1. Introduction and overview

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After the global financial crisis of 2008–09, many countries suffered from economic underperformance, despite strong, unconventional monetary policies. Growth rates were below potential, inflation rates undershot monetary authority targets and unemployment rates declined only at a modest pace. Seven years after the failure of Lehman Brothers and the near meltdown of the global financial system, policy interest rates remained near zero—even negative in some countries—and quantitative easing had bloated the balance sheet of major central banks. This secular stagnation and deflationary state is now branded as "Japanization," a model best avoided.

Advanced countries struggled to recover by lowering interest rates, flattening their yield curve and embracing a strong dose of quantitative easing. As is well known, central banks pursue quantitative easing by purchasing large amounts of long-term government bonds and private sector assets. The policy induced a massive flow of capital from advanced to emerging markets. Emerging markets experienced currency appreciation and responded by cutting interest rates. Slower economic growth in China, which started in 2014, affected many economies that heavily rely on exports to China. Currently, many emerging market economies are suffering from slow growth and disinflation and are turning to low interest rate policies.

Korea resembles Japan more than any other emerging market economy. This is far from surprising, as Korea has pursued a development strategy based on Japan's success. Korea's industrial structure has evolved following that of Japan—from light industries to heavy industries and on to electronics industries, which are mostly dominated by a handful of conglomerates. Economic policies are also similar for a wide range, from financial and labor to product markets. Korea's aging pattern is particularly similar but with a 20-year lag. Accordingly, it would not be an understatement to say that concerns are warranted with regard to how similar the emerging patterns are in Korea to those of Japan 20 years ago, when Japanization first reared its head.

Hence, "Japanization" may be used in two different contexts. First, the term is used in the literature regarding secular stagnation, a zero lower bound and quantitative easing. Japanization is a process of declining inflation and growth rates combined with monetary policy that becomes ineffective after the interest rate hits the lower bound of zero. When an economy experiences deflation (a negative inflation rate), the stagnant state becomes self-reinforcing, because the real interest rate (the nominal interest rate minus the inflation rate) must be positive. A stagnant economy often calls for a negative interest rate to stimulate consumption and investment, which becomes impossible under deflation. Japan experienced prolonged deflation with stagnant growth for nearly two decades, from the mid-1990s to 2012, leading to the coinage "Japanized state" or "Japanization" to refer to a deflationary, stagnant economy. After the global financial crisis of 2008–09, many advanced countries experienced stagnant growth, near deflation and zero interest rate policy—very similar to Japan in the 1990s and 2000s, raising concerns from policy makers in advanced countries about possible Japanization.

"Japanization" can be used in a more comprehensive context in Korea. The process of Korea's economic development has followed in the footsteps of Japan; although income per-capita exhibited rapid growth in the past, the pace has dwindled as the economy reaches a high-income state. By many indicators, Korea is following Japan lagged by 20 years. Japanization, under the circumstances, emphasizes the similarity between the two economies. And as Japan suffered from the "lost two decades," Korea also seems poised to fall into a similar malaise. Indeed, despite serving earlier as a positive role model for Korea in terms of industrialization and economic development, Japan must now become a cautionary tale. All of Japan's failures during the past two decades, stretching from macroeconomic performance to social and structural problems, need to be avoided in Korea. Learning the lessons from Japan's experiences is the first step to fending off the problems that have beset the country for so long.

AGING, INDUSTRY MATURATION AND JAPANIZATION

In Chapter 2 of this book, "Japanization: is it spreading to the rest of the world?," Takatoshi Ito defines the term "Japanization" as a combination of the following economic conditions: (1) the actual growth rate is lower than the potential growth rate for an extended period, (2) the natural real interest rate is below zero and also below the actual real interest rate, (3) the nominal (policy) interest rate is zero and (4) the presence of deflation (that is, a negative inflation rate).

As a summary measure for these conditions, the author proposes a Japanization index (J-index), the sum of the proxy for the GDP gap, the inflation rate and the nominal interest rate. Under normal conditions of 2 percent growth (that is, the GDP gap = 0), 2 percent inflation rate and 3–4 percent interest rate (with the policy rate being 4 percent), the J-index should be around 6. When the index is below zero, the condition can be viewed as a Japanized state. Japan has been in such a condition since the late 1990s; the J-index for Korea and Germany has been below 1 since 2012.

A closer examination of how Japan fell into Japanization, or the deflationary trap, reveals that it was a combination of adverse shocks and policy failures. The following factors seem to be decisive in driving the economy into a deflationary trap:

(1) failure to restore financial stability by overkilling the bubble in 1990–92 to ensure against a resurrection of the bubble,
(2) failure to tackle the nonperforming loan problem promptly and decisively in order to avoid a major banking crisis,
(3) failure to engineer a soft landing of the banking crisis by means of an early and large-scale capital injection,
(4) failure to make the timely and decisive decision to adopt quantitative easing to end deflation,
(5) failure to adopt the inflation targeting regime earlier and
(6) failure to adopt a large and timely fiscal stimulus.

The next two chapters analyze the effects of population aging and China's catch-up in export structure on the recent lethargy in the Korean economy. Chapter 3 by Kyooho Kwon, "GDP growth from the perspective of demographic change: will aging Korea become another Japan?," focuses on the downward pressures generated by demographic changes on Korea's potential growth. Japan is well known for its rapid aging, which has played a major role in its stagnation during the past 20 years. And although not as notorious yet, Korea's demographic structure bears a striking resemblance to that of Japan in the 1990s, which will pose a serious obstacle to growth in the near future.

Kwon projects that the absolute number of employees will begin to decrease in the 2020s. In addition, the increase in the share of the senior population will put significant downward pressure on the volume of labor supply, despite the steady rise in the labor force participation rate of all age groups. Considering these factors, the potential growth rate of Korea is projected to decline from about 3 percent per annum in the 2010s to the mid-1-percent range in the first half of the 2030s.

Considering the pace of population aging, the author argues that mid-1-percent growth in the 2030s is not a "pessimistic scenario" for Korea; rather it highlights the tasks at hand in order to avoid a Japanese type prolonged recession. As the relative contribution of total factor productivity (TFP) to potential growth becomes larger, Korea must proactively address structural reforms such as restructuring inefficient firms, enhancing labor market flexibility and improving product market competition, areas in which Japan has seen little success. In addition, it would be prudent to raise the female labor market participation rate, which in both Korea and Japan ranks relatively low among advanced countries.

Chapter 4 by Kyu-Chul Jung, "Export dynamics of Japan, Korea and China," discusses the catch-up processes among the three East Asian countries in export markets. The author first observes that Korea's export baskets are concentrated in the machinery and transport equipment sectors, which were Japan's main export industries in the 1990s; its shares in the key export markets of these sectors dropped sharply during the same period. Similarly, Korea is beginning to lose its market shares in electrical and electronic products. And just as Japan was caught up by Korea and lost its market shares in the 1990s, China caught up with Korea in the late 2000s. As evidence for this assertion, the author shows that Korea's market shares, in which China had high export potential (a weighted average of comparative advantage indexes of all other export items, where the weight increases as the other item becomes similar to a particular item), decreased further than other sectors. Additionally, it was found that the negative impact of China's catch-up on Korea's exports is gradually growing, while the opposite is the case for Korea's catch-up with Japan. Appropriately, it may not be an exaggeration to assert that Korea is sandwiched between China and Japan.

In fact, the loss of export competitiveness may affect Korea more adversely than it did Japan in the 1990s, as the Korean economy relies more heavily on exports. This, however, does not imply that Korea should raise trade barriers or restrict global market integration, as it is highly probable that Japan's reluctance to expand into overseas markets in the 1990s had a negative impact on its competitiveness. On the contrary, lowering trade barriers not only improves price competitiveness but also provides incentives to innovate, as firms are exposed to higher competition pressures.

The time has come for Korea to develop core capabilities that latecomers cannot easily imitate. Indeed, although Japan has lost most of its shares in the export markets, it has maintained strength in sectors such as specialized machinery for specific industries and metalworking, where creative, sophisticated and highly advanced technology is required. In this regard, the Korean government needs to reconsider the current policy stance—assisting export firms across the board without much discretion—and concentrate limited resources on the sectors that can nourish comparative advantages.

RESOURCE ALLOCATIONS AND TFP

Part II is composed of two chapters, both of which analyze the allocative efficiencies of Japan and Korea. Given the total amount of production factors (capital and labor) in an economy, the aggregate output and TFP can increase as larger amounts of production factors are allocated to more productive firms. "Allocative efficiency" thus measures how efficiently production factors are allocated to heterogeneous firms in terms of productivity. In this regard, Japan and Korea are interesting countries to study because they have long been accustomed to government interventions in the market. As an example, Japan and Korea are the two countries in which policy support and protection for small and medium-size enterprises are by far the most widely applied among the countries of the Organisation for Economic Co-operation and Development (OECD).

In Chapter 5, "Product market efficiencies and TFP: a comparative study of Japanese and Korean firms," Keiko Ito and YoungGak Kim focus on the deterioration of allocative efficiency as a cause for Japan's aggregate productivity slowdown. According to a large body of literature, in the 1990s many troubled Japanese banks were reluctant to issue loans to new firms while rolling over their lending for large "zombie" firms. Such behavior may have caused efficient firms to go out of business in the late 1990s, while inefficient firms survived. In the early 2000s, the Japanese economy started to recover, and the productivity of many Japanese firms improved. However, large firms, whose productivity improved much faster than smaller firms, remained reluctant to increase investment and employment in the first half of the 2000s. These observations on the history of Japan lead to the conjecture that allocative efficiency was not improved during the lost two decades, which, in turn, exacerbated the slowdown in aggregate productivity.

In order to examine this conjecture, the authors measure firm-level distortions on capital and output using Japanese firm-level data and find that Japan's allocative efficiency slightly worsened in the 2000s despite the economic recovery. Although the downward trend of allocative efficiency is not clearly visible during the 1990s, they confirm that distortions arising from financial frictions worsened in the latter half of the 1990s; while the output distortion diminished for top-level productivity firms and capital distortion was mitigated over time, the results show that the majority of firms continued overproducing.

The authors also compare Korea with Japan and find that allocative efficiency is even lower in Korea. In both countries, however, low productivity firms tend to overproduce, suggesting that resources do not flexibly move from low productivity firms to high productivity ones. In order to resolve the problem of overproduction by low productivity firms, the authors argue that the government should support corporate revival rather than helping inefficient firms to survive.

Chapter 6 by Jiyoon Oh, "Misallocation in the manufacturing sector of Korea: a micro data analysis," focuses on the case of Korea, using raw data from the Korean manufacturing survey, which consists of detailed information on more than one million establishments. The results show that the allocative efficiency in the Korean manufacturing sector (0.65) is lower than that of the United States (0.73), similar to Japan's and higher than China's (0.50). These figures may not be comparable with one another because sampling schemes, target populations, wordings of survey questions and analysis periods of the respective data sets are different, but the ordering seems to make sense in view of the development stage of each country.

More worrisome for Korea is its time trend of allocative efficiency, which has declined from 1990 to 2012 at a pace even faster than that of Japan. According to the author's estimation, the potential loss in TFP from this is as high as 0.6 percentage points per annum. A decomposition exercise of the downward trend shows that allocative efficiency has deteriorated mostly due to within-industry rather than between-industry misallocation, implying that the change in industrial structures was not the main reason.

Many factors may have affected the exacerbation of misallocation. One notable feature in Korea, however, is that large productive firms produce substantially less than their efficient output levels, on average. This pattern appears in many countries, as is also confirmed by Ito and Kim, but is particularly noticeable in Korea. It is also interesting that young firms produce less than their efficient levels of production. Accordingly, the author argues that more focus should be placed on selective support for younger, small and medium-size enterprises based on growth potential rather than on unilateral support for all of them.

ZOMBIES IN THE FINANCIAL MARKET

Part III discusses the so-called zombie problem in the financial markets of Japan and Korea. Chapter 7 by Mitsuhiro Fukao, "Financial market efficiency: a comparative perspective," focuses on the behaviors of severely undercapitalized banks, dubbed "zombie banks," and the negative implications for Japan's financial market stability. In general, zombie banks keep operating by hiding losses or through the forbearance of regulators. They do not want to recognize loan losses to nonviable firms and thus create zombie firms by evergreening their lending. In particular, they cannot allow large borrowers to fail to avoid their own downfall. As a result, zombie firms and zombie banks make it difficult to measure the true size of the bad-loan problem due to complex debtor-creditor relationships among related parties, thereby increasing the risk of financial crisis.

Responses to the bad-loan problem have often been painfully slow. In Japan's case, regulators recognized the seriousness of the problem in the banking sector by 1992–93. Although the problem was resolved for smaller financial institutions during the 1994–95 period, larger institutions were not afforded the same courtesy. In order to recapitalize large failing banks, regulators had to mobilize taxpayers' money, which proved difficult as it required public consensus. Close relationships among bankers, regulators and accountants also impeded a quick resolution of zombie banks and allowed them to hide loan losses for a considerable time.

Japan's worst financial crisis broke out during the 1997–2003 period. Numerous commercial banks and investment banks were involved, including large institutions such as Yamaichi Securities, the Long-term Credit Bank of Japan and the Japan Credit Bank. The most direct cause of the crisis was the loss of confidence in the accounting and auditing system. The actual amount of bad loans discovered on the books of failed financial institutions was far larger than the amount disclosed prior to the failures, exacerbating suspicions about financial statements and supervision. The credit crunch, in turn, cut into corporate investment and hiring, increased bankruptcy rates and reduced consumption and housing investment, which resulted in a further contraction of credit and generated a vicious cycle.

While this study focuses on nonviable lenders in Japan, Chapter 8 by Daehee Jeong, "How to deal with the rise of zombie firms in Korea," looks at nonviable borrowers, or zombie firms in Korea. For the benefit of learning lessons from the Japanese zombie infestation, the author tries to identify stylized facts about the looming zombie lending problem in Korea. For this, firms that were both "potentially distressed" and "financially supported" were defined as zombie.

The findings can be summarized as follows. First, the proportion of zombie firms in corporate-sector assets rose from 13 percent in 2010 to 15.6 percent in 2013. Second, breakdowns by industry and size reveal that zombie firms dramatically increased mainly in the construction and shipbuilding industries and among large firms. Third, the zombie lending problem seems to be much more serious in Korea than in other major developed countries that experienced severe recessions during the 2008–09 crisis period, implying that the corporate sector in Korea has delayed restructuring. The author also finds that troubled assets have substantially increased in public banks (or public financial institutions whose missions and operations are designated under special laws), which contrasts starkly with commercial banks, whose shares of substandard loans decreased during the same period. This implies that public banks have continued to provide credit to distressed large firms in certain manufacturing and construction sectors, hoping for reclamation.

A remedy to Korea's zombie lending problem is, the author argues, to address the politically directed lending by public banks. The nature of zombie lending in Korea is not driven by insolvent commercial banks, but rather by public banks that increased their exposure to large firms. Therefore, it would be necessary to re-establish the mandates for public banks so that they work only for the sectors where the financial market fails—for example, small and medium-size enterprises and newly established firms. Also, the Financial Supervisory Agency (FSA) should check whether the standards for classifying bad loans are consistent across commercial and public banks.

MONETARY POLICY AND HOUSE PRICES

Part IV begins with Barry Eichengreen's arguments in Chapter 9 on "Deflation and monetary policy." Deflation has replaced inflation as the principal challenge for monetary policy, at least for the moment. But there is little agreement, as the author notes, on the gravity of the challenge. Some experts question whether deflation really is a problem for economic growth and financial stability. They question whether recent experiences with deflation are more than a transitory phenomenon, associated with the aftermath of the financial crisis and record-low oil prices, that is already on its way to solving itself. And they question whether, even if deflation remains a problem, monetary policy can solve it without creating side effects in the form of even more serious risks.

Eichengreen asserts that as Japan's recent and historical experiences generally confirm, deflation is a problem for which the solution should be a priority for central banks. Japan's experience, in particular, suggests that deflation does not solve itself but that it can be self-reinforcing in an environment where desired saving significantly exceeds desired investment. The jury is still out, however, on whether, once deflation is under way, concerted monetary policy action like that undertaken by the Bank of Japan can return inflation to its positive target levels.

The author argues that it can. If the policies undertaken to date have not achieved their goal, then the central bank or banks in question need to do more. If doing more threatens to jeopardize financial stability, then tools other than conventional and unconventional monetary policy—so-called macroprudential tools—are appropriate for addressing these risks. If a central bank runs out of government securities to buy or worries about dangerously reducing the liquidity of the government bond market, then there are other assets to buy. If it worries about the side-effects of purchasing these other assets, then it can cooperate with the government on a helicopter drop of money. If that helicopter drop is targeted at productive public infrastructure investments, they can proceed without increasing the public debt burden; to the contrary, they can actually reduce it.

In a similar vein, Dongchul Cho critically examines the conservative monetary policy stance of Korea in Chapter 10, "Is Korea's monetary policy following in the footsteps of Japan?" Korea's inflation remained below the lower bound of the target range (3 ± 0.5%) for four consecutive years from 2012. Over the course of the four years, however, the Bank of Korea (BOK) adjusted the call rate target by only 1.25 percentage points, from 3.25 to 2.0 and then to 1.50. This conservative monetary policy actually raised the real interest rate, as seen in Japan in the 1990s. A more formal assessment, using the Taylor Rule equation adjusted to the declining trend of the equilibrium interest rate, clearly shows that Korea's monetary policy has been overly conservative.

Why then has the BOK been so conservative? Like Japan, the author argues, excessive optimism seems to be one reason. However, there also seems to be other explanations, including the "independence trap" that the Bank of Japan (BOJ) fell into as it adhered to its reputation as an independent inflation-fighter. Both monetary authorities were somewhat insensitive to disinflation while overly so to outside critiques. Perhaps the BOK's conservatism is even more striking in the sense that inflation targeting is a legal mandate for the BOK while it was not for the BOJ in the 1990s.

This tradition of conservatism may not become a serious issue as long as the environment surrounding the economy is stable. Yet, excessive conservatism can become disastrous when the environment is rapidly changing. A relatively comforting aspect of the recent disinflation in Korea is that its pace is milder than that experienced by Japan in the early 1990s. It is also a relief that the possibility of an abrupt and huge correction in real estate prices is low. However, it should be borne in mind that unanticipated shocks can occur at any time and overwhelm the economy. If, by any chance, Korea fell into deflation, it would be more shameful than in the case of Japan, because Korea has a predecessor to learn from, whereas Japan did not.

Chapter 11 by Inho Song, "Aging and housing prices: the cases of Korea and Japan," examines a critically important element of the deflation spiral in Japan: housing prices. The Korean economy may be highly susceptible to the changes in housing prices, as Japan was in the 1990s, in that Korea's real estate assets accounted for approximately 75 percent of national wealth in 2012. Korea of today and Japan in the 1990s also share similarities in demographics and the proportion of single-member households, which seem to affect housing prices.

In this regard, the author takes into consideration the model of demographic structure by age group as an element that can explain the long-term trends in real housing prices. Additionally, the author constructs an empirical long-term price model. The estimation results show that the Korean housing market has yet to experience the population aging that Japan has done. However, simulation exercises for the future based on assumptions about the changes in demographics indicate that Korea's real housing prices will begin to decline from 2019 (at annualized growth rates of –1 to –2 percent), which, in turn, implies that Korea's nominal housing prices do not have to decline as long as approximately 2 percent inflation per annum is maintained, despite population aging.

JAPANIZATION AND FISCAL POLICY

Part V begins with Chapter 12 by Jerald Schiff and Ikuo Saito, "Avoiding another 'lost decade': What role for fiscal policy?" The chapter reviews the policy debate on the role for fiscal policy in the current economic environment. The seven years from 2008 to 2015 witnessed a painfully slow recovery in the global economy, and effective policy responses have proved hard to find. In advanced economies, monetary policy has arguably been pushed to its limits, whereas heavy public debt burdens have been seen as limiting the scope for fiscal policy in supporting growth. While structural reforms could raise potential growth, many of these are politically difficult, have upfront costs and take considerable time to generate economic gains. In dealing with these interrelated issues, Japan has the dubious distinction of being ahead of the curve. A careful analysis of Japan's successes and failures in addressing deflation and low growth can provide insights for others, including the role of fiscal policy in avoiding a "lost decade" of their own.

Among the tentative conclusions of the author are the following. For countries in danger of deflation or stagnation, and where fiscal space is adequate, decisive and early action is desirable. Once a country finds itself in a deflation/stagnation hole, exit becomes more difficult. In Japan, fiscal stimulus was employed but was initially too small and later was applied in a start–stop manner. In this context, initial fiscal stimulus may be appropriate, even where fiscal adjustment may be needed over the longer term. Policy should aim to employ a "win–win" stimulus, with a positive impact on both near-term demand and potential growth. For example, absorbing the costs of growth-enhancing structural reforms in temporary higher deficits would, in effect, bring forward the benefits of those reforms. Increased infrastructure investment can raise actual and potential growth and contribute to a decline in debt burdens. However, judgments should be made on a country-by-country basis, taking into account the scope for high-return investment, macroeconomic and financial conditions, and fiscal risks. In Japan, a sharp decline in public investment as a share of GDP and a failure to direct such investment to high-return projects contributed to the prolonged difficulties of the lost decade.

The role for stimulative fiscal policy is strengthened to the extent that countries develop credible medium-term fiscal plans. The lack of a detailed and credible plan to bring down public debt in Japan has limited the scope for, and effectiveness of, fiscal policy in supporting growth and has raised fiscal risks. Fiscal institutions matter in this regard. Strong institutions can be critical in ensuring that public investment (and other spending) is efficient, stimulus is timely and government credibility is high. In Japan, adopting more credible assumptions on the economic and demographic outlooks would be important in fiscal policy planning, suggesting the usefulness of fiscal institutions independent of political process.

Since 2012, Japan has adopted a new approach to economic recovery, known as "Abenomics," based on three policy "arrows": bold monetary easing, a flexible fiscal policy and structural reforms to raise growth. While the broad fiscal approach—upfront stimulus followed by adjustment—is appropriate, a number of old policy gaps remain. Notably, a credible medium-term fiscal plan is still lacking and public investment implementation remains weak. A three-percentage-point hike in the consumption tax in 2014 had a larger-than-expected impact on the economy, reflecting low potential growth and the inability to provide a mitigating stimulus. Going forward, Japan will need to undertake gradual fiscal adjustment, anchored by a credible medium-term plan and emphasizing a package of pro-growth fiscal measures.

Chapter 13 by SeongTae Kim attempts to draw out "Lessons for Korea from Japan's fiscal policy." The deterioration of fiscal soundness in Japan is attributable not only to the decline in the absolute level of revenue but also to the continuing increase in expenditure. Revenue was reduced by tax cuts along with a falling nominal growth rate due to economic recession and deflation. On the expenditure side, it is mostly attributable to social welfare spending, local allocation tax grants and public-works-related expenditure. The current fiscal state of Korea is considered to be in better shape than that of Japan in the early 1990s. The structural balances remain positive and the debt-to-GDP ratio is in the mid-30-percent range, which is much lower than that of Japan in the early 1990s. Korea has seen, so far, a milder decline in the nominal growth rate and a higher stability in the key tax burden ratios.

However, the author argues that Korea's current sound fiscal condition does not guarantee fiscal soundness in the future. In particular, the faster-than-expected decline in the potential growth and inflation rate is a major risk factor for maintaining fiscal soundness, as it could significantly shrink the tax base. Furthermore, an increase in social welfare expenditure in accordance with population aging will be unavoidable. It will not be apparent in the near term; but as the Korean pension system continues to accumulate assets, age-related spending pressures will eventually accelerate in the long-term. Therefore, in order to avoid a repetition of Japan's experience, a comprehensive reform of Korean fiscal policy is inevitable.

In terms of revenue, a cautious approach is required regarding tax reduction and exemption policies. Arguments for tax cuts to stimulate the economy must also address the possibility that tax cuts without structural reform could permanently weaken the tax base. To ease the downward trend in the nominal growth rate, structural reforms to enhance real economic growth, while keeping the inflation rate above a certain level, are necessary. In terms of expenditure, it will be essential to reform pensions and health insurance—the main cause of the increasing trend in Japan's government expenditure. Korea's expenditure is likely to follow the pattern observed in Japan, because its age structure lags Japan's by about 20 years, and social welfare in both countries is based on a "pay-as-you-go" system.

CONCLUSION

Recent conditions of the global economy can be characterized as Japanization. As Takatoshi Ito (Chapter 2) discusses, in most advanced economies, growth does not visibly recover while inflation continues to subside despite virtually zero interest rate policies. In the case of Korea, Japanization has been observed in not only macroeconomic variables but also in many structural variables. For example, Kyooho Kwon (Chapter 3) shows how closely Korea's demography follows Japan's, with a 20-year time lag. The same goes for Korea's export industry structure, which

Kyu-Chul Jung (Chapter 4) finds to be shadowing Japan's with the same time lag. Keiko Ito and YoungGak Kim (Chapter 5) and Jiyoon Oh (Chapter 6) all find that the allocative efficiency of Korea's manufacturing sector has not improved (if indeed it has not worsened) much like Japan's, while Daehee Jeong (Chapter 8) asserts that the "zombie problem" is prevalent in the Korean financial market as discussed by Mitsuhiro Fukao (Chapter 7) for Japan's case. Addressing these issues, Barry Eichengreen (Chapter 9) argues for a proactive monetary policy to fight deflation, whereas Dongchul Cho (Chapter 10) shows that Korea's monetary policy mirrors Japan's conservatism in the 1990s.

Some differences can be found in the real estate market and fiscal space. Inho Song (Chapter 11) argues that the present state of Korea's housing prices does not entail a large scale bubble, unlike its Japanese counterpart in the 1990s, although aging may work to apply downward pressure in the future. Additionally, SeongTae Kim (Chapter 13) contends that Korea's fiscal position has not yet structurally deteriorated and thus can be mobilized at a critical juncture, as argued for by Jerald Schiff and Ikuo Saito (Chapter 12).

Given the above analyses, the time has come to seriously contemplate the methods through which the global economy as well as Korea can be protected from the threat of Japanization. Of course, the results of this book cannot deliver final answers to this challenging question. At the same time, many important issues remain to be explored, and remedies should differ across countries depending on country-specific factors. Yet, the efforts made to examine the similarities to and differences from Japan are a necessary first step toward learning crucial lessons to avoid Japanization.