ended December 31, 2014 and December 31, 2015	Millions	of yen	U.S. dollars (Note 1)
Shareholders' equity	12/2014	12/2015	12/2015
Common stock			
Balance at beginning of current fiscal year Balance at end of current fiscal year.		¥12,011 ¥12.011	\$99,585 \$99,585
·		,	***************************************
Capital surplus Balance at beginning of current fiscal year	¥18.717	¥18.717	\$155,186
Balance at end of current fiscal year		¥18,717	\$155,186
Retained earnings			
Balance at beginning of current fiscal year		¥86,218	\$714,849
Cumulative effects of changes in accounting policies Beginning balance after reflection of changes in accounting policies		(90) ¥86,128	(746) \$714,103
Changes in items during the period:		·	
Cash dividends		(2,955) 12,882	(24,500) 106,807
Disposal of treasury stock	(13)	<u> </u>	
Total		9,926 ¥96,055	82,298 \$796,409
Treasury stock Balance at beginning of current fiscal year	(¥765)	(¥730)	(\$6,052)
Changes in items during the period:			
Purchase of treasury stock		(999)	(8,282)
Total		(999)	(8,282)
Balance at end of current fiscal year	(¥730)	(¥1,730)	(\$14,343)
Shareholders' equity, total			
Balance at beginning of current fiscal year Cumulative effects of changes in accounting policies		¥116,216 (90)	\$963,568 (746)
Beginning balance after reflection of changes in accounting policies		¥116,126	\$962,822
Changes in items during the period: Cash dividends	(2,834)	(2.955)	(24,500)
Net income	10,589	12,882	106,807
Purchase of treasury stock		(999)	(8,282)
Total	7,775	8,926	74,007
Balance at end of current fiscal year	¥116,216	¥125,053	\$1,036,837
Accumulated other comprehensive income			
Unrealized gains (losses) on available-for-sale securities Balance at beginning of current fiscal year	¥2,296	¥2,041	\$16,922
Changes in items during the period:	+2,200	72,071	₩10,522
Net changes in items other than shareholders' equity Total		582 582	4,825 4,825
Balance at end of current fiscal year		¥2,624	\$21,756
Deferred gains or losses on hedges			
Balance at beginning of current fiscal year	¥3	¥18	\$149
Changes in items during the period: Net changes in items other than shareholders' equity		(19)	(157)
Total		(19)	(157)
Balance at end of current fiscal year	¥18	(¥0)	(\$0)
Foreign currency translation adjustments			
Balance at beginning of current fiscal year	¥3,468	¥5,630	\$46,679
Net changes in items other than shareholders' equity	2,161	(3,793)	(31,448)
TotalBalance at end of current fiscal year.		(3,793) ¥1,836	(31,448) \$15,222
	<u>+3,030</u>	Ŧ1,030	#10,222
Remeasurements of defined benefit plans	_	¥16	\$132
Balance at beginning of current fiscal year Changes in items during the period:		710	♦132
Net changes in items other than shareholders' equity		50	414
TotalBalance at end of current fiscal year		¥66	\$547
A		,	
Accumulated other comprehensive income, total Balance at beginning of current fiscal year	¥5,768	¥7,707	\$63,900
Changes in items during the period:	4 000	(0.400)	(00.005)
Net changes in items other than shareholders' equity Total		(3,180)	(26,365)
Balance at end of current fiscal year	¥7,707	¥4,527	\$37,534
Subscription rights to shares			
Balance at beginning of current fiscal year	¥335	¥389	\$3,225
Changes in items during the period: Net changes in items other than shareholders' equity	53	79	655
Total	53	79	655
Balance at end of current fiscal year	¥389	¥469	\$3,888
Minority interests in consolidated subsidiaries			
Balance at beginning of current fiscal year	¥0	¥0	\$0
Net changes in items other than shareholders' equity	(0)	(0)	(0)
TotalBalance at end of current fiscal year		(0) ¥0	(0) \$0
Datalice at ellu oi current liscal year			
Net assets, total	V114 F4F	¥124.314	\$1,030,710
Balance at beginning of current fiscal year Cumulative effects of changes in accounting policies		(90)	(746)
Beginning balance after reflection of changes in accounting policies		¥124,224	\$1,029,964
Changes in items during the period: Cash dividends	(2,834)	(2,955)	(24,500)
Net income		12,882	106,807
Purchase of treasury stock		(999)	(8,282)
Net changes in items other than shareholders' equity	1,992	(3,100)	(25,702)
Palance at end of current fiscal year		¥5,826 ¥130,050	\$48,304 \$1,078,268

See the notes to the consolidated financial statements.

Consolidated Statements of Cash Flows

HORIBA, Ltd. and Consolidated Subsidiaries

For the years ended December 31, 2014 and December 31, 2015

Thousands of U.S. dollars

	Millions of yen		(Note 1)	
	12/2014	12/2015	12/2015	
ash flows from operating activities:				
Income before income taxes and minority interests	¥16.265	¥19,013	\$157,640	
Adjustments to reconcile income before income taxes and minority interests to net cash provided by operating activities:	,			
Depreciation and amortization	4,905	6,110	50,659	
Impairment loss	42	170	1,409	
Increase (decrease) in allowance for doubtful receivables	68	(243)	(2,014)	
Increase (decrease) in net defined benefit liability	(214)	(302)	(2,503)	
Increase (decrease) in provision for loss on dissolution of the employees' pension fund	1,870	(603)	(4,999)	
Interest and dividend income	(337)	(420)	(3,482)	
Interest expense	545	816	6,765	
Foreign exchange losses (gains)	(237)	(106)	(878)	
Loss (gain) on sales of property, plant and equipment	(9)	5	41	
Loss on disposal of property, plant and equipment	110	10	82	
Loss (gain) on sales of investment securities.	(1,804)	(44)	(364)	
Decrease (increase) in trade notes and accounts receivable	(2,718)	(2,286)	(18,953)	
Decrease (increase) in inventories	12	(1,515)	(12,561)	
Increase (decrease) in trade notes and accounts payable	(1,943)	2,078	17,229	
Other, net	514	161	1,334	
Subtotal	17,069	22,844	189,403	
Interest and dividends received	346	423	3,507	
Interest paid.	(538)	(814)	(6,749)	
Income taxes (paid) refund.	(5,422)	(7,682)	(63,692)	
Net cash provided by (used in) operating activities	11,455	14,770	122,460	
sh flows from investing activities:				
Increase in time deposits	(2,843)	(3,204)	(26,564)	
Decrease in time deposits.	2.988	2.964	24.575	
Decrease in time deposits restricted for use	32	32	265	
Payments for purchase of marketable securities.	(3,008)	(1,702)	(14,111)	
Proceeds from sales or redemption of marketable securities	2,706	2,504	20,761	
Payments for purchase of property, plant and equipment	(7.806)	(15,671)	(129,931)	
Proceeds from sales of property, plant and equipment	85	68	563	
Payments for purchase of intangibles	(1.846)	(1,442)	(11,955)	
Payments for purchase of investment securities	(1.859)	(620)	(5.140)	
Proceeds from sales or redemption of investment securities	2.184	83	688	
Proceeds from sales of stocks of subsidiaries and affiliates	1	-	_	
Payments for transfer of business (Note 22).	(658)	(13,610)	(112,843)	
Other, net	149	(42)	(348)	
Net cash provided by (used in) investing activities	(9,875)	(30,642)	(254,058)	
ash flows from financing activities:				
Net increase (decrease) in short-term borrowings	3.294	2.380	19,733	
Increase in long-term debt.	269	15.388	127.584	
Repayments of long-term debt.	(803)	(826)	(6,848)	
Repayments on finance lease obligations	(200)	(170)	(1,409)	
Net decrease (increase) of treasury stock	(0)	(999)	(8,282)	
Cash dividends paid.	(2,833)	(2,928)	(24,276)	
Net cash provided by (used in) financing activities	(273)	12,843	106,483	
-		(000)	/F F653	
ffect of exchange rate changes on cash and cash equivalents	556	(668)	(5,538)	
et increase (decrease) in cash and cash equivalents	1,863	(3,697)	(30,652)	
ash and cash equivalents at beginning of year	49,246	51,109	423,754	
ncrease (decrease) in cash and cash equivalents resulting from change of scope of consolidation	-	446	3,697	
Sash and cash equivalents at end of year	¥51,109	¥47,859	\$396,807	

See the notes to the consolidated financial statements.

1. Basis of presenting consolidated financial statements

The accompanying consolidated financial statements of HORIBA,Ltd. ("the Company") have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Law and its related accounting regulations and in conformity with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to application and disclosure requirements from International Financial Reporting Standards.

The accounts of the consolidated overseas subsidiaries have been prepared in accordance with either International Financial Reporting Standards or U.S. generally accepted accounting principles, with adjustments for the five specified items as applicable. The accompanying consolidated financial statements have been restructured and translated into English, with some expanded descriptions, from the consolidated financial statements of the Company prepared in accordance with Japanese GAAP and filed with the appropriate Local Finance Bureau of the Ministry of Finance as required by the Japanese Financial Instruments and Exchange Law. Some supplementary information included in the statutory Japanese language consolidated financial statements, but not required for fair presentation, is not presented in the accompanying consolidated financial statements.

Yen amounts are rounded down to the nearest million.

Therefore, total or subtotal amounts do not necessarily correspond with the aggregate of such account balances.

The translation of the Japanese yen amounts into U.S. dollar amounts is included solely for the convenience of readers outside Japan, using the prevailing exchange rate at December 31, 2015, which was ¥120.61 to U.S. \$1.00. The translations should not be construed as representations that the Japanese yen amounts have been, could have been or could in the future be converted into U.S. dollars at this or any other rate of exchange. The U.S. dollars amounts are then rounded down to the nearest thousand.

Certain prior year amounts have been reclassified to conform to the current year's presentation.

2. Summary of significant accounting policies

(a) Principles of consolidation

The consolidated financial statements include the accounts of the Company and 48 (37 in fiscal 2014) of its subsidiaries ("HORIBA" as a consolidated group). In fiscal year 2015, 10 companies were newly consolidated due to the business acquisition from MIRA Ltd, one company was newly established, one was incorporated

into consolidation (originally equity method applied) and one was merged into another subsidiary.

The accompanying consolidated financial statements include the accounts of the Company and significant companies over which the Company has control through majority voting rights or certain other conditions evidencing control by the Company. Significant intercompany transactions and accounts have been eliminated in consolidation. In the elimination of investments in subsidiaries, the assets and liabilities of the subsidiaries, including the portions attributable to minority shareholders, are evaluated using the fair value at the time the Company acquired control of the respective subsidiary. Acquisition costs that are in excess of the net assets of acquired subsidiaries and affiliates and cannot be assigned to specific individual accounts are amortized on a straight-line basis over five years.

December 31 is the year-end of the consolidated subsidiaries and that of the consolidated financial statements for fiscal 2014 and fiscal 2015.

One of the Company's subsidiaries is not included in the consolidated accounts as the effect of its inclusion on total assets, sales, income and retained earnings would have been immaterial

The Company has two affiliated companies (one in fiscal 2014). For one of the two affiliated companies, the equity method was applied. As for the other affiliated company, investment in the affiliates (generally 20%-50% ownership) was accounted for on a cost basis, not by the equity method, as the effect on income and retained earnings was immaterial.

(b) Cash and cash equivalents

Cash and cash equivalents include cash on hand, readily available bank deposits and short-term highly liquid investments that are readily convertible into cash, have insignificant risk of change in value and have original maturities of three months or less from date of purchase.

(c) Securities

Available-for-sale securities with available fair market values are stated at fair market value. Unrealized gains and losses on these securities are reported, net of applicable income taxes, as a separate component of net assets. Realized gains and losses on the sale of such securities are computed using moving average cost. Available-for-sale securities with no available fair market value are stated mainly at moving average cost.

(d) Inventories

Inventories are stated at the lower of average cost or net realizable value. Cost is determined principally by the weighted average method for merchandise, finished goods and work-in-process and by the moving average method for raw materials

and supplies.

(e) Property, plant and equipment and depreciation (except for leases)

Property, plant and equipment are stated at cost. Depreciation is computed by the straight-line method over the estimated useful life of the asset. The estimated useful lives of buildings and structures range from 3 to 60 years and those of machinery, equipment and vehicles from 2 to 20 years.

(f) Goodwill

Goodwill, which represents the excess of the purchase price over the fair value of the net assets acquired, is amortized on a straight-line basis over a period of five years.

(g) Intangibles

Amortization of intangibles is computed by the straight-line method. Computer software used by HORIBA is amortized over the estimated useful life of 3 to 10 years.

(h) Leases

With regard to leased assets under finance leases other than those that are deemed to transfer ownership of the leased property to the lessee, the lease term is deemed to be the useful life, and depreciation is computed by the straight-line method over the lease term with zero residual value. Finance leases other than those that are deemed to transfer ownership of the leased property to the lessee and which commenced in fiscal years beginning prior to January 1, 2009 continue to be accounted for in a way that is similar to the method used for operating leases.

(i) Allowance for doubtful receivables

The Company and its domestic subsidiaries provide for doubtful accounts principally at an amount computed based on the actual ratio of bad debts in the past plus the estimated uncollectible amounts of certain individual receivables. The overseas subsidiaries provide for doubtful accounts based on estimates made by management.

(j) Accrued bonuses to employees

Accrued bonuses to employees are provided for the expected payment of employee bonuses for fiscal 2015 to those employees employed at the end of the fiscal year.

(k) Accrued bonuses to directors and corporate auditors Some consolidated subsidiaries provide for accrued bonuses to directors and corporate auditors for the expected payment of director and corporate auditor bonuses for fiscal 2015 to those directors and corporate auditors serving at the end of the fiscal year.

(I) Reserve for product warranty

The reserve for product warranty is provided for accrued warranty expenses for products of the Company and certain

subsidiaries. The provision is based on estimates made from actual past experience and product warranty records and takes into account individual cases.

(m) Provision for loss on dissolution of the employees' pension fund

As it was resolved to adopt Japanese government policy to carry out special dissolution of the employees' local pension fund (general type) in which the Company and a domestic consolidated subsidiary are members, HORIBA posted an estimated loss that will arise in relation to the dissolution.

(n) Accounting methods associated with retirement benefits

i) Period-based method for estimated amount of retirement benefits

In calculating projected benefit obligations, the method to attribute the estimated amount of retirement benefits to the period up to the end of the current fiscal year is based on the benefit formula method.

ii) Recording of expenses for actuarial differences and prior service costs

Actuarial differences are recognized in expenses from the respectively occurring subsequent fiscal year, using the straight-line method over a fixed term of years (5 to 8 years), which is within the average of the estimated remaining service years of employees, at the time of occurrence of each fiscal year.

Prior service costs are recognized in expenses using the straight-line method over a fixed term of years (10 years), which is within the average of the estimated remaining service years of employees, commencing in the period they arise.

(o) Sales and costs of completed construction

Sales and costs of completed construction were recorded using the percentage of completion method when the progress of the construction up to the end of fiscal 2015 was deemed to be certain (estimates of the ratio of completion of construction work are based on the cost-to-cost method). In the case of other construction, sales and costs were recorded using the completed contract method.

(p) Foreign currency translation

Short-term and long-term receivables and payables in foreign currencies are translated into Japanese yen based on exchange rates at the balance sheet date.

Balance sheet accounts of consolidated foreign subsidiaries are translated into Japanese yen at the balance sheet date, except for shareholders' equity accounts, which are translated at historical rates. Revenue and expense accounts of consolidated foreign subsidiaries are translated into Japanese yen at average annual exchange rates. Differences arising from

the application of the processes stated above are presented separately in the consolidated financial statements in "Foreign currency translation adjustments" and "Minority interests in consolidated subsidiaries" in net assets.

(a) Derivatives

Derivative financial instruments are stated at fair value, and changes in the fair value are recognized as gains or losses, unless the derivative financial instruments are used for hedging purposes. HORIBA uses foreign currency exchange contracts to manage risk related to its importing and exporting activities. Regarding derivative transactions, in addition to conducting exchange agreement transactions within the limit of the balance of foreign currency-denominated receivables and payables, HORIBA conducts forward exchange agreement transactions for the expected foreign currency-denominated receivables and payables, which would be generated with certainty by scheduled export or import trading. HORIBA uses derivative financial instruments, such as interest rate swap contracts, and interest rate and currency swap contracts to avoid risks of fluctuations in interest rates and foreign exchange rates. Contracts are entered into and controlled by the finance department, which reports results to the director. Transactions involving derivative contracts are limited to highly rated banking institutions, and HORIBA considers that there are no material credit risks associated with them.

(r) Hedge accounting

i) Hedge accounting method

Deferred hedge accounting is applied. However, exceptional accounting treatment is applied to certain interest rate and currency swap contracts which conform to the requirements of integral accounting rules.

ii) Hedging instruments and hedged items

Hedging instruments: Forward foreign exchange contracts, etc., and interest rate and currency swap contracts Hedged items: Foreign currency-denominated forecast transactions and foreign currency-denominated loans payable iii) Hedging policy

Forward foreign exchange transactions are used to avoid foreign currency risks, and interest rate and currency swaps

are used to avoid the risk of rising interest rates and foreign currency risks, based on the Company's Administrative Rules.

iv) Assessment of hedge effectiveness

The effectiveness of hedges is assessed by comparing the cumulative changes in cash flows of both hedging instruments and corresponding hedged items. However, an assessment of effectiveness is not conducted when the significant conditions of both hedging instruments and corresponding hedged items

are the same

(s) Research and development expenses

Research and development expenses are charged to income when incurred. Research and development expenses charged to income for fiscal 2014 and fiscal 2015 were ¥11,986 million and ¥12,341 million (\$102,321 thousand), respectively.

(t) Income taxes

Income taxes comprise corporate tax, enterprise tax and prefectural and municipal inhabitant taxes.

HORIBA recognizes the tax effects of loss carryforwards and the temporary differences between the carrying amounts of assets and liabilities for tax and financial reporting. The provision for current income tax is computed based on the pretax income included in the consolidated statements of income.

The asset/liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

The Company and its consolidated domestic subsidiaries have adopted the consolidated taxation system.

(u) Per share information

The computations of net income per share are based on the weighted average number of shares of common stock outstanding during each period. The weighted average number of shares of common stock used in the computation for fiscal 2014 and fiscal 2015 was 42.309 thousand and 42.136 thousand, respectively. Diluted net income per share of common stock assumes full conversion of dilutive convertible bonds at the beginning of the year or at the later date of issuance, with an applicable adjustment for related interest expense, net of tax and dilutive stock option plans. The weighted average number of shares used in the computation for fiscal 2014 and fiscal 2015 was 42,479 thousand and 42,326 thousand, respectively.

Cash dividends per share shown in the consolidated statements of income represent actual amounts applicable to earnings in the respective fiscal year, including dividends to be paid after the end of the period.

3. Accounting standards issued but not yet effective

(a) "Accounting Standard for Business Combinations" (ASBJ Statement No. 21, issued on Sep. 13, 2013), "Accounting Standard for Consolidated Financial Statements" (ASBJ Statement No. 22, issued on Sep. 13, 2013), "Accounting Standard for Business Divestitures" (ASBJ Statement No. 7, issued on Sep. 13, 2013), "Accounting Standard for Earnings

Per Share" (ASBJ Statement No. 2, issued on Sep. 13, 2013), "Guidance on Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures" (ASBJ Guidance No. 10, issued on Sep. 13, 2013) and "Guidance on Accounting Standard for Earnings Per Share" (ASBJ Guidance No. 4, issued on Sep. 13, 2013)

i) Overview

These accounting standards have been revised mainly in terms of (1) handling a change in equity of a parent company in relation to a subsidiary when control continues in the case of the additional acquisition of shares of a subsidiary, (2) handling of acquisition-related expenses, (3) the representation of net income and a change from a minority interest to a non-controlling interest, and (4) handling of provisional accounting procedures.

ii) Date of application

It is planned to apply these standards from the start of the fiscal year ending December 31, 2016. It is planned to apply the handling of the establishment of provisional accounting procedures starting with business combinations that are implemented from the start of the fiscal year ending December 31, 2016.

iii) Effect of applying these accounting standards HORIBA is currently evaluating the effect of applying these accounting standards on its consolidated financial statements.

(b) "Guidance on Recoverability of Deferred Tax Assets" (ASBJ Guidance No. 26, issued on December 28, 2015)

i) Overview

With regards to the treatment of the recoverability of deferred tax assets, a necessary review was conducted on the treatment below following the mechanisms of the JICPA Auditing Standards Committee Report No. 66 "Audit Treatment for Determining the Recoverability of Deferred Tax Assets," whereby companies are categorized according to five categories and deferred tax assets are calculated based on each of these categories.

(1)Treatment of companies that do not fulfill any of the requirements for classification from Category 1 to Category 5.

(2)Requirements for classification as Category 2 and Category 3

(3)Treatment of deductible temporary differences that cannot be scheduled for companies applicable to Category 2

(4)Treatment of reasonably estimable periods of temporary differences in future pre-adjusted taxable income for companies applicable to Category 3

(5)Treatment in cases where a company fulfilling the requirements of Category 4 is also applicable to Category 2 or Category 3

ii) Date of application

It is planned to apply these standards from the start of the fiscal year ending December 31, 2017.

iii) Effect of applying these accounting standards
HORIBA is currently evaluating the effect of applying these
accounting standards on its consolidated financial statements.

4. Financial instruments

(1) Overview of financial instruments

Management policy

HORIBA carries out fund management with an emphasis on security and procures funds mainly through bank borrowings and bond issuances. Derivatives are used to manage foreign exchange fluctuation risk and interest rate fluctuation risk, and it is HORIBA's policy not to engage in speculative transactions.

Financial instruments, risks and risk management

Trade notes and accounts receivable, which are operating receivables, are exposed to the credit risk of customers. HORIBA endeavors to reduce this risk by conducting due date control and balance control and by attempting to promptly recognize collection concerns stemming from such factors as a deterioration in the financial condition of a customer.

Most trade notes and accounts payable, which are operating payables, have payment due dates within one year.

Some operating receivables and payables are denominated in foreign currencies and are exposed to foreign exchange fluctuation risk. However, HORIBA endeavors to reduce this risk by offsetting foreign currency denominated operating receivables and payables and by using forward exchange contracts, etc.

Marketable securities are mainly short-term investments with high liquidity such as negotiable deposits. Investment securities are mainly shares of companies that have a business relationships with HORIBA and are exposed to market value fluctuation risk. However, when acquiring or selling shares of a certain value, the Board of Directors considers the details of the transactions and HORIBA endeavors to reduce any risk by ensuring that the market value information regarding the shares is reported to the management team in a timely manner.

Short-term loans are mainly for financing related to operating transactions, while long-term loans and corporate bonds are mainly for financing related to plant and equipment and working capital.

Trade liabilities and loans are exposed to liquidity risk, but HORIBA endeavors to reduce this risk by using methods such as the preparation of cash flow plans.

Regarding derivative transactions, in addition to conducting exchange agreement transactions within the limit of the balance of foreign currency-denominated receivables and payables, HORIBA conducts forward exchange agreement transactions for the expected foreign currency-denominated receivables and payables, which would be generated with certainty by scheduled export or import trading. HORIBA uses derivative financial instruments, such as interest rate swap contracts and, interest rate and currency swap contracts to avoid risks of fluctuations in interest rates and foreign exchange rates, within the outstanding amount of borrowings. HORIBA's policy is not to engage in speculative transactions.

Supplementary explanation of the estimated fair value of financial instruments

The market value of financial instruments includes values based on market prices and amounts rationally calculated when there are no market prices available. As HORIBA incorporates variable factors when making these calculations, the amounts may change due to the adoption of different assumptions. With regard to contract amounts related to derivative transactions in the Notes to Consolidated Financial Statements item "Derivative transactions," the amounts do not indicate the market risk associated with derivative transactions themselves.

(2) Fair value of financial instruments

The book value and fair value of financial instruments and any difference between the two as of December 31, 2014 and December 31, 2015 are set forth in the table below. Financial instruments whose fair value was extremely difficult to estimate are not included (See Note 2). Cash and cash equivalents of ¥9,278 million and ¥5,515 million (\$45,725 thousand) for the fiscal years ended December 31, 2014 and December 31, 2015 are included in (3) Marketable securities and investment securities.

	N	Millions of ye	n	Millions of yen			
	12/2014			12/2015			
	Book value	Fair value	Difference	Book value	Fair value	Difference	
Assets:				-			
(1) Cash and time deposits	¥43,255	¥43,255	-	¥43,922	¥43,922	-	
(2) Trade notes and accounts receivable	52,246	52,246	-	54,772	54,772	-	
(3) Marketable securities and investment securities							
Available-for-sale securities	18,320	18,320	_	14,965	14,965	_	
Total	¥113,822	¥113,822		¥113,660	¥113,660	_	
Liabilities: (1) Trade notes and accounts payable(2) Short-term loans and current portion of long-term loans(3) Accounts payable – other	10,832	¥15,406 10,832 14,457	- - -	¥17,638 12,879 14,787	¥17,638 12,879 14,787	- - -	
(4) Accrued income taxes		5,220	_	3,796	3,796	_	
(5) Bonds		15,264	264	15,000	15,219	219	
(6) Long-term loans	2,209	2,177	(32)	16,826	16,823	(3)	
Total	¥63,127	¥63,359	¥232	¥80,928	¥81,145	¥216	
Derivative transactions (1) Hedge accounting not applied(2) Hedge accounting applied		(¥113) 29		¥144 (0)	¥144 (0)		
Total	(¥84)	(¥84)		¥144	¥144		
	(.31)	(.01)					

	Thousands of U.S. dollars			
	12/2015			
	Book value	Fair value	Difference	
Assets:	4004405	4004405		
(1) Cash and time deposits		\$364,165	_	
(2) Trade notes and accounts receivable	454,124	454,124	_	
(3) Marketable securities and investment securities				
Available-for-sale securities	124,077	124,077	_	
Total	\$942,376	\$942,376	_	
Liabilities: (1) Trade notes and accounts payable	106,782 122,601 31,473 124,367	\$146,239 106,782 122,601 31,473 126,183	- - - 1,815	
(6) Long-term loans		139,482	(24)	
Total	\$670,989	\$672,788	\$1,790	
Derivative transactions	_	_		
(1) Hedge accounting not applied		\$1,193	-	
(2) Hedge accounting applied	(0)	(0)		
Total	\$1,193	\$1,193	_	

Note 1. Method for calculating the fair value of financial instruments and notes regarding securities and derivative transactions.

Assets

(1) Cash and time deposits and (2) Trade notes and accounts receivable

As these are settled in the short term, market value approximates book value and is, therefore, based on the applicable book value.

(3) Marketable securities and investment securities

Market value for these is based on prices on securities exchanges in the case of shares, etc. For bonds, market value is based on prices on securities exchanges or prices indicated by corresponding financial institutions. For marketable securities classified by the purpose for which they are held, see Note 5.

Liabilities

(1) Trade notes and accounts payable, (2) Short-term loans and current portion of long-term loans, (3) Accounts payable - other and (4) Accrued income taxes

As these are settled in the short term, market value approximates book value and is, therefore, based on the applicable book value.

(5) Bonds

Market value for bonds issued by HORIBA is calculated based on market prices.

(6) Long-term loans

Borrowings based on variable interest rates reflect market interest rates, and as the creditworthiness of HORIBA has not changed significantly since execution, market value is considered to be approximate book value and is, therefore, based on applicable book value. The value of borrowings with fixed interest rates is based on the total amount of principal and interest discounted at an interest rate of a similar new loan.

Derivative transactions

See Note 14 for derivative transactions.

Net receivables (payables) derived from derivative transactions are displayed in the table above. Total net payables are shown in parenthesis.

Note 2. The following table summarizes financial instruments whose fair value was extremely difficult to estimate.

			Thousands of
_	Millions	of yen	U.S. dollars
-	12/2014	12/2015	12/2015
Non-listed equity securities	¥129	¥227	\$1,882
Investments in nonconsolidated subsidiaries and affiliates	53	69	572

The above financial instruments were not included in "(3) Marketable securities and investment securities" because they did not have market values and the fair value was extremely difficult to estimate.

Note 3. Repayment schedule of monetary claims, available-for-sales securities with maturities and bonds held to maturity.

Repayment schedule of monetary claims, available-for	-sales securities wi	th maturities and	bonds held to ma	aturity.		
		Million	s of yen			
		12/	2014			
	Within one year	Over one year but within five years	Over five years but within ten years	Over ten years		
Cash and time deposits	¥43,255	-	-	_		
Trade notes and accounts receivable	52,246	-	-	-		
Marketable securities and investment securities						
Available-for-sale securities with maturities						
(1) Governmental/municipal bonds		10	_	-		
(2) Corporate bonds	501	201	_	-		
(3) Other bonds		_	_	-		
(4) Other		26	14	-		
Total	¥98,104	¥237	¥14			
		Million	s of yen			
		12/	2015			
	Within one year	Over one year but within five years	Over five years but within ten years	Over ten years		
Cash and time deposits	¥43,922	-	-	-		
Trade notes and accounts receivable	54,772	-	-	-		
Marketable securities and investment securities						
Available-for-sale securities with maturities						
(1) Governmental/municipal bonds	10	-	-	-		
(2) Corporate bonds	901	100	-	-		
(3) Other bonds	499	-	-	-		
(4) Other		25	-	-		
Total	¥100,607	¥126	_			
	Thousands of U.S. dollars					
	12/2015					
	Within one year	Over one year but within five years	Over five years but within ten years	Over ten years		
Cash and time deposits	\$364,165	_	_	_		
Trade notes and accounts receivable	454,124	_	-	-		
Marketable securities and investment securities						
Available-for-sale securities with maturities						
(1) Governmental/municipal bonds	82	_	-	-		
(2) Corporate bonds	7,470	829	-	-		
(3) Other bonds	4,137	-	-	-		
(4) Other	4,145	207	_	-		
Total	\$834,151	\$1,044	-	-		

Note 4. Repayment schedule of short-term loans, bonds and long-term debt See Note 8 for short-term loans and long-term debt.

5 Securities

The following table summarizes acquisition costs and book values (fair values) of available-for-sale securities as of December 31, 2014 and December 31, 2015.

Cost		1	Millions of ye	n	Millions of yen			
Securities with book values exceeding acquisition costs:	-		12/2014			12/2015		
Equity securities		Book value		Difference	Book value		Difference	
Equity securities								
Governmental/municipal bonds	<u> </u>	V6 602	V2 607	V2.056	V7 060	V4.076	V2 702	
Corporate bonds		,	,	,	•		¥3,792 0	
Other bonds	· ·			•			1	
Other 500 500 0 500 500 Subtotal 7,395 4,337 3,058 8,580 4,786 3 Securities with book values not exceeding acquisition costs: Equity securities 36 38 (1) 61 65 Governmental/municipal bonds -<	-	201	200	'_	201	200	'_	
Subtotal		500	500	n	500	500	0	
Equity securities	-						3,793	
Covernmental/municipal bonds								
Corporate bonds	Equity securities	36	38	(1)	61	65	(3)	
Other bonds	Governmental/municipal bonds.	-	_	_	_	-	-	
Other. 9,086 9,086 00 5,022 5,022 Subtotal. 10,924 10,927 (2) 6,384 6,389 Total. ¥18,320 ¥15,265 ¥3,055 ¥14,965 ¥11,175 ¥3 Securities with book values Equity securities with book values exceeding acquisition costs: Equity securities. \$65,243 \$33,794 \$31 Governmental/municipal bonds. 82 82 Corporate bonds. 1,666 1,658 Other bonds. - - Other. 4,145 4,145	Corporate bonds	501	502	(0)	801	802	(0)	
Subtotal	Other bonds	1,299	1,300	(0)	499	500	(0)	
Total	Other	9,086	9,086	(0)	5,022	5,022	(0)	
Thousands of U.S. dollars 12/2015 Book value Acquisition cost Differ	Subtotal	10,924	10,927	(2)	6,384	6,389	(4)	
T2/2015 Book value Acquisition cost Difference	Total	¥18,320	¥15,265	¥3,055	¥14,965	¥11,175	¥3,789	
Book value Acquisition cost Differ					Thous		dollars	
Securities with book values					Ĭ.			
exceeding acquisition costs: \$65,243 \$33,794 \$31 Governmental/municipal bonds 82 82 Corporate bonds 1,666 1,658 Other bonds - - Other 4,145 4,145					Book value		Difference	
Equity securities \$65,243 \$33,794 \$31 Governmental/municipal bonds 82 82 Corporate bonds 1,666 1,658 Other bonds - - Other 4,145 4,145								
Governmental/municipal bonds 82 82 Corporate bonds 1,666 1,658 Other bonds - - Other 4,145 4,145	<u> </u>				\$ 05.040	\$00.704	\$ 04.440	
Corporate bonds 1,666 1,658 Other bonds - - Other 4,145 4,145	, ,				• •		\$ 31,440	
Other bonds - - Other 4,145 4,145	-						0	
Other	•				•	1,038	8	
4,110						4 145	_	
							31,448	
Securities with book values not	Securities with book values not							
exceeding acquisition costs:	exceeding acquisition costs:							
Equity securities	Equity securities				505	538	(24)	
Governmental/municipal bonds – – –	Governmental/municipal bonds					-	-	
Corporate bonds	Corporate bonds				6,641	6,649	(0)	
Other bonds	Other bonds					•	(0)	
Other							(0)	
Subtotal	Subtotal				52,930	52,972	(33)	
Total	Total				\$124,077	\$92,654	\$31,415	

Note. Non-listed equity securities, etc., of ¥129 million and ¥227 million (\$1,882 thousand) for the fiscal years ended December 31, 2014 and December 31, 2015, respectively, are not included in the above table because they did not have market values and the fair value was extremely difficult to estimate.

The following table summarizes available-for-sale securities sold for the fiscal year ended December 31, 2014 and December 31, 2015.

			Thousands of
	Millions	of yen	U.S. dollars
•	12/2014	12/2015	12/2015
Total sales of available-for-sale securities	¥2,178	¥81	\$671
Related gains	1,804	44	364

Impairment loss on marketable securities

Not applicable.

When applying impairment accounting, if the market value at the end of the term has fallen by more than 50% from the acquisition price, an impairment loss is applied to the entire amount. If the market value has fallen by approximately 30% to 50%, an impairment loss is applied to the amount recognized as necessary after considering the possibility of recovery, etc.

6. Inventories

Inventories at December 31, 2014 and December 31, 2015 consisted of the following:

	Millions	of yen	Thousands of U.S. dollars
-	12/2014	12/2015	12/2015
Merchandise and finished goods	¥13,811	¥15,696	\$130,138
Work-in-process	11,022	9,234	76,560
Raw materials and supplies	10,003	10,786	89,428
Total	¥34,838	¥35,717	\$296,136

7. Trade notes receivable maturing on December 31, 2014 and December 31, 2015, which were bank holidays

December 31, 2014 and December 31, 2015, the end of the period, were bank holidays. Trade notes receivable maturing on those dates were settled on the following business day. Therefore, notes in the amount of ¥355 million were included in the ending balance at December 31, 2014 and notes in the amount of ¥332 million (\$2,752 thousand) were included in the ending balance at December 31, 2015.

8. Short-term loans and long-term debt

Short-term loans are generally represented by bank notes with annual interest rates ranging from 0.58% to 13.45% and 0.57% to 17.02% at December 31, 2014 and December 31, 2015, respectively.

Long-term debt at December 31, 2014 and December 31, 2015 consisted of the following:

Long term debt at December 31, 2014 and December 31, 2013 consisted of	71 6110 101101111	'6'	Thousands of
	Millions	of yen	U.S. dollars
-	12/2014	12/2015	12/2015
0.609% unsecured bonds due in 2020	¥15,000	¥15,000	\$124,367
Loans from banks due serially from 2016 to 2022			
at rates from 0.09% to 15.66% per annum	3,154	17,480	144,929
Lease obligations at 9.98% maturing serially through 2022	369	522	4,327
Total	18,524	33,002	273,625
Current portion	(1,104)	(848)	(7,030)
Long-term debt, less current portion	¥17,419	¥32,153	\$266,586

The aggregate annual maturities of long-term debt outstanding at December 31, 2015 were as follows:

		Thousands of
Year ending December 31	Millions of yen	U.S. dollars
2016	¥848	\$7,030
2017	701	5,812
2018	385	3,192
2019	278	2,304
2020	15,241	126,365
Thereafter	15,547	128,903
Total	¥33,002	\$273,625

As of December 31, 2015, the Company and its 9 subsidiaries had entered into agreements for bank overdrafts or loan commitments with 9 banks as follows:

		Thousands of
Million	s of yen	U.S. dollars
The maximum aggregate principal¥1	7,105	\$141,820
Amount utilized	919	7,619
Balance available¥1	16,185	\$134,192

As of December 31, 2015, assets were pledged as collateral for current portion of long-term debt of ¥83 million (\$688 thousand) and long term debt of ¥228 million (\$1,890 thousand) as follows:

		Thousands of
	Millions of yen	U.S. dollars
Land	¥104	\$862
Machinery, equipment and vehicles	. 370	3,067
Total	¥474	\$3,930

9. Employees' severance and pension benefits

(1) Outline of adopted retirement pension fund

The Company and domestic consolidated subsidiaries have adopted a funded defined benefit pension plan (cash balance plan) and a defined contribution pension plan. Certain overseas consolidated subsidiaries have adopted funded and unfunded defined benefit plans and a defined contribution plan.

The Company and a domestic consolidated subsidiary have been members of the Kyoto Machinery and Metal Employees' Pension Fund (general type). As it is not possible to reasonably calculate the amount of pension assets corresponding to the company's own contributions, accounting procedures are the same as for defined contribution plans.

(2) Defined benefits plan

(a) The changes in projected benefit obligation for the years ended December 31, 2014 and December 31, 2015 were as follows:

	Millions	of ven	Thousands of U.S. dollars
-	12/2014	12/2015	12/2015
Balance at beginning of year	¥7,782	¥8,449	\$70,052
Cumulative effects of changes in accounting policies	_	139	1,152
Restarted balance	7,782	8,589	71,213
Service cost	603	561	4,651
Interest expense on projected benefit obligation	143	127	1,052
Actuarial differences	284	(27)	(223)
Benefits paid	(541)	(245)	(2,031)
Other	178	(137)	(1,135)
Balance at end of year	¥8,449	¥8,868	\$73,526

(b) The changes in pension assets for the years ended December 31, 2014 and December 31, 2015 were as follows:

	B.4:111:	r	Thousands of U.S. dollars
-	Millions		
	12/2014	12/2015	12/2015
Balance at beginning of year	¥5,406	¥6,187	\$51,297
Expected return on pension assets	150	169	1,401
Actuarial differences	270	14	116
Contributions from the employer	630	798	6,616
Benefits paid	(371)	(241)	(1,998)
Other	101	(8)	(66)
Balance at end of year	¥6,187	¥6,920	\$57,375

(c) Reconciliation between the net defined benefit liability and the net defined benefit asset posted in the consolidated balance sheets, and the balances of projected benefit obligation and pension assets

			Thousands of
	Millions	of yen	U.S. dollars
	12/2014	12/2015	12/2015
Funded projected benefit obligation	¥7,135	¥7,640	\$63,344
Pension assets	(6,187)	(6,920)	(57,375)
	947	720	5,969
Unfunded projected benefit obligation	1,313	1,227	10,173
Net liability for retirement benefits in the consolidated balance sheets	2,261	1,947	16,142
Net defined benefit liability	2,264	1,947	16,142
Net defined benefit asset	(2)	-	-
Net liability for retirement benefits in the consolidated balance sheets	¥2,261	¥1,947	\$16,142

(d) The components of retirement benefits expense for the years ended December 31, 2014 and December 31, 2015 were as follows:

			Thousands of
	Millions	of yen	U.S. dollars
	12/2014	12/2015	12/2015
Service cost	¥603	¥561	\$4,651
Interest expense on projected benefit obligation	143	127	1,052
Expected return on pension assets	(150)	(169)	(1,401)
Amortization of actuarial differences	109	(7)	(58)
Amortization of prior service costs	9	-	_
Retirement benefits expense	¥715	¥511	\$4,236

(e) The components of remeasurements of defined benefit plans (before tax effect) in the consolidated statements of comprehensive income as of December 31, 2014 and December 31, 2015 were as follows:

	Millions	of yen	Thousands of U.S. dollars
	12/2014	12/2015	12/2015
Actuarial differences	-	¥26	\$215
Total	-	¥26	\$215

(f) The components of remeasurements of defined benefit plans (before tax effect) in the consolidated balance sheets as of December 31 2014 and December 31, 2015 were as follows:

			Thousands of
	Millions	of yen	U.S. dollars
	12/2014	12/2015	12/2015
Unrecognized actuarial differences	¥56	¥82	\$679
Total	¥56	¥82	\$679

(g) Pension assets

i) The pension assets by major category as a percentage of total pension assets as of December 31, 2014 and December 31, 2015 were as follows:

	12/2014	12/2015
Debt investments	45.7%	40.6%
Equity investments	27.3	27.4
Mutual funds (Note)	13.6	15.7
Other	13.4	16.3
Total	'100.0%	100.0%

Note. Mutual funds primarily invest in debt investments.

ii) Method of determining the expected rate of return on pension assets

The expected rate of return on pension assets is determined considering the current and anticipated future portfolio of pension assets and, the long-term rates of return which are expected currently and in the future from the various components of the pension assets.

(h) Assumptions used for the years ended December 31, 2014 and December 31, 2015 were as follows:

	12/2014	12/2015
Discount rate (mainly)	1.0-1.4%	1.0-1.2%
Expected rate of return on pension assets (mainly)	2.5%	2.5%
Expected rate of salary raises (mainly)	3.9-4.1%	3.9-4.0%
Note. A point system is used as the basis for the calculation of expected rates of salary raises		

(3) Defined contribution plan

Benefits expense for the defined contribution plan for the years ended December 31, 2014 and December 31, 2015 was ¥629 million and ¥962 million (\$7,976 thousand) respectively

(4) Multi-employer pension plan

Benefits expense for the multi-employer pension plan, for which accounting procedures are the same as for defined contribution plans, for the years ended December 31, 2014 and December 31, 2015 was ¥432 million and ¥423 million (\$3,507 thousand) respectively

(a) Funded status of pension plans (available information as of March 31, 2014 and March 31, 2015)

			Thousands of
	Millions	of yen	U.S. dollars
	12/2014	12/2015	12/2015
Fair value of plan assets	¥51,677	¥58,075	\$481,510
Total of actuarial obligation and minimum actuarial reserve	72,954	76,550	634,690
Net balance	(¥21,276)	(¥18,474)	(\$153,171)

(b) Ratio of HORIBA's contribution to the multi-employer plans relative to the contributions to the overall retirement benefit plans were as follows:

From March 1 2014 to March 31 2014: 16 21% From March 1, 2015 to March 31, 2015: 16.79%

- Note 1. Net balance resulted from the prior service cost of ¥19.778 million and ¥19.024 million (\$157.731 thousand), the shortage of reserve for plan assets of ¥1,497 million and ¥—million (\$—thousand) and the general reserve for plan assets of ¥—million and ¥549 million (\$4,551 thousand) for the years ended December 31, 2014 and December 31, 2015, respectively.
- Note 2. Prior service cost is amortized over 20 years.
- Note 3. The percentage of HORIBA's contribution to the multi-employer pension plan described above in (4)(b) should not be construed as the percentage of HORIBA's actual obligation.
- Note 4. As it was resolved to adopt Japanese government policy to carry out special dissolution of the Fund at the representative assembly that took place on February 20, 2014, HORIBA posted an estimated loss that will arise in relation to the dissolution. Consequently, we posted provision for loss on dissolution of the employees' pension fund of ¥1,267 million (\$10,504 thousand) under long-term liabilities in the consolidated balance sheets.

(Application of Accounting Standard for Retirement Benefits)

HORIBA has adopted the main provisions from clause 35 of "Accounting Standard for Retirement Benefits" (ASBJ Statement No. 26; issued on May 17, 2012) and clause 67 of "Guidance on Accounting Standard for Retirement Benefits" (ASBJ Guidance No. 25; issued on March 26, 2015) from current fiscal year. Accordingly, the method for calculating projected benefit obligations and service cost has been revised and the method for attributing estimated benefit to periods has been changed from a straight-line basis to a benefit formula basis. In addition, the method of determining the discount rates applied in the calculation of projected benefit obligations was changed from the method using the discount rate based on the period approximating the average of the estimated remaining service years of employees to the method using the single weighted-average discount rate that reflects the estimated period and amount of benefit payment in each period. The accounting standard and guidance for retirement benefits were adopted in accordance with the transitional treatment set forth in clause 37 of the standard, and the amounts of the change in calculation methods for projected benefit obligations and service cost were reflected in retained earnings as of January 1, 2015.

The adoption of the standard and guidance had the effect of increasing net defined benefit liability by ¥139 million (\$1,152 thousand) and reducing retained earnings by ¥90 million (\$746 thousand) as of January 1, 2015. Its impact on profit for the current fiscal year is immaterial.

10. Net assets

Under Japanese laws and regulations, the entire amount paid for new shares is required to be designated as common stock. However, a company may, by a resolution of the Board of Directors, designate an amount not exceeding one half of the price of the new shares as additional paid—in capital, which is included in capital surplus.

Under the Japanese Corporate Law ("the Law"), in cases where a dividend distribution of surplus is made, the smaller of an amount equal to 10% of the dividend or the excess, if any, of 25% of common stock over the total of additional paid-in capital and legal earnings reserve must be set aside as additional paid-in capital or legal earnings reserve. Legal earnings reserve is included in retained earnings in the accompanying consolidated balance sheets.

Additional paid-in capital and legal earnings reserve may not be distributed as dividends. Under the Law, all additional paid-in capital and all legal earnings reserve may be transferred to other capital surplus and retained earnings, respectively, which are potentially available for dividends. Both of these appropriations generally require a resolution of the shareholder's meeting.

The maximum amount that the Company can distribute as dividends is calculated based on the nonconsolidated financial statements of the Company in accordance with Japanese laws and regulations.

At the Board of Directors' meeting held on February 9, 2016, the Board of Directors approved cash dividends in the amount of ¥1,767 million (\$14,650 thousand). The appropriation had not been accrued in the consolidated financial statements as of December 31, 2015. Such appropriations are recognized in the period in which they are approved by the Board of Directors.

11. Stock options

(1) Expenses and items related to stock options

			Thousands of
	Millions of yen		U.S.dollars
	12/2014	12/2015	12/2015
Selling, general and administrative expenses	¥75	¥79	\$655

(2) Scale and movement (fluctuation) of stock options

Information regarding stock options outstanding. The number of stock options is stated after conversion into an equal number of shares.

(a) Details of stock options

(a) Botaile of deask operation	No. 1 Stock-based	No. 2 Stock-based	No. 3 Stock-based	No. 4 Stock-based
	Compensation Type	Compensation Type	Compensation Type	Compensation Type
	Stock Option	Stock Option	Stock Option	Stock Option
	4 directors and	4 directors and	4 directors and	4 directors and
Persons granted options	13 corporate officers of the Company	14 corporate officers of the Company	16 corporate officers of the Company	16 corporate officers of the Company
Number of shares by type of stock (Note 1)	Common stock 54,200 shares	Common stock 26,400 shares	Common stock 31,000 shares	Common stock 28,200 shares
Date of grant	April 16, 2009	April 23, 2010	April 21, 2011	April 24, 2012
Vesting conditions	(Note 2)	(Note 2)	(Note 2)	(Note 2)
Service period	(Note 3)	(Note 3)	(Note 3)	(Note 3)
	April 17, 2009	April 24, 2010	April 22, 2011	April 25, 2012
	to	to	to	to
Exercise period	April 16, 2039	April 23, 2040	April 21, 2041	April 24, 2042

	No. 5 Stock-based	No. 6 Stock-based	No. 7 Stock-based
	Compensation Type	Compensation Type	Compensation Type
	Stock Option	Stock Option	Stock Option
	4 directors and	5 directors and	5 directors and
	14 corporate officers of the Company,	12 corporate officers of the Company,	13 corporate officers of the Company,
	2 directors and	3 directors and	3 directors and
	3 corporate officers	6 corporate officers	8 corporate officers
Persons granted options	of the subsidiaries	of the subsidiaries	of the subsidiaries
Number of shares by type of stock	Common stock	Common stock	Common stock
(Note 1)	33,200 shares	27,500 shares	22,100 shares
Date of grant	May 8, 2013	April 24, 2014	May 8, 2015
Vesting conditions	(Note 2)	(Note 2)	(Note 2)
Service period	(Note 3)	(Note 3)	(Note 3)
	May 9, 2013	April 24, 2014	May 9, 2015
	to	to	to
Exercise period	May 8, 2043	April 23, 2044	May 8, 2045

Note 1. Stock options are convertible into an equal number of shares.

Note 2. Vesting conditions are not stipulated.

Note 3. The service period is not stipulated.

(b) Number, movement and price of stock options

Stock options are convertible into an equal number of shares.

(i) Number of shares

	No. 1 Stock-based Compensation Type Stock Option	No. 2 Stock-based Compensation Type Stock Option	No. 3 Stock-based Compensation Type Stock Option	No. 4 Stock-based Compensation Type Stock Option
Options before vesting (number of shares)				
Balance at December 31, 2014	-	_	_	_
Granted	1	1	-	_
Forfeited	1	1	-	_
Vested	1	1	-	-
Balance at December 31, 2015	1	1	-	_
Options after vesting (number of shares)				
Balance at December 31, 2014	42,700	22,000	27,300	24,900
Vested	1	1	-	_
Exercised	_		-	_
Forfeited	_	_	_	_
Balance at December 31, 2015	42,700	22,000	27,300	24,900

	No. 5 Stock-based Compensation Type Stock Option	No. 6 Stock-based Compensation Type Stock Option	No. 7 Stock-based Compensation Type Stock Option
Options before vesting (number of shares)			
Balance at December 31, 2014	-	-	-
Granted	-	_	22,100
Forfeited	-	-	-
Vested	-	-	22,100
Balance at December 31, 2015	-	-	-
Options after vesting (number of shares)			
Balance at December 31, 2014	31,400	27,500	-
Vested	-	ı	22,100
Exercised	-	-	-
Forfeited	_		_
Balance at December 31, 2015	31,400	27,500	22,100

(ii) Price per share

(II) I TICE per share				
	No. 1 Stock-based	No. 2 Stock-based	No. 3 Stock-based	No. 4 Stock-based
	Compensation Type	Compensation Type	Compensation Type	Compensation Type
	Stock Option	Stock Option	Stock Option	Stock Option
Option price (yen)	1	1	1	1
Weighted average stock price (yen)	-	ı	-	-
Fair value at grant date (yen)	1,091	2,628	2,208	2,245

	No. 5 Stock-based Compensation Type Stock Option	No. 6 Stock-based Compensation Type Stock Option	No. 7 Stock-based Compensation Type Stock Option
Option price (yen)	1	1	1
Weighted average stock price (yen)	-	-	-
Fair value at grant date (yen)	2,988	2,739	3,598

(3) Method to estimate fair unit value of stock options

The grant date fair value of No. 7 Stock-based Compensation Type Stock Option in the year ended December 31, 2015 was estimated using the Black-Scholes option pricing model as follows:

	No. 7 Stock-based Compensation Type Stock Option
Stock price volatility (Note 1)	36.0%
Expected remaining period (Note 2)	15 Years
Expected dividend (Note 3)	¥67/share
Risk free interest rate (Note 4)	0.87%

- Note 1. Stock price volatility was calculated based on actual weekly stock prices over 15 years (from the week of May 8, 2000 to the week of May 4, 2015).
- Note 2. As it was difficult to estimate the expected remaining period without sufficient relevant data, it was determined to be exercised at the mid-point of the exercise period.
- Note 3. Expected dividend was calculated by using the actual dividend paid for the year ended December 31, 2014.
- Note 4. Risk free interest rate represents the comparable compound interest rate of strip government bonds whose remaining period corresponds to the expected remaining period of the stock options.
- (4) Condition regarding the estimate of the fair unit value of stock options

Retirement from the office of director is a condition to exercise stock options, but continuous employment is not. Accordingly, the initial number of stock options granted is used as an estimate of the number of vested shares.

12 Leases

Finance leases which do not transfer ownership at December 31, 2014 and December 31, 2015 consisted of leases for office equipment and software. The method of depreciation and amortization of lease assets is described in Note 2(h), "Summary of significant accounting policies – Leases."

With respect to finance lease transactions that do not transfer ownership and in which the lease transaction began before December 31, 2008, the Company has continued to account for them in the same manner as operating leases as stated above.

At December 31, 2014 and December 31, 2015, assets leased under non-capitalized finance leases were as follows:

Acquisition cost, accumulated depreciation and balance of assets leased

rioquisition occi, accumulated depreciation and balance of decide feature	Millions	of yen	Thousands of U.S. dollars
-	12/2014	12/2015	12/2015
Machinery, equipment and vehicles	¥96	¥5	\$41
Other property, plant and equipment	45	_	-
Less accumulated depreciation and amortization	(134)	(4)	(33)
Total	¥8	¥1	\$8

Note. The above depreciation and amortization was calculated by the straight-line method over the term of the lease. If the above leases had been capitalized, interest of ¥0 million and ¥0 million (\$0 thousand) and depreciation and amortization of ¥18 million and ¥7 million (\$58 thousand) would have been recorded for the years ended December 31, 2014 and December 31, 2015, respectively. Lease payments under non-capitalized finance leases were ¥20 million and ¥7 million (\$58 thousand) for the years ended December 31, 2014 and December 31, 2015, respectively. Obligations under finance leases at December 31, 2014 and December 31, 2015 were as follows:

			Thousands of
	Millions	of yen	U.S. dollars
Payments remaining:	12/2014	12/2015	12/2015
Payments due within 1 year	¥7	¥0	\$0
Payments due after 1 year	1	0	0
Total	¥8	¥1	\$8

Payments remaining under operating leases at December 31, 2014 and December 31, 2015 were as follows:

	Millions of yen		U.S. dollars
Payments remaining:	12/2014	12/2015	12/2015
Payments due within 1 year	¥915	¥873	\$7,238
Payments due after 1 year	2,180	1,767	14,650
Total	¥3,096	¥2,640	\$21,888

Thousands of

13. Contingent liabilities

The Company and certain consolidated subsidiaries were contingently liable as guarantors of loans to a nonconsolidated subsidiary using equity method in the amounts of ¥270 million and ¥—million (\$—thousand) at December 31, 2014 and December 31, 2015, respectively.

14. Derivative transactions

Derivative transactions for which hedge accounting was not applied at December 31, 2014 and December 31, 2015 were as follows: Currency related:

		Millions of	of yen		Millions of yen			
	,	12/20	114		,	12/2	015	
	Contract amount	Amount of principal due over 1 year	Fair value	Gain (loss)	Contract amount	Amount of principal due over 1 year	Fair value	Gain (loss)
Forwards								
Selling								
US dollar	¥3,235	-	(¥90)	(¥90)	¥3,079	-	¥9	¥9
Euro	2,021	-	(75)	(75)	1,307	_	(2)	(2)
British pound	149	_	(1)	(1)	6,998	-	104	104
New Taiwan dollar	_	-	_	_	86	_	0	0
Polish zloty	_	-	_	_	18	-	(0)	(0)
Thai baht	63	-	(1)	(1)	17	_	0	0
Indian rupee	_	-	_	_	60	_	(1)	(1)
Brazillian real	_	-	_	_	38	_	1	1
Japanese yen	25	_	0	0	-	-	-	-
Chinese yuan	45	_	(0)	(0)	-	-	_	-
Buying								
US dollar	140	_	1	1	497	_	(1)	(1)
Euro	583	-	(12)	(12)	456	-	(5)	(5)
British pound	98	_	0	0	37	_	(0)	(0)
Japanese yen	102	-	2	2	51	_	(0)	(0)
Chinese yuan	16	_	0	0	219	_	(6)	(6)
Currency swap								
Receiving in US dollar								
and paying in real	481	88	64	64	58	34	48	48
Total	¥6,964	¥88	(¥113)	(¥113)	¥12,926	¥34	¥144	¥144

Note. Fair value is determined by banking institutions.

	Thousands of U.S. dollars				
		12/2	015		
	Contract amount	Amount of principal due over 1 year	Fair value	Gain (loss)	
Forwards		•			
Selling					
US dollar	\$25,528	_	\$74	\$7-	
Euro	10,836	_	(16)	(1	
British pound	58,021	_	862	86	
New Taiwan dollar	713	_	0		
Polish zloty	149	_	(0)	(
Thai baht	140	_	0		
Indian rupee	497	-	(8)	(
Brazillian real	315	_	8		
Japanese yen	-	-	-		
Chinese yuan	-	-	-		
Buying					
US dollar	4,120	_	(8)	(
Euro	3,780	_	(41)	(4	
British pound	306	_	(0)	(
Japanese yen	422	-	(0)	(
Chinese yuan	1,815	-	(49)	(4	
Currency swap					
Receiving in US dollar					
and paying in real	480	281	397	39	
Total	\$107,171	\$281	\$1,193	\$1,19	

Derivative transactions for which hedge accounting was applied at December 31, 2014 and December 31, 2015 were as follows: Currency related:

Currency related:								
			ns of yen				ns of yen 1/2015	
		12	/2014					
	Hedged	Contract	Amount of	Fair	Hedged	Contract	Amount of	Fair
	items	amount	principal due over 1 year	value	items	amount	principal due over 1 year	value
Forwards								
Selling	Accounts				Accounts			
Euro	receivable	¥5	j –	(¥0)	receivable	-	· -	_
Buying								
US dollar	Accounts			_	Accounts	¥125	-	¥0
Euro	payable	514	ļ -	29	payable	160	-	(1)
Total		¥520) –	¥29		¥286	-	(¥0)
Note. Fair value is determined	d by banking in	stitutions.						
						Thousands	of U.S. dollars	
							2/2015	
							Amount of	
					Hedged	Contract	principal due	Fair
					items	amount	over 1 year	value
Forwards							· · · · · · · · · · · · · · · · · · ·	
Selling					Accounts			
Euro					receivable	_	-	_
Buying								
US dollar					Accounts	\$1,036	_	\$0
Euro					payable	1,326	_	(8)
Total						\$2,371	-	(\$0)
Interest rate currency related			ns of yen /2014				ns of yen 2/2015	
		12.	Amount of			12	Amount of	
	Hedged	Contract	principal due	Fair	Hedged	Contract	principal due	Fair
	items	amount	over 1 year	value	items	amount	over 1 year	value
Exceptional accounting for int	terest rate and	currency swa					575 you.	
Interest rate and currency					,			
swap contracts								
Fixed rate payments and								
variable rate receipts								
Receiving in US dollar and					Long-term			
paying in Japanese yen	_				loans	¥15,120	¥15,120	Note
Note. Interest rate and currer for together with long-t				_				are accounted
Tot togother man long t		ougou reemen	tooor amigny, amon	ran valuos are	moradou in cho ra		ig com round.	
							of U.S. dollars	
						12	2/2015	
					Hedged	Contract	Amount of	Fair
					items	amount	principal due	value
					1001110	amount	over 1 year	74.40
Exceptional accounting for int	terest rate and	currency swa	aps	<u> </u>				
Interest rate and currency								
swap contracts								
Fixed rate payments and								
variable rate receipts								
Receiving in US dollar and					Long-term	A	A.a	
paying in Japanese yen					loans	\$125,362	\$125,362	Note

15. Income taxes

The Company is subject to a number of taxes based on income, which, in the aggregate, indicate a statutory income tax rate in Japan of approximately 37.9% and 35.5% for the years ended December 31, 2014 and December 31, 2015, respectively.

The following table summarizes the significant differences between the statutory tax rate and HORIBA's effective tax rate for financial statement purposes for the years ended December 31, 2014 and December 31, 2015.

•	12/2014	12/2015
Statutory tax rate	37.9%	35.5%
Expenses not qualifying for permanent deduction,		
e.g. entertainment expenses	1.8	1.9
Nontaxable dividend income	(0.5)	(1.3)
Per capita inhabitants tax	0.3	0.3
Increase/decrease in valuation allowance for deferred tax assets	0.9	1.9
Differences in tax rate between		
foreign subsidiaries and the Company	(3.3)	(1.6)
Tax credits	(4.5)	(6.0)
Reduction in deferred tax assets by the changes of tax rate	0.8	1.4
Other	1.6	0.1
Effective tax rate	34.9%	32.2%
	•	

Significant components of HORIBA's deferred tax assets and liabilities at December 31, 2014 and December 31, 2015 were as follows:

12/2014 12/2015 12/2				Thousands of
Name		Millions	of yen	U.S. dollars
Accrued enterprise tax.		12/2014	12/2015	12/2015
Loss on write-down of inventory. 864 1,151 9,543 Allowance for doubtful receivables. 70 70 580 Accrued bonuses. 229 190 1,575 Loss carryforwards. 1,333 1,540 12,768 Unrealized gains. 1,555 1,727 14,318 Net defined benefit liability. 461 411 3,407 Depreciation. 547 445 3,689 Loss on valuation of investment securities. 109 81 671 Loss on impairment of fixed assets. 117 106 878 Provision for loss on dissolution of the employees' pension fund. 665 408 3,382 Other 3,163 3,336 27,659 Total deferred tax assets. 9,430 9,678 80,242 Valuation allowance. (1,281) (1,710) (14,177) Net deferred tax liabilities 8,149 7,968 66,064	Deferred tax assets			
Allowance for doubtful receivables 70 70 580 Accrued bonuses 229 190 1,575 Loss carryforwards 1,333 1,540 12,768 Unrealized gains 1,555 1,727 14,318 Net defined benefit liability 461 411 3,407 Depreciation 547 445 3,689 Loss on valuation of investment securities 109 81 671 Loss on impairment of fixed assets 117 106 878 Provision for loss on dissolution of the employees' pension fund 665 408 3,382 Other 3,163 3,336 27,659 Total deferred tax assets 9,430 9,678 80,242 Valuation allowance (1,281) (1,710) (14,177) Net deferred tax liabilities 8,149 7,968 66,064	Accrued enterprise tax	¥313	¥207	• •
Accrued bonuses 229 190 1,575 Loss carryforwards 1,333 1,540 12,768 Unrealized gains 1,555 1,727 14,318 Net defined benefit liability 461 411 3,407 Depreciation 547 445 3,689 Loss on valuation of investment securities 109 81 671 Loss on impairment of fixed assets 117 106 878 Provision for loss on dissolution of the employees' pension fund 665 408 3,382 Other 3,163 3,336 27,659 Total deferred tax assets 9,430 9,678 80,242 Valuation allowance (1,281) (1,710) (14,177) Net deferred tax assets 8,149 7,968 66,064	Loss on write-down of inventory	864	1,151	9,543
Loss carryforwards. 1,333 1,540 12,768 Unrealized gains. 1,555 1,727 14,318 Net defined benefit liability. 461 411 3,407 Depreciation. 547 445 3,689 Loss on valuation of investment securities. 109 81 671 Loss on impairment of fixed assets. 117 106 878 Provision for loss on dissolution of the employees' pension fund. 665 408 3,382 Other. 3,163 3,336 27,659 Total deferred tax assets. 9,430 9,678 80,242 Valuation allowance (1,281) (1,710) (14,177) Net deferred tax assets. 8,149 7,968 66,064	Allowance for doubtful receivables	70	70	580
Unrealized gains. 1,555 1,727 14,318 Net defined benefit liability. 461 411 3,407 Depreciation	Accrued bonuses	229	190	1,575
Net defined benefit liability 461 411 3,407 Depreciation 547 445 3,689 Loss on valuation of investment securities 109 81 671 Loss on impairment of fixed assets 117 106 878 Provision for loss on dissolution of the employees' pension fund 665 408 3,382 Other 3,163 3,336 27,659 Total deferred tax assets 9,430 9,678 80,242 Valuation allowance (1,281) (1,710) (14,177) Net deferred tax assets 8,149 7,968 66,064	Loss carryforwards	1,333	1,540	12,768
Depreciation 547 445 3,689 Loss on valuation of investment securities 109 81 671 Loss on impairment of fixed assets 117 106 878 Provision for loss on dissolution of the employees' pension fund 665 408 3,382 Other	Unrealized gains	1,555	1,727	14,318
Loss on valuation of investment securities 109 81 671 Loss on impairment of fixed assets 117 106 878 Provision for loss on dissolution of the employees' pension fund 665 408 3,382 Other 3,163 3,336 27,659 Total deferred tax assets 9,430 9,678 80,242 Valuation allowance (1,281) (1,710) (14,177) Net deferred tax assets 8,149 7,968 66,064	Net defined benefit liability	461	411	3,407
Loss on impairment of fixed assets 117 106 878 Provision for loss on dissolution of the employees' pension fund 665 408 3,382 Other 3,163 3,336 27,659 Total deferred tax assets 9,430 9,678 80,242 Valuation allowance (1,281) (1,710) (14,177) Net deferred tax assets 8,149 7,968 66,064	Depreciation	547	445	3,689
Provision for loss on dissolution of the employees' pension fund. 665 408 3,382 Other. 3,163 3,336 27,659 Total deferred tax assets. 9,430 9,678 80,242 Valuation allowance. (1,281) (1,710) (14,177) Net deferred tax assets. 8,149 7,968 66,064	Loss on valuation of investment securities	109	81	671
Other 3,163 3,336 27,659 Total deferred tax assets 9,430 9,678 80,242 Valuation allowance (1,281) (1,710) (14,177) Net deferred tax assets 8,149 7,968 66,064	Loss on impairment of fixed assets	. 117	106	878
Total deferred tax assets 9,430 9,678 80,242 Valuation allowance (1,281) (1,710) (14,177) Net deferred tax assets 8,149 7,968 66,064	Provision for loss on dissolution of the employees' pension fund	665	408	3,382
Valuation allowance (1,281) (1,710) (14,177) Net deferred tax assets 8,149 7,968 66,064	Other	3,163	3,336	27,659
Net deferred tax assets	Total deferred tax assets	9,430	9,678	80,242
Deferred tax liabilities	Valuation allowance	(1,281)	(1,710)	(14,177)
	Net deferred tax assets	8,149	7,968	66,064
Unrealized losses (402) (390) (3 233)	Deferred tax liabilities			
0111 0411E04 100000	Unrealized losses	(402)	(390)	(3,233)
			(1,164)	(9,650)
Other (1,367) (2,013) (16,690)	Other	(1,367)	(2,013)	(16,690)
Total deferred tax liabilities	Total deferred tax liabilities	(2,784)	(3,568)	(29,582)
Net deferred tax assets	Net deferred tax assets	¥5,365	¥4,399	\$36,472

Net deferred tax assets are included in the consolidated balance sheets as follows:

	Millions	of yen	Thousands of U.S. dollars
•	12/2014	12/2015	12/2015
Current assets	¥3,635	¥4,001	\$33,173
Investments and other noncurrent assets	1,993	1,671	13,854
Current liabilities	(88)	(91)	(754)
Long-term liabilities	(174)	(1,181)	(9,791)
Net deferred tax assets	¥5,365	¥4,399	\$36,472

(Revision of amount of deferred tax assets and deferred tax liabilities due to change in rate of corporate and other income taxes) Following the promulgation of the "Act for Partial Amendment of the Income Tax Act (Act No. 9 of 2015) and the Act for Partial Amendment of the Local Tax Act (Act No. 2 of 2015) on March 31, 2015, the statutory effective tax rate for the consolidated fiscal year on and after April 1, 2015 was reduced.

Following the Act, the statutory effective tax rate used to calculate deferred tax assets and deferred tax liabilities was changed from 35.5% to 33.0% for temporary differences expected to be reversed in the fiscal year beginning on January 1, 2016 and 32.2% for temporary differences expected to be reversed in the fiscal year beginning on January 1, 2017 or after.

Due to such change in tax rate, the amount of deferred tax assets (netted with deferred tax liabilities) decreased by ¥141 million (\$1,169 thousand), while the amounts of income taxes (deferred), unrealized gains on available-for-sale securities and remeasurements of defined benefit plans increased by ¥271 million (\$2,246 thousand), ¥120 million (\$994 thousand) and ¥9 million (\$74 thousand), respectively. Deferred gains or losses on hedges, however, decreased by ¥0 million (\$0 thousand).

16. Impairment loss

HORIBA reviewed its long-lived assets for impairment, and, as a result, impairment losses were recognized by the Company for the following asset groups as other expenses for the year ended December 31, 2014.

Location	Use	Type	Millions of yen
Montpellier, France	Idle	Machinery and equipment	¥25
Gothenburg, Sweden	Planned to be sold	Machinery and equipment	16

(Background)

In the case of idle assets, there was no concrete plan to use the assets for business. In the case of assets that are planned to be sold, they have been estimated that losses will arise due to the sales. Thus, the book value of these assets was lowered to the recoverable value, and the resulting impairment loss (¥42 million) was recognized as other expenses.

(Method used for grouping)

In connection with the use of impairment accounting, business assets are grouped on a reporting segment basis. Idle assets, etc., are grouped on a property-by-property basis.

(Method used for calculating a recoverable amount)

The recoverable amount was measured according to estimated net realizable value. As it is difficult to sell or divert machinery and equipment of idle assets elsewhere, the recoverable amount was estimated at zero. Assets that are planned to be sold were estimated at the contract amount.

HORIBA reviewed its long-lived assets for impairment, and, as a result, impairment losses were recognized by the Company for the following asset groups as other expenses for the year ended December 31, 2015.

				Thousands of
Location	Use	Type	Millions of yen	U.S. dollars
Sao Paulo, Brazil	Planned to be sold	Machinery and equipment	¥170	\$1,409

(Background)

In the case of assets that are planned to be sold, they have been estimated that losses will arise due to the sales. Thus, the book value of these assets was lowered to the recoverable value, and the resulting impairment loss was recognized as other expenses.

(Method used for grouping)

In connection with the use of impairment accounting, business assets are grouped on a reporting segment basis. Idle assets, etc., are grouped on a property-by-property basis.

(Method used for calculating a recoverable amount)

The recoverable amount was measured according to estimated net realizable value. Assets that are planned to be sold were estimated at the contract amount.

17. Consolidated statement of comprehensive income

Components of other comprehensive income for the years ended December 31, 2014 and December 31 2015 consisted of the following

	5.4 *10*		Thousands of
	Millions		U.S. dollars
Unrealized gains (losses) on available-for-sale securities:	12/2014	12/2015	12/2015
Increase (decrease) during the year	¥1,402	¥778	\$6,450
Reclassification adjustment	(1,804)	(44)	(364)
Subtotal, before tax	(402)	733	6,077
Tax (expense) or benefit	148	(150)	(1,243)
Subtotal, net tax	(254)	582	4,825
Deferred gains or losses on hedges			
Increase (decrease) during the year	5	(63)	(522)
Reclassification adjustment		33	273
Subtotal, before tax	23	(29)	(240)
Tax (expense) or benefit	(8)	10	82
Subtotal, net tax	15	(19)	(157)
Foreign currency translation adjustments			
Increase (decrease) during the year	2,132	(3,793)	(31,448)
Remeasurements of defined benefit plans	-		
Increase (decrease) during the year		53	439
Reclassification adjustment		(26)	(215)
Subtotal, before tax	 	26	215
Tax (expense) or benefit		23	190
Subtotal, net tax		50	414
Share of other comprehensive income of associates accounted for using the equity method			
Increase (decrease) during the year	29	_	-
Total other comprehensive income	¥1,923	(¥3,180)	(\$26,365)

18. Segment information

General information regarding reportable segments

(1) Calculation method for reportable segments

HORIBA's reportable segments are components of the Company about which separate financial information is available and that are evaluated regularly by the management in deciding how to allocate resources and in assessing performance.

The Company has established the segment strategy office for each product and service at its headquarters which draws a comprehensive plan for Japan and overseas markets for business development

The Company thus is composed of business segments by product and service that are determined at the head office. The Automotive Test Systems, Process & Environmental Instruments & Systems, Medical-Diagnostic Instruments & Systems, Semiconductor Instruments & Systems and Scientific Instruments & Systems comprise five reportable segments.

Major products and services of each segment are described below.

(a) Automotive Test Systems

Emission Measurement Systems, In-Use Automotive Emissions Analyzers, On-Board Emission Measurement, Driveline Test Systems, Engine Test Systems, Brake Test Systems, Drive Recorders, Engineering Consultancy, Test Services & Consultancy, Leasing of R&D Facility

(b) Process & Environmental Instruments & Systems

Stack Gas Analyzers, Water Quality Analysis and Examination Systems, Air Pollution Analyzers, Environmental Radiation Monitors

(c) Medical-Diagnostic Instruments & Systems

Hematology Analyzers, Equipment for Measuring Immunological Responses, Clinical Chemistry Analyzers, Blood Sugar Measurement Systems

(d) Semiconductor Instruments & Systems

Mass Flow Controllers, Chemical Concentration Monitors, Reticle/Mask Particle Detection Systems, Residual Gas Analyzers

(e) Scientific Instruments & Systems

pH Meters, Particle-Size Distribution Analyzers, X-Ray Fluorescence Analyzers, Raman, Spectrophotometers, Gratings

(2) Method of measurement regarding income (loss), assets and other material items by reportable segment

The accounting methods applied for reportable segments are identical with those stated in Note 2, "Summary of significant accounting policies." Income for each reportable segment is the amount based on operating income.

(3) Information regarding income (loss), assets and other material items by reportable segment

				Millions of yen			
				12/2014			
	Automotive	Process & Environmental	Medical- Diagnostic	Semiconductor	Scientific	Adjustment	Consolidated
Sales Sales to outside customers Intersegment sales and transfers	¥55,001	¥16,465	¥27,037 -	¥28,934	¥25,627 -	-	¥153,065 -
Total	55,001	16,465	27,037	28,934	25,627	-	153,065
Segment income (loss)	¥5,827	¥2,007	¥1,717	¥6,455	¥1,206	-	¥17,214
Segment assets	¥49,035	¥14,921	¥23,953	¥29,926	¥24,405	¥65,092	¥207,335
Other items:							
Depreciation	1,518	503	1,181	868	743	_	4,815
Amortization of goodwill	_	-	-	-	89	-	89
Increase in tangible and intangible fixed assets	3,827	1,191	2,168	2,776	1,038	-	11,001
				Millions of yen			
		Process &	Medical-				
	Automotive	Environmental	Diagnostic	Semiconductor	Scientific	Adjustment	Consolidated
Sales			Diagnoons				
Sales to outside customers Intersegment sales and transfers	¥64,251 _	¥16,754 - –	¥27,447 -	¥35,386 -	¥27,059 -	-	¥170,898 -
Total	64,251	16,754	27,447	35,386	27,059	-	170,898
Segment income (loss)	¥4,448	¥1,773	¥2,403	¥9,439	¥1,307	-	¥19,372
Segment assets	¥71,370	¥15,717	¥23,829	¥33,901	¥23,778	¥62,435	¥231,032
Other items:							
Depreciation	2,183	519	1,343	1,172	745	-	5,964
Amortization of goodwill	53	-	-		92	-	145
Increase in tangible and intangible fixed assets	7,919	2,259	2,319	2,257	1,552	_	16,309
			Tho	usands of U.S. do 12/2015	llars		
		Process &	Medical-	12/ 2013			
	Automotive	Environmental	Diagnostic	Semiconductor	Scientific	Adjustment	Consolidated
Sales		Livii oriirieritai	Diagnostic				
Sales to outside customers Intersegment sales and transfers	\$ 532,717	\$138,910 _	\$227,568 _	\$293,391 	\$224,351 _	- -	\$1,416,947 _
Total		138,910	227.568	293,391	224.351	_	1.416.947
Segment income (loss)		\$14,700	\$19,923	\$78,260	\$10,836	_	\$160,616
Segment assets		\$130,312	\$197,570	\$281,079	\$197,147	\$517,660	\$1,915,529
Other items:							
Depreciation	18,099	4,303	11,135	9,717	6,176	_	49,448
Amortization of goodwill		_	_	•	762	_	1,202
Increase in tangible and intangible fixed assets	65,657	18,729	19,227	18,713	12,867	_	135,220
•			· · · · · · · · · · · · · · · · · · ·	•			

Note 1. Details of adjustment amounts are as follows:

- (1)Unallocated amounts to be included in the adjustment amount of segment income were not generated.
- (2)The adjustment amounts of ¥65,092 million and ¥62,435 million (\$517,660 thousand) of segment assets for the years ended December 31, 2014 and December 31, 2015, respectively, represent corporate assets that are not allocated to any business segment.

They include cash and cash equivalents, short-term investments, investment securities, idle land, etc.

- Note 2. Depreciation and increase in tangible and intangible fixed assets include long-term prepaid expenses and the amount of amortization associated with the expenses.
- Note 3. Increase in tangible and intangible fixed assets does not include an increase in fixed assets of ¥14,446 million (\$119,774 thousand) due to acquisition of the ECT business from MIRA Ltd.

<Related Information>

- 1. Information regarding geographic areas
- (1) Net sales

	Millions	Thousands of U.S. dollars	
_	12/2014	12/2015	12/2015
Japan	¥47,428	¥52,474	\$435,071
United States	21,743	27,022	224,044
China	16,836	20,495	169,927
Europe	38,710	40,840	338,612
Asia	22,249	23,812	197,429
Others	6,097	6,254	51,853
Total	¥153,065	¥170,898	\$1,416,947

- Note 1. Net sales are categorized by country or geographic area based on the location of the customer.
- Note 2. The "Asia" amount is that of the Asian region other than China.
- (2) Property, plant and equipment

	Millions	U.S. dollars	
-	12/2014	12/2015	12/2015
Japan	¥20,157	¥27,933	\$231,597
France	6,997	6,682	55,401
United Kingdom	725	11,081	91,874
Others	11,561	11,281	93,532
Total	¥39,441	¥56,978	\$472,415

2. Information regarding major customers

There is no customer who represents more than 10% of the consolidated sales.

3. Information regarding impairment loss on fixed assets by reporting segment

	Millions	of yen	Thousands of U.S. dollars
-	12/2014	12/2015	12/2015
Automotive Test Systems	¥16	_	
Medical-Diagnostic Instruments & Systems	25	170	1,409
Total	¥42	¥170	\$1,409

4. Information regarding the amortized amount and unamortized balance of goodwill by reporting segment

	Millions	of yen	U.S. dollars
-	12/2014	12/2015	12/2015
Automotive Test Systems	-	¥272	\$2,255
Scientific Instruments & Systems	¥418	303	\$2,512
Total	¥418	¥576	\$4,775

Note. Information regarding the "Amortized amount of goodwill" is omitted as similar information is disclosed in "Segment Information."

5. Information regarding gain on bargain purchase by reporting segment Not applicable.

19. Related party transactions

(1) Related party transactions with the Company

Directors and major shareholders (individuals only) of the Company

The year ended December 31, 2014

The year ended December 31, 2014					
Category			r's close member		
Na	me	Masao	Horiba		
Add	ress	-	-		
Amount of capital stock (millions of yen)		-			
Business or occupation		Advisor			
Percentage of v	Percentage of voting rights held		2.7% (direct)		
Relationship		Consultin	g contract		
Transaction	Transaction amount	Consulting fee (Note 2)	¥24 million		
Account	Balance at December 31, 2014	-	-		

The year ended December 31, 2015

Category			's close nember	
Na	me	Masao	Horiba	
Add	ress	-	-	
Amount of capital stock (millions of yen)		-		
Business or	siness or occupation Adv		isor	
Percentage of v	ercentage of voting rights held		2.7% (direct)	
Relati	onship	Consulting contract		
Transaction	Transaction amount	Consulting fee (Note 2,3)	¥14 million (\$116 thousand)	
Account	Balance at December 31, 2015	ı	-	

- Note 1. The above transaction amounts do not include consumption taxes.
- Note 2. Transaction conditions and policy on determining transaction conditions

The consulting fee for Masao Horiba is compensation for management consulting services to the Company, so valued on the basis of his background of long experience starting with the founding of the Company, and activities of society-academia collaboration for innovation and participation in economic organizations, as the representative of the Company. The payment was determined on a negotiated basis.

- Note 3. As Masao Horiba passed away on July 14, 2015, the amount of transactions with him for the current fiscal year is for the period from January 1, 2015 to the date of his retirement.
- (2) Related party transactions with consolidated subsidiaries of the Company that submitted consolidated financial statements Directors and major shareholders (individuals only) of the Company

The year ended December 31, 2014

The year ended December 31, 2014					
Category		r's close member			
Name		Horiba			
Address		-			
	-				
Business or occupation		isor			
Percentage of voting rights held		direct)			
onship	Consulting contract				
Transaction amount	Consulting fee (Note 2)	¥30 million			
Balance at December 31, 2014	-	-			
	me ress sapital stock of yen) occupation oting rights held onship Transaction amount Balance at December 31,	pegory Director family reme Masao ress papital stock of yen) Occupation Advorting rights held onship Consulting fee (Note 2) Balance at December 31,			

The year ended December 31, 2015

The year ended D	ecember 31, 2013		
Category			's close nember
Na	me	Masao	Horiba
Add	ress	-	-
	apital stock of yen)	-	-
Business or occupation		Adv	isor
Percentage of voting rights held		2.7% (direct)	
Relationship		Consulting contract	
Transaction	Transaction amount	Consulting fee (Note 2,3)	¥17 million (\$140 thousand)
Account	Balance at December 31, 2015	-	-

- Note 1. The above transaction amounts do not include consumption taxes.
- Note 2. Transaction conditions and policy on determining transaction conditions

The consulting fee for Masao Horiba is compensation for management consulting services to consolidated subsidiaries of the Company, so valued on the basis of his background of long experience starting with the founding of the Company. The payment was determined on a negotiated basis.

Note 3. As Masao Horiba passed away on July 14, 2015, the amount of transactions with him for the current fiscal year is for the period from January 1, 2015 to the date of his retirement.

20. Subsequent events

Not Applicable.

21. Significant business combination

In board of directors meeting held on July 14, 2015, the Company decided to acquire the business of MIRA Ltd. through the Company's subsidiary HRA International Ltd. and entered into a business purchase agreement on the same date.

HRA International Ltd. acquired the business of MIRA Ltd. and changed its corporate name to HORIBA MIRA Ltd. on the same date.

- 1. Summary of Business Combination
- (1) Name and business of acquired company

Name of company: MIRA Ltd.

Description of business: Engineering consultancy, Test services & consultancy and Leasing of R&D facility

(2) Purpose of business combination

Goal of HORIBA is to integrate MIRA's competences into its Automotive Test Systems segment to complement its established strength in analysis and measurement technologies for automotive development and regulatory compliance. HORIBA will expand its business and add new products and services at the cutting-edge of next-generation mobility development, in area such as autonomous vehicles, electric vehicles and ultra-low fuel consumption vehicles.

- (3) Date of business combination
 - July 14, 2015
- (4) Legal form of business combination

Acquisition of business to be paid for in cash

(5) Name of company after combination

HORIBA MIRA Ltd.

(6) Primary basis for determination of acquirer

The Company's subsidiary HRA International Ltd. paid cash in consideration of acquiring 100% of the business of MIRA Ltd.

2. Accounting period during which the financial results of the acquired company were included in the consolidated statements of income for the fiscal year

From July 14, 2015 to December 31, 2015

3. Acquisition cost and its breakdown of acquired business

Acquisition Price: ¥15,469 million (\$128,256 thousand) in cash

Acquisition Cost: ¥15,469 million (\$128,256 thousand)

- 4. Amount of goodwill recognized, reason for recognition, amortization method, and amortization period
- (1) Amount of goodwill recognized

¥247 million (\$2,047 thousand)

(2) Reason for recognition

This is mainly due to the expectation of excess earning power from future business development.

(3) Amortization method and amortization period

Straight-line method of amortization over 5-year period

(4) Amounts allocated to intangible assets other than goodwill, primary components of those assets by type, and amortization period of major types

Customer-related assets	¥	1,905 million (\$	15,794 thousand)	Amortization period	9 years
Trademark rights	¥	2,142 million (\$	17,759 thousand)	Amortization period	10 years
Other	¥	107 million (\$	887 thousand)	Amortization period	10 years

5. Amounts and primary components of assets acquired and liabilities assumed as of the date of the business combination

Current assets	¥	4,494 million (\$	37,260 thousand)
Fixed assets	¥	14,446 million (\$	119,774 thousand)
Total assets	¥	18,941 million (\$	157,043 thousand)
Current liabilities	¥	2,809 million (\$	23,289 thousand)
Non-current liabilities	¥	911 million (\$	7,553 thousand)
Total liabilities	¥	3,720 million (\$	30,843 thousand)

6. Approximate amounts and calculation method of the impacts on consolidated statements of income of the fiscal year, assuming that the business combination was completed on the first date of the fiscal year

(Calculation method of approximate amounts)

Approximate amounts of the impacts are the difference between the calculated amounts of net sales and income in the assumption that the business combination was completed on the first date of the fiscal year, and the amounts of net sales and income of the acquired company were recorded on the consolidated statements of income. The notes above are unaudited.

22. Cash flow information

Breakdown of assets and liabilities that were newly included in the scope of consolidation due to the business combination
The details of increment of assets and liabilities due to acquisition of the ECT business from MIRA Ltd. with the related acquisition costs and net disbursement are as follows:

Current assets	¥	4,494 million (\$	37,260 thousand)
Fixed assets	¥	14,446 million (\$	119,774 thousand)
Goodwill	¥	247 million (\$	2,047 thousand)
Current liabilities	¥	(2,809) million (\$	(23,289) thousand)
Non-current liabilities	¥	(911) million (\$	(7,553) thousand)
Acquisition cost of business	¥	15,469 million (\$	128,256 thousand)
Cash and cash equivalents	¥	(1,897) million (\$	(15,728) thousand)
Payments for transfer of business	¥	13,572 million (\$	112,527 thousand)

Independent Auditor's Report

To the Board of Directors of HORIBA, Ltd.:

We have audited the accompanying consolidated financial statements of HORIBA, Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at December 31, 2014, and the consolidated income statement, statement of comprehensive income, statement of changes in net assets and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatements, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, while the objective of the financial statement audit is not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of HORIBA, Ltd. and its consolidated subsidiaries as at December 31, 2014, and their financial performance and cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Emphasis of Matter

Without qualifying our opinion, we draw attention to Note 20 to the consolidated financial statements, which describes that the board of directors' meeting of HORIBA, Ltd. held on February 12, 2015 passed a resolution to acquire treasury stock.

Convenience Translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended December 31, 2014 are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 1 to the consolidated financial statements.

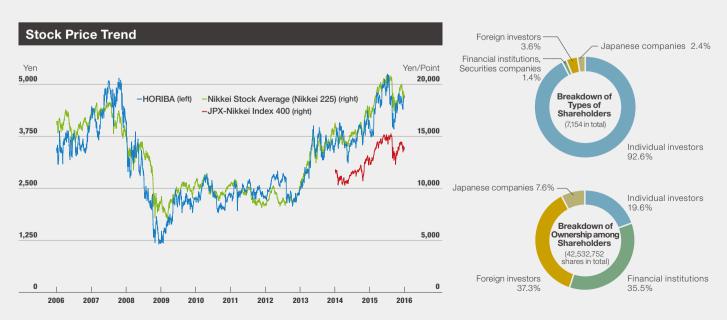
KPMG AZSA LLC
March 30, 2015

Kyoto, Japan

Corporate Information		
Head Office	2, Miyanohigashi-cho, Kisshoin, Minar	mi-ku, Kyoto 601-8510, Japan
Founded	October 17, 1945	
Incorporated	January 26, 1953	
Net sales	¥170,898 million (Consolidated)	Fiscal 2015
Paid in Capital	¥12,011 million	As of December 31, 2015
Number of Employees	6,831(Consolidated)	As of December 31, 2015
Fiscal Closing Date	December 31, annually	
Annual Meeting of Shareholders	Held in March	
Transfer Agent	Sumitomo Mitsui Trust Bank, Limited	
Independent Auditor	KPMG AZSA LLC	
Stock Listings	Tokyo Stock Exchange, First Section	Securities Code: 6856

Major Shareholders	As	of December 31, 2015
Name of Shareholders	Shares (Thousands)	Percentage (%)
Japan Trustee Service Bank, Ltd.	2,270	5.34
PICTET AND CIE (EUROPE) S.A.	2,182	5.13
The Master Trust Bank of Japan, Ltd.	1,849	4.35
UBS AG LONDON A/C IPB SEGREGATED CLIENT ACCOUNT	1,435	3.37
National Mutual Insurance Federation of Agricultural Cooperatives	1,287	3.03
Masao Horiba*	1,150	2.70
The Bank of Kyoto, Ltd.	828	1.95
Atsushi Horiba	810	1.91
HORIBA Raku-Raku Kai (partner suppliers)	794	1.87
BNP Paribas Securities Services Paris/JASDEC/France	771	1.81

^{*}Masao Horiba passed away in July 2015, but he remains listed in the shareholder registry because the transfer of registration has not yet been completed as of December 31, 2015.



HORIBA's corporate motto

"Joy and Fun"

Originates from the belief that if we take interest and pride in the work that occupies most of the active time in our lives, in the place where we spend the large part of each day, then as a result our satisfaction with life will increase, and we will be able to enjoy our lives even more.

Taking interest and pride in our work leads us to "Joy and Fun."

Business Operations

At HORIBA, our mission is to contribute to the progress of science and technology, and the preservation of the global environment and resources through the provision of highly original products, analytical and measurement solutions, and engineering services that utilize our world renowned measurement and analytical technologies. We are engaged in the fields of engine emissions, scientific analysis, industrial and process measurement, environment monitoring, semiconductor process control, medical and health-care, and biotechnology. The new businesses and new products we may initiate shall also satisfy our aim to develop scientific technology, improve the life of the community, and minimize the impact on the environment. We put priority on ensuring a safe business environment and strictly abide by applicable laws, regulations, and our articles of incorporation. We have established and adopted a quality management system and environmental preservation system. We strive to deliver high value-added products and services in the shortest possible time to customers all over the world while combining the unique development, production, sales, and service functions of all HORIBA Group companies throughout the world. We aim to be a leader in the global market in the fields in which we operate by consistently satisfying our customers' needs and effectively maximizing our resources through investments in the carefully selected fields.

Customer Responsiveness

We maintain a philosophy of pursuing cutting edge technology in order to supply products and services that consistently satisfy customers' requirements. We are committed to offering top-quality, highly reliable products and services with a consistent level of excellence throughout the world. Meanwhile, we strive to understand the true needs of customers and proactively propose solutions.

Responsibility to Shareholders and Investors

We recognize that maximizing the returns to shareholders by consistently raising HORIBA's long-term corporate value is

one of the priority objectives of management. Our basic policy is to target total returns (the combination of dividend payments and share buybacks) to shareholders to be at a certain ratio of HORIBA's consolidated net income, and consistently deliver them. In addition, we are committed to create opportunities for constructive dialogues with investors and stakeholders, regularly reporting our operating performance, fairly and promptly disclosing information whenever an important business or managerial issue arises, and maintaining transparency in our management. HORIBA Group companies, having adopted a unified accounting standard and system and a common information base, shall maintain a timely and responsive management control system. The managements of group companies also share responsibility in generating profit, delivering dividend payments, establishing and managing the internal control system, and developing human resources.

Employees

We are proud of the entrepreneurial spirit that has led to the creation of HORIBA Group companies. Each group employee is made aware of this heritage and we actively encourage ideas and innovations from individual employees. HORIBA promotes an open and fair business environment, with attention to safety and health, which allows all group employees to achieve their individual goals and maximize their talents and potential. We strive to foster an environment of mutual respect so that diverse talents and viewpoints can flourish. At the same time, to further everyone's personal and professional growth, we encourage intercultural understanding and thinking from a global perspective. We create a work environment for employees to achieve their growth potential and exert their talents to the maximum by accelerating diversity management and expanding our international core human resources development and exchange program. The basis of our performance evaluation is the merit count principle, (not the demerit mark principle), as we value each and every employee who makes efforts to improve his or her performance with a challenging spirit.

J O Y a n d F U N

HORIBA Report 2015

Editorial policy

We have published integrated "HORIBA Report" since 2013 to help you better understand the true value of HORIBA by introducing our unique corporate culture and "invisible values", which cannot be found in financial statements.

Additional information on our "invisible values" is available on our website.

HORIBA Report Booklet "To our stakeholders" Website

This booklet summarizes primarily HORIBA's business activities and financial information, along with "invisible values" such as human resources and technologies.

the HORIBA Report web data collection, which features HORIBA's safety and environmental activities, contribution to the society, and other information.

This website provides the detailed information including

http://www.horiba.com/to-our-stakeholders/

