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# Reading South Korea's Economic Outlook —Emerging G2 and Political Risks—

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## Summary

1. South Korea's economic outlook appears increasingly uncertain because of chronically low growth and the emergence of numerous risk factors. In addition to domestic risk factors in the form of growing household debt and possible policy changes by the next administration, the South Korean economy also faces external risk factors. These include the trade policies of the Trump administration, and Chinese economic reprisals in response to the deployment of the Terminal High Altitude Area Defense (THAAD) system. This article will examine the outlook for the South Korean economy, with a particular focus on these risk factors.
2. The single biggest risk factor for South Korea's domestic economy is the increase in household debt. In recent years, housing investment has driven growth, but household debt has swollen dramatically. The issues include the large number of people using interest-only loans and variable-interest loans, as well as an increase in borrowing from non-bank lenders. The government has begun to strengthen debt management measures, but this has not halted the expansion of household debt. There is a risk that consumption will come under pressure if South Korea's domestic interest rates rise in response to future FF rate rises in the U.S., leading to an increase in debt servicing costs.
3. Another risk factor in South Korea's domestic economy is the increasing level of corporate debt. In industries that are vulnerable to economic fluctuations, there are many companies whose core business earnings are not sufficient to cover their interest payments. Structural adjustment measures designed to rebuild corporate finances have slowed growth in the number of companies requiring restructuring, but conditions in some industries, such as shipping and shipbuilding, remain dire. Additional rebuilding measures have been launched, but there is concern that any reforms will be delayed due to the change of administration.
4. One external risk factor is the trade policies of the Trump administration. America's pursuit of trade policies that put American interests first could impact on South Korea in a number of ways. First, there will be increasing pressure to correct trade imbalances that have emerged since the U.S.-Korea Free Trade Agreement came into effect. Second, if economic sanctions are imposed on China, South Korea's exports to that country will drop even further. Third, U.S. trade policy towards Mexico could have a negative impact on the business activities of South Korean companies in that country.
5. Another external risk factor for South Korea is economic reprisals by China in response to the decision to deploy the THAAD missile defense system. The Chinese government pressured the South Korean government to halt the deployment of the THAAD system on the grounds that it is a threat to China's own security. China initiated measures that are tantamount to economic retaliation, including restrictions on South Korean media content, and prevention of customs clearance for South Korean food products and cosmetics. The level of economic retaliation has intensified since the deployment of the THAAD system. This rise in the China risk could lead to an increasing tendency for South Korean companies to abandon the Chinese market.
6. The last major risk category for South Korea is domestic political risk. As a result of the dismissal of President Park Geun-hye, South Korea will hold a presidential election on May 9. Opinion poll results point to a strong possibility that victory will go to Moon Jae-in, former leader of the biggest opposition party, the Democratic Party of Korea. This could result in major changes in South Korea's foreign and security policies, including its stance towards North Korea, THAAD deployment, and relations with the U.S. and China, as well as economic policies. A factor that will need to be monitored particularly closely is the possibility of a shift to populist economic policies.

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The future of the South Korean economy appears increasingly uncertain. South Korea has experienced a string of crises since the fall of 2016, including the collapse of Hanjin Shipping, and the suspension of shipments of Samsung Electronic's Galaxy Note 7, as well as political chaos triggered by the arrest of Choi Soon Sil on suspicion of interference in government affairs. In early 2017, Lee Jae-yong, Vice-Chairman and effective top executive of Samsung, was arrested and later formally indicted.

President Park Geun-hye was dismissed from her position as President after the South Korean Constitutional Court issued a ruling on March 10 upholding the decision to impeach her. As a result, South Korea will hold a presidential election on May 9. According to opinion polls (as of early April), the winning candidate is likely to be Moon Jae-in, former leader the Democratic Party of Korea, which is the largest of the opposition parties. This would cause major changes in South Korea's economic and foreign policy.

In addition to these domestic risk factors, South Korea also faces uncertainty going forward due to Group of Two (G2) risks, such as U.S. trade policies under the Trump administration, and potential economic retaliation from China in response to the decision to deploy the THAAD system in South Korea. Increased protectionism under the Trump administration's "America First" policy could result in a number of outcomes. First, there could be increased pressure to correct the trade imbalance between South Korea and the United States. Second, South Korean exports to China could decline as a result of economic sanctions against China. Third, the renegotiation of NAFTA could have a negative impact on South Korean business interests in Mexico. In addition, the Chinese government is pressuring the South Korean government to halt the deployment of the THAAD system, which it regards as a threat to its own national security, and has effectively begun to implement economic reprisals.

These factors are reflected in increased uncertainty about South Korea's economic outlook. This article will examine the future of the South Korean economy, focusing on the internal and ex-

ternal risk factors that are liable to impact on the economy. In Part 1, we will examine the present status of the South Korean economy and identify existing risks. In Parts 2 and 3, we will look at the problem of household debt as a risk factor affecting the domestic economy, as well as issues relating to corporate debt. In Part 4 we will consider external risks relating to the United States and China and examine domestic political risks based on the preceding analysis.

## **1. South Korean Economy Enters a Low-Growth Stage**

The Park Geun-hye administration tried to lift the economy out of low growth through economic innovation based on medium- to long-term perspectives. Despite this, the outlook for the South Korean economy has become increasingly uncertain.

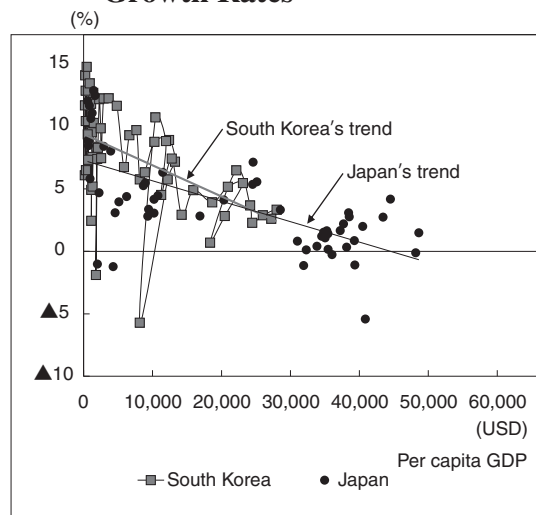
### **(1) Continuing Low Growth due to Poor Exports**

As in 2015, South Korea's real GDP growth rate was again in the 2% range in 2016. The growth of domestic and external demand remains slow in 2017, and there is a strong possibility that the real growth rate will again be in the mid-2% range. Based on these results, we can reasonably conclude that South Korea has shifted to a low-growth phase.

The pattern of declining growth in step with economic maturation has been observed in many countries. After maintaining a growth rate of 8-9% in the 1960s through to the 1980s, the South Korean economy slowed to 6.6% in the 1990s and 4.4% in the 2000s. South Korea's growth rate has slowed faster than Japan's, in part because the growth rate during its high-growth era was generally higher (Fig. 1).

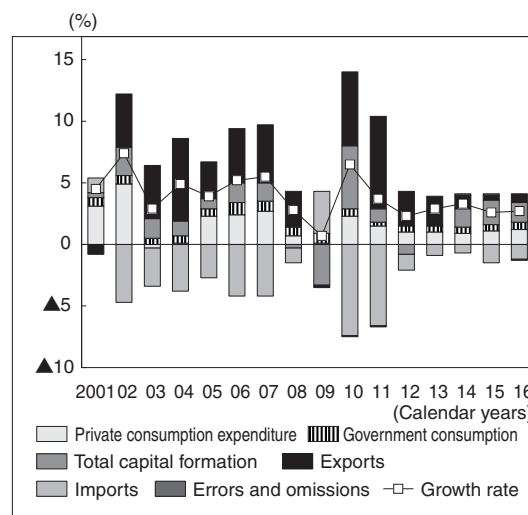
Sustained double-digit growth in fixed capital

**Fig. 1 Per Capita GDP and Real GDP Growth Rates**



Notes: 1961-2015 for both South Korea and Japan.  
Source: World Bank, World Development Indicators

**Fig. 2 South Korea's Real GDP Growth Rate, Contribution of Demand Items**



Source: Bank of Korea, Economic Statistics System

formation during South Korea's period of rapid economic growth, which is known as the "Miracle on the Han River," is evidence that high growth was underpinned by the rapid expansion of investment. However, as capital stocks grew, the pace of growth gradually decreased. In addition, South Korea's potential growth rate also began to drop in step with a rapid shift to a declining birthrate and demographic aging in the 2000s. South Korea's total fertility rate (the average number of children a woman gives birth to during her lifetime) decreased from 1.71 in 1991 to 1.47 in 2000. This was followed by further rapid declines, and in 2001 South Korea's rate was lower than Japan's at 1.30. By 2005 it had fallen even further to 1.08. The total fertility rate in 2015 was 1.24. Deterioration in the income and employment environment after the currency crisis played a major role in this accelerating birthrate decline in the first half of the 2000s.

In addition to these long-term trends, the fall in South Korea's growth rate in recent years is also attributable to China's efforts to achieve stable growth while implementing structural reforms through its shift to a "new normal."

In the 2000s, South Korea moved increasingly toward economic globalization, and growth was driven by exports and the resulting expansion of investment (Fig. 2). This pattern was linked to the

activities of large corporations, which aggressively developed markets in emerging countries with potential for demand expansion. A key feature of this period was the rapid expansion of direct investment in China. In addition to the traditional pattern of investment in export production bases, there was also an increase in investment targeted toward sales in China following the easing of restrictions after China's admission to WTO membership in December 2001. The expansion of direct investment in China led to an increase in exports of intermediate goods, including parts and semi-manufactured goods, from South Korea. As a result, South Korea's reliance on exports to China rose from 10.7% in 2000 to a record high of 26.1% in 2013. At the same time, the South Korean economy has become heavily influenced by the Chinese economy.

As China transitioned to the "new normal," the Chinese economy began to decelerate, triggering a growth slowdown in emerging economies and causing global trade to stagnate. This led in turn to a slowdown in South Korean exports. The value of customs-cleared exports fell by 8.0% year on year in 2015 and 5.9% year on year in 2016, marking the first two-year consecutive drop in export value since the 1960s. The value of exports to China in particular has been in decline for three consecutive years, falling by 0.4% in 2014, 5.6% in 2015,

and 9.3% in 2016.

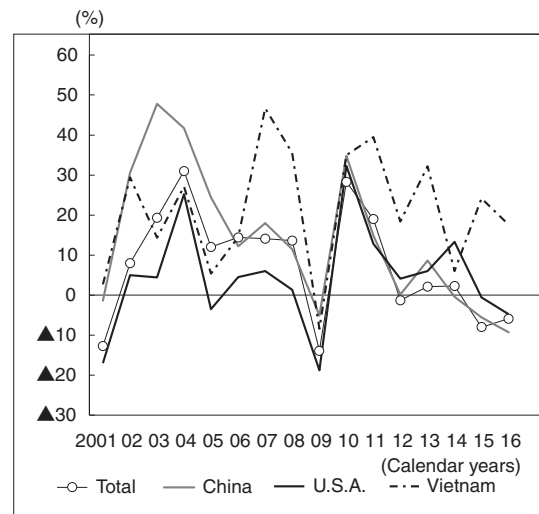
The decline in exports to China is also partly the result of structural changes in the Chinese economy. In recent years, the Chinese government has been focusing on urbanization and the growth of service industries with the aim of driving a transition from its traditional model of growth based on exports and investment to consumption-led growth. The contribution of secondary industries to China's GDP has declined from 46.1% in 2011 to 40.5% in 2015, while the contribution from tertiary industries has grown from 44.3% to 50.5% over the same period, indicating that China is making progress toward the establishment of a service-based economy (Fig. 3).

In addition, China is developing domestic production capabilities for intermediate goods and has improved its self-sufficiency ratios for synthetic resins, steel products, and other items.

China's shift toward a service-based economy and its increased reliance on domestic production have led to a decline in the processing trade as a percentage of total imports (Fig. 4). This has impacted on South Korea, which has traditionally exported many intermediate goods. For example, exports of the nylon raw material caprolactam to China have dropped to almost zero in recent years. After expanding dramatically in the 2000s, South Korean exports of liquid crystal panels to China are now in decline as Chinese companies rapidly expand production in response to Chinese government subsidies and the establishment of local production facilities by South Korean companies. China is expected to become the world's largest producer of liquid crystal panels in 2017. As with iron and steel, however, there is now concern about overproduction.

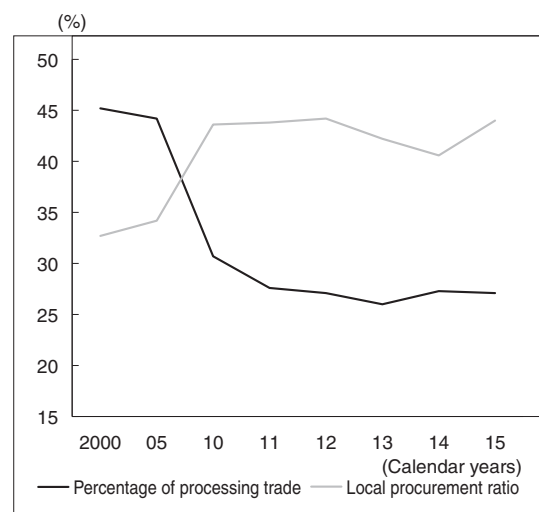
In recent years, South Korea has responded to these structural changes in the Chinese economy by expanding exports of finished goods and services to China. However, the decision by the South Korean and U.S. governments to deploy the THAAD system has prompted China to tighten restrictions on imports of South Korean media content and consumer goods, with the result that South Korea now faces a harsh export environment.

**Fig. 3 South Korea's Export Growth Rate (Year on Year)**



Source: Korea International Trade Association database

**Fig. 4 Processing Trade as a Share of China's Imports**



Notes: The local procurement ratio is calculated as processing trade balance / processing trade exports.  
Source: IIT [2016a]

## (2) Benefits and Limitations of Stimulus Measures

Faced with chronically low growth, President Park Geun-hye sought to boost the economy and drive economic innovation from a medium- to long-term perspective<sup>(1)</sup> by introducing a supplementary budget, partially easing home mortgage rules, and implementing tax reforms. The ad-

ministration also introduced measures designed to stimulate consumption, such as the reduction of the special consumption tax on automobiles, and the promotion of the “Korea Sale Festa.” The Bank of Korea also worked in coordination with the South Korean government by implementing interest rate cuts in March and October of 2014, March and June of 2015, and June of 2016, taking the policy interest rate down to its present record low of 1.25%.

The underpinning effect of this series of stimulus measures boosted domestic demand, including private consumption expenditure and construction investment, leading to economic growth of 2.7% in 2016. The growth rate of construction investment accelerated from 3.9% in 2015 to 11.0% in 2016, and that of private consumption expenditure from 2.2% to 2.4%. However, there are a number of issues in relation to the sustainability of this growth.

First, the accelerated growth of private consumption expenditure can largely be attributed to (1) an increase in real national income due to a decline in the price of crude oil, (2) lower interest rates and higher household credit balances, and (3) the effect of consumption stimulus measures and other initiatives. The boost to consumption will wane. For example, automobile sales began to drop year on year following the end of the cut in the special consumption tax rate for automobiles in June 2016.

Since the 2000s growth in private consumption expenditure in South Korea has generally remained below the economic growth rate. This reflects income stagnation, increasing social insurance and debt servicing burdens, and a growing emphasis on savings as South Korea becomes an aged society. These factors are likely to have the effect of impeding consumption in the future.

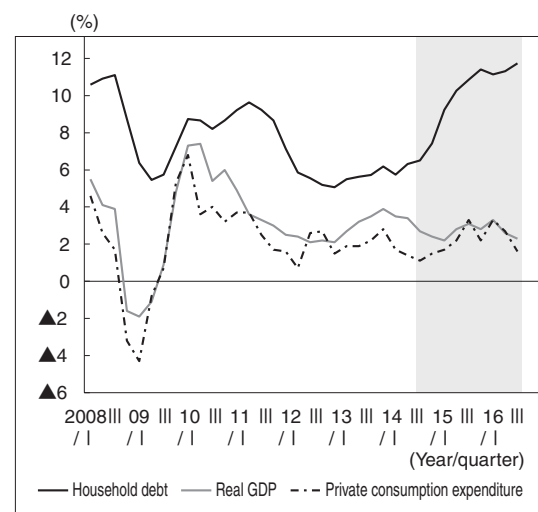
Another issue is the lack of sustainable growth in construction investment, which has been boosted by government policies. The South Korean government is also concerned about the expansion of household debt and is switching to policies designed to curb housing investment.

South Korea has experienced several housing investment booms in the past due to a cycle

of restraints in response to market overheating, followed by stimulus measures when the market cools. The current housing investment boom was triggered by economic stimulus measures implemented in 2014. Choi Kyoung-hwan, who became Deputy Prime Minister in a cabinet reshuffle in July of the same year, moved quickly to introduce several economic stimulus measures over a short period of time. Introduced in August, these measures included the partial easing of housing loan regulations, such as those governing the loan to value and debt to income ratios. These changes, combined with falling interest rates, led to an increase in the popularity of apartments as investment targets, which in turn caused a surge in housing construction.

While this situation breathed new life into the housing market, it has also caused a dramatic rise in household debt since the start of 2015 (Fig. 5), primarily because of an increase in home mortgage borrowing<sup>(2)</sup>. Debt reached the warning level, while in some regions housing prices began to surge. In addition, rising interest rates brought an increase in debt repayment burdens. In response to these and other developments, the government began to tighten the lending rules again. For example, in addition to existing household debt

**Fig. 5 Growth Rates of Real GDP, Real PCE, and Household Debt (Year on Year)**



Notes: Household debt consists of loans and sales credit.  
Source: Bank of Korea, Economic Statistics System

management measures<sup>(3)</sup>, regulations, in February 2016 the government replaced the loan ratio with the debt service ratio (DSR, home mortgages + other debt / income) as the yardstick for measuring the debt burden.

Despite these measures, household debt continued to expand, and the housing market started to show signs of overheating. On November 3, 2016, the government responded by announcing plans to impose restrictions on housing transactions<sup>(4)</sup>. The measures include restrictions on the resale of apartment subdivision rights in regions where investment is overheating (Seoul, Gyeonggi Province, Sejong City), and an increase in the minimum down payment ratio from 5% to 10%<sup>(5)</sup>.

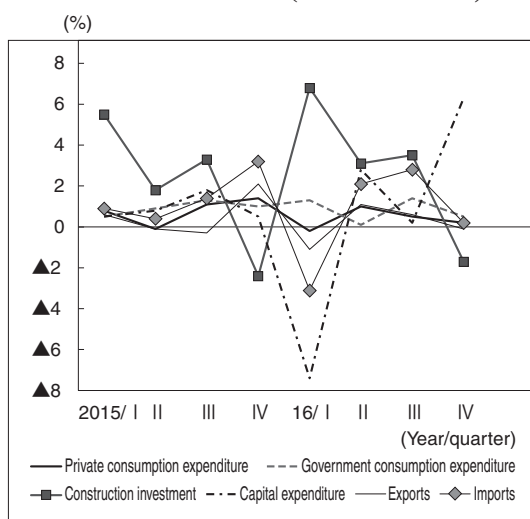
The real GDP growth rate in the October-December quarter of 2016 was largely in line with predictions at 0.4% (2.3% year on year), which was lower than the previous two quarters. Domestic demand, which had hitherto driven growth, began to slow, as evidenced by the fact that the rate of increase in private consumption expenditure fell to 0.2%, while construction investment growth dropped into negative figures for the first time in four quarters (Fig. 6). Growth in capital expenditure meanwhile accelerated to 6.3%.

One reason for the deceleration of growth in

private consumption expenditure is the Improper Solicitation and Graft Act (Kim Young-ran Act), which came into effect at the end of September 2016. This act sets upper limits for spending on entertainment, gifts, and congratulatory or condolence payments for civil servants, media representatives, educators, and other groups. On February 23, the South Korean government responded to the deceleration of consumption expenditure by announcing measures designed to stimulate consumption<sup>(6)</sup>. These measures include the expansion of tax refunds on mini-car purchases, discounts on advanced reservations for high-speed rail travel, and the establishment of the “Day with Family” system. There are also plans to expand low-interest loans for small businesses affected by the Kim Young-ran Act.

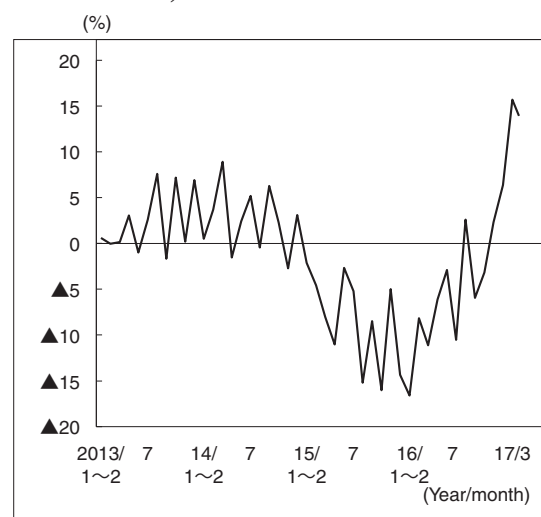
While domestic demand has slowed, there has been an encouraging recovery in exports (customs-cleared basis) since the end of 2016. After temporarily shifting to positive year on year growth in August 2016, exports returned to downward trend due to the collapse of Hanjin Shipping, a strike at Hyundai Motors, and the recall of the Galaxy Note 7. However, an accelerating growth trend has emerged since November (Fig. 7). Semiconductors, which made up 12.6% of total exports

**Fig. 6 South Korea’s Real GDP Growth Rate (Year on Year)**



Source: Bank of Korea, Economic Statistics System

**Fig. 7 South Korea’s Exports (Year on Year)**



Notes: The figures for January and February have been aggregated to exclude the effect of the Lunar New Year holiday.

Source: Korea International Trade Association database

in 2016, are providing the impetus for this recovery.

While exports can be expected to recover further, there is growing concern about the trade policies of the Trump administration, and about the possibility of Chinese economic reprisals following the decision to deploy the THAAD system.

### (3) Future Risk Factors

Numerous risk factors have emerged with implications for future economic trends. These will be analyzed in detail later in this article. The following analysis provides an overview of these risks.

#### Internal Risk Factors

While risk factors can be broadly divided into internal and external risks, we need to be aware that these risks are interrelated (Fig. 8). There are significant internal risks relating to both the economy and the political situation.

The most serious economic risk factor is the rising level of household debt. In particular, the prospect of future FF rate rises in the United States is reflected in growing concern about how this will impact on household debt in South Korea<sup>(7)</sup>. As interest rates rise, debt servicing costs also increase. In addition to the resulting pressure on consumption expenditure, there is also a risk that more low- and middle-income households will become unable to meet their debt repayment obligations.

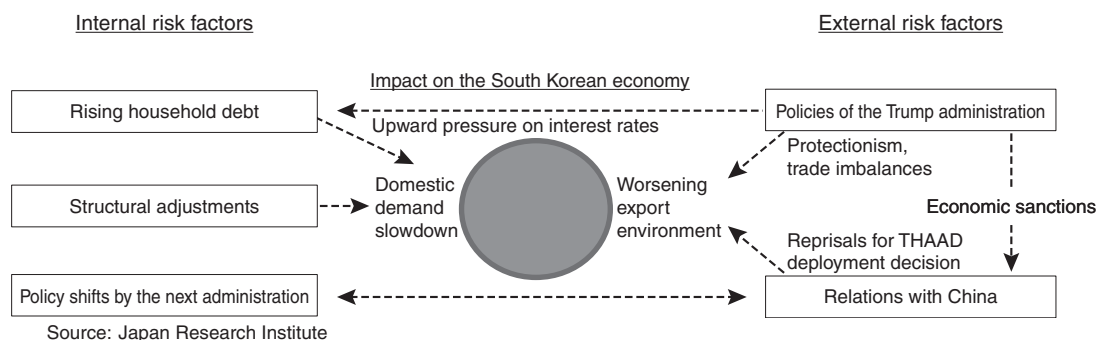
South Korea's policy rate is likely to remain unchanged at present. However, the U.S. economy continues to recover, and there is also the possibility of increasing inflationary pressure due to the expansion of infrastructure investment under the Trump administration. The U.S. FF rate rose for the first time this year in March, and the present situation is expected to lead to more increases in 2017. South Korea's market interest rates are also expected to increase.

Another economic risk factor is the growing impact of structural adjustments. China's shift to a "new normal" is affecting key South Korean industries through various routes. First, the shipping industry has been negatively impacted due to a decline in global cargo traffic, which has pushed the shipbuilding industry into recession. As orders shrank, companies increasingly resorted to discounting, causing their financial performance to suffer. Earnings have been further eroded by growing losses on the marine plant business, which companies have been working to develop over the past few years.

Government-led structural adjustment initiatives are now in progress in the shipping and shipbuilding industries. In other sectors affected by downturns, syndicates of creditor banks are working with companies to implement structural adjustments. The situation will need to be monitored closely to see whether these structural adjustments can be carried out as planned, and whether the Hanjin Shipping collapse will be followed by more major corporate bankruptcies<sup>(8)</sup>.

The biggest political risk factor is the possibil-

**Fig. 8 Risk Factors Affecting the South Korean Economy**



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ity of a policy shift under the next administration. Public opinion poll results indicate that the opposition party candidate, Moon Jae-in, will probably win the presidential election. If the opposition candidate becomes President, there could be major changes in South Korea's economic and foreign policies.

Mr. Moon was previously the leader of the Democratic Party, South Korea's largest opposition party. He announced a plan to create more than 800,000 public sector jobs but said nothing about how these jobs would be funded. From a foreign policy perspective, Mr. Moon may reconsider the deployment of THAAD and start to improve the relationship with China. The Chinese government has harshly criticized South Korea's decision to deploy the THAAD system and has tightened restrictions on imports of South Korean manufactured goods. China has also openly taken retaliatory action against Lotte, which provided land for the deployment of the THAAD system.

Given the close linkage between the THAAD deployment and South Korea's relationship with China, an extremely strategic approach to decision-making will be needed.

### **External Risk Factors**

One external risk factor with the potential to have a major impact on the South Korean economy is the trade policies of the Trump administration. Another is the outlook for South Korea's relationship with China, as discussed above.

The Trump administration's stance toward South Korea remains uncertain at present. When U.S. Defense Secretary James Mattis visited South Korea, he reaffirmed the importance of the alliance between the U.S. and South Korea, and some saw this as a sign that the Trump administration might not take a particularly hard line on trade. This expectation was shattered in early March with the release of the 2017 Trade Policy Agenda, which highlighted the fact that the value of goods exported from the United States to South Korea had decreased by US\$1.2 billion between 2011 and 2016, while the value of imports to the United States from South Korea had increased by US\$13 billion over the same period. The report

stated that this outcome was not what the American people had expected from the agreement.

A related issue is recent speculation that South Korea will be designated as a currency manipulator. Twice each year, the U.S. Department of the Treasury advises Congress about currency manipulation in its Report on International Economic and Exchange Rate Policies. If a country is designated as a currency manipulator, bilateral consultations are initiated. These can result in currency revaluations or sanctions, such as higher tariffs. A country will be designated as a currency manipulator if it has a trade surplus in excess of US\$20 billion with the United States, if its current account surplus is 3% or more of GDP, and if it has engaged in currency interventions amounting to over 2% of GDP in a single year. Countries that meet two of these criteria are placed on a watch list. In the October 2016 Report on International Economic and Exchange Rate Policies, South Korea appears on the currency manipulation watch list, alongside China, Japan, Taiwan, Germany and Switzerland.

While it is unlikely that South Korea will be designated as a currency manipulator, the fact that the U.S. trade deficit with South Korea has expanded since the signing of the U.S.-Korea Free Trade Agreement in March 2012 means that there is a significant risk of increased pressure to correct the imbalance.

South Korea faces numerous risk factors, and the outlook remains uncertain. We will now look at internal and external risk factors in greater detail.

## **2. Expanding Household Debt and its Impact on the Economy**

In Part 2 we will look at household debt as one of South Korea's internal risk factors. After analyzing the causes of the increase in household debt, government efforts to bring household debt under control, and other aspects, we will examine the impact on the economy.



## (1) Reasons for the Expansion of Households Debt, Related Problems

Over the past few years, South Korea's economic growth has been driven by construction investment, especially investment in housing. Since the January-March quarter of 2013, the year on year growth rate of housing investment has generally remained above 10%. In the October-December quarter of 2016 it reached 23.7% (Fig. 9). This reflects the revitalization of the property market as part of economic stimulus measures.

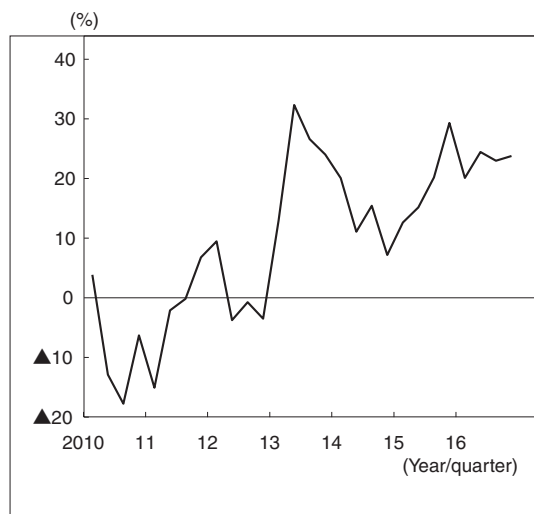
In April 2013, the government announced a comprehensive housing market normalization policy. This was followed in December 2013 by cuts in property acquisition taxes. In July 2014, the government eased home mortgage rules, and in September it announced a package of measures to stimulate the property market, including the easing of reconstruction rules. The housing investment boom gathered momentum as a result of these measures. In addition to deregulation, another factor that contributed to the growth of housing investment was the reduction of the policy interest rate, which was cut from 2.75% in January 2013 in six steps of 0.25% each.

At the end of 2011, housing prices peaked out after reaching their highest level after the 2007-8 global financial crisis. They bottomed out and shifted to a positive trend at the end of 2013 and have continued to climb ever since (Fig. 10). In South Korea, property accounts for a large share of household assets, which means that property price rises stimulate new investment.

At the same time, the increase in home mortgages and other forms of borrowing has resulted in a sharp rise in household debt, which has climbed from 1,019 trillion won in December 2013 to 1,344 trillion in December 2016 (Fig. 11). This represents an increase of 31.8%, compared with growth of just 6.9% in disposable income (nominal income minus non-consumption expenditure, such as taxes) over the same period. Nominal disposable income has stagnated in recent years because of marginal wage growth and increases in social insurance costs. The ratio of household debt to disposable income rose from 137% in March 2013 to 170% in September 2016 and has reached a level that should be viewed with concern.

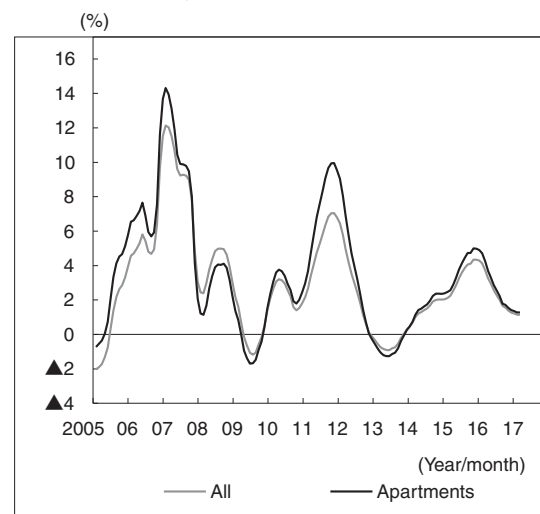
We need to take three factors into account when considering the current household debt problem. First, the percentage of amortized loans is low. The ratio has risen in recent years but still stood at 41% at the end of June 2016 (Fig. 12).

**Fig. 9 Housing Investment (Year on Year)**



Source: Bank of Korea, *Economic Statistics System*

**Fig. 10 Housing Price Index (Year on Year)**



Source: Kookmin Bank

In the past, almost all home mortgages were repayable in full at maturity. With loans of this type, once the initial grace period has ended, borrowers can refinance with another bank and start another grace period. This system has been another reason for the growth of household debt.

Over the past few years, slower economic growth and a fall in housing prices have created an

environment in which there is a risk of an increase in the number of people unable to repay loans in full on maturity. This has led to efforts to raise the percentage of amortized mortgages, resulting in a substantial increase from the 6.4% level at the end of 2010. However, the percentage of mortgages provided on an interest-only basis remains high at around 60%.

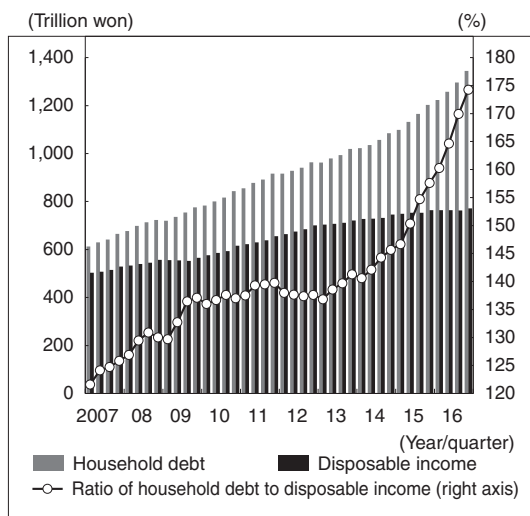
Second, most loans are subject to variable interest rates (Fig. 12). In January 2010, 93.5% of loans to households were provided on variable interest basis. While the percentage has been trending downward since mid-2011, it remains high at 65.5%. This reflects the consistently low level of interest rates in South Korea as part of the global trend toward monetary easing.

The government is working to increase the ratio of fixed-interest borrowing by introducing tax concessions. However, many households still opt for variable interest rates, which are lower.

Third, borrowing from sources other than banks has increased in recent years. There has been a sustained rise in borrowing from non-bank lenders (Fig. 13), which offer more relaxed lending rules and screening criteria than banks.

Borrowing from non-bank lenders accounts for about 30% of total household debt. Because interest rates are higher than those applied to bank

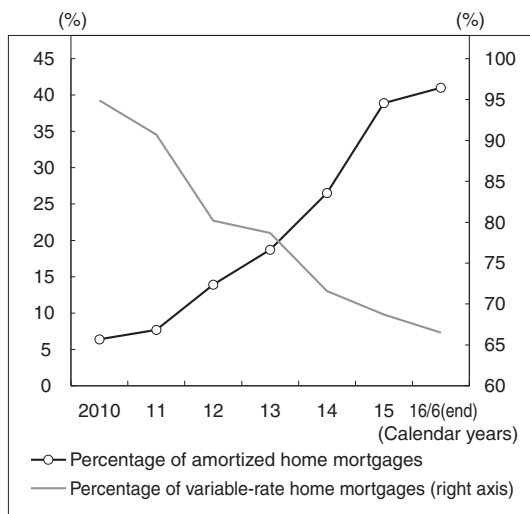
**Fig. 11 Household Debt and Disposable Income**



Notes: Disposable income is calculated by subtracting non-consumption expenditure from household income.

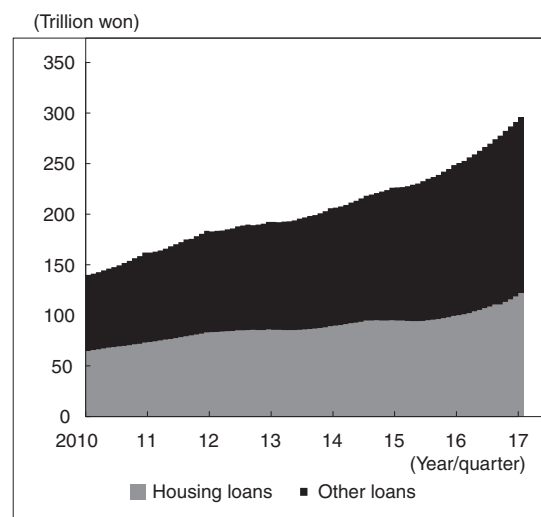
Source: Bank of Korea, *Economic Statistics System*

**Fig. 12 Percentages of Amortized and Variable-Rate Home Mortgages**



Source: Compiled by JRI using data from the Bank of Korea and the Financial Services Commission

**Fig. 13 Borrowing from Non-Bank Lenders**



Source: Bank of Korea, *Economic Statistics System*

loans, the burden on household is even heavier. Moreover, the growth of this type of borrowing is causing a decline in the quality of debt because of the reasons for which money is borrowed, including (1) living expenses, and (2) the use of general loans to cover the additional cost of house over the mortgage lending limit.

An analysis of the distribution of indebted households by income level shows that households in the fifth quintile, which have the highest income level, account for 25% overall, while only 10% are in the first quintile, which is made up of households with the lowest income level (Fig. 14). Households in the fifth and fourth quintiles have substantial funds that they can use with relative freedom and engage in investment, especially property investment, with the result that their outstanding debt is proportionately higher.

Because the distribution of household debt is weighted toward quintiles with relatively high income levels, interest rate rises are unlikely to result in an immediate cooling of consumption. However, an increase in the debt burden can be expected to inhibit consumption by households in the low- and middle-income groups. The question of whether or not household debt can be managed appropriately will have an important bearing on South Korea's ability to achieve sustainable

growth.

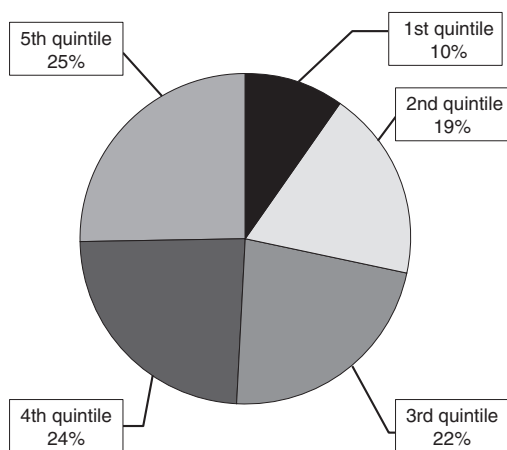
## (2) Strengthening Household Debt Management

South Korea's level of household debt is extremely high compared with other countries. The ratio of household debt to GDP was close to 90% at the end of June 2016 (Fig. 15). While the ratios for Japan, the United States, and the Eurozone have been falling consistently since around 2009 or 2010, South Korea's ratio has continued to climb and is substantially above the average for emerging countries. By 2011 it had even overtaken the average for developed countries. China's ratio has also risen continuously, but the level is still low at around 40%. (As discussed later, the level of corporate debt is high.)

In addition to the high level of debt, interest rate rises also constitute a major risk factor because of the high percentage of loans subject to variable interest rates. As noted above, over 60% of loans are in this category.

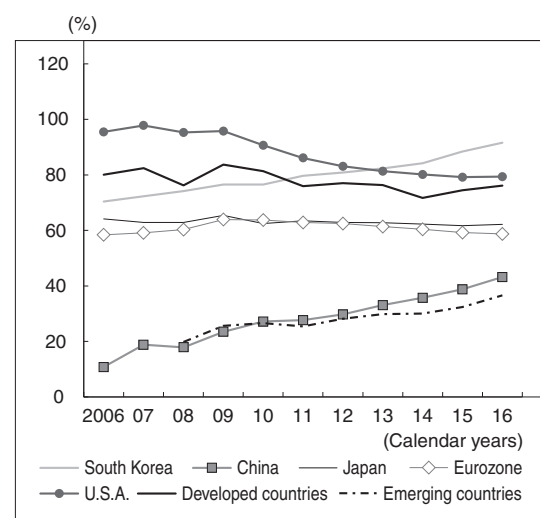
The policy interest rate has been cut several times over the past few years. By the end of March 2017 it was at an historical low of 1.25%

**Fig. 14 Indebted Households by Income Level**



Source: Compiled by JRI using data from the South Korean National Bureau of Statistics and KOSIS

**Fig. 15 Ratio of Household Debt to Nominal GDP (%)**



Notes: The figures for 2016 are as of the end of September.

Source: Bank for International Settlements

(Fig. 16). The rates applied to new loans by commercial banks and specialist banks have also continued to fall. The policy interest rate has been pegged for the last eight months, in part because of continuing economic stagnation. However, the rate could start to rise again.

One reason for this is the rise in the U.S. FF rate. With the U.S. economy on a steady recovery trend, the FF rate was raised in March 2017, and several further increases are predicted. Expansion of the interest rate gap between the United States and South Korea would be likely to trigger an outflow of investment funds, causing the won to weaken. While there is no need for excessive concern from the perspectives of external debt and foreign currency reserves, a weaker won would cause dollar-denominated debt to increase, further expanding the outflow of funds. Another reason is concern about the rise in household debt. Because low interest rates are also one of the factors driving the growth of the household debt, the government could decide to review its low-interest policy.

South Korea's export trade would be impacted by any intensification of the Trump administration's protectionism stance. This could cause an income downturn, further increasing the debt repayment burden.

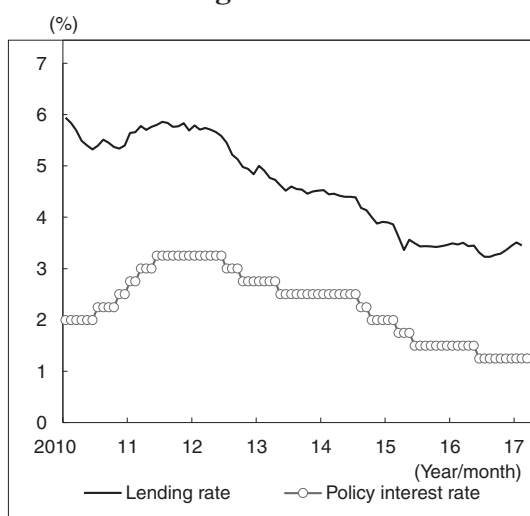
With the risk interest rate rises becoming increasingly likely, the government has started to strengthen debt management. In July 2015, the Financial Services Commission announced "Household Debt Management Measures," and in December of the same year it adopted formal guidelines. Those guidelines call (1) the promotion of amortized loans, (2) the introduction of the debt service ratio, and (3) the tightening of screening criteria, including the application of a "stress rate" when calculating the amount that can be borrowed.

These guidelines have been applied in Seoul and other major cities since February 2016, and in other regions since May 2016. However, debt continued to increase after the introduction of the measures, and in August 2016 new management measures were introduced. A key feature of the new measures was the introduction of rules concerning collective lending, which is seen as cause of debt expansion<sup>(9)</sup>.

Other measures include the reduction of the supply of housing land, and the tightening of non-bank lending criteria. In November, the Financial Services Commission further strengthened the management measures introduced in August by announcing follow-up measures designed primarily to tighten screening criteria. First, collective loans for new condominiums subdivided from January 2017 onwards will be more rigorous than those for normal home mortgages. Second, mutual financial institutions will formulate loan screening guidelines in the January-March quarter of 2017. Third, starting from early December, financial institutions will use the debt service ratio when assessing the repayment capacity of home mortgage borrowers as part of the loan screening process. In addition, loans must be within the borrower's repayment capacity and repaid in installments from the outset.

The government's efforts to strengthen household debt management are expected to result in a gradual braking of debt growth. However, caution will be needed concerning the effect of increases in the repayment burden.

**Fig. 16 Policy Interest Rate and Bank Lending Rate**



Notes: The lending rate is the rate applied to new loans by commercial banks and specialist banks.

Source: Bank of Korea, *Economic Statistics System*

### (3) Economic Impact of Increasing Debt

Rising debt levels impact on the economy by inhibiting private consumption expenditure due to increases in debt servicing costs when interest rates rise.

While there are no signs of a major slowing of private consumption expenditure at present, household income growth has slowed significantly since September 2015, while the percentage of household expenditure devoted to non-consumption items, such as taxes, pension and social insurance premiums, and interest payments, has climbed to around 15%. This is reducing the amount of consumption expenditure that households can afford.

The liabilities of households in the first income quintile, which have the lowest incomes, have reached 144% of annual income, which is higher than the ratio for all households (Fig. 17). The next highest ratio is that of the fifth quintile, but this is generally because households in this group have surplus cash and substantial investments. The first quintile includes many aged and single-

person households. An increase in their liabilities at a time when incomes are stagnating would not only cause a consumption slowdown, but could also lead to social problems.

The all-household average debt servicing ratio (principal repayments and interest payments as a percentage of average income) has been rising consistently since 2012. By 2016 it was over 20%, indicating that the burden has risen significantly.

In 2016, the ratio rose in all quintiles except the first. There is no need for concern about the increases in the ratios for the fourth and fifth quintiles, which have the highest income levels, but the ratios for the second and third quintiles are above the all-household average and will need to be monitored carefully.

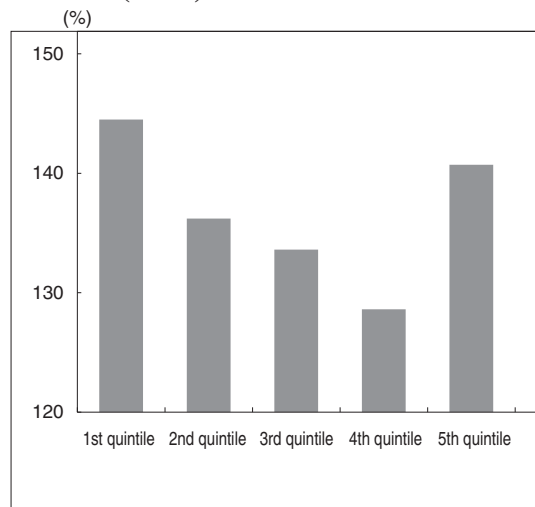
On an all-household basis, the average debt servicing ratio reached 21.9% in 2016. However, if the ratio is calculated solely for households that have liabilities, it is already in excess of one-quarter of income at 27.0%. This means that any increase in the debt servicing ratio is likely to impact on consumption, including expenditure on big-ticket durable items and services<sup>(10)</sup>.

Property price trends also have an indirect effect on consumption expenditure. Property makes up about 70% of household assets in South Korea, which means that when prices start to fall, consumption expenditure will be negatively impacted by the weakening of consumer confidence and the reduction of prices to below collateral values.

If there is an increase in the number of households that cannot meet repayments, the soundness of banks and other financial institutions will also be affected. (This point will be examined as part of the analysis of corporate debt in Part 3.)

The IMF and OECD have also called for risk management in relation to household debt, and this is likely to remain an important policy priority for the next administration. Yet there is also concern about the possible emergence of populist policies. The people of South Korea are becoming increasingly angry about expanding debt burdens, delays in the improvement of the income and employment environment, and other factors, and it is possible that the government will seek to absorb this anger by adopting simplistic measures to re-

**Fig. 17 Ratio of Liabilities to Annual Income by Income Quintile (2016)**



Notes: Ratio of liabilities to annual income = total liabilities / annual income.

Source: Compiled by JRI using data from the South Korean National Bureau of Statistics and KOSIS

duce the debt servicing burden. That would not only create moral hazards, but could also compromise the government's fiscal soundness. (This aspect will be examined in Part 4.)

### 3. Structural Adjustments for Corporations and Industries

In addition to household debt, corporate debt has also expanded rapidly in a worsening economic environment, and urgent action is needed. In Part 3 we will examine the current state of corporate debt and look at structural adjustment efforts. This will be followed an analysis of the impact on financial institutions.

#### (1) Economic Downturn Reflected in Rapid Increase in Corporate Debt

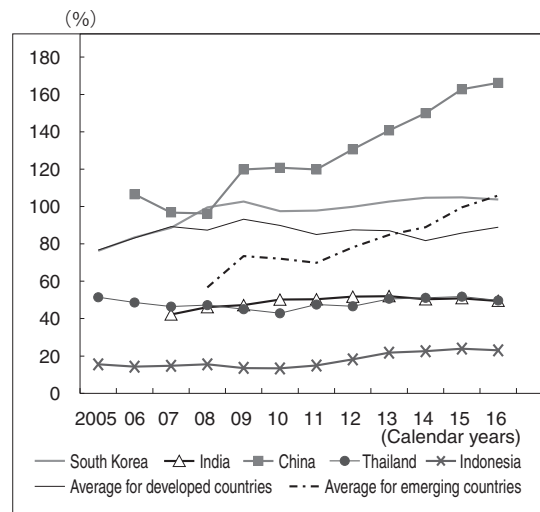
According to statistics compiled by the Bank for International Settlements, corporate debt expanded during the 2000s, when there was continuing economic growth of around 5%. Debt has remained above the averages for both emerging and developed countries (Fig. 18). The level of debt has been generally static over the past few years, with the result that the debts of non-financial corporations are now around the average for emerging countries at just over 100% of GDP<sup>(11)</sup>. Today corporate debt ranks alongside household debt as a risk factor.

Lending to corporations by commercial and specialist banks has increased dramatically during past economic expansionary phases. The balance of debt has generally continued to rise, and while lending for operating funds has been in decline since 2010, there has been a constant increase in lending to fund capital expenditure (Fig. 19). This is because companies in buoyant sectors have responded to strong demand and stimulus measures, including CAPEX tax cuts and accelerated depreciation, by investing in business expansion and the

improvement of competitiveness.

However, while investment continued to expand, sales and corporate earnings shrank due to the economic slowdown and the emergence of Chinese companies over the past few years. As a result, an increasing number of companies are now burdened with excessive capacity and debt.

**Fig. 18 Ratio of Debts of Non-Financial Corporations to GDP**

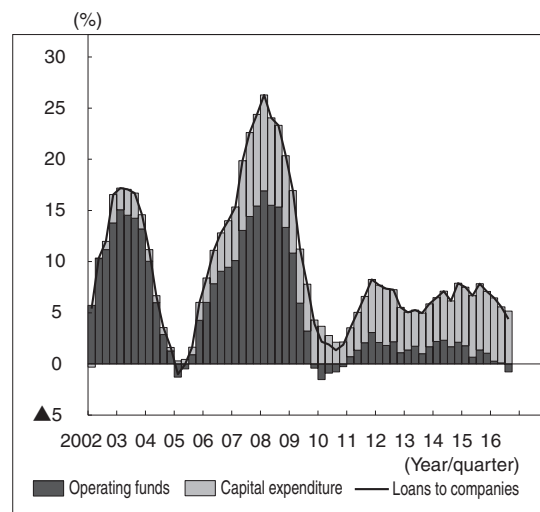


Notes 1: Developed countries include Japan, the United States, Eurozone members, and the United Kingdom. Emerging countries include China, India, ASEAN members, Russia, Latin American countries, and South Africa.

Notes 2: Figures for 2016 cover the period to the end of September.

Source: Bank for International Settlements

**Fig. 19 Outstanding Corporate Debt by Purpose (Year on Year)**



Source: Financial Supervisory Service

There has been a conspicuous increase in debt, especially in industries that are vulnerable to economic fluctuations. A comparison of lending to manufacturers (38.2% of total business lending as of September 2016) in December 2005 and September 2016 shows that the percentages of lending to the textile and telecommunications equipment industries fell, while manufacturers of metal products, such as iron and steel, and transportation equipment, including shipbuilders, increased their shares (Fig. 20). In the non-manufacturing sector, the transportation industry, including marine transportation, increased its share of the all-industry total from 2.5% to 3.0%, while the real estate industry's share climbed from 12.7% to 18.1%.

Although corporate debt has expanded, the number of corporate bankruptcies has been falling consistently since mid-2011 and has remained far below the quarterly average of 973 for the period from 2000 to 2009. This could be seen as the result of winnowing of companies with fragile financial structures during the economic slowdown of the early 2000s and the 2007-8 global financial crisis. However, there is also a possibility that companies that would have failed under normal conditions have avoided bankruptcy.

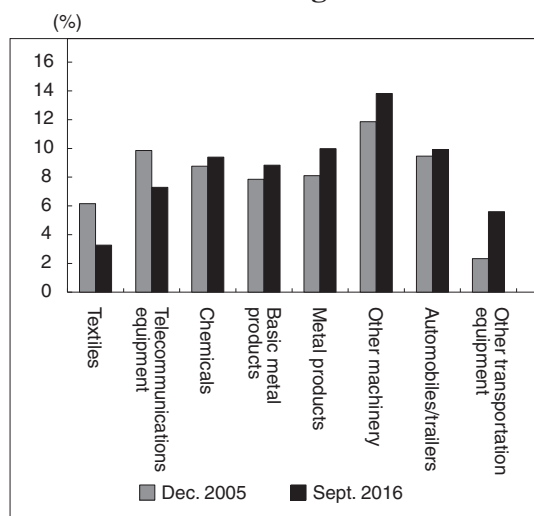
Companies that are essentially bankrupt but continue to operate with support from the government and banks are known as “zombie compa-

nies.” Proof of the existence of such companies can be found in the increase, since 2011, in the number of companies with interest coverage ratios<sup>(12)</sup> below 1.0, which means that they are unable to meet interest payments from their operating income (Fig. 21).

While the number dropped when financial results for 2015 were published, it is still above the level after the financial crisis. Furthermore, the 2015 financial results for the top 1,000 listed companies in terms of sales<sup>(13)</sup> show that at least 81 companies have had interest coverage ratios below 1.0 for three straight years. This number includes 30 companies in areas relating to raw materials, such as metals and chemicals, seven in the construction industry, two in the shipping industry, and one in the shipbuilding industry. Unable to repay their debts, these companies are somehow surviving on bailouts from the government and financial institutions. There is a risk that further increases in corporate debt or the termination of bailouts could turn that debt into non-performing loans<sup>(14)</sup>.

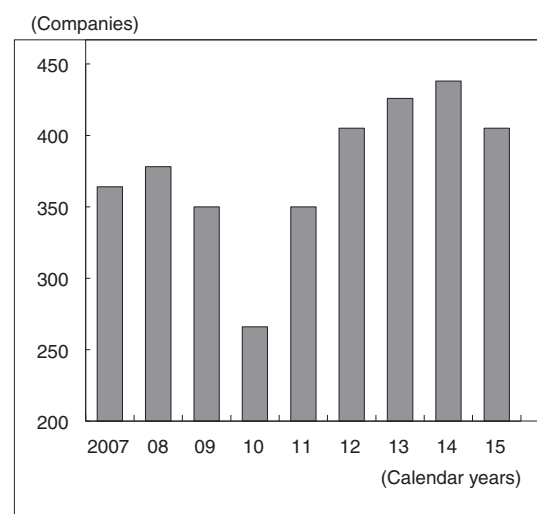
This situation has prompted the government to step up its structural adjustment initiatives. The aim of structural adjustments is to ensure the effi-

**Fig. 20 Shares of Lending to Manufacturing Industries**



Source: Compiled by JRI using data from the Bank of Korea

**Fig. 21 Number of Companies with Interest Coverage Ratios below 1.0**



Notes: The graph is based on 1,467 listed companies for which data has not been lost since 2007. The number of companies with interest coverage ratios below 1.0 was extracted.

Source: Compiled by JRI using financial reporting data from SPEEDA

cient allocation of management resources, such as human resources and technology, and to enhance the soundness and competitiveness of companies through withdrawal from or disposal of unprofitable operations, and restructuring within industries.

Specifically, measures targeting large enterprises with debts in excess of 50 billion won are based on a law designed to facilitate corporate structural adjustments, while those for small and medium enterprises with debts under 50 billion won are based on agreements with creditor banks.

First, creditor banks assess companies' financial positions according to their credit risk and assign ranks from A to D. Companies ranked A or B are generally regarded as normal, while those ranked C or D are targeted for structural adjustments. The criteria are that companies that are unable to repay debt or at risk of bankruptcy are classed as Rank C. These companies are regarded as having the potential to return to a normal financial position by working out their problems and improving their financial situation and other indicators in collaboration with creditor syndicates. Rank D companies are seen as being beyond rehabilitation and are placed in statutory administration (equivalent to

Japan's civil rehabilitation system) or liquidation.

Recent statistics for the number of companies targeted for structural adjustments show that in 2016 the total for large enterprises fell from 54 in the previous year to 32, while that for small and medium enterprises remained basically static at 176, compared with 175 in previous year (Table 1). There has been a certain amount of progress in relation to large enterprises, thanks to factors that include the waning impact of China's economic slowdown in 2015, as well as the benefits of structural adjustments carried out on an individual basis. The profitability of small and medium enterprises has been slower to improve because of reduced sales in domestic markets. Other factors include a decline in shipments to large enterprises, and falling prices due to over-supply situations. In terms of industrial sectors, large enterprises targeted for structure adjustments are concentrated mainly in the shipbuilding, shipping, and iron and steel industries (Table 2). Small and medium enterprises with weak financial structures are spread across a wide range of industries, including metal processing, and electronic components.

Compared with household debt, the upward trend in the number of companies affected has leveled out at present, indicating that the worst may be over for corporate debt. However, given the increasing uncertainty about the outlook for exports and the domestic political situation, corporate structural adjustments and their impact still need to be monitored closely.

We will look next at the progress of structural adjustments, focusing in particular on the state of the shipping and shipbuilding industries, which have attracted much attention recently. We will then examine government initiatives in response to these industries.

**Table 1 Number of Companies Targeted for Structural Adjustments**

		2013	2014	2015	2016
Large enterprises	Rank C	27	11	27	13
	Rank D	13	23	27	19
	Total	40	34	54	32
Small and medium enterprises	Rank C	54	54	70	71
	Rank D	58	71	105	105
	Total	112	125	175	176

Source: Compiled by JRI using surveys of the credit risk of large enterprises (August 8, 2016) and small and medium enterprises (December 7, 2016) by the Financial Supervisory Service

**Table 2 Industry Breakdown of Large Enterprises Targeted for Structural Adjustment**

Industry		Shipbuilding	Construction	Electronics	Shipping	Iron & steel	Petrochemicals	Others	Total
2016	Rank C	1	3	-	2	1	-	6	13
	Rank D	5	3	5	1	-	1	4	19
	Total	6	6	5	3	1	1	10	32

Source: Compiled by JRI using surveys of the credit risk of large enterprises (August 8, 2016) by the Financial Supervisory Service



## (2) Progress on Structural Adjustments

In April 2016, the government introduced a new structural adjustment plan in response to continuing deterioration in the financial performance of companies in recession-hit industries (Table 3). Companies requiring structural adjustments have been divided into three industry-based groups. Adjustment initiatives are implemented according to the policies for each of these groups.

The procedures for Track 1 and Track 2 are the same as those used previously by the government under the Corporate Structural Adjustment Promotion Law. However, measures targeting Track 3 companies in industries that have less seriously impacted than shipbuilding and shipping, such as iron and steel and petrochemicals, will be based on the Special Law on Improving Corporate Vitality, which was enacted in August 2016. Structural adjustments at the time of 1997 financial crisis were led by the government, but this time compa-

nies are being left to implement their own restructuring measures.

Business performance statistics for shipbuilding and shipping industries, which have been categorized as Track 1 industries, show that the performance of the main shipping companies has generally remained stagnant (Fig. 22). Hyundai Merchant Marine was reducing its losses until mid-2015, but it is again moving further into the red at present. The shipping slump has been attributed to a number of factors. First, demand has shrunk due to a downturn in resource trading. Second, the Chinese economy has slowed. Third, shipping companies are paying high vessel leasing charges under long-term contracts signed during the economic boom. Fourth, competition has intensified due to the over-production of vessels. In addition, the Baltic Dry Index, which is the indicator for freight charges, has gone through a repeated cycle of rises and falls, including a shift back from an upward trend to decline in early 2016 (Fig. 23). Alleviation of the shipping glut is therefore likely to take time. There is little hope of a major improvement in financial performance in this environment<sup>(15)</sup>.

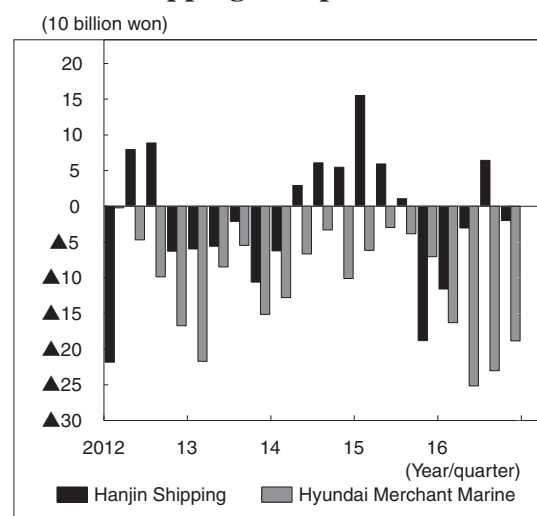
Shipbuilding companies have started to go into

**Table 3 Structural Adjustment Proposals Announced in April 2016**

Track 1	Track 2	Track 3
Cyclically vulnerable industries (shipbuilding, shipping)	Main debtor groups, individual companies	Over-supplied industries (iron and steel, petrochemicals)
Implementation organization		
Government, creditor syndicates	Financial Supervisory Service, creditor syndicates (under the Corporate Structural Adjustment Promotion Law)	Government agencies, individual companies (under the Special Law on Improving Corporate Vitality)
Main actions		
The basic direction of structural adjustments strategies is determined through consultation within the government. Creditor syndicates then work on structural adjustments for individual companies in line with that policy.	Financial structure assessments are carried out and improvement agreements are signed. The credit risk of individual companies is assessed, followed either by financial normalization or immediate liquidation. Methods include voluntary agreements (joint management by creditor syndicates), work-outs, and rehabilitation procedures.	Preventive structural adjustments are implemented through business restructuring, including M&A or capacity reduction. Companies receive independent consultation, and with the approval of the government agencies in charge, they can also receive tax relief, finance, and support for R&D expenditure, etc.

Source: Compiled by JRI on the basis of Financial Services Commission, *Corporate Restructuring Plan* (April 26, 2016)

**Fig. 22 Operating Income of Major Shipping Companies**



Notes: As indicated in the footnotes, Hanjin Shipping was declared bankrupt in February. The figures are based on its financial results for the October-December quarter of 2016.

Source: Compiled by Japan Research Institute using data from Bloomberg L.P.

the red since 2014 as a result of the global shipping slump (Fig. 24). In 2015 in particular, a number of companies reported major losses, signaling a conspicuous downturn in financial performance. The slump has eased since 2016, but global demand for vessels remains slow, with only a trickle of new orders. There is limited sales growth from new orders, and companies are surviving on orders received over the past 2-3 years. In China, which was once a major source of big orders, work is now being channeled to domestic shipbuilders. In addition, the weak yen has restored the competitiveness of Japanese shipbuilding companies.

With the industry continuing to face harsh conditions, the government announced a policy designed to strengthen the competitiveness of the shipbuilding and shipping industries at the end of October 2016. Measures targeting the shipbuilding industry include support for the sales of facilities and non-core business assets. The government is also helping companies to avoid the acceptance of orders at unreasonably low prices. In addition, the government has placed orders for 250 vessels worth approximately 11 trillion won to be built during the period to 2020. The policy calls for companies to leverage their strengths and concen-

trate their management resources, so that they can improve their business efficiency and move into new markets, such as environment-friendly smart vessels.

For the shipping industry, the government has developed a policy designed to encourage collaboration between transportation companies and vessel leasing companies. The government will also provide subsidies totaling 6.5 trillion won for port development and the acquisition of new vessels. However, the only measure that is likely to produce tangible benefits at present is the provision of government subsidies.

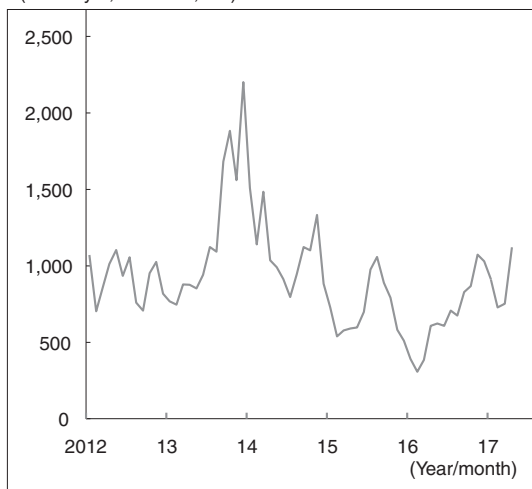
The way forward for the shipbuilding industry will need to include corporate mergers and further improvements in business efficiency. The shipping industry will need to step up the level of reforms, including the reduction of tonnages, utilization of the management resources of Hanjin Shipping, and the reinforcement of global shipping alliances.

Structural adjustments in these industries are expected to result in workforce restructuring affecting tens of thousands of people. The government will need to provide social security and re-employment support for those made redundant.

There has been a gradual improvement in the performance of companies in industries that were

**Fig. 23 Baltic Dry Index (Monthly Average)**

(January 4, 1985 = 1,000)



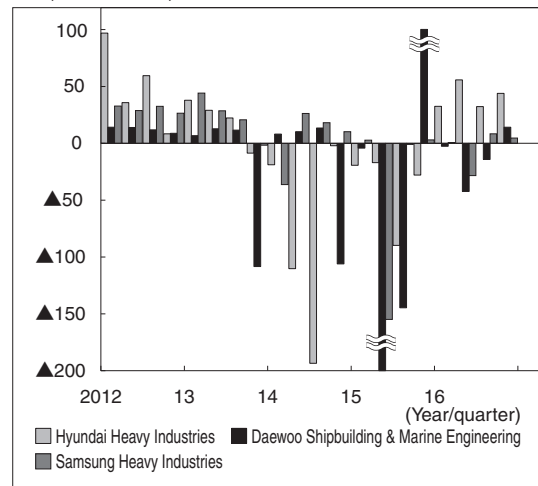
Notes 1: Issued by the Baltic Exchange in the United Kingdom, the Baltic Dry Index is an indicator of the freight costs of tramp vessels. Prices are indexed based on the level as of January 4, 1985 (1,000).

Notes 2: The figures represent monthly averages.

Source: Compiled by Japan Research Institute using data from Bloomberg L.P.

**Fig. 24 Operating Income of Major Shipbuilding Companies**

(10 billion won)



Source: Compiled by Japan Research Institute using data from Bloomberg L.P.

previously regarded as being in recession, such as iron and steel and petrochemicals. POSCO's earnings have improved, thanks to the disposal of unprofitable operations, and an increase in the percentage of premium products, as well as an upward trend in the market prices of iron and steel.

As is apparent from the preceding analysis, progress on structural adjustments varies according to the sector, and there has been no fundamental solution of the problems confronting industries in recession. The next administration will need to continue the structural adjustment process, but it is possible that reforms will be delayed if the opposition becomes the government.

### (3) Concerns about the Soundness of Financial Institutions

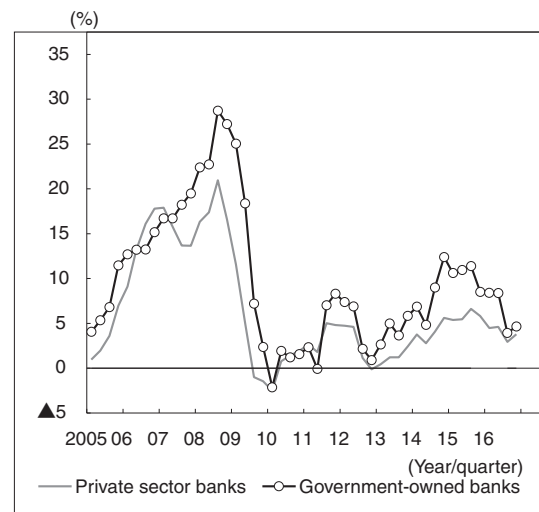
Financial institutions are being directly impacted by the declining debt service capacity of households and businesses. After global financial crises, such as the one that occurred in 2007-8, governments have tightened financial regulations and required financial institutions to raise their capital adequacy ratios to the levels stipulated in the Basel rules<sup>(16)</sup>. If the shrinking debt servicing capacity of households or delays in structural adjustments lead to increased non-performing loans, there is a risk of serious deterioration in the financial soundness of financial institutions.

Although growth in the loan balances of private sector and government-owned banks has slowed, there has been a continuous upward trend since 2013 (Fig. 25). A feature of this trend is the fact that the loan balance of government-owned banks has risen faster than that of private sector banks. Private sector banks have disposed of non-performing loans while implementing structural adjustments. They have also adopted more cautious lending stances. This has been offset by increased lending by government-owned banks, in part as we a way of stimulating the economy.

This situation is reflected in a wide divergence between private sector and government-owned banks in terms of the percentage of credit classed

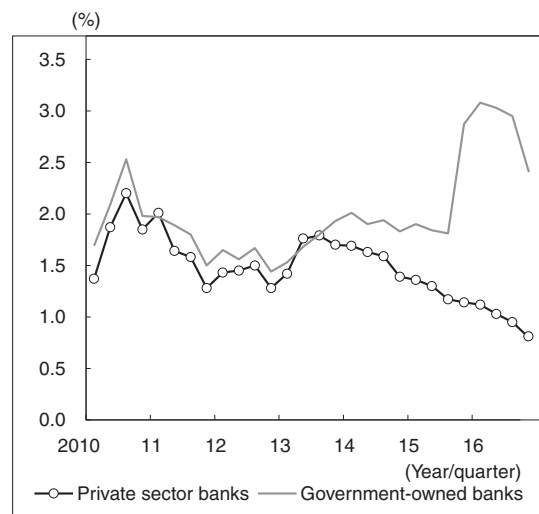
as "fixed" (more than 90 days in arrears) or below since mid-2013 (Fig. 26). Because of changes in the classification criteria for loans to recession-affected industries, such as the shipping industry, the ratio for government-owned banks rose dramatically to a 2.9% in the October-December quarter of 2015. This is higher than the level in 2008 during the financial crisis.

**Fig. 25 Loan Balances (Year on Year Changes)**



Source: Financial Supervisory Service

**Fig. 26 Percentage of Bank Credit Classed as "Fixed" or Below**



Notes: "Fixed" is the credit for which the principal repayments and interest payments have not been made for more than 90 days.

Source: Financial Supervisory Service

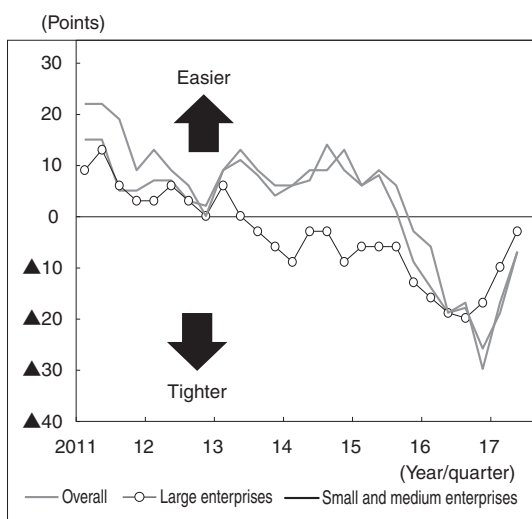
So far there has been no major decline in the capital adequacy ratios of the Industrial Bank of Korea and the Export–Import Bank of Korea, but in June 2016 they announced the expansion of their capital through the establishment of an 11 trillion won fund in preparation for future increases in non-performing loans<sup>(17)</sup>.

Partly because of the continuing export slump, the lending policy index (the number of financial institutions planning to ease their lending policies - the number of financial institutions planning to tighten their lending policies) for lending to large enterprises has been falling since 2013 (Fig. 27). Lending to small and medium enterprises has fallen sharply since the second half of 2015, in part because of the deteriorating business performance of large enterprises. The dividing line for decisions remains substantially below zero.

The performance of both large enterprises and small and medium enterprises bottomed out in December 2016 and began to rally moderately. Given the increasing uncertainty surrounding the economic outlook, however, any softening of leading stances is likely to take time.

In the next section, we will consider risk factors from sources other than the domestic economy.

**Fig. 27 Lending Policy Index for Financial Institutions**



Source: Bank of Korea, Economic Statistics System

## 4. The Emergence of G2 Risks and Domestic Political Risks

In Part 4 we will examine external risk factors, including the Trump administration’s trade policies, and retaliatory action by China following the decision to deploy the THAAD system. This will be followed by an analysis of domestic political risks.

### (1) Concerns about the Impact of the “America First” Policy

U.S. trade policy has shifted toward a bilateralist “America first” stance. In addition to the January 23 signing of a Presidential Memorandum regarding the withdrawal of the U.S. from the TPP, President Trump has also announced his intention to renegotiate NAFTA. In early March the Office of the US Trade Representative (USTR) released the 2017 Trade Policy Agenda<sup>(18)</sup>.

South Korea could potentially be impacted in a number of ways. For example, it could face increased pressure to correct trade imbalances with the United States, or its exports could shrink as a result of economic sanctions against China. Another possibility is that the revision of NAFTA could deal a blow to South Korean businesses in Mexico. We will examine each of these risks in the following analysis.

#### ① Pressure to Correct the Trade Imbalance with the U.S.

During the election campaign, President Trump described the U.S.-Korea Free Trade Agreement (FTA) as a disastrous “broken promise” that had killed 100,000 jobs. While there may not be an objective basis for this claim<sup>(19)</sup>, President Trump’s deep dissatisfaction with the U.S.-Korea FTA, which took effect on March 15, 2012, reflects the expansion of the trade imbalance between the United States and South Korea. An analysis of trends in the trade balance between the two countries on a balance of payments basis (Fig. 28)

since the FTA came into effect shows that South Korea's trade surplus expanded rapidly in 2013 and 2014, and then fell moderately on a year on year basis in 2015<sup>(20)</sup>. South Korea's services account has remained consistently in deficit, and in 2015 that deficit expanded further. While the trade imbalance between the U.S. and South Korea is not currently expanding, however, it is clearly greater than before the FTA came into force.

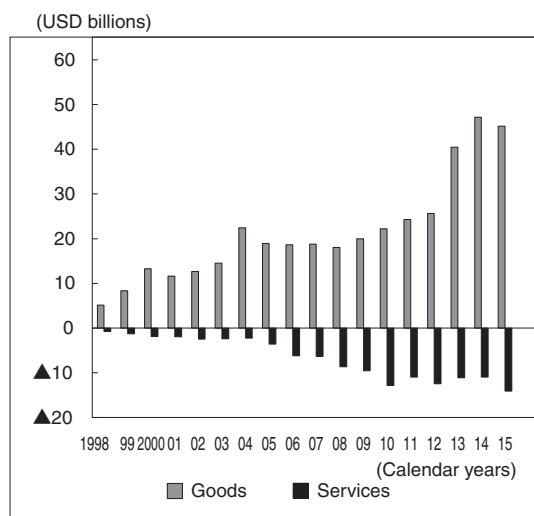
The United States was seen as unlikely to adopt an especially hard-line stance on trade with South Korea for a number of reasons. First, President Trump made no mention of the FTA with South Korea after his election victory. Second, Secretary of Defense Mattis reaffirmed the importance of the alliance between the United States and South Korea during a visit to that country in January 2017. Third, most of America's trade deficit is with China (Fig. 29). However, this expectation was shattered with the release in early March of the 2017 Trade Policy Agenda, which stated that the U.S.-Korea Trade Agreement had not produced the results expected by the American people, since the value of exports from the U.S. to South Korea fell by US\$1.2 billion between 2011 and 2016, while imports from South Korea to the U.S. grew by US\$13 billion over the same period.

This is expected to result in increasing pressure for corrective action in areas with serious trade

imbalances, such as automobiles and iron and steel, and for improved market access in areas in which the United States has a comparative advantage, including financial and legal services.

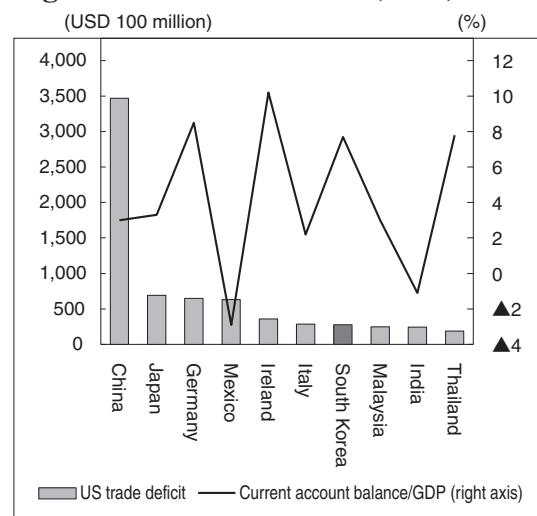
Recently there has also been speculation about whether or not South Korea will be classified as a currency manipulator. The U.S. Department of the Treasury advises Congress about currency manipulation in its biannual Report on International Economic and Exchange Rate Policies. If a country is designated as a currency manipulator, the U.S. enters into bilateral talks that can result in currency revaluations or sanctions, including higher tariffs. A country will be designated as a currency manipulator if (1) it has a trade surplus in excess of US\$20 billion with the United States, (2) if its current account surplus is 3% or more of GDP, and (3) if it has engaged in currency interventions amounting to over 2% of GDP in a single year. Countries that meet all three of these criteria are designated as currency manipulators, while those that meet two are placed on a watch list. In the October 2016 Report on International Economic and Exchange Rate Policies, South Korea is included in the currency manipulation watch list, together with China, Japan, Taiwan, Germany and Switzerland. If South Korea wishes to avoid being classified as a currency manipulator, it will need to reduce its current account surplus by expanding

**Fig. 28 South Korea's Trade Balance with the United States**



Source: Korean Statistical Information Service

**Fig. 29 U.S. Trade Deficit (2016)**



Notes: Current account balance/GDP is a number in 2015.  
Source: U.S. Department of Commerce, U.S. Census Bureau, IMF World Economic Outlook (Oct 2016)

investment, and to avoid unnecessary currency interventions. In relation to the exchange rate, IMF [2016] contains the recommendation that South Korea should maintain its flexibility, and that the monetary authorities should refrain from continual unilateral intervention.

## ② Economic Sanctions against China

We will next examine the potential effects of economic sanctions against China. In 2000 China replaced Japan as the country with which the United States has the biggest trade deficit. China's share of the total U.S. trade deficit continued to rise in the following years (Fig. 30) and now accounts for almost one half, having reached a peak of 49.2% in 2015 (47.3% in 2016).

Because China's current account/GDP ratio is less than 3%, it cannot be classed as a currency manipulator under the current criteria. However, we cannot rule out the possibility that President Trump will impose economic sanctions on China for three reasons. First, he has repeatedly criticized China for taking jobs from the United States by intentionally weakening the yuan in order to increase exports. Second, he has appointed Peter Navarro, a hardliner with regard to China, as Director of the White House National Trade Council. Third, he expressed dissatisfaction about China's response to sanctions against North Korea. How-

ever, it is possible that the Chinese government will seek to avert sanctions through summit talks and strategic economic dialogue with the United States.

As discussed in Part 1 of this article, many of South Korea's exports to China are intermediate goods. This means that if the U.S. government imposes economic sanctions on China, South Korea's exports to China will also be affected.

## ③ Renegotiation of NAFTA

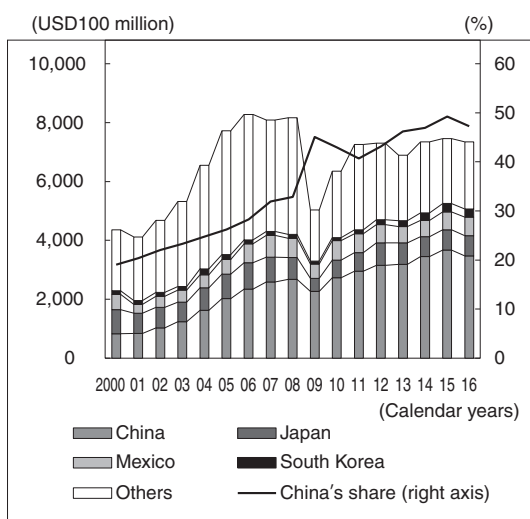
A renegotiation of NAFTA and a drastic increase in tariffs on Mexican products would also have implications for the South Korean economy and companies. South Korean companies have recently been expanding their business activities in Mexico, and there has also been an increase in exports from South Korea to Mexico.

Particularly significant is the rapid growth of the Mexican automobile industry in recent years. In 2016, Mexico produced 3.5 million vehicles, making it the seventh largest automobile producer in the world after China, the U.S., Japan, Germany, India and South Korea. After NAFTA came into effect, Mexico attracted interest as an export base for the North American market because of its low production costs. Major automobile manufacturers from around the world successively established production bases there.

The expansion of automobile production in Mexico has been accompanied by growth in exports of automobile parts from South Korea. This growth is also linked to an increase in transactions between South Korean automotive part manufacturers and companies outside of the Hyundai Motor Group. Automobile parts share of total exports of South Korea to Mexico has risen from 1.1% in 2005 to 7.2% in 2013 and 14.1% in 2016. The rapid increase in 2016 reflects the start of production in Mexico by Kia Motors in May of that year. Kia Motors produced approximately 100,000 vehicles in 2016, and is planning to expand production to 300,000 vehicles from 2017 onwards.

POSCO began production of hot-dip galvanized steel sheets in Mexico ahead of other manufacturers in 2009. It imports cold rolled steel sheets from South Korea and processes them locally

**Fig. 30 U.S. Trade Deficit by Trading Partner**



Source: U.S. Department of Commerce, U.S. Census Bureau

by dipping the steel sheets into molten zinc. The sheets are then supplied to foreign-owned companies, including Japanese manufacturers such as Nissan and Honda.

The renegotiation of NAFTA and a drastic increase in tariffs on Mexican products would therefore have a major impact on South Korean companies operating in Mexico.

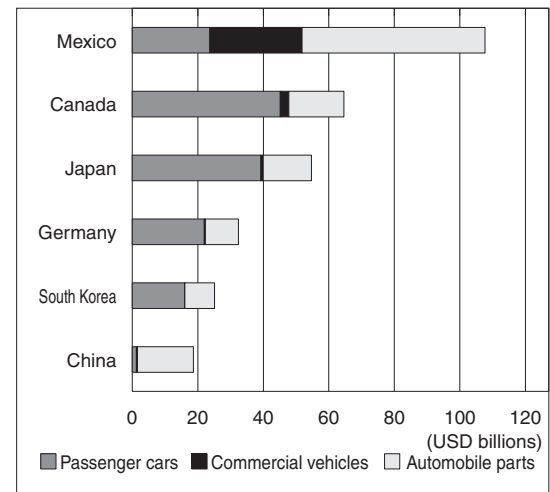
The Trump administration's "America first" trade policies are viewed with concern by South Korean companies, which are being forced to take action in response to pressure for them to produce in America and employ Americans.

On January 17, 2017, the Hyundai Motor Group announced plans to invest US\$3.1 billion in the United States over the next five years, including R&D investment relating to the development of new technologies for next-generation automobiles, such as eco-friendly cars and self-driving vehicles, the production of new models at existing plants, and environmental improvement activities. Samsung Electronics has started to consider the possibility of producing home appliances, such as refrigerators and washing machines, in the United States.

LG Electronics has decided to establish a production plant for tub and water-jet washing machines in Tennessee and signed a memorandum of understanding about the project with the Tennessee state government at the end of February 2017. The plant will cost a total of US\$250 million, and will start producing one million washing machines a year from the April-June quarter of 2019<sup>(21)</sup>. Currently LG produces washing machines in Mexico and exports them to the United States.

Based on these developments, South Korean companies can be expected to shift increasingly toward local production in the United States. There will be particular interest in moves by the Hyundai Motor Group. According to South Korean statistics, South Korea's trade surplus with the United States (customs-cleared basis) in 2016 amounted to US\$23.25 billion, with the automotive industry recording a surplus of US\$19.71 billion. U.S. statistics also show that the U.S. trade deficit with South Korea in the automobile sector is the next highest after Mexico, Canada, Japan,

**Fig. 31 U.S. Automobile Trade Balance**



Source: U.S. Department of Commerce, U.S. Census Bureau

and Germany (Fig. 31).

In future bilateral negotiations, the U.S. government is likely to pressure South Korea to correct the automobile trade imbalance in various ways, including the expansion of local production in the United States, import expansion, and the removal of non-tariff barriers. One problem with this approach is the fact that the Hyundai Motor Group has reached agreement with labor unions to maintain a minimum level of production in South Korea.

## (2) Escalating Economic Retaliation by China

In addition to anxiety about the trade policies of the Trump administration, economic retaliation by China in the wake of the decision to deploy the THAAD system has introduced further uncertainty into the export environment. The Chinese government is pressuring the South Korean government to halt the deployment of the system, which it sees as a threat to its national security. Starting the fall of 2016, China has imposed restrictions on South Korean media content, including concerts, dramas, and movies. It has also blocked customs clearance of South Korea foodstuffs and cosmet-

ics through various measures, including the tightening of regulations and the establishment of new quality requirements.

China's economic retaliatory measures have escalated since the deployment of the THAAD system on March 7. After the Lotte Group provided land for the deployment of the system, the Chinese authorities have suspended business operations by 55 Lotte Mart stores operated by the group in China, ostensibly for fire code violations (as of March 9). There are also reports that Chinese travel agencies have been ordered to refrain from selling group tours to South Korea<sup>(22)</sup>, and the number of Chinese tourists visiting Lotte World in South Korea has already declined<sup>(23)</sup>.

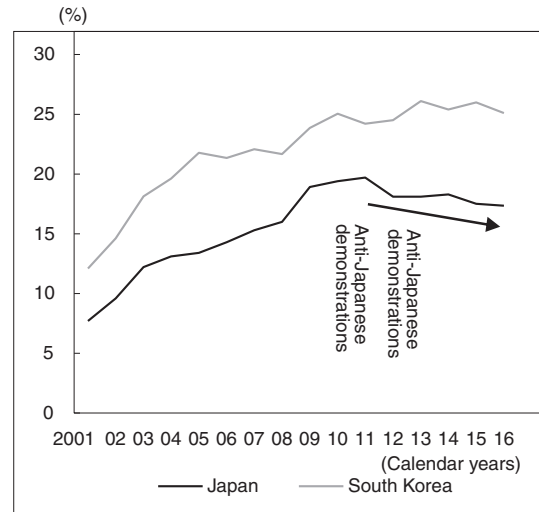
Calls for the severing of relations with South Korea and the exclusion of South Korean products from China have appeared in the overseas social media editions of the *People's Daily*, as well as in its sister publication, the *Global Times*. This escalation has resulted in calls for restraint within China, but the next South Korean administration is likely to face continuing pressure to halt the deployment of the THAAD system.

On March 20, 2017 Korea Development Bank (KDB) Research published a report in which it estimated that this situation would result in economic losses of US\$10 billion for South Korea in 2017, including a US\$7.4 billion downturn in duty free and tourism sales, and a US\$2.6 billion reduction in sales by major manufacturing industries, and that further escalation of China's economic retaliatory measures could increase the losses to US\$20 billion (US\$11.7 billion for duty free and tourism sales, US\$8.3 billion for sales by major manufacturing industries)<sup>(24)</sup>.

Because of this heightened China risk, an increasing number of South Korean companies are expected to shift away from China<sup>(25)</sup>. In 2013, South Korean dependence on exporting to China reached a record high of 26.1%. This figure has since declined in three consecutive years, reflecting increased exports to Vietnam and the resurgence of exports to the United States. By 2016 it had fallen to 25.1%.

There is a strong possibility that South Korean exports to China will remain low in the foresee-

**Fig. 32 Japanese and South Korea Dependence on Exports to China**



Source: Korea International Trade Association database, Ministry of Finance trade statistics

able future because of China's economic slowdown and the China risk. This is likely to lead to a further decline in dependence on exporting to China.

Japan's dependence on exports to China has decreased from 19.7% in 2011 to 17.7% in 2016 (Fig. 32), reflecting the spread of the "China plus one" strategy due to rising production costs in China, as well as massive anti-Japanese demonstrations there in 2012.

### (3) The Presidential Election and Domestic Political Risks

On March 10, South Korea's Constitutional Court upheld the impeachment of President Park Geun-hye, and Ms. Park was dismissed from her position as President. The uncertainty that had been predicted if the court had rejected the impeachment has evaporated, but a new source of uncertainty has emerged.

The focus of interest now, both within South Korea and overseas, is the upcoming presidential election, which will be held on May 9. According to the results of various opinion polls, the candi-



date with the best chance of victory is Moon Jae-in of the opposition Democratic Party. It is still too early to predict the outcome of the election, given the possibility of new developments<sup>(26)</sup>. However, a victory for Mr. Moon would be likely to have the following consequences.

First, South Korea faces difficult choices in terms of its policies on foreign relations and security. The new president will need to provide clear policies on various interrelated issues, such as the appropriate response to suspected nuclear weapons development and other provocative actions by North Korea, the question of whether or not to reconsider South Korea's deployment of the THAAD system, and how to handle relations with the United States and China. Mr. Moon has not yet revealed his thoughts on these issues.

To improve relations with China, South Korea will have to accede to China's demands for the discontinuation of the THAAD system deployment. In addition, because Mr. Moon has advocated a conciliatory stance towards North Korea, including an emphasis on dialogue, and the reopening of the Kaesong Industrial Complex, we must consider the possibility that there will be a major shift away from the foreign policy stance of the Park Geun-hye administration. Such a shift would strain the alliance between the United States and South Korea.

However, if South Korea decides to continue the deployment of the THAAD system for the sake of the country's alliance with the U.S., relations with China will continue to deteriorate, possibly leading to further escalation of China's retaliatory measures. In addition, such a course of action could lead to a backlash from within the Democratic Party and among voters who supported Mr. Moon (Table 4), potentially causing a sudden decline in the new president's ability to lead.

Another factor that needs to be considered is the likelihood of a more populist approach to economic policy. Although not a formal election promise, one of the commitments made by Moon Jae-in ahead of the presidential election was to relieve the youth unemployment problem by creating over 800,000 jobs in the public sector. The justification for this position is that there is room

**Table 4 Attitudes to THAAD by Political Party Supported**

	Implementation as planned by the present administration	Implementation earlier than the current plan	Delayed implementation
All	20.8	24.6	39.7
Democratic Party	13	13.9	62.5
Liberty Korea Party	35.1	51.3	7.7
People's Party	25.3	27.2	38
Bareun Party	41.5	40.8	8.7

Notes 1: Shading was applied by Japan Research Institute.

Notes 2: The Liberty Korea Party is a conservative government party, and the Bareun Party is a conservative opposition party. The Democratic Party is a progressive opposition party, and the People's Party is a centrist opposition party.

Source: 서울 경제(March 13, 2017)

for expansion in South Korea's public sector, since the proportion of public sector workers in South Korea is lower than the average for OECD countries.

There are several problems with this proposal. First, Mr. Moon has not clarified how the necessary fiscal resources would be provided. Second, a bloated public sector could compromise South Korea's fiscal soundness. Third, the proposal runs counter to the public sector reforms implemented by the South Korean government in recent years.

Mr. Moon's proposal is reminiscent of an election promise by former president Park Geun-hye, who said that she would provide elderly citizens with a basic monthly pension of 200,000 won without increasing taxes. Ultimately the idea proved to be fiscally unaffordable, so it was decided instead that the top 30% of income earners would be excluded, and that pensions up to a maximum of 200,000 won would be paid only to the remaining 70%. Any future increase in welfare-related expenditure will involve increased costs, including higher taxes. There has not been a proper debate in South Korea about how the necessary fiscal resources should be provided, or about the kind of welfare society that South Korea wants to create.

There is also the possibility that the government will respond to the issues described in this article, such as household debt and structural adjustments, by implementing measures ostensibly designed to ease the pain felt by society and workers, such as

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simplistic debt relief measures, or the postponement of structural adjustments by restricting layoffs or providing additional finance<sup>(27)</sup>.

*Chaebol* reform is likely to be a contentious issue in relation to economic policy. Collusion between business and the government has frequently been a problem in South Korea. To overcome this issue, South Korea will need to modify its presidential system and implement radical reforms to eliminate collusive relationships. Another area in which reforms are needed is the governance of large corporations. There is a risk that the government will ride the wave of popular anti-*chaebol* sentiment and impose excessive restrictions on them, causing a decline in economic activity.

The South Korean government and major South Korean companies need to reach a social consensus on reform, and to establish a structure capable of driving reform. The Samsung Group and other *chaebols* should take the initiative in governance reform.

## Conclusions

In this article, we have analyzed the internal and external risk factors that are creating uncertainty about the future of the South Korean economy. The conclusions that emerged from this analysis can be summed up as follows.

First, the single biggest risk factor for South Korea's domestic economy is the increasing level of household debt. FF rate rises in the United States could cause interest rates in South Korea to rise, which would result in bigger debt service burdens and downward pressure on consumption expenditure. South Korea needs to improve debt management and implement economic stimulus measures.

Second, structural adjustments are being implemented in the South Korean business sector, especially in industries affected by recession. However, the shipping and shipbuilding industries still face a dire situation, and future developments in these areas will need to be monitored closely. Structural adjustments aimed at the revitalization of these industries will need to be accompanied by efforts to minimize the negative effects of the

adjustments.

Third, the biggest external risk factor for South Korea is the future direction of U.S. trade policy under the Trump administration. In particular, there is likely to be increasing pressure from the U.S. to correct the trade imbalance that has been expanding since the signing of the U.S.-Korea Free Trade Agreement. The South Korean government and business sector will need to be ready to respond to every possible outcome of this situation.

The policy decisions taken by South Korea's new administration in the areas of foreign policy, security and economic policy in response to this proliferation of risk factors will have a major influence on the country's future direction. However, the future outlook is still unpredictable. This unpredictability is the greatest risk factor for South Korea at present.

To achieve sustainable growth, South Korea needs to correct its excessive dependence on China, while restructuring its businesses and industries and creating new growth drivers. Faced with China's rapid economic catch-up, South Korea needs to take urgent steps to strengthen its economic innovation initiatives. This will require both the creation of new business activities by large corporations, and the establishment of new venture companies. The question is whether South Korea can achieve these goals without lapsing into populism under its new administration.

This article is based mainly on information available as of early April.

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## End Notes

1. In her inaugural address, President Park Geun-hye stated that she aimed to raise the employment rate to 70% by building ~“creative economy” through economic innovation. The Park administration’s Three-Year Plan for Economic Innovation, which was drafted in February 2013, was designed to achieve growth through (1) the reinforcement of fundamentals, (2) economic innovation, and (3) the balanced development of domestic and external demand, including the reinforcement of service industries and support for small- and medium-enterprises. Centers for Creative Economy & Innovation were established in 17 cities in order to support the establishment of venture companies through collaborative efforts by regional municipalities, research institutions, financial companies, large corporations and other groups. In *OECD Economic Surveys KOREA* (June 2014), the OECD strongly praised South Korea’s Three-Year Plan for Economic Innovation because of its inclusion of structural reforms previously recommended to the South Korean government by the OECD.
2. In 2014 and 2015, over 50% of borrowing was for residential housing and real estate development, followed by business capital, consumption expenditure (weddings, medical care, education, living expenses), and *Jeonse* deposits.
3. Measures include a shift from interest-only loans repayable on maturity to amortized loans based on equal payments of principal and interest, as well as stricter screening of borrower’s debt servicing capacity.
4. For further details, see Ministry of Land, Infrastructure and Transport, November 3, 실수요 중심의 시장형성을 통한 주택시장의 안정적 관리방안.
5. In South Korea, the right to subdivide apartments can be sold before they are actually constructed, allowing units to be resold before completion. This has stimulated~ investment in apartments, since the sale price is lower than the actual price, allowing profits to be made by reselling apartments.
6. For further details, see Ministry of Strategy and Finance, 내수 활성화 방안, February 23, 2017.
7. Since the autumn of 2016, many South Korean think tanks, including the Korea Development Institute, Hyundai Economic Research Institute, and LG Economic Research Institute, have released reports on household debt on the basis that U.S. FF rate rises are imminent.
8. The collapse of Hanjin Shipping can be attributed both to the simultaneous impact of a macro factor, in the form of reduced cargo movements, and micro factors that included business strategy failures caused by an increase in the number of vessels during the economic boom, and the signing of a long-term charter agreement at a high price. Another factor was *chaebol*-style management.
9. Collective lending is ~system used when the rights to condominium units are sold before construction. Under agreements between banks and construction firms, all prospective purchasers are offered finance on the same terms. Borrowers are able to borrow at low interest rates with simple procedures, while the banks can simplify their screening processes because the loans are guaranteed by housing land guarantee corporations. The percentage of loans covered by guarantees from the Housing Finance Corporation (KHFC) and the Korea Housing & Urban Guarantee Corporation (KHUG) will be reduced from 100% to 90%. Previously one borrower could obtain multiple guarantees, but the number will now be strictly capped at two per borrower. The aim of the policy is to force banks to strengthen their management systems by requiring them to accept some of the risk.

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10. According to an analysis by Ju Won, Jae Kyu Lim, and Kim Soo-hyung of the Hyundai Research Institute (2016), the waning effect of the easing of liquidity restrictions and an increase in the servicing burden will push down household consumption expenditure by 0.63 points in 2017. The model was created using the rate of increase in household consumption expenditure as a dependent variable and the rates of increase in GNI and household liabilities, the increase in the ratio of liabilities to income, and the increase in market interest rates as explanatory variables.

According to the same report, loans for consumption expenditure made up 51.3% of lending to the first quintile, compared with 34.1% for all households, indicating that households in this group are going into debt to pay for living expenses.
  11. The only emerging countries where the ratio debts of non-financial enterprises to GDP is higher than that of South Korea are Chile, China, Hong Kong, and Singapore. China appears to be driving the rapid rise in the average for emerging countries in recent years.
  12. The interest coverage ratio is expressed as (operating income + interest and dividends received) / interest and discounts paid). A ratio below 1.0 times indicates that a company is unable to earn enough from its core operations to meet interest payments.
  13. The top 1,000 companies in terms of net sales were selected using SPEEDA corporate financial results data. Companies for which financial results were unavailable were excluded.
  14. In the July-September quarter of 2016, 468 companies had interest coverage ratios below 1.0, indicating that many companies are unable to meet interest payments from their core business earnings, including those temporarily in that situation. This figure was calculated based on results for 1,581 companies for which there were no gaps in the financial results data for the period from the January-March quarter of 2015 to the July-September quarter of 2016.
  15. Some companies in the shipping industry have already tried unsuccessfully to implement structural adjustments. Hanjin Shipping applied for a voluntary agreement, but the negotiations fell through, in part because there was no prospect of obtaining finance. Financial bailouts were cut off at the end of August 2016, and the company went into statutory management. This was followed by rehabilitation procedures, but on February 17 the court ruled that there was no hope of rehabilitation, the company was declared bankrupt.
  16. These are banking rules established by the Basel Committee on Banking Supervision, which has a permanent secretariat in the Bank of International Settlements. Currently 28 countries participate in the system. Most are developed countries, such as Japan, the United States, and EU members. Under the Basel III rules introduced in 2013, the capital adequacy ratio and capital quality standards will be progressively raised in the period to 2019.
  17. Funds required for structural adjustment will be arranged as required up to the deadline at the end of 2018. The strategic direction for support will be revised at the end of each year.
  18. There are serious problems with the policies of the Trump administration and the thinking behind them. First, there is the idea that trade deficits are the result of unfair trade with other countries. In fact, there is a high correlation between the trade balance and the investment-savings gap (the difference between savings rate and the investment rate). The United States continues to run trade deficits because its savings rate is lower than its investment rate. This situation is linked to government fiscal deficits and inadequate household savings (excessive consumption). However, the Trump Administration only sees the trade deficit in the context of bilateral trade and is determined to turn the deficit into a foreign policy issue so that it can apply pressure to partner countries.
  19. According to the International Trade Administration's "Jobs Supported by Export Destination, 2015" (U.S. Department of Commerce), South Korea ranks seventh in terms of jobs created through the export of goods from the United States. (The three top-ranking countries are Canada, Mexico and China.)

20. Although statistics for South Korea's 2016 trade balance with the United States (balance of payments basis) have not yet been released, on a customs-clearance basis the trade surplus with the United States was smaller year on year.
21. Ministry of Trade, Industry and Energy (South Korea), 산업부 장관, LG-테네시주 투자 조인식 참석, March 1, 2017.
22. On March 7, 2017, the U.S. government imposed fines of approximately US\$1.2 billion on the Chinese telecommunications manufacturer ZTE on the grounds that the company had illegally exported goods to North Korea and Iran. Some see this as a warning in response to China's use of economic retaliatory measures against South Korea.
23. The Korea Times, *More Korean firms suffer THAAD retaliation*, March 9, 2017.
24. See KDB, 사드배치와 한중관계 악화에 따른 산업별 영향, for an analysis of the most heavily impacted major industries, including cosmetics, duty-free shopping, and tourism, followed by the automobiles, mobile phones, oil, petrochemicals, and shipping.
25. For further information regarding the recent global business expansion of South Korean companies, see Mukoyama [2017].
26. Since entering the presidential race in April, People's Party candidate Ahn Cheol-soo has rapidly caught up with Moon Jae-in.
27. In addition to introducing regulatory limits on total household debt, the South Korean government has also proposed lowering the upper limit for lending rates from 27.9% to 25%. It has also reportedly been considering debt reduction or forgiveness (*Chosun Ilbo*, Japanese edition, March 17, 2017).

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