

**2016 PRODUCTION FORECASTS FOR THE
GLOBAL ELECTRONICS AND
INFORMATION TECHNOLOGY INDUSTRIES**

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JEITA

JAPAN ELECTRONICS AND INFORMATION TECHNOLOGY INDUSTRIES ASSOCIATION

FOREWORD

For the Japanese economy, 2015 was a year of waiting for recovery, as positive factors such as the expansion of corporate earnings linked to the weaker yen and a rise in real wages due to favorable employment conditions had only a limited impact on consumer spending and capital investment. Meanwhile, in its October 2015 World Economic Outlook, the IMF forecast 3.1% real growth for the world economy in 2015, and 3.6% for 2016, despite concerns about slowing production and reduced investment attributable to slower growth in the Chinese economy.

In the annual industries survey conducted by JEITA, production by the global electronics and information technology industries is estimated to have increased 13% year on year in 2015, to ¥318.1 trillion, partly due to a larger-than-expected boost from exchange rates. The forecast for 2016 is a 3% year-on-year increase, to ¥327.3 trillion. Solid growth is expected, given the expansion of devices connecting with the Internet, such as smartphones, towards the CPS/IoT(Cyber Physical System) society, and the growth of electronic components and devices that respond to demand related to the progress of IT in automobiles and the adoption of IT solution services in numerous industries. Production by the electronics industry in Japan is estimated to have risen 7% year on year in 2015, to ¥12.6 trillion, following 2014 when positive growth was seen for the first time in four years. It should rise 3% year on year in 2016, to ¥12.9 trillion, the third straight year of increase. They are very positive signs.

In this environment, JEITA is actively working for the realization of the CPS/IoT society, a new concept of creating new added value through information sharing between the real world (an actual space) and the virtual world (a cyber space). JEITA aims to solve social challenges facing Japan and create new businesses by cooperating in areas where growth is expected, such as automobiles, healthcare, energy and social infrastructure, with the IT and electronics industries as a platform.

In its sixth “Trends Survey on Focused Areas,” JEITA investigated trends in the world market with respect to wearable terminals, wireless modules and sensors by focusing attention on product areas that will become critical in the coming society, in anticipation of the advent of the CPS/IoT society.

In 2016 and beyond, JEITA will continue to bolster its activities by reflecting a broad base of comments and opinions from both within and outside the electronics and IT industries. We will strive to contribute not only to the growth of these industries, but also to better lifestyles for people everywhere. We will continue to report on our progress in the future in the sincere hope that information from JEITA proves to be a valuable resource.

Shigeaki Mizushima

Chairman

Japan Electronics and Information Technology Industries Association (JEITA)

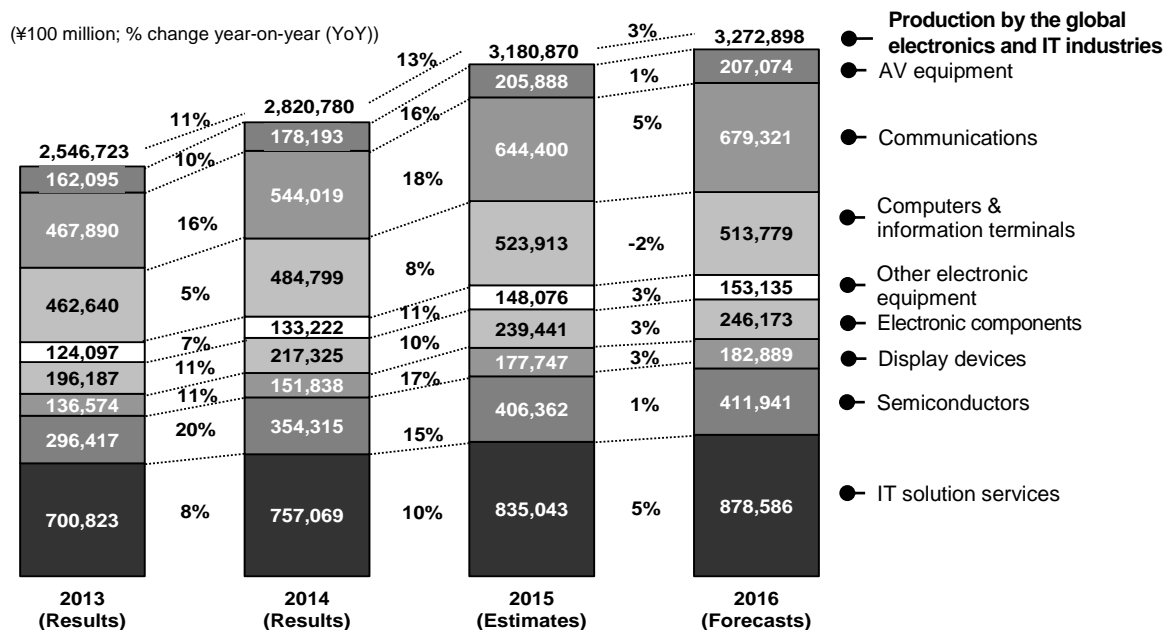
PRODUCTION FORECASTS FOR THE GLOBAL ELECTRONICS AND INFORMATION TECHNOLOGY INDUSTRIES

Production by the global electronics and IT industries is expected to have risen 13% year on year, to ¥318,087 billion in 2015, mainly reflecting the expansion of smartphones and flat televisions and an unexpectedly large positive effect of exchange rates. In 2016, global production is forecast to grow for a fifth straight year, rising 3%, to ¥327,289.8 billion, backed by the expected expansion of devices connecting with the Internet, such as smartphones, toward the CPS/IoT society and the growth of electronic components and devices that respond to demand related to the progress of IT in automobiles and IT solution services for the creation of new value.

In 2015, the world economy continued a sustainable trend of moderate recovery, mainly in developed countries. In the U.S. economy in particular, improvements in employment, consumption and housing investment were noticeable, and capital investment was also recovering. In emerging countries, however, growth slowed due to a deceleration in the Chinese economy and falling resource prices. In this environment, solid increases were seen in the production of smartphones—which benefited from progress in multiband and energy-saving associated with the spread of the high-speed wireless communication network—and flat televisions with larger screen sizes and higher added value. In addition, movements in exchange rates produced an unexpectedly large positive result. In this situation, total global production by the electronics and IT industries (total of electronics industry and IT solutions and services) in 2015 is expected to climb 13% year on year, to ¥318,087 billion. Of this total, production by the electronics industry (hardware, including electronic equipment, components and devices) is seen rising 14%, to ¥234,582.7 billion, increasing for the fourth straight year.

In 2016, the world economy is expected to see sustainable growth in the U.S. and European economies, taking advantage of low oil prices, and rising consumption and infrastructure development in India and Southeast Asia, among other regions, despite some concerns such as the slower growth rate in emerging countries. In Japan, growth is also anticipated, given higher consumption and an increase in capital investment driven by higher corporate earnings. In the electronics and IT industries, the expansion of devices connected to the Internet, such as smartphones, towards the CPS/IoT society is expected, and the progress of IT in automobiles will also lead to an increase in the number of vehicle-mounted electronic components and semiconductors. In addition, since demand for IT solution services will increase as a result of progress in efforts to create new value in wide-ranging areas in anticipation of the advent of the CPS/IoT society, production by the global electronics and IT industries is expected to achieve a fifth straight year of growth in 2016, rising 3%.

Production by the Global Electronics and IT Industries



FORECASTS OF GLOBAL PRODUCTION BY JAPANESE COMPANIES

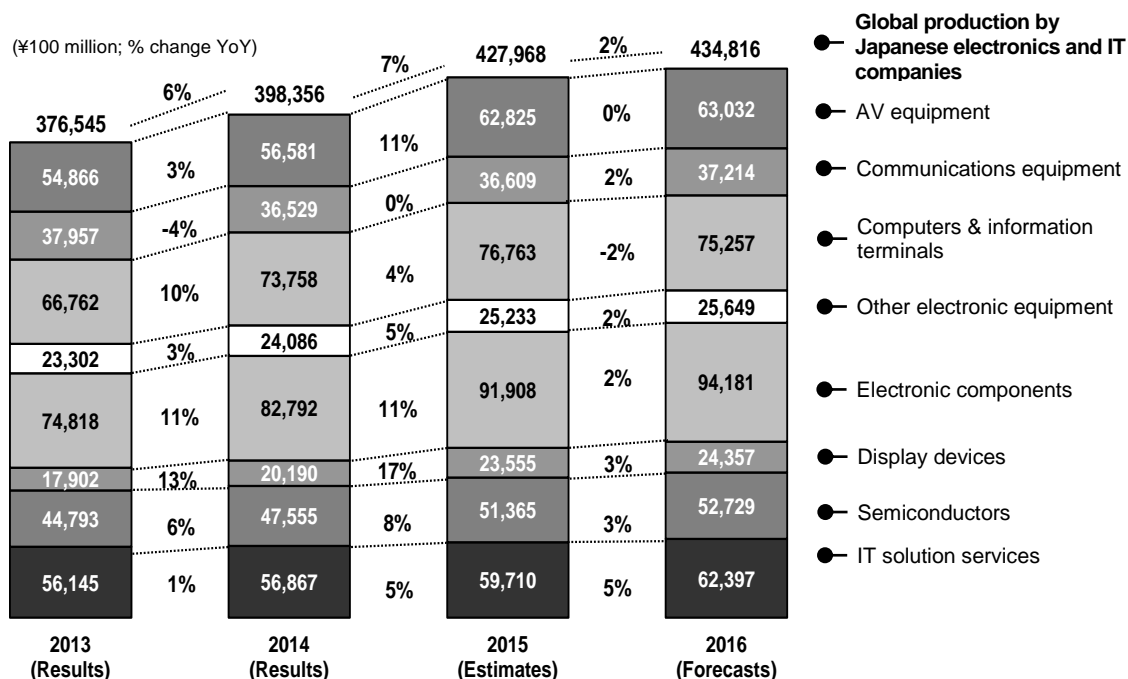
In 2015, global production by Japanese electronics and IT companies (including offshore production) appears to have increased for the third straight year, rising 7% year on year, to ¥42,796.8 billion, mainly thanks to the strong performance of flat televisions and electronic components and devices and an unexpectedly large positive effect of exchange rates. Global production by Japanese electronics and IT companies in 2016 is expected to rise 2%, to ¥43,481.6 billion, reflecting a stronger orientation towards high-performance and high-end products in the world market, the advantage of Japanese companies in energy-saving and downsizing, and an expected rise in aggressive IT investment in the Japanese market.

In 2015, the business environment for Japanese companies was positive thanks to Abenomics. In flat televisions, demand for larger screen sizes and high-function, high-performance and high-end products was well established and remained firm overseas. Also strong were needs for products such as smartphones that incorporated technologies at which Japanese companies excel on the strength of their high reliability and energy saving. Consequently, production of electronic components, display devices and semiconductors remained solid. Although the market for stand-alone products in which Japanese companies have traditionally been dominant was eroded by the spread of smartphones, production by Japanese electronics and IT companies (including offshore production) in 2015 is estimated to increase 7% year on year, to ¥42,796.8 billion, partly due to the larger-than-expected benefit of exchange rates. Of

this total, electronics production is seen increasing 8%, to ¥36,825.8 billion.

In 2016, the world economy is expected to grow moderately. In electronic components and devices, needs for the kind of highly reliable and high-functional products at which Japanese companies excel are expected to increase further with the growing presence of IT in automobiles and the expansion of IoT equipment. In IT solutions and services, growth in new IT investment is anticipated, given moves towards aggressive IT management and accelerating trends towards security measures in the Japanese market. In addition, as IT investment in industry and social infrastructure, in particular, is expected to gain momentum towards the Tokyo 2020 Olympic and Paralympic Games, global production by the Japanese electronics and IT companies should see positive growth in 2016.

Global Production by Japanese Electronics and IT Companies



FORECASTS OF DOMESTIC PRODUCTION BY THE JAPANESE ELECTRONICS INDUSTRY

After rising for the first time in four years in 2014, domestic production by the Japanese electronics industry in 2015 is expected to increase for the second straight year, climbing 7% year on year, to ¥12,580.2 billion. Moreover, 2016 should see a third consecutive year of increase in domestic production by the industry, with an increase of 3% year on year, to ¥12,942.6 billion, on the strength of an expected rise in exports of electronic components and devices and an anticipated improvement in domestic demand going forward.

The Japanese economy saw a recovery in consumer spending and housing investment backed by a rise in real wages and solid capital investment linked to higher corporate earnings. In the Japanese electronics industry, display devices, semiconductors and electronic components, which are the mainstay products for export, became a driving force for stronger domestic production. One of the factors for this was an increase in the number of these products mounted on smartphones due to trends towards larger screen size and multiband. In addition, as domestic production of electric measuring instruments and printers, etc. is also recovering, domestic production by the Japanese electronics industry in 2015 is expected to have increased year on year for the second straight year, rising 7%, following 2014 when domestic production increased for the first time in four years since 2011 when production fell as a result of the Great East Japan Earthquake.

In 2016, more and more highly reliable electronic components and semiconductors manufactured in Japan, which will contribute to downsizing, energy-saving and reduced thickness, are likely to be mounted on smartphones and in-vehicle products, given the higher functionality of smartphones and stronger demand for in-vehicle products with the rising percentage of electrical equipment in automobiles. In addition, given expectations of rising IT investment with increased corporate earnings and stronger demand for servers and personal computers, domestic production is forecast to show positive growth in 2016, and should represent 35% of total global production by Japanese companies. In particular, domestic production should remain strong for products offering high reliability and quality, such as display devices (92% manufactured in Japan), server/storage equipment (77%), electronic medical equipment (70%), electric measuring instruments (68%) and semiconductors (66%).

Domestic Production by the Japanese Electronics Industry

