Risks Relating to the Group’s Business

Described below are matters related to the Group’s business that are considered to be main sources of risk or that could have a significant effect on investor decision-making. Recognizing the possibility that such risks may materialize, the Group will work to avoid these risks and take appropriate measures should they occur. However, investment decisions regarding Yokogawa’s securities should be made carefully by evaluating the matters stipulated below along with matters mentioned in other sections of this document.

The risks described below include forward-looking statements that are based on judgments made by the Group at the end of fiscal year 2018 and are subject to uncertainties. Actual results may therefore vary from the statements.

1. Risks Relating to the Business Environment
   a. Impact of changes in the external business environment
      The Group conducts its business activities around the world, and changes in economic and other external conditions in each region could adversely affect its business results and financial condition. Specifically, the following risks are involved:
      - Political and economic climate
      - Fluctuations in currency exchange rates and interest rates
      - Impact of government regulations such as taxation and trade restrictions
      - Differences in commercial practices
      - Social disruption arising from wars, riots, terrorist attacks, epidemics, new infectious diseases, strikes, and other factors
      - Cyber-attacks against the Company’s products, services, and internal infrastructure
      - Impact of natural disasters such as earthquakes, tsunamis, and typhoons
      - Incomplete understanding of country-specific regulations, sanctions, patents, and other legal requirements including those related to environmental protection, and new laws and regulatory amendments

While the Group strives to prevent and avoid these risks by means such as gathering information throughout the Group and signing a contract with external organizations, any of these developments could impact the Group’s business results and financial condition as well as its overall business activities, including R&D and production.

b. Changes in the value of assets owned
   Changes in the value of shares, etc., owned by the Group could adversely affect its business results and financial condition. In addition, regarding the fixed assets owned by the Group, a decrease in asset value accompanying a decline in their market value or a fall in profitability could adversely affect its business results and financial condition.

2. Risks Relating to Business Activities
   a. Industrial automation and control business
      The industrial automation and control business is mainly expected to grow outside Japan in the medium to long term due to increased demand for energy in emerging and resource-rich countries. To increase its share of the global market and bolster sales and income, the Group has focused its resources on this business and strengthened systems related to R&D, production, sales, engineering, and service as well as deployment of M&As and alliances.

      Against this background, the Group faces intensifying competition with respect to projects of a certain scale such as the construction of new facilities and system modernization and therefore an even greater need to reduce costs. At the same time, the recent rise of nationalism in resource-rich nations and emerging markets is giving rise to an urgent need for the localization of production and procurement of workforce and services.

      While the Group is continuously investing in R&D on technological and service innovation to maintain its competitiveness, its R&D investments may not succeed if the Group is unable to grasp market trends in product and service areas with growth potential. Even if the Group’s R&D investments meet market needs, they may not produce innovative technologies, yield anticipated results, or be forestalled by competitors’ technological development. Further, the Group may not be able to respond effectively to market demands for cost reduction, including the reduction of production costs and SG&A expenses. In such cases, the Group’s business results and financial condition may be adversely affected.

      Meanwhile, there is a greater need to enhance production efficiency throughout value chains and lifecycles using AI and other digital technologies, and the Group must meet this need through its businesses. Competitors as well as corporations in IT, heavy electric machinery, and other sectors are stepping up their activities in these areas, and the Group may not be able to match its competitors in cost competitiveness or unexpected new technologies. Further, as we focus on its industrial automation and control business, the Group may not be able to procure parts or execute production for its core products as planned due to some unforeseen circumstances and supply may be delayed or stopped. In such cases the Group’s business results and financial condition could be adversely affected.

   b. Strategic investment
      As the Group focuses on the industrial automation and control business, it continues to invest in new businesses with future potential. In addition to completing a full range of M&A deals and forming alliances, the Group continues to invest aggressively in the life innovation business to realize production improvements in the extensive value chains of the pharmaceuticals and food industries. In its effort to evolve from being a provider of equipment and engineering technologies, the Group also continues to invest in consultation- and simulation-driven advanced services with added value, MES* and other solutions, and other areas aimed at expanding such services.
The Group has in place a complete system to launch new businesses following an M&A transaction. However, if the expected outcome cannot be achieved because of unanticipated change in the business environment or for any other reasons, or the anticipated outcome cannot be achieved because businesses are not launched swiftly following an M&A transaction, the Group’s business results and financial condition could be adversely affected.

Manufacturing Execution System: Information system that visualizes and manages the production process and provides support and instructions to operators.

c. Securing and training human resources
The Group’s growth is supported by its talented and capable personnel. The technical personnel that support its leading-edge technology in the fields of measurement, control, and information, and who assure high levels of product quality, are particularly important. Further, in the industrial automation and control business, the importance of personnel with solutions proposal capabilities as well as personnel with the project management and engineering capabilities required to work in the international market is increasing.

The Group continues to recruit personnel in and outside Japan. There is a risk, however, that the Group will be unable to secure the necessary personnel. While the Group continues to develop the personnel it has recruited through education and training, it may face personnel shortages or may not be able to achieve the employee development as planned. If the Group is unable to address such issues satisfactorily, its business results and financial condition could be adversely affected.

d. Product quality
The Group provides its customers highly reliable products and services based on technologies and expertise that have been built up over many years and a rigorous quality control system. If by any chance a defect should occur in one of its products or services, and if this defect causes any damage, then this could adversely affect the Group’s business results and financial condition, and could also impact its overall business activities.

e. R&D activities
The Group has positioned basic research in the measurement, control, and information fields and the development of advanced technologies and digital technologies such as IIoT and AI as its most important management issues and is continuously developing new technologies with an eye to the future. The Group is also strengthening its initiatives toward achieving its sustainability goals including SDGs* in response to changes in international standards and regulations. However, if R&D investments do not match future market needs and goals as planned, this could adversely affect the Group’s business results and financial condition.

*Sustainable Development Goals: Development goals established by the United Nations made up of 17 global goals and 169 targets set forth in the 2030 Agenda for Sustainable Development, which aims to transform our world.

3. Other Risks
a. Intellectual property
The Group has built a complete management system for protecting its intellectual property rights and preventing infringement of the rights of other companies in the course of developing proprietary products and services. However, if such intellectual property rights are infringed upon by a third party and the Group is therefore unable to make an expected profit, or if the Group is deemed to have infringed upon the intellectual property rights of another company due to a difference in viewpoint or some other reason, there is a risk that it will be subsequently disadvantaged by its inability to use important technology and/or may be held liable for compensation, which could adversely affect its business results and financial condition.

b. Information security
Through its business activities, the Group acquires personal or otherwise confidential information on its customers and trading partners. It therefore establishes systems to manage this information and provides employees training on information security. However, in the event that information is leaked or abused due to some unforeseen circumstance, there is a risk the Group will be held liable for compensation or the corporate image will be drastically tarnished, which could adversely affect the Group’s business results and financial condition.

c. Breakdown in production of core products due to social instability caused by natural disasters, etc.
A natural disaster, such as an earthquake, fire, flood, or tsunami; the outbreak of war; a terrorist attack; a cyber-attack; or a disruption in the supply chain caused by any of the aforementioned factors that makes it difficult to procure electronic parts or other materials and therefore to manufacture its core products could impact the Group’s overall business activities, including its production activities.

d. Changes in the market environment due to impact of SDGs
Society’s intensifying expectations concerning social and environmental issues, including SDGs, are impacting the strategies of the Group’s customers. The Group is conducting its business activities by setting short-, mid-, and long-term plans for sustainability goals. If, however, the demands of society and customers significantly exceed its initial projections and the Group is unable to meet its customer expectations, the Group’s business results and financial condition could be adversely affected.