1. Introduction and overview

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Korea has attracted worldwide attention for its rapid economic growth since the 1960s. Although the country's economic growth is considered relatively healthy by international standards, the Korean economy still faces considerable challenges. One of the key aspects of the challenges includes socioeconomic problems such as the rising numbers of disadvantaged elderly people, employment instability among young people, the high cost of having children and the widening gap between the rich and the poor.

The importance of social policy is highlighted most by the recent rapid change in age structure in Korea, which registered the world's lowest fertility rate. The speed of population aging in Korea is unprecedented, and the proportion of the elderly in Korea's population will surpass that of the United States and many European countries in less than two decades. The rapid decrease in fertility is believed to be related to the high cost of children, especially the high cost of private tutoring for teenagers in Korea. Since many public social policies target the old and the young, the changes in age structure have profound and fundamental implications for social policy. The elderly are particularly vulnerable in Korea, because the traditional family support system has been deteriorating rapidly. Public pension programs and public health care are obvious and important examples of the pressing needs of the elderly. These problems call for substantial reform in social policies.

The purpose of this book is to investigate the conventional economic problems faced by many countries and to exchange ideas and solutions based on each country's experiences. The authors in this volume review social and fiscal policies that provide for the most important human needs: employment, old-age support, education and basic livelihood. The underlying premise is that the provision of such needs drives government design of new programs that maintain efficiency and equity, promote further economic growth and minimize social conflicts. A new social policy for maximizing the potential of human resources development and for sustaining sound socioeconomic development is emerging as the basis for successful

programs in many developed countries. Thus, it has become crucial for Korea to cooperate and share Korean experiences.

The book is arranged in parts that examine social and fiscal policy challenges, labor market and education issues, social insurance and antipoverty policy. The chapters are authored by experts from both Korea and other developed countries, thereby incorporating views of both developed countries and of a newly industrialized economy in Asia.

In Chapter 2, John Karl Scholz and Hsueh-Hsiang Li examine the interplay of fiscal and social policy in the context of antipoverty policy, schooling, disability rolls and unemployment. The authors examine several potential explanations for the aversion of policymakers to tax increases, and conclude that there is no obvious answer to the question of why US policymakers are reluctant to raise taxes.

The authors provide an overview of five major policies in the United States: antipoverty measures, K–12 education, infrastructure investment, unemployment and disability assistance, and population aging. For antipoverty measures, Scholz and Li explain why poverty rates have changed little over time, even though per-recipient means-tested transfers have risen sharply. First, most of the increase in these antipoverty measures is due to the increasing costs of Medicaid: health insurance primarily for poor mothers, for very young children and for the indigent elderly who need nursing home care. Second, within the nonelderly and nondisabled group, there has been redistribution among low-income families, but it did not significantly affect the proportion of the population living in poverty. Concerning intervention in education, the authors mention that financing of education is the responsibility of state-level governments in the United States, whereas the federal government plays a relatively minor role. For this reason, financial and other constraints make progress difficult in trying to overcome the disadvantages related to poverty.

The authors point out that the infrastructure deficit will impose the biggest additional fiscal pressure on the national and state governments in the United States. Substantial expenditure is necessary merely to maintain the status quo, by replacing old infrastructure and to meet increasing demands as the population expands. Even more investment is essential to provide the higher-quality infrastructure needed to ensure continued economic growth. On benefits for unemployment and disability payments, readers are referred to the respective chapters by Alan Krueger and David Autor. The central issue for this chapter is that weak labor markets create pressure for additional spending, while simultaneously constraining the government's ability to spend more. Finally, the demographic change to an aging population adds greatly to the financial pressure. Costs have been rising rapidly and will continue to rise as the dependency ratio rises.

The authors next turn to the fiscal environment. Comparing the data, they make three observations on (1) the massive fiscal imbalance resulting from the economic crisis since 2008, (2) the rising debt-to-GDP ratio, with Medicare and Medicaid as the main drivers and (3) the trend during the past three decades of persistent and substantial federal-government deficits. The authors cite three reasons for being concerned about long-run fiscal imbalances: (1) deficits reduce national (public plus private) saving, and lower national saving raises interest rates, reducing investment; (2) large deficits increase the possibility of sudden, catastrophic changes (interest rates, exchange rates, movements of capital) and (3) concerns about “fiscal slack” (the idea that governments with a balanced fiscal status have the capacity to respond when confronted by adverse economic shocks).

In the section on politicians’ reluctance to raise taxes, the authors discuss three hypotheses: (1) the starve the beast hypothesis (low taxes constrain the growth of government spending, and government spending is wasteful); (2) disincentive effects of taxes (the deadweight loss of taxation is extremely high, adversely affecting labor supply, saving, entrepreneurship and other productive activities) and (3) attitudes about taxes (American voters loathe taxes to a degree that is not observed elsewhere around the world).

The authors cite studies and found no support for these hypotheses. Low taxes appear unrelated to low spending; efficiency considerations would not justify marginal tax rates as low as those observed in the United States for high-income taxpayers; and attitudes do not fully account for beliefs about taxation in the United States. In conclusion, the authors argue that there is no obvious answer to the question of why US policymakers are reluctant to raise taxes. Instead, they offer a speculative conjecture: that American attitudes differ from those of citizens in other industrialized countries, and hence perhaps more needs to be done to demonstrate the value of government spending. They argue finally that it is critical for the tax system to become more efficient, and the key to this is to reform the income tax on individuals and perhaps increase revenues with more efficient tax instruments, such as a value-added tax.

In Chapter 3, Youngsun Koh discusses various policy options to improve the effectiveness of Korea’s social safety net, to secure long-term fiscal sustainability, strengthen the activation policy, target welfare programs at the most needy and delineate the respective roles of the central and local governments.

Youngsun Koh begins by discussing Korea’s income inequality. Korea experienced rapid economic growth up through the 1980s, while income distribution remained stable. The trend of inequality began to appear,

however, in the 1990s, with a jump in the Gini coefficient from 0.245 in 1992 to 0.295 in 2009. Particularly vulnerable are the elderly, who represent roughly one-eighth of the total population. Koh then turns to the main features of the social safety net that has been developed in Korea since the 1970s, including health insurance, pension plans, employment insurance, public assistance, tax credits for poor households and active labor market programs.

The author notes that, despite rapid spending growth, the social safety net has played a limited role in reducing poverty in Korea. He discusses three problems: gaps in the safety net, inadequate attention to activation policies and the inefficient delivery system. Among the gaps, only 60 percent of workers are currently covered by pension programs, and some of those cannot draw pensions if they have not contributed for the minimum ten years by the time they reach retirement age. The main public assistance arm, the National Basic Livelihood Security Program (NBLSP), has been ineffective, because only about half of the people living below the poverty line receive benefits from it. Many elderly people are denied benefits, but get little support from the Basic Old-Age Pension (BOAP) program (a problem investigated in depth in Chapter 10 by Wankyo Chung). Koh also argues that more attention must be paid to activation policies for the labor market, and particularly in assisting low-skilled workers, since the recent increase in poverty has been led by the working-age population. The effectiveness of the Earned Income Tax Credit (EITC) has been questioned because of the meager annual benefit. The author identifies three main sources of inefficiency in the delivery system. First, the Ministry of Welfare lacks a nationwide organization for direct contact with welfare recipients. Second, the complicated program structure and the lack of coordination between service providers make it difficult for potential beneficiaries to identify and apply for services. Third, the government has given little attention to monitoring private-sector service providers and fostering competition among them. Koh also proposes that the government reduce spending on public capital stock, on subsidies to industries, small and medium-size enterprises and farmers and on welfare spending to secure a long-term sustainability fiscal policy.

Koh believes that employment programs under the activation policy should be consolidated. He also stresses the need to coordinate major policy areas in the fight against poverty. In macroeconomic policy, he calls for higher priority in monetary policy on fighting inflation, for strengthening prudential regulation of financial institutions and for maintaining flexibility in the exchange rate. In structural reforms to raise productivity, he points to the importance of the market-friendly economic system, to deregulation and market opening in the service sector and to flexibility

in the labor market, all of which will help eliminate the duality between core and periphery. In education he cautions against the push to provide tuition support at the tertiary level, pointing out that many college graduates face difficulties when entering the labor market. He favors student loans over scholarships and feels that the assistance should be given to those who have the potential to yield social returns that will outweigh the cost. To improve equity in education, however, he also feels that greater efforts are needed at the primary and secondary levels of the education system in Korea.

In Chapter 4, Alan Krueger attempts to understand what went wrong in the US job market in the 2000s and why job growth slowed down even before the Great Recession that began in 2008. Because Canada is similar to the United States in terms of geography, technology, productivity and exposure to global markets, particular attention is devoted to comparing job growth in Canada with the United States.

Krueger cites six possible reasons for weak job growth, provides evidence for two of them (the aging workforce and health insurance as a fixed cost of employment) and conjectures on the others. A rough calculation to decompose the change in the employment-to-population ratio suggests that about a third of the drop can be attributed to the secular trend and about two-thirds can be attributed to the cycle. Assuming that the factors for the secular trend are still present, he turns to possible causes of the downward trend: age, education and gender. The author calculates that the aging of the workforce appears to account for almost one-third of the declining trend based on calculations for the period 2000–07. He also argues that there was a shift during the 1990s toward more highly educated workers, who have higher employment prospects, but that during the same period, the decline within education groups was a harbinger of structural challenges in the job market, so that the rate fell for all education groups during the 2000s. The author finds data on gender difficult to interpret, because women's participation stopped expanding prior to the 2008 recession. He suggests that women, like young workers, are more on the margins of the job market and thus more susceptible to economy-wide demand trends. For men, his interpretation of cross-country data is that other countries began to catch up with the United States in the 2000s in terms of opportunities for women, whereas economy-wide forces hindered US job growth for both men and women.

The author uses employment data for 26 countries from the OECD's Labor Force Survey to compute the change in employment-to-population rate during 1969–2009. For these four decades, he finds that the changes in both the log employment and the unemployment rate over a given decade are inversely correlated with the respective levels at the end of the previous

decade. He concludes that there is some tendency for mean reversion in key employment outcomes over decade-long periods. He points out that this mean reversion seems attributable to the behavior of productivity growth rather than GDP and cites a study that attributes mean reversion in unemployment across US states to mobility of workers and firms.

Turning to the differences between the United States and Canada in labor market performance, the author considers three factors: (1) industry mix, (2) share of immigrants and (3) health insurance. First, Krueger argues that different industry mixes cannot account for the differences in employment growth in Canada and the United States during 1999–2007, because Canada had significantly stronger job growth in all but two industries. It appears that it is not the different industry mix between two countries, but different job growth within industries. Second, the author thinks that the higher share of immigrants in Canada is unlikely to account for much of the difference between the two countries in employment-to-population rates. On the contrary, he suggests that the recent higher growth rate of immigration is a response to Canada's strong job growth. Third, Krueger discusses that the major difference between the two countries is health insurance, which is an expensive fixed cost of employment in the United States. The author's economic analysis provides some tentative evidence that the costs of employer-sponsored health insurance were associated with slower US job growth during 1999–2007, but he cautions that research using a more direct measure of the level and growth of these costs is needed.

In Chapter 5, David Autor reviews the Social Security Disability Insurance (SSDI) program in the United States, addresses issues and provides some policy implications to remedy problems.

Autor begins with the question of why the SSDI rolls have increased so rapidly, while there has been no corresponding increase in physical disability or mental illness in the United States in per capita terms. A related factor is that beneficiaries of the SSDI program have received Medicare benefits in addition since 1965, which in turn has affected the already skyrocketing costs of Medicare. The Americans with Disabilities Act (ADA) of 1990 stresses the government's goals not only of equality but of economic self-sufficiency, and in theory it should assist disabled people to remain in the workforce. But according to the author, in practice, the SSDI program has not been altered to reflect this goal. Even now, long after the Disabilities Act was passed, SSDI remains unable to provide assistance to workers with disabilities until their condition has made it infeasible for them to work. The author stresses the latter point, because SSDI rules do not allow applicants to work while their applications are under review, even if they are capable of working. Since the review process

may extend for many months, the rules actually remove workers from the labor market and may hold them there for so long that they eventually find it impossible to re-enter the workforce. The SSDI program provides strong incentives to employers to terminate employment, and to workers to seek SSDI benefits. The author argues that incentives should be built into the system to encourage employers to be more accommodating and to encourage the disabled to remain in the workforce as much as possible.

The author reviews various attempts by the Social Security Administration (SSA) and Congress during the 1980s and 1990s to slow or reverse the trend of rising SSDI awards. He identifies fundamental mistakes that have made these efforts largely fruitless. They merely denied applications, rather than trying to find ways to reduce the number of applicants. They revoked the benefits of some individuals who had no other sources of financial support and therefore had strong incentives to re-enter the workforce. And they reduced the penalties for gainful employment, but only when such a change was largely too late to matter. The author argues that a different approach is needed, especially to reduce the unnecessary dependency that the SSDI program has fostered. He discusses three recent proposals for reforms in the United States and assesses the strengths and weaknesses of each: experience rating the SSDI payroll tax, reducing SSDI inflows by offering comprehensive in-work supports, and a new social insurance program. He also finds positive lessons in the Dutch program, which focused on employer incentives and mandatory return-to-work plans, resulting in a sharp drop in new entrants to the Dutch disability program during 2002–06.

In conclusion he points out that the SSDI program is no longer aligned with current societal objectives in the United States, spends too little on helping individuals remain employed and devotes too many resources merely to support long-term dependency. He sees two reasons for optimism: first the SSDI program is so obviously out of step with the contemporary understanding of disability and, second, there is common ground for fiscally minded reformers and advocates for the disabled to improve the program, so that both beneficiaries and taxpayers will be better off.

He cautions, however, that SSDI has come to function, at the margin, as a *de facto* social safety net for individuals whose primary barrier to gainful employment is one of poor skills and job opportunities rather than health limitations *per se*. Thus close attention must be paid not only to people with health-related work limitations but also to those whose employment barriers are primarily nonmedical. He thus suggests that reforms to the US disability system should be paired with a complementary policy that will provide better support to workers who turn to SSDI as an option of last resort.

In Chapter 6, Hyungpyo Moon examines the compliance behavior in the National Pension system in Korea and evaluates the effectiveness of the matching contribution subsidy in expanding coverage.

The author begins with a brief history of the system and its pitfalls. In 1988 the Korean government introduced the National Pension Scheme, but with limited coverage that included employees of large businesses. According to data from the National Pension Corporation for the year 2009, a total of 18.6 million people were insured under the system. Slightly more than half were insured through their place of work and the others were insured as individuals. However, well over half of the individually insured were given exemptions or deferrals from making contributions. They include people who are temporarily without work, students, military personnel, hospital patients and so on.

In Korea, workers are entitled by law to be insured through their place of work. But employers in smaller companies often are either unable or unwilling to pay the employer's contribution to the scheme, leaving the workers uninsured. Such workers may join the scheme as individuals, but many of them choose to remain excluded from the system, either because they do not want to pay the premium or because of the burden it would place on an already low level of income. The author estimates that nearly two-thirds of the total population subject to insurance is classified as exempt, and yet more than half of the exempt people are, in fact, engaged in economic activities and thus not complying with the system. Furthermore, in the category of the individually insured, many people do not report all of their earned income and therefore do not pay the full contribution that is due by law to the pension scheme.

One proposal for increasing compliance with the system is a government subsidy. Essentially intended to assist workers in the lower income category, the subsidy would theoretically bring many people out of the blind spots and into the system and therefore provide a basic pension scheme for their old age. Advocates of the subsidy reason that it will cost the government less in the long run to subsidize the pension scheme than it will cost to support the same people in impoverished old age.

In testing this argument and the feasibility of such a subsidy, the author finds that the compliance probability is significantly influenced only by income level, suggesting that a subsidy for lower-income individuals would probably have a significant effect on compliance behavior, whereas a subsidy for higher-income individuals would not. For purposes of developing policy measures, the author concludes that nonregular workers and low-income households should be primary targets for reducing blind spots, because of their low rate of compliance with the National Pension

system. Special attention should also be given to workers in their thirties or younger and to the needs of women.

The author advises caution, however, if the government decides to implement a subsidy. Equity issues will arise between employers who are already paying their share and those who are not. Moral hazard may arise if employers currently paying their share are tempted to convert their employees to individually insured status, so that the employers no longer have to pay. To avoid potential problems, the author suggests that the employer, the employee and the subsidy cover 3 percent each. Such an arrangement would give both employers and workers an incentive for converting everyone to workplace-based insurance, which is the ultimate goal.

In conclusion, the author points out that the subsidy should be only a temporary measure to reduce the blind spots in the system. Administrative measures are necessary to prevent employers from refusing to insure their employees through the workplace. And eventually, all workers should be reported and registered for insurance through their place of work, according to the law.

In Chapter 7, Diane Schanzenbach provides an overview of recent trends in education policy in the United States, from kindergarten to the twelfth grade (K–12). She broadly discusses the input-based policies and market-based incentives to improve student achievement.

The author begins with the major goal of education policy in the United States, which is concerned most with narrowing the gaps in educational attainment and skill levels between more advantaged and less advantaged students, notably those across racial groups and by socioeconomic status. Although the research base for education reform has expanded, the author observes that there is no overwhelming evidence in favor of a single policy change and that, at present, the literature is characterized more by disagreements than by consensus.

Possibly the most straightforward policy in terms of implementation is to increase the funding available to schools. Studies of the results of such untargeted funding have produced mixed results, and many policymakers have concluded that such increases do not clearly lead to better student performance. As a result, policies have shifted toward targeted increases for specific inputs or for introducing market discipline to ensure that funding increases are used productively.

Some of the best evidence for targeted increases is on class size reduction, which is one of the most straightforward policies to implement and is also popular among parents and teachers. Although it is also one of the most expensive, there is evidence that the potential increase in lifetime incomes of the students is high enough to make the investment worthwhile from a cost-benefit perspective. Another recent approach is to attract

more teachers of higher ability to serve in low-income areas: for example, the Teach for America (TFA) program. Also popular are on-the-job training and continuing coursework. Other approaches include after-school academic and tutoring programs, which have increased dramatically. Despite growing popularity of the input-based policies, however, empirical evidence is somewhat mixed.

Schanzenbach then discusses market-based reforms that are designed to increase competitive pressure, giving schools incentives to improve school quality through greater accountability and increasing the choices available to parents. This approach is popular in part because it can lead to improvement in student performance without big increases in costs.

With regard to accountability, policies are currently dominated by the No Child Left Behind (NCLB) system enacted by the federal government in 2002. The law requires that schools be accountable for proficiency rates, not only for the overall school population but also for each subgroup. School choice is another promarket policy that has become popular. It gives some students an option to leave a poor-performing neighborhood school, while also generating system-wide competitive pressure on the poor-performing schools. Charter schools (publicly financed but operated with greater autonomy than other public schools) have also increased school choice. The author argues that some research finds no impact of these policies on overall performance, although some have been effective in raising the performance of low-income students. The author then discusses recent attention given to improving teacher quality through incentive pay, along with the difficulties of implementing such a policy. For example, assessment through test scores is problematic, because factors outside the control of the teacher determine such a large part of student achievement. School districts are just beginning to experiment with measures to improve teacher quality through incentive pay, and little research has been done so far to assess the results.

The author concludes with observations about some of the difficulties facing educators. If school administrators are held accountable for performance, they ought to have control over the relevant inputs that determine the outcomes. But under the existing system, they may have little control over budgets or decisions about teaching personnel. Home inputs, too, are very important to student achievement but are beyond the control of schools.

In Chapter 8 Hisam Kim examines the effects of after-school classes on the demand for private tutoring and academic performance of Korean students. He begins with the background of the popular after-school class in Korea. The government of Korea has pursued a policy since the 1970s of trying to equalize the quality of schools nationwide at the secondary

level. This was done at first by assigning students randomly to schools and distributing education resources equally throughout the country. Intense competition for high academic achievement and gaining places in the best universities has given rise to a major private tutoring industry in recent decades. About three-quarters of all students in primary and secondary education receive at least some private tutoring. The cost of such tutoring was estimated by the OECD in 2007 at 2.2 percent of GDP, representing an expenditure of about 8.8 percent of average family income. Access to high-quality tutoring and ability to pay greatly vary by area and by income.

In an effort to reduce the financial burden that has arisen, as well as to reduce the resulting gaps in educational achievement, the government introduced the after-school class program in 2006. These after-school classes provide not only academic subjects but also special subjects such as arts, sports and computer training. The government subsidizes the costs in such a way that the more-privileged families pay fees that are modest relative to the cost of private tutoring, and low-income and less-advantaged families pay nothing. To supplement this program, the Educational Broadcasting System (EBS) provides tutoring by television and web-based learning programs, targeting especially students in secondary education.

Kim first investigates the effects of the government's after-school program on the demand for private tutoring. The author finds that participation in after-school classes leads to a lower demand for private tutoring. The cost-saving effect of after-school classes, rather than private tutoring, is substantial. An exception here is the wealthy Gangnam area of Seoul, where private tutoring is strongly preferred. Even so, about 46 percent of Gangnam students participate in both private tutoring and after-school classes, and another 11 percent participate only in after-school classes.

The author then finds that after-school classes are superior to private tutoring when measuring their effects on the academic performance of students, particularly those from low-income households, in terms of both expenditure and participation time. The author points out that students from disadvantaged backgrounds are more likely to participate only in after-school programs, or in the cheaper forms of private tutoring, and he concludes that subsidizing their participation in the government programs may be an effective way to narrow the educational gaps between income groups and between regions.

Although private tutoring costs were a major focus of the government's policy, the author suggests that private tutoring may decrease gradually, as parents become more and more skeptical about the effectiveness of private tutoring. Instead, he recommends that the government concentrate on developing the programs further, as measures for narrowing

education gaps, for improving the quality of public school education and for generating upward social mobility among children from low-income households through better educational opportunities. Finally, he suggests that the optional programs can serve as a catalyst for improving the formal education system, which is the ultimate goal of education policy.

In Chapter 9 James Ziliak surveys recent developments in antipoverty policies in the United States and evaluates their effectiveness. He begins with an overview of major programs and substantial growth in the social safety net and how they affect poverty and its correlates. Raising the question of what accounts for this spending boom in the social safety net, the author finds that the answer varies widely across programs. Typically it can be accounted for by changing demographics, business cycles, policy implementation and, in some cases, policy reform. Participation in the food-stamps program, for example, moves counter-cyclically with the business cycle, and thus the increased expenditure since 1999 resulted in part from the weak economy. The Earned Income Tax Credit is a refundable tax credit available to low-income families and individuals, but only those in the labor market. As a consequence of the changing labor force composition and policy, expenditures on this tax credit make it the largest cash assistance program to low-income working persons. By contrast, increased spending on disability insurance took place not through policy reform but as a result of changes in the implementation of program rules, combined with an increase in the proportion of the population applying for benefits.

In light of the growth of social insurance and mean-tested transfer programs over the past decade, the author examines whether these growing expenditures have resulted in any trend break in poverty. He shows that the aggregate poverty gap increased by approximately 50 percent in each case over the past decade, suggesting that the social safety net is losing some of its antipoverty bite.

Dividing the population by age, he also finds that the antipoverty effectiveness of these results comes from adults in the age range of 18 to 64, and that the safety net reduces the intensity of poverty much less among older people and far less among children. But even so, the safety net lifted more than twice as many elderly persons out of poverty than children. Data specifically on those in deep poverty suggest that the safety net expansions since the 1990s have not kept up with the increasing deprivation facing the extreme poor. One section of the chapter is devoted to income volatility, given that a central goal of economic policy is to stabilize household consumption in the presence of adverse economic events. The author shows that income volatility across various measures was fairly stable during the first decade of the present century. He argues that the social safety net

plays a big role in reducing this volatility, although the effectiveness of the safety net was weaker with regard to the poor during the economic downturn that began in 2008.

In summary, the author asks what accounts for the recent lackluster performance of the safety net in combating poverty, especially deep poverty. Part of the reason is that the social insurance programs in the safety net are not targeted directly to the poor. The growth in Social Security, Medicare, unemployment insurance, disability insurance and workers compensation could in fact be improving the outcomes of middle-class families rather than the poor. Likewise, among means-tested transfers, the growth in Medicaid occurred among those with gross incomes one to two times the poverty line, and food-stamps growth likely occurred among households recently suffering job loss. The nearly 50 percent increase in the Earned Income Tax Credit clearly improved the employment of single mothers with dependent children, but the author suggests that, among low-skilled single mothers, the combination of welfare reform and the tax credits resulted in lower after-tax and transfer incomes. He also points out that the tax credit is available only to those who are in the labor market. These trends suggest that future policy reforms need to be directed at improving the outcomes of the truly disadvantaged.

In Chapter 10 Wankyo Chung estimates the poverty reduction effect of the Basic Old-Age Pension (BOAP) in Korea. More specifically, he examines the poverty reduction effects of the direct income transfer through the BOAP to the elderly.

Chung begins with an overview of the National Pension Scheme (NPS) and the BOAP. The NPS, initiated in 1988, was expanded to universal coverage in 1999. But by 2009 only about 28 percent of the elderly were recipients, because it had been introduced recently. Due to the low coverage, an additional pension scheme, the BOAP was introduced in January 2008. The purpose of the BOAP is to help to alleviate poverty among the elderly, but the amount of the benefit is small: only 5 percent of the three-year average earnings of everyone insured by the NPS.

The author conducts statistical analysis to examine absolute poverty, using the minimum cost of living as the poverty line. Both the poverty rate and the poverty gap index are used to estimate the poverty reduction effect on the elderly resulting from the newly introduced BOAP. The results show that the overall poverty rate declined from 60 percent to 56 percent with the BOAP, and that the poverty gap index declined from 41 percent to 32 percent. Across the three groups of elderly households, the poverty rate declined from 76 percent to 73 percent for single-elderly households, from 36 percent to 34 percent for elderly-couple households with one elderly person and from 50 percent to 45 percent for elderly-couple

households with two elderly persons. The poverty gap index declined from 60 percent to 47 percent for single-elderly households, from 19 percent to 16 percent for elderly-couple households with one elderly person and from 30 percent to 21 percent for elderly-couple households with two elderly persons. Further evidence of these changes is provided by Kernel density functions and three indexes of poverty (TIP) curves of income changes with the BOAP.

The author cautions that the expectation of receiving the BOAP may crowd out private income transfers from family members of the elderly or may reduce incentives to work and save. This method of measuring the poverty reduction effect (poverty changes with and without the BOAP) may consequently overestimate the poverty reduction effect of the BOAP. Furthermore, the extensive coverage but low-benefit structure of the BOAP is not efficient enough to reduce poverty in old age. Instead, limited coverage but with high benefits would be a better direction for the purpose of poverty reduction. Finally, as Korea's pension system matures over time, Chung notes, the related BOAP benefits will have to change toward better protection of the vulnerable elderly.

In Chapter 11 Bong Geul Chun and Hanwook Yoo examine the effects of government subsidies on investment by small companies. They begin with the venture support policies at home and abroad. The current venture support programs in Korea are divided into subsidies, loans and securities, and exhibitions and conventions. The authors list some examples of other country cases, although it is difficult to find counterparts abroad to Korean business startup subsidy projects that are used to provide cash incentives for new business. One example is the United Kingdom and its system for providing investment funds for promoting business startups in certain backward regions. The United Kingdom designates the assisted areas based on the European Union treaty and gives funds such as Selective Finance for Investment and Regional Selective Assistance to domestic or foreign enterprises in the areas. Poland is implementing a policy to designate and operate special economic zones (SEZs) and to invest capital and support business startups in such zones. Fourteen regions with high unemployment rates have been designated as SEZs since 1995. Once they enter an SEZ, enterprises are exempted from corporate tax, can use facilities and utilities required for investment and moving into the zone, and receive subsidies for workforce training and employment promotion.

The authors then focus on the Venture Investment Subsidy Program (VISP) introduced by the Korean government in 2007, under the Small and Medium Businesses Administration, to promote business startups and employment creation. The program provides support for some

investment costs for new manufacturing businesses in nonmetropolitan areas. Subsidies are paid as part of the National Balanced Development Committee's measure for boosting local economies. Venture businesses have received subsidies only since 2007, and therefore the data accumulated thus far are limited.

The authors examine, through empirical analysis, the effectiveness of this program in terms of promoting investment. Using regression analysis on data drawn from the government's Survey of Mining and Manufacturing Industries for the first two years of the program, together with a five-year data set for the period 2004–08, the study finds that the subsidies improved the rates of increase of tangible assets significantly. The caveat for this pooled, ordinary-least-squares analysis is that the study does not control for the effect of other venture support policies. Since most VISP beneficiaries are also beneficiaries of other venture support policies, there is a strong possibility that the authors' findings overestimate the program's effects. To deal with this bias, the authors calculate the probability that a VISP beneficiary has received other subsidies. This propensity score matching analysis indicates that there is no significant difference in the rates of increase of tangible assets, when comparing VISP-funded companies with nonfunded companies. The authors conclude that more rigorous analysis on the effects of this government program would require more complete data.