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Working Paper

Developing Asia's pension systems and old-age income support

ADB Working Paper, No. 358

Provided in Cooperation with:

Asian Development Bank Institute (ADBI), Tokyo

Suggested Citation: Park, Donghyun; Estrada, Gemma B. (2012) : Developing Asia's pension systems and old-age income support, ADB Working Paper, No. 358, Asian Development Bank Institute (ADBI), Tokyo

This Version is available at:

<https://hdl.handle.net/10419/101249>

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ADBI Working Paper Series

Developing Asia's Pension Systems and Old-Age Income Support

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No. 358
April 2012

Asian Development Bank Institute

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This paper was prepared for the Conference on New Thinking in Social Security in Asia, held at ADBI in Tokyo on 17 November 2011.

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Suggested citation:

Park, D. and G. Estrada. 2012. Developing Asia's Pension Systems and Old-Age Income Support. ADBI Working Paper 358. Tokyo: Asian Development Bank Institute. Available: <http://www.adbi.org/working-paper/2012/04/26/5056.dev.asia.pension.systems/>

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Abstract

Old-age income support is becoming an issue of growing importance throughout Asia. This is especially true in East and Southeast Asia where the population is aging. This paper provides a broad overview of the current state of pension systems in the People's Republic of China, Indonesia, Republic of Korea, Malaysia, Philippines, Singapore, Thailand, and Viet Nam; analyzes the pension systems; and identifies their major structural weaknesses. The paper concludes with some specific policy directions for pension reform to strengthen the capacity of Asian pension systems in delivering economic security for the large and growing population of elderly looming on the region's horizon.

JEL Classification: H55, J11, J14

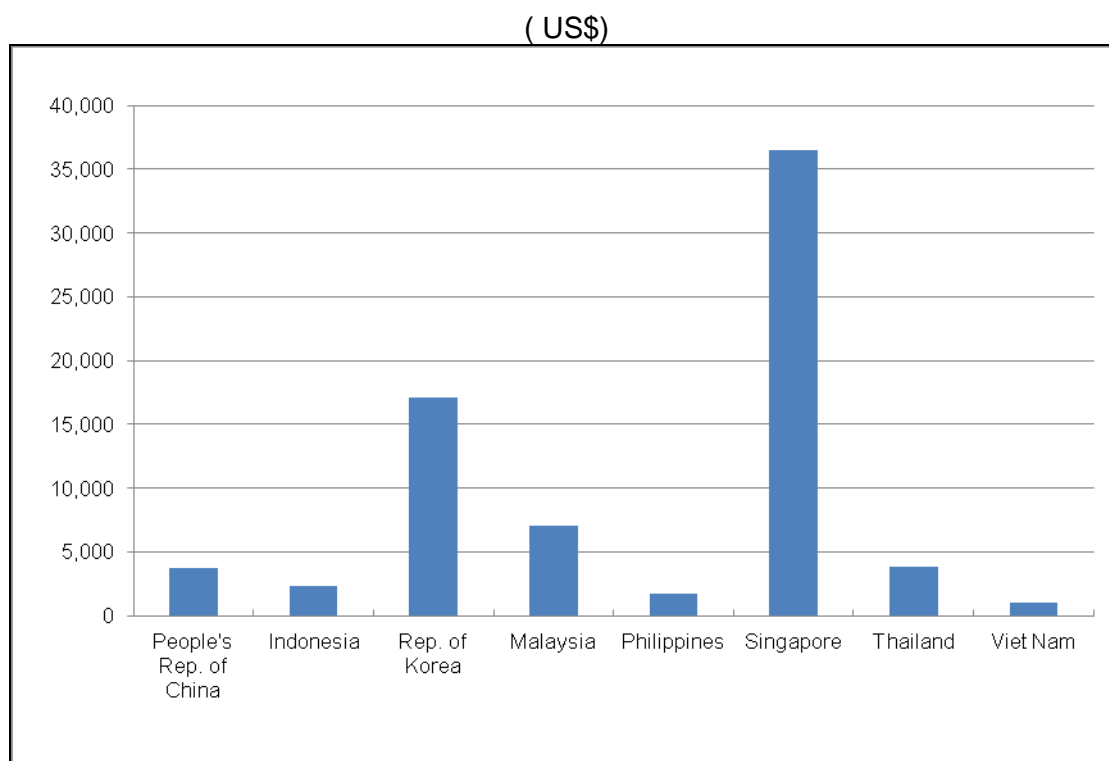
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1. INTRODUCTION: POPULATION AGING AND OLD AGE INCOME SUPPORT IN DEVELOPING ASIA

Old-age income support will be one of the greatest social and economic challenges facing developing Asia (henceforth Asia) in the 21st century. The growing spotlight on old-age income support is largely due to a seismic demographic transition that is fundamentally reshaping Asia's demographic profile. A young continent reaping the demographic dividend of a large youthful workforce is giving way to a graying continent where the ratio of retirees to workers is on the rise. In contrast to industrialized countries, most Asian countries do not yet have mature, well-functioning pension systems. As a result, they are ill-prepared to provide economic security for the large number of retirees looming on the horizon. This paper takes a brief preliminary look at the pension systems of eight countries in East and Southeast Asia: the People's Republic of China (PRC), Indonesia, the Republic of Korea, Malaysia, Philippines, Singapore, Thailand, and Viet Nam. They encompass a wide range of income and development. The demographic transition toward older populations is much more advanced in these two subregions than in South Asia. The countries are far from homogenous and range from Viet Nam, still a low-income country despite rapid growth in recent years, to Singapore, one of the richest countries in the world (Figure 1). They also vary widely in terms of political systems and financial sector development.

Figure 1: Gross Domestic Product Per Capita, 2009

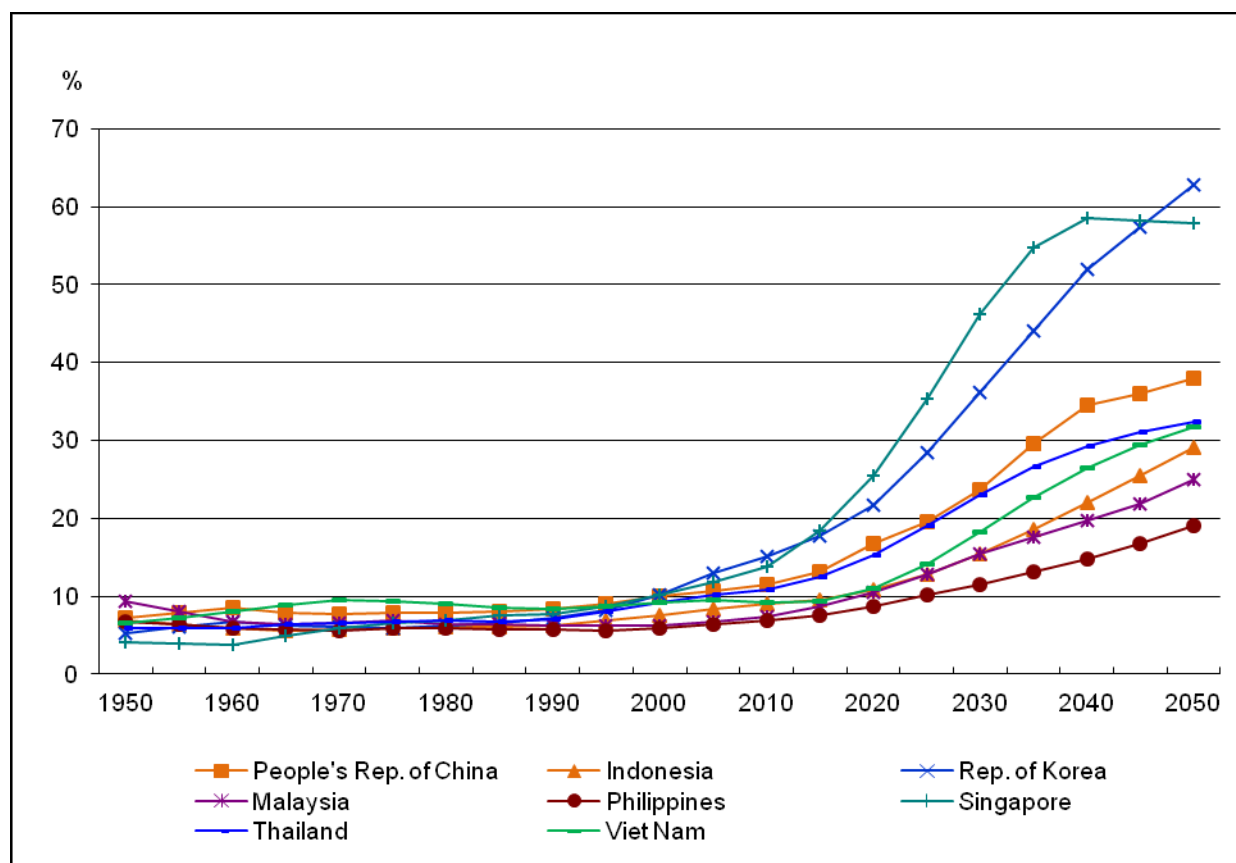


Source: World Bank. 2010. *World Development Indicators 2010*. Washington, DC: World Bank.

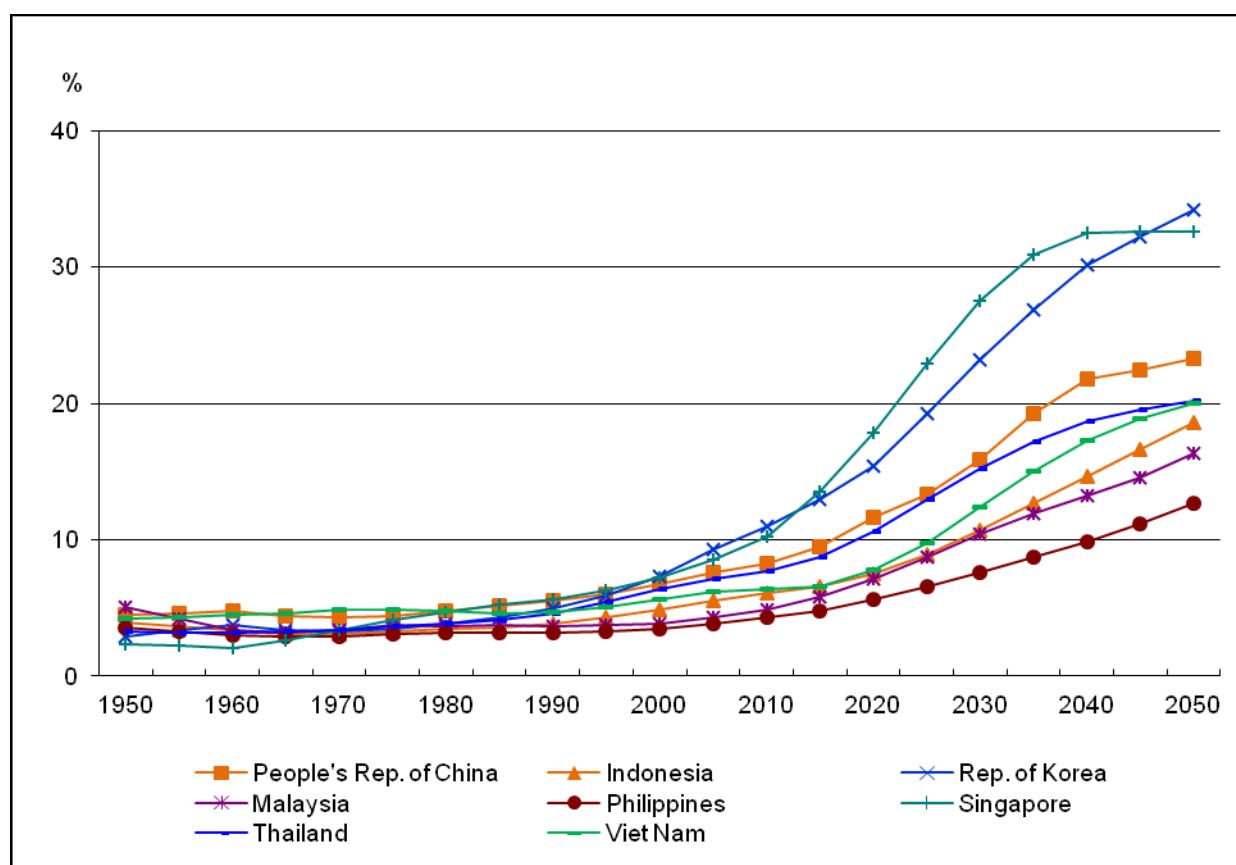
Within the broader regionwide trend of population aging in East and Southeast Asia, the eight countries share a great deal of demographic heterogeneity. They are at very different stages of the demographic transition. In countries such as the Republic of Korea, population aging has already set in, whereas countries such as the Philippines are still relatively youthful. However, the demographic trends of the eight countries as a whole resoundingly confirm the conventional

wisdom of a rapidly aging Asia. All eight countries are experiencing a steady secular increase in the proportion of the elderly relative to the working-age population (Figure 2) and total population (Figure 3). By 2050, the entire region will have a drastically different, much grayer, OK demographic profile. As in the industrialized countries, Asia's demographic transition is driven by falling fertility (Figure 4) and rising life expectancy (Figure 5). A constellation of economic and social factors such as fast-rising living standards, improved female education, and better medical care is inducing Asians to have fewer children and enabling them to live longer. Other demographic indicators also point unequivocally toward a graying continent (Table 1). The median age of all eight countries, except the Philippines, will exceed the world average by 2050. Furthermore, life expectancy at 60 is already fairly high and by 2050 fertility rates will fall below that required for a stable population.

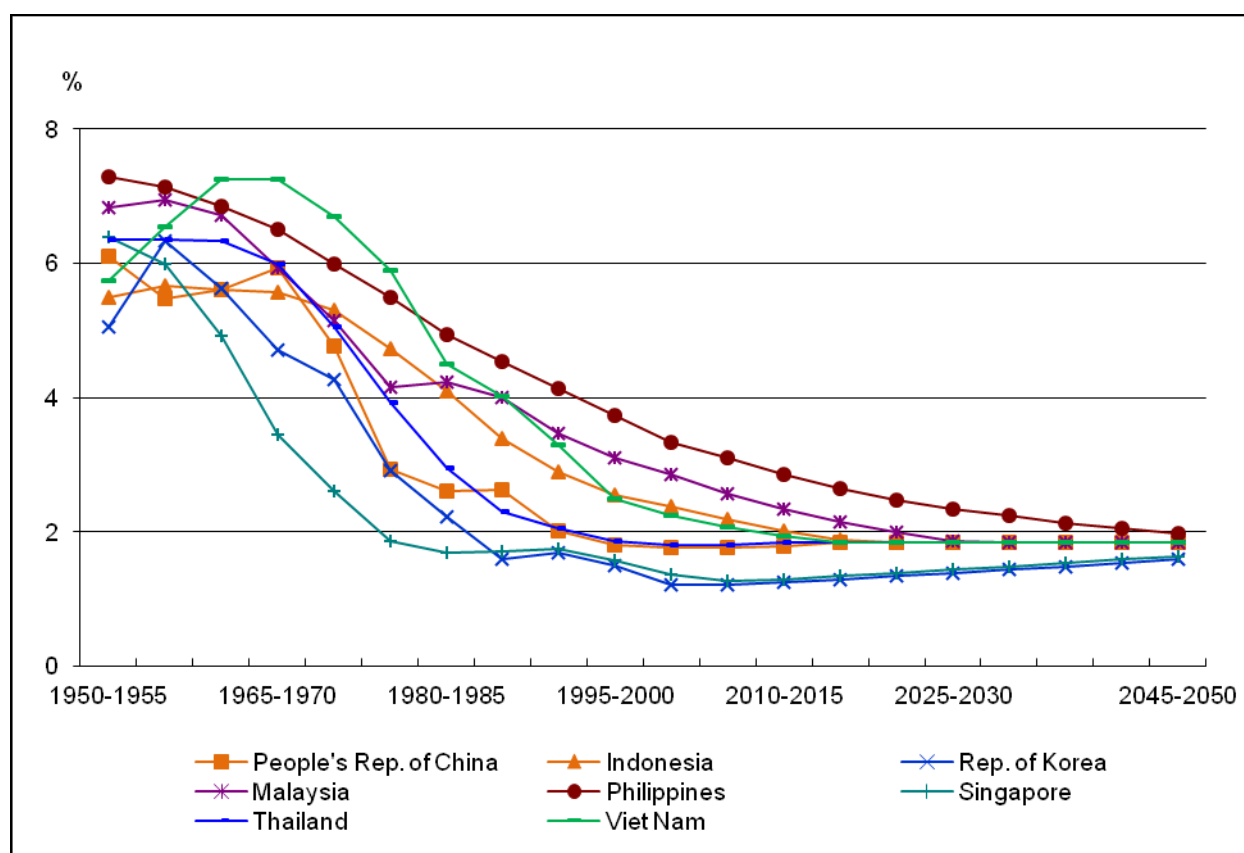
Figure 2: Ratio of Population Aged 65 and Older to Population Aged 15–64, 1950–2050



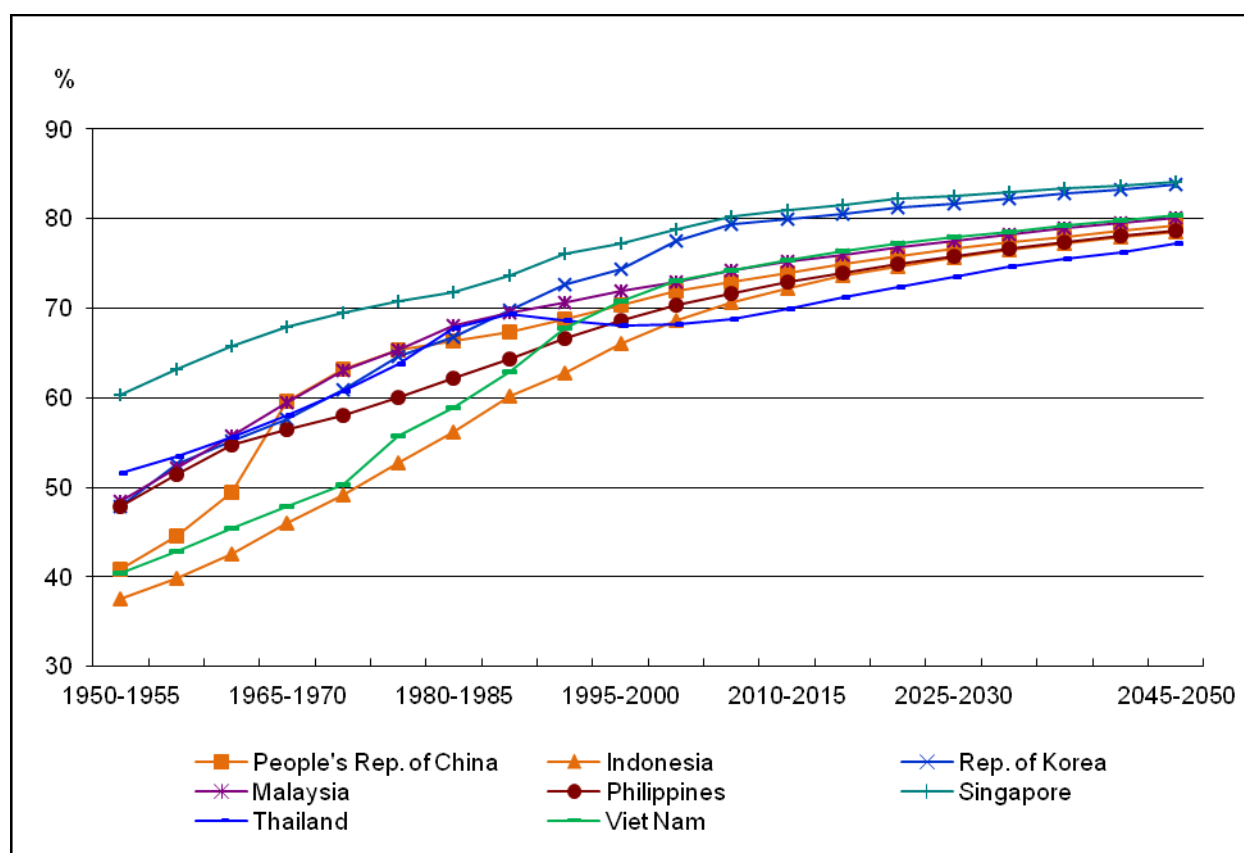
Source: Population Division, Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision. <http://esa.un.org/unpp> (accessed 25 April 2011).

Figure 3: Ratio of Population Aged 65 and Older to Total Population, 1950–2050

Source: Population Division, Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision. <http://esa.un.org/unpp> (accessed 25 April 2011).

Figure 4: Total Fertility Rates (Children Per Woman), 1950–2050

Source: Population Division, Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision. <http://esa.un.org/unpp> (accessed 25 April 2011).

Figure 5: Life Expectancy at Birth (years), 1950–2050

Source: Population Division, Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision. <http://esa.un.org/unpp> (accessed 25 April 2011).

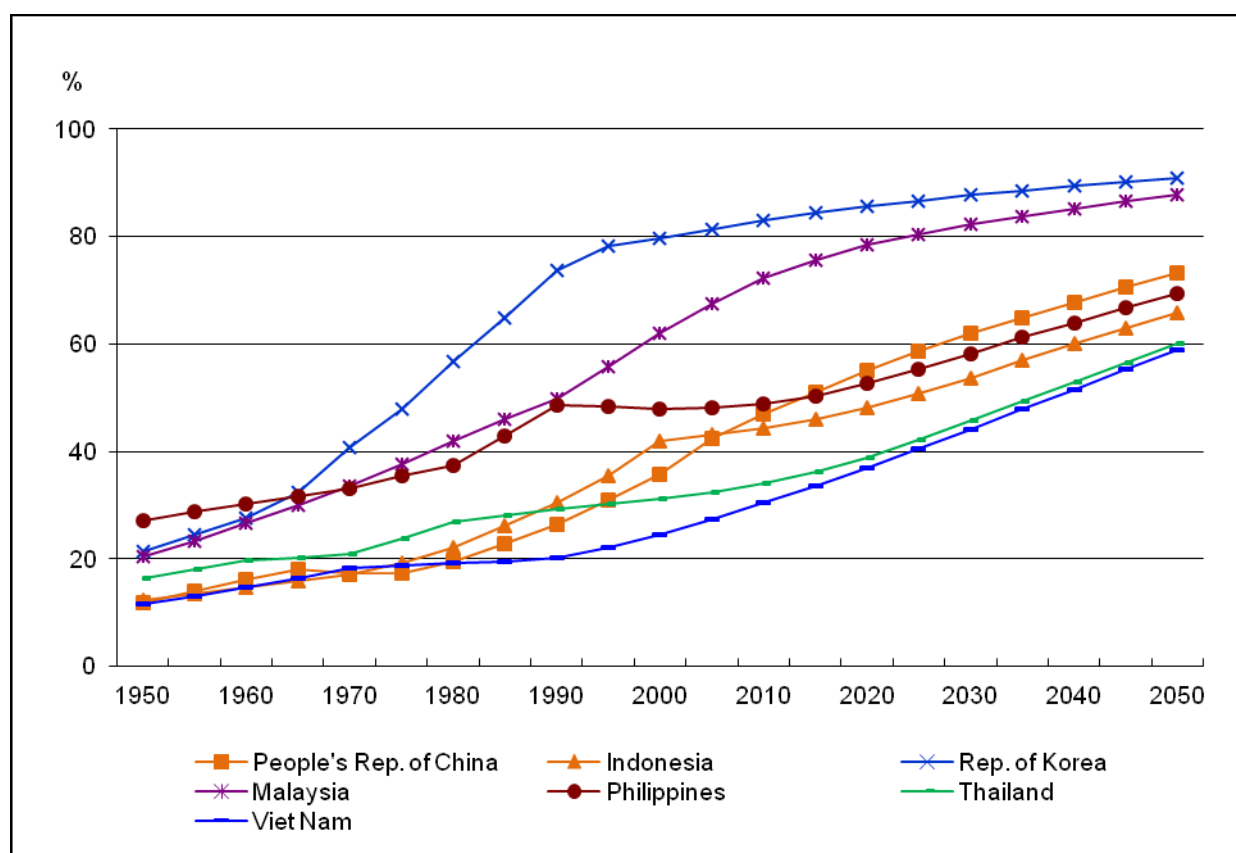
Table 1: Demographic Indicators of Selected Asian Countries

Country	Total Population (million)		Average Annual Rate of Change of Population		Total Fertility Rate		Median Age	
Year	2010	2050	2005–2010	2045–2050	2005– 2010	2045– 2050	2010	2050
World	6,908.7	9,150.0	1.18	0.34	2.6	2.0	29.1	38.4
PRC	1,354.1	1,417.0	0.63	(0.33)	1.8	1.9	34.2	45.2
Indonesia	232.5	288.1	1.18	0.10	2.2	1.9	28.2	41.1
Rep. of Korea	48.5	44.1	0.39	(0.77)	1.2	1.6	37.9	53.7
Malaysia	27.9	39.7	1.71	0.41	2.6	1.9	26.3	39.3
Philippines	93.6	146.2	1.82	0.60	3.1	2.0	23.2	35.0
Singapore	4.8	5.2	2.51	(0.45)	1.3	1.6	40.6	53.5
Thailand	68.1	73.4	0.65	(0.12)	1.8	1.9	33.2	41.4
Viet Nam	89.0	111.7	1.15	0.09	2.1	1.9	28.5	42.4
Country	Life Expectancy at Birth		Life Expectancy at 60, 2000–2005		Percentage of Population Aged 60 and above		Population Aged 60 and Above (million)	
Year	2005–2010	2045–2050	Men	Women	2010	2050	2010	2050
World	67.6	75.5	(...)	(...)	11.0	21.9	759.1	2,008.2
PRC	73.0	79.3	18	20	12.3	31.1	166.5	440.4
Indonesia	70.7	78.6	16	18	8.9	24.8	20.8	71.6
Rep. of Korea	79.4	83.8	18	23	15.6	40.8	7.6	18.0
Malaysia	74.2	80.1	17	20	7.8	22.2	2.2	8.8
Philippines	71.7	78.7	16	19	6.7	17.9	6.2	26.1
Singapore	80.3	84.1	20	23	16.0	39.6	0.8	2.1
Thailand	68.8	77.2	17	22	11.5	26.4	7.9	19.3
Viet Nam	74.3	80.4	19	20	8.7	26.6	7.8	29.7

() = negative value, ... = data not available.

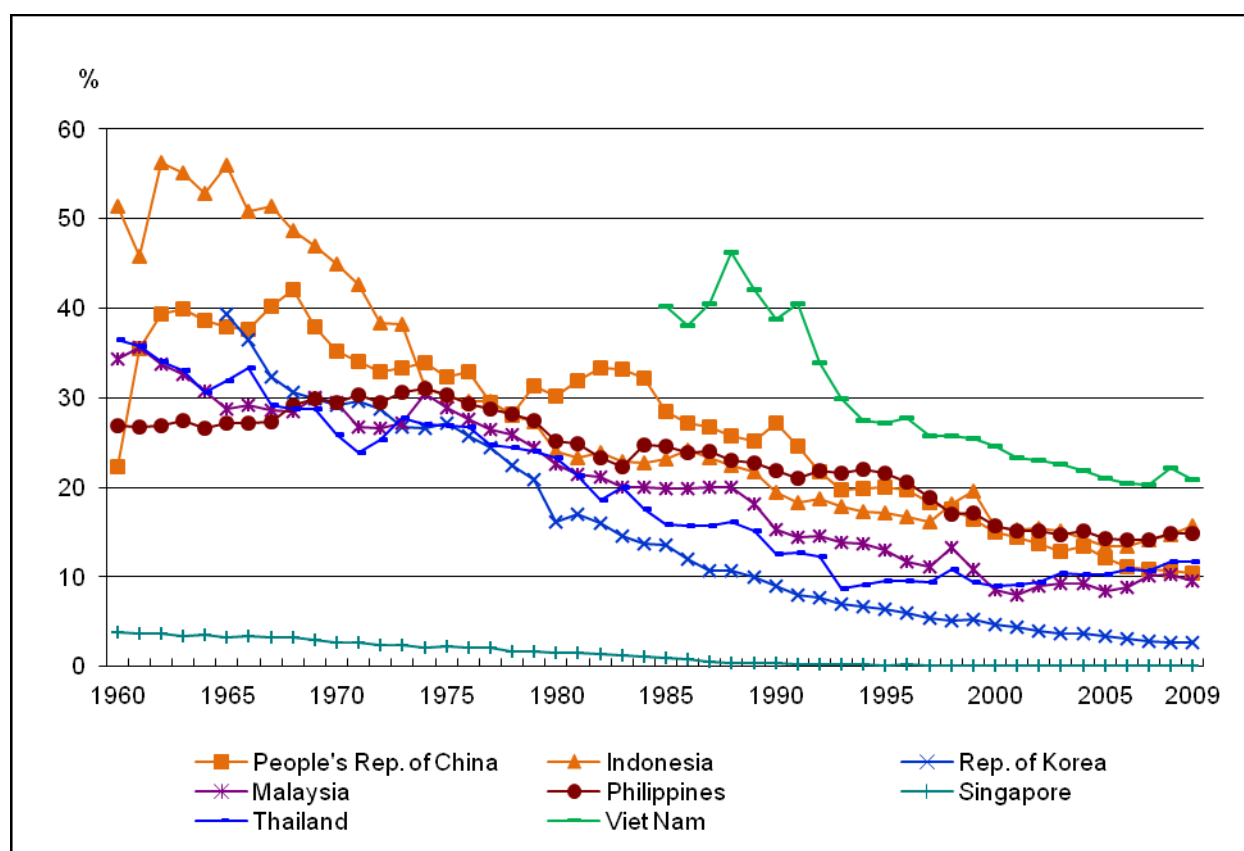
Sources: Population Division, Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision. <http://esa.un.org/unpp>; United Nations, Gender Info 2010, <http://www.devinfo.info/genderinfo> (both accessed 25 April 2011).

In addition to population aging, other factors also point to an urgent need to strengthen old-age support in Asia. In particular, the weakening of informal family-based old-age support mechanisms suggests a greater role for formal pension systems throughout the region. Asians have traditionally relied upon their children to take care of their material needs in their old age. The family network was in effect Asia's pension system, especially in rural environments where extended families of three generations often lived together under one roof and younger family members supported older family members. However, the far-reaching social changes that accompanied the region's economic progress have given rise to smaller nuclear families that are less conducive to intrafamily support. Such changes include rapid urbanization (Figure 6) and declining relative importance of agriculture in the economy (Figure 7). In short, urbanization, industrialization, and sociocultural changes are creating a vacuum in Asia's old-age support, a vacuum that must be filled by formal pension systems.

Figure 6: Urban Population as Share of Total Population, 1950–2050

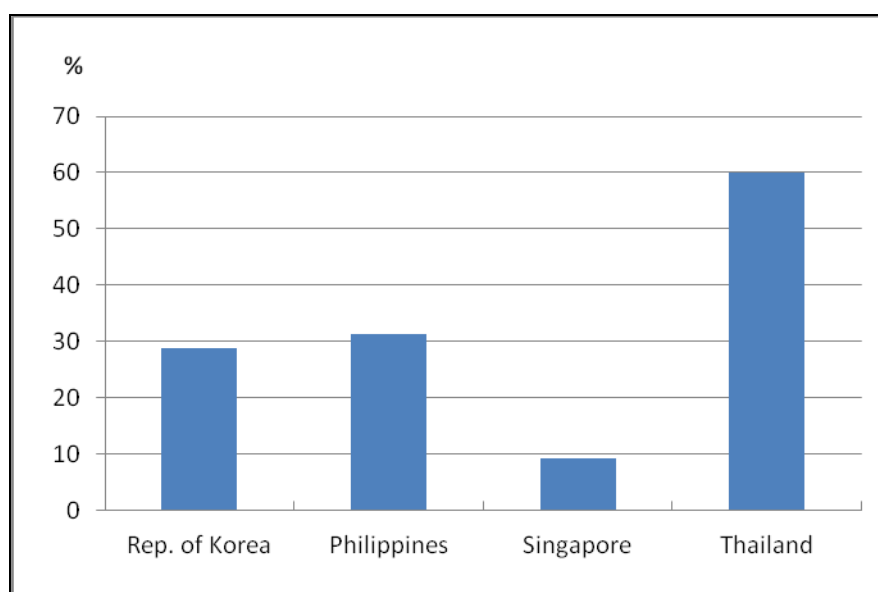
Note: Singapore is not included since it does not have rural population.

Source: Population Division, Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision; World Urbanization Prospects: The 2009 Revision, <http://esa.un.org/wup2009/unup/> (accessed 25 April 2011).

Figure 7: Agriculture Value Added as Percent of Gross Domestic Product, 1960–2006

Sources: CEIC Data Company; World Bank World Development Indicators online database (both accessed 25 April 2011).

Globalization and globalization-related labor market developments provide further rationale for strengthening Asia's pension systems. While Asia has reaped enormous benefits from globalization, it is not immune to the structural dislocations it wreaks. Globalization produces both winners and losers, and increases the sense of economic and social insecurity. Well-functioning social protection systems, including pension systems, can ease such insecurity and thereby promote public support for globalization. The competitive pressures unleashed by globalization are forcing firms to reduce labor costs. As a result, workers are more likely to lose their jobs at some points in their careers and move from one job to another. In Asia, the large number of workers in the informal sector compounds the loss of workers' job security due to globalization (Figure 8). Those workers are usually unprotected by labor regulations and lack access to pensions and other social benefits. Asia's growing labor mobility and prevalence of informal employment calls for improving pension coverage and portability in the region.

Figure 8: Share of Informal Sector Employment in Urban Employment

Source: Asian Development Bank. 2005. *Key Indicators 2005*. Manila: Asian Development Bank.

2. ASIAN PENSION SYSTEMS

Identifying directions for pension reform in Asia requires an understanding of the current shortcomings of Asian pension systems. Understanding the shortcomings, in turn, requires a basic understanding of Asian pension systems themselves. One key characteristic of a pension system is the retirement age, or the age at which retirees begin to receive their benefits. This ranges from 55 in Indonesia, Malaysia, and Thailand, to 65 in the Republic of Korea and the Philippines (Table 2). Retirement age is lower for women than men in the PRC and Viet Nam. The difference between life expectancy and retirement age is the number of years that a retiree has to depend on pension benefits for old-age support. Other things being equal, the larger this difference, the larger the liabilities of the pension system. The life expectancy–retirement age gap ranges from 6.7 years in the Philippines to 19.2 years in Malaysia and for women in Viet Nam. The retirement age is expected to rise throughout Asia in response to rising life expectancy.

Table 2: Retirement Age and Basic Structure of Pension Systems, 2007

Country	Retirement Age (years)	Difference Between Life Expectancy and Retirement Age (years)	Defined Benefit or Defined Contribution	Element of Income Redistribution
People's Republic of China	60 (55)	13.0 (18.0)	Defined benefit, defined contribution, and notional defined contribution	Yes
Indonesia	55	15.7	Defined contribution	No
Republic of Korea	65	13.6	Defined benefit	Yes
Malaysia	55	19.2	Defined contribution	No
Philippines	65	6.7	Defined benefit	Yes
Singapore	62	18.0	Defined contribution	No
Thailand	55	15.6	Defined benefit	No
Viet Nam	60 (55)	14.2 (19.2)	Defined benefit	No

Note: The pension age in parentheses refers to the pension age for women, where different from men. Life expectancy refers to life expectancy at birth.

Source: Park, D. 2009. Developing Asia's Pension Systems: Overview and Reform Directions. Asian Development Bank Economics Working Paper 165. Manila: Asian Development Bank.

In some countries, including Australia; Chile; and Hong Kong, China; the government has set up pension systems that are run by the private sector. Individual members can choose from among different private-sector investment funds. In contrast, in all the eight countries studied, the government manages the pension system. However, the basic pension system structure for formal-sector workers is far from uniform in the eight countries. The pension systems of the PRC, Indonesia, Malaysia, and Singapore are defined contribution or partly defined contribution; while those of the Republic of Korea, the Philippines, Thailand, and Viet Nam are defined benefit.¹ Defined contribution systems are generally prefunded, while defined benefit systems are not. The structure of the PRC's pension system combines a defined benefit pillar with a defined contribution account pillar. Among the eight countries, ignoring the broader social safety nets, only the pension systems of three countries explicitly redistribute income. The Philippines has a minimum pension that pays higher benefits to poor retirees. In the PRC, the redistributive element takes the form of a defined benefit basic pension. In both the PRC and the Republic of Korea, pension benefits depend partly on average earnings.

The formula for computing pension benefits varies widely across the four countries with defined benefit pension systems—the Republic of Korea, the Philippines, Thailand, and Viet Nam (Box: Benefit Rules of Asian Pension Systems). Areas of differences include the earnings measure used to compute benefits, indexation of benefits to wages and prices, and qualifying conditions for pension eligibility. For an individual who enters the labor market at 20 years of age, the defined benefit replaces 85% of income in Viet Nam, 80% in the Philippines, 50% in the

¹ In the special case of Indonesia, the main public pension system—Jamsostek—pays a lump sum upon termination of employment, less than 10% of which take place at retirement age. The plans for civil servants and armed forces, and a majority of occupational plans are defined benefit.

Republic of Korea, and 35% in Thailand. The corresponding figure for the PRC's redistributive basic pension is 40%. Under the defined contribution and notional defined contribution pension systems of the PRC, Indonesia, Malaysia, and Singapore, the worker receives a lump sum comprising accumulated contributions and interest income upon retirement. The contribution rate for employees and employers differs substantially across countries (Figure 9). The employee contribution rate ranges from 2% of wages in Indonesia to 20% in Singapore. Workers also make contributions under defined benefit systems. Total contribution rates are the highest in Singapore and Malaysia, and lowest in Indonesia and Thailand.

Box 1: Benefit Rules of Asian Pension Systems

People's Republic of China. Both the defined contribution and the notional defined contribution pension pay a lump sum comprising accumulated contributions and interest income upon retirement. The redistributive basic pension is a defined benefit pension, and pays 1% of the average of citywide average earnings and individual earnings for each year of coverage, subject to a minimum of 15 years of service. The earnings basis for benefits is citywide because pension systems are organized on a municipal basis. The basic pension is indexed to a mix of wages and prices.

Indonesia. The defined contribution pension pays a lump sum comprising accumulated contributions, net of preretirement withdrawals, and interest income upon retirement.

Republic of Korea. For an individual with 40 years of contributions, pension benefits were designed to replace 60% of earnings until 2007. Due to pension reform, the replacement was reduced to 50% in 2008 and will be reduced 0.5% every year until reaching 40% from 2009 to 2028. The earnings measure used for computing benefits is a weighted average of individual lifetime earnings, adjusted for wage growth, and economy-wide earnings over the previous 3 years, adjusted for price inflation. Pension benefits are indexed to price inflation.

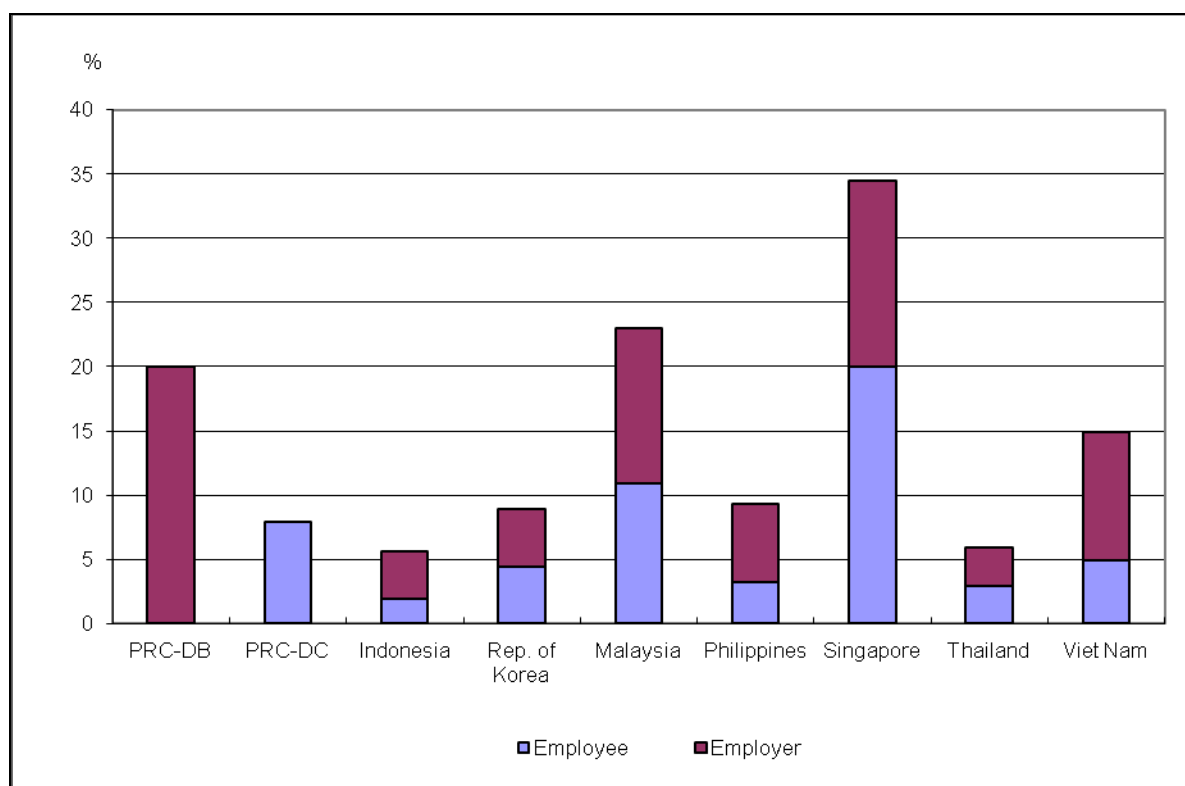
Malaysia. The defined contribution pension pays a lump sum comprising accumulated contributions, net of preretirement withdrawals and interest income upon retirement.

Philippines. The monthly basic pension, which is independent of earnings, is P300. The earnings-related component of the monthly pension is the greater of (i) 20% of a worker's average monthly earnings plus 2% of average monthly earnings for each year of service exceeding 10 years or (ii) 40% of the workers' average monthly earnings. The earnings basis is the greater of (i) average earnings over 5 years prior to pension claim or (ii) average earnings for the period in which contributions were made. Benefits are periodically adjusted for price inflation and wage growth on an ad hoc basis. The minimum pension for those who qualify, i.e., minimum of P1,000 salary bracket, is P1,200 if they complete at least 10 years of service and P2,400 if they complete at least 20 years of service. For those who are considered as the elderly poor and have not been part of any mandatory pension system, the new Senior Citizens Act, 2010 provides a monthly allowance of P500.

Singapore. The defined contribution pension pays a lump sum comprising accumulated contributions, net of preretirement withdrawals, and interest income, which is over and above a minimum specified sum. From 2013, a member must purchase a deferred annuity with the minimum sum.

Thailand. Workers accrue 1% of their earnings each year up to a maximum of 35 years. The base wage used to compute benefits is the average wage over the last 5 years prior to retirement. For example, an individual who worked for 20 years would be entitled to 20% of the base wage. Rules for indexing benefits to wage growth and price inflation are discretionary.

Viet Nam. The monthly pension is the sum of three components: (i) 45% of career average earnings for employees with at least 15 years of service, (ii) 2% of the average of earnings in the last 5 years prior to retirement for each year of credited service beyond 15 years, and (iii) a lump sum equal to 50% of the 5-year average monthly earnings prior to retirement for those with more than 30 years of contributions. Pension benefits are indexed to changes in the minimum wage.

Figure 9: Employee, Employer, and Total Contribution Rates of Pension Systems, 2007

PRC-DB = People's Republic of China-defined benefit, PRC-DC = People's Republic of China-defined contribution.

Source: Park, D. 2009. Developing Asia's Pension Systems: Overview and Reform Directions. Asian Development Bank Economics Working Paper 165. Manila: Asian Development Bank.

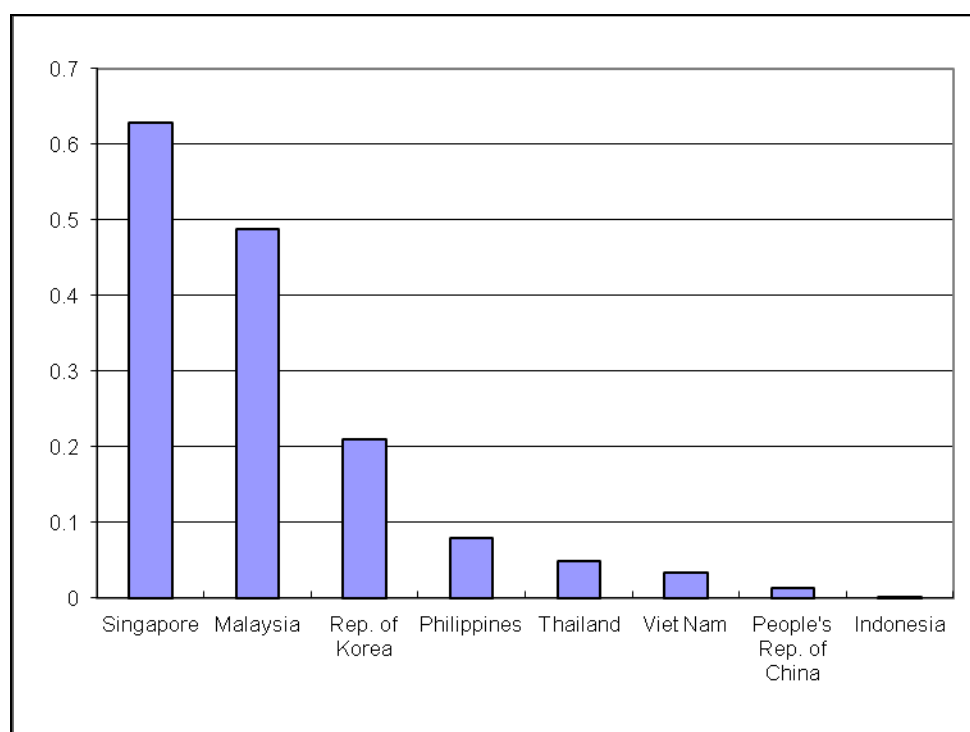
Asian countries face a strategic choice between social risk pooling and individual risk taking in pension system design. The pension systems of Indonesia, Malaysia, and Singapore are unique in the region for their heavy tilt toward individual risk taking and relative absence of social risk pooling. Unlike the other countries of the region, the three countries explicitly reject the social insurance principle in old-age income support. Malaysia and Singapore have national provident funds, which are essentially mandatory savings schemes. Malaysia established its Employees Provident Fund (EPF) in 1951 and Singapore set up its Central Provident Fund (CPF) in 1955. Employers and employees are required to contribute to the funds, which are managed by government organizations on behalf of employees—each employee has an individual account. Although the primary purpose of the two funds is to encourage saving for retirement, both the CPF and EPF allow their members to use their balances for a variety of purposes, including housing, preretirement investments, and tertiary education. Furthermore, members can use part of the balances only for health expenditures. The mandatory savings nature of the funds has contributed to high national savings rates. In Indonesia, accumulated savings are paid as a lump sum at the termination of employment, only 8% of which takes place at retirement.

Relative to Indonesia, Malaysia, and Singapore, social risk pooling plays a greater role in the pension systems of the other countries. However, five countries diverge widely in terms of the economic, institutional, and technological capacity needed to apply the social insurance principle on the ground. For example, the Korean pension system is a comprehensive social security system comparable with those found in welfare states. At the other end, Indonesia is just beginning to plan the foundations of a new social insurance-based social security system. The main pension systems of the Republic of Korea, the Philippines, Thailand, and Viet Nam

are all defined benefit systems that protect individual members from investment and longevity risks. In the PRC, the defined benefit scheme is a redistributive basic pension. Indonesia is moving toward a more mixed system with greater social assistance. The defined benefit pension systems of the region are largely pay-as-you-go (PAYG). Only the Republic of Korea's defined benefit system involves a significant amount of prefunding. The benefit payments of the other defined benefit systems depend almost exclusively on the contributions of current workers.

Another noteworthy characteristic of many Asian pension systems is that they are relatively new and very much in a state of flux. The oldest systems are those of Malaysia, the Philippines, and Singapore, but even they are constantly evolving. The relatively advanced Korean system was created only in 1988 and is still undergoing reform. Indonesia enacted a law designed to establish a comprehensive social security system in 2004, although it has yet to be implemented. Likewise, Thailand and Viet Nam are in the process of revamping their pension systems to extend coverage and improve benefits. The ongoing evolution of the PRC's pension system reflects the extensive structural transformation of its economy and society. A milestone 1997 decree provides the basic structure of the new two-pillar pension system: (i) PAYG defined benefit basic pension and (ii) funded defined contribution pensions. The PRC is in the middle of a systemic consolidation from a highly fragmented system to the two-pillar state system.

The total size of pension assets in a country is relevant from a macroeconomic perspective. For example, the assets of the provident funds of Malaysia and Singapore represent a large part of national savings. Total pension assets also influence the impact that liberalizing pension asset investment has on financial markets. Countries such as Malaysia, the Republic of Korea, and Singapore have set up public funds to manage the contributions of funded or partially funded pension systems. The public funds of the Philippines and Thailand manage the contributions of pension schemes for civil servants. In 2000, the PRC established a dedicated reserve fund—the National Social Security Fund—to help cover future pension liabilities arising from demographic trends. The assets controlled by Asia's public pension and reserve funds are quite sizable but vary widely across countries. Total pension assets in 2006 ranged from less than US\$1 billion in Indonesia to more than US\$180 billion in the Republic of Korea. The ratio of state pension assets to gross domestic product is highest in Singapore, Malaysia, and the Republic of Korea (Figure 10). The overall trend in the investment portfolios of Asia's pension funds is toward greater diversification in terms of both asset class and rising share of international investment.

Figure 10: Ratio of Total Pension Assets to Gross Domestic Product, 2006

Note: Assets of the People Republic of China refer to those of the National Social Security Fund. The assets of the Philippines and Thailand refer to those of the pension systems for government workers.

Source: Park, D. 2009. Developing Asia's Pension Systems: Overview and Reform Directions. Asian Development Bank Economics Working Paper 165. Manila: Asian Development Bank.

3. ANALYSIS OF ASIAN PENSION SYSTEMS

A brief survey of Asian pension systems indicates a great deal of heterogeneity in design and structure. Pension reform requires that the main weaknesses of pension systems be identified. The weaknesses impede the ability of pension systems to fulfill their basic objectives, such as enabling consumption smoothing and relieving poverty. A diagnosis is essential for identifying the main areas of pension systems that need to be improved and strengthened, and hence for mapping out the strategic directions of reform. Broadly speaking, Asian pension systems suffer from failures in (i) performing the five core functions of pension systems, as well as (ii) fulfilling the ideal properties of pension systems such as adequate coverage. These failures suggest that Asian pension systems still have some way to go if they are to achieve their main objectives.

3.1 Performance of Five Core Functions

A fundamental difference exists between developing and developed countries in the context of pension reform. The institutional capacity of developing countries lags considerably behind that of developed countries. Thus framing pension design and reform issues in Asia in the same terms as in developed countries with more well-established pension systems is not productive. With the exception of Singapore and the Republic of Korea, the scope for reducing administrative and other transactions costs is significant. The prevalence of such costs constrains the amount of resources that can be made available to pensioners. More importantly, high administrative and transactions costs impede the ability of pension systems to perform the

five core functions to varying degrees in the PRC, Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam. For example, administrative inefficiency interferes with the collection of contributions from and payment of benefits to hard-to-reach groups such as rural and informal sector workers. The fact that many Asian pension systems are in a state of flux further adds to their high administrative and transaction costs.

Compliance cost is a specific transaction cost that adversely affects the pension systems of many Asian countries. Compliance cost refers to the cost to employers and employees of complying with the provisions of pension systems. For example, employers have to collect contributions from employees and remit them to relevant authorities, in addition to contributing their share. Compliance costs are high when the pensioner does not get benefits on time, and has to make several trips to ensure that benefits are paid. Furthermore, in some countries, employees have to pay bribes to receive statutory benefits that are their right. If compliance costs are too high, employers and employees may choose not to participate in the pension system. Furthermore, if the government has only limited capacity to enforce compliance, employers may evade rather than contribute. Even in countries with superficially comprehensive pension systems, such as the Philippines, widespread noncompliance means a wide gulf between nominal and effective old-age income support.²

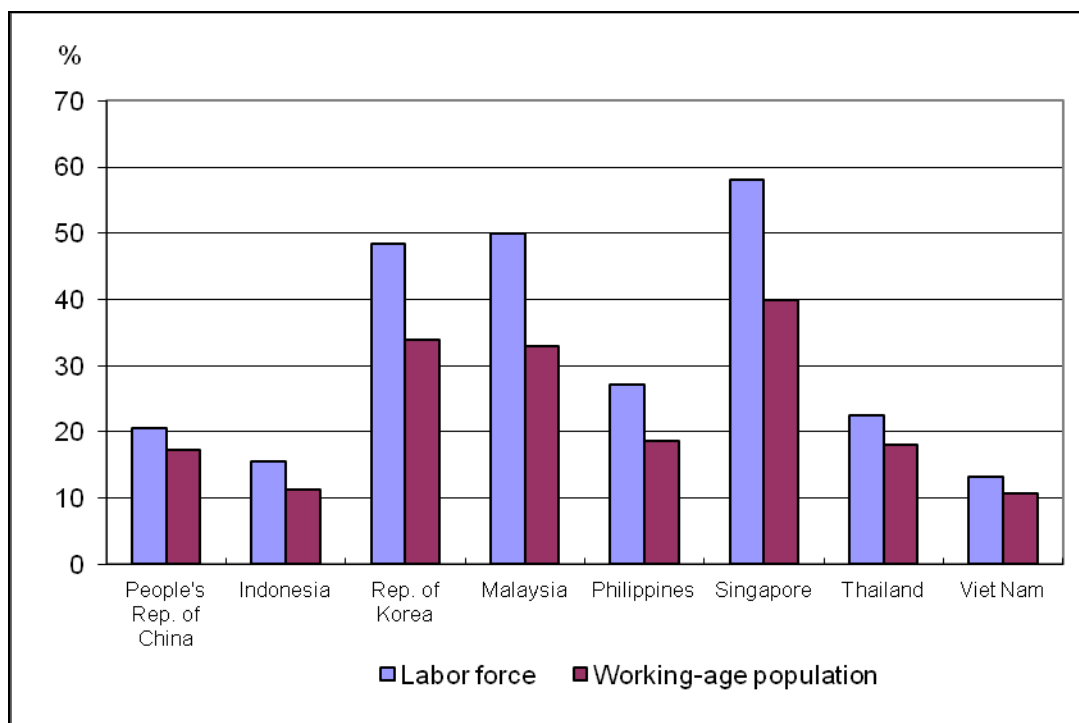
The lack of institutional capacity can be attributed in large part to the generally weak governance and regulation of Asian pension systems. Effective performance of the five core functions of pension systems requires efficient governance, management, and regulation. For prefunded pension systems, governance and regulation are especially important for the sound financial management and productive investment of pension assets. In well-developed financial markets, such as North America and the European Union, pension funds are subject to explicit regulatory structures and laws governing pension funds. In contrast, in Asia, banks and insurance companies are regulated but a regulatory body for pension funds is lacking. Lack of strong governance and regulation also breeds lack of public confidence in pension systems, which, in turn, discourages compliance and participation. Political support for pension systems will remain fragile until the general public is confident that their future promises will be honored.

3.2 Issues in Pension System Design

At one level, Asian pension systems are failing because they fail to effectively perform the five core functions of pension systems due to high transactions costs and lack of strong governance. At another level, they are failing because to varying degrees they are not well-designed, i.e., adequate, affordable, robust, sustainable, and equitable pension systems. At this level, the biggest failure of the systems is that they cover only a limited part of the total population, and the covered are usually the better-off groups. The percentage of population covered by a pension system differs from country to country, but no country has managed to achieve anywhere near universal coverage. The share of the labor force covered by pension systems ranges from 13.2% to 58% (Figure 11). The coverage rate for working-age population ranges from 10.8% to 40%. By comparison, in developed countries, such as Germany, Japan, and the United States pension systems typically cover around 90% of the labor force and 60%–75% of the working-age population. Therefore, even in high-income Asian countries, such as the Republic of Korea, coverage falls well short of that in developed countries.

² Regardless of the form of government, public confidence and trust play key roles in an effective pension system. A pension is, after all, a promise of benefits in the distant future in exchange for contributions made today.

Figure 11: Share of Labor Force Covered by Pension Systems and Share of Population Aged 15–64 Covered by Pension Systems, 2007



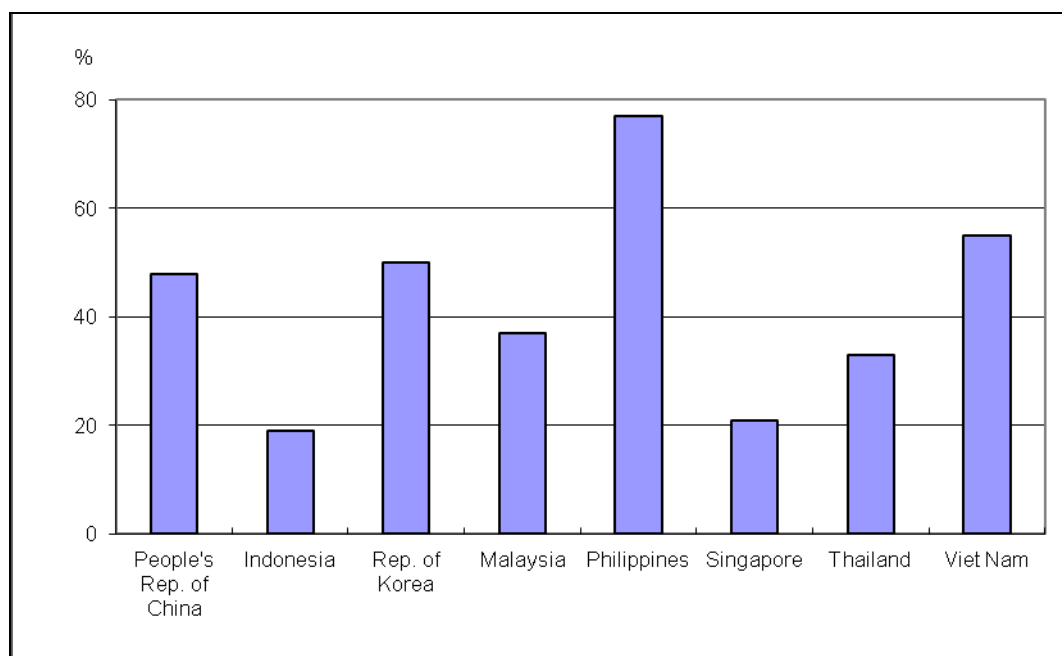
Source: Park, D. 2009. Developing Asia's Pension Systems: Overview and Reform Directions. Asian Development Bank Economics Working Paper 165. Manila: Asian Development Bank.

The coverage of Asian pension systems tends to be skewed toward urban areas and the formal sector. For example, in the PRC less than 10% of rural workers are estimated to have pension coverage. Low rural coverage, in combination with the large number of rural workers, helps to account for the PRC's low overall coverage rate of 20.5% of the labor force and 17.2% of the working-age population. Massive rural-to-urban migration is adding to the pool of informal-sector workers in the PRC, Viet Nam, and other countries. The limited coverage of rural and informal-sector workers reflects the high administrative costs of reaching them and the limited institutional capacity of Asian pension systems. Pension coverage is also higher for government workers, including military forces, than private sector workers throughout the region. In fact, in many Asian countries, including the Republic of Korea and Viet Nam, pension systems initially covered only government workers. Government workers' better access to pension systems is part of the privileged position and stronger rights they enjoy relative to private sector workers. A general lack of portability in Asian pension systems also contributes to the low coverage. For example, PRC workers migrating from the countryside cannot readily join the urban pension system.

Another key performance indicator where Asian countries perform poorly is the replacement rate, or the ratio of retirement income to preretirement income. The replacement rate is a widely used measure of the adequacy of pension benefit as a source of postretirement income. A higher replacement rate enables the pensioner to achieve a higher standard of living. Pension experts generally recommend a replacement rate of 60%–75%, adjusted for longevity and inflation risks. A pension modeling study completed in 2008 by the Asian Development Bank (ADB) computed the replacement rate for Asian pension systems: from 19% in Indonesia to 77% in the Philippines (Figure 12). The computed replacement rates are higher in the PRC, the Republic of Korea, the Philippines, and Viet Nam than in Indonesia, Malaysia, Singapore, and

Thailand.³ Among the eight countries, only the Philippines has replacement rates within the recommended range. This implies that by and large Asian pension systems are not providing an adequate retirement income for retirees.⁴

Figure 12: Replacement Rate—Ratio of Retirement Income to Preretirement Income, 2007



Source: Park, D. 2009. *Developing Asia's Pension Systems: Overview and Reform Directions*. Asian Development Bank Economics Working Paper 165. Manila: Asian Development Bank.

The apparent adequacy of the Philippine pension system brings the issues of sustainability and affordability to the fore. Sizable benefits for a high share of the population are not sustainable in the long run if the country cannot afford such a generous pension system. In this case, the adequacy of the pension system is more apparent than real. A widely used index of sustainability is implicit pension debt, which can be broadly defined as the present value of future pension promises minus prefunding, if any. In Asian countries with defined benefit pension systems, pension promises are unfunded or only partly funded. Earlier studies by the World Bank found the implicit pension debt of the Republic of Korea, the Philippines, and the PRC to be substantially larger than the public debt of those countries (Holzman, Palacios, and Zvinienė 2004 and Sin 2005). Therefore, relatively healthy fiscal positions should not be allowed to obscure the fiscal risks due to large future pension liabilities. Furthermore, in all three countries, the relative size of the implicit pension debt is large enough to raise concerns about the pension system's ability to honor its future promises. In the Republic of Korea, such concerns spurred a reduction of benefits beginning in 2008. The implicit pension debt is much higher in the PRC and the Philippines than in the Republic of Korea, which suggests that the need for sustainability-enhancing reform is even stronger in those two countries.

Asian pension contribution rates are generally quite low and hence seemingly affordable for employers and employees. However, widespread noncompliance in many lower income Asian countries suggests that the true pension costs are higher and hence less affordable for

³ In the Republic of Korea, sustainability-enhancing parametric reforms are further reducing the replacement rate to 40% starting in 2028.

⁴ An important caveat to this assessment is that, in principle, the target replacement rate can be achieved by a multipillar system even if it cannot be achieved by a public pension system.

individuals. On the other hand, pension costs do not seem to significantly distort the incentives of employees to work and employers to hire, even in countries with the highest contribution rates. Given that many Asian pension systems are still evolving and consolidating, it is too early to tell whether they are robust against macroeconomic and other shocks. However, the more established pension systems of the region came through the 1997 Asian financial crisis and the 2008 global financial crisis unscathed.⁵ Finally, while the pension systems of the PRC, Republic of Korea, and the Philippines have safety nets designed to protect the elderly poor, the safety nets fail to provide enough income for even a minimum standard of living. For example, the basic monthly pension in the Philippines is only P300 or about US\$7, and a recently introduced means-tested benefit for the Korean elderly is only about 5% of the average wage. The replacement rate for low-income workers substantially exceeds that of average-income workers in the PRC, the Republic of Korea, and the Philippines but not in the other countries.

4. COUNTRY-SPECIFIC POLICY OPTIONS FOR PENSION REFORM

The country-specific analysis of the eight developing Asian countries covered in *Pension Systems and Old-Age Income Support in East and Southeast Asia: Overview and Reform Directions*—the PRC, Indonesia, the Republic of Korea, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam—indicates that the process of building strong and well-functioning pensions systems is far from complete in the region (Park 2011). The pension systems of the eight countries vary a great deal in terms of key performance indicators such as coverage, replacement rate, sustainability, and overall performance. In addition, the in-depth diagnosis of the country studies uncovered a wide range of serious shortcomings in every country. The results of the pension modeling exercise of the Organization for Economic Cooperation and Development (OECD) give some quantitative estimates of those shortcomings. The case for reform is compelling even in the more developed East and Southeast Asian countries, such the Republic of Korea and Singapore. The case for reform is even stronger in less affluent countries, which face a serious risk of aging before they become rich. Furthermore, even more mature old-age support systems with a relatively long history, such as those of Malaysia and Singapore, continue to face formidable challenges to their central mandate of delivering adequate, affordable, sustainable, robust, and equitable old-age income support. All in all, the analysis of the eight country studies and the pension modeling exercise resoundingly confirm an urgent need for pension reform in developing Asia.

The fundamental driver of pension reform in developing Asia is rapid population aging. The advanced economies of Europe, North America, and Japan experienced population aging earlier than developing Asia. Latin America and other parts of the developing world are also witnessing a steady increase in the share of elderly in their total populations. What is striking and unique about developing Asia's own demographic transition in the context of the historical international experience is its sheer speed and scale. Just as the region's economic growth and development is replicating centuries of advanced-economy experience within a few decades, the region is graying much faster than the advanced economies.

Within the broader regionwide demographic transition to significantly older populations, the countries have very different profiles due to major differences in the timing and speed of their respective fertility and mortality declines. However, while the need for pension reform is more

⁵ Pension funds have long-term investment objectives, especially if they pay out annuities rather than lump sums, so they are uniquely positioned to ride out short-term volatility in the financial markets.

urgent in countries where the demographic transition is more advanced, even countries that still have relatively youthful populations should start to prepare as early as possible to address the socioeconomic impact of population aging. After all, policies implemented today will determine the ability of today's workers to prepare for their retirement in 2040 or 2050.

Well-functioning and robust pension systems are a central pillar of any adequate and sustainable old-age income support system but there are other components as well. While private young-to-old transfers are declining due to extensive socioeconomic transformation, they remain important in most countries. Asset-based income, in particular income from personal savings, is a significant source of postretirement income. While the relative importance of the components differs across countries, the multidimensional nature of old-age income support necessarily means that a number of additional policies will have to complement pension reform. For example, financial development fosters sound and efficient financial systems that foster savings and capital accumulation. To cite another example, expanding investment in human capital and thereby improving labor productivity will help offset the negative impact of population aging on the size of the workforce. A constellation of mutually supportive policies, including pension reform, will be required for developing Asia to successfully meet the enormous social and economic challenge arising from its seismic demographic shift.

Given the great deal of heterogeneity among the eight countries, both in terms of their overall socioeconomic development and the development of their pension systems, the policy options for pension reform differ substantially. A summary of the most salient country-specific policy options for building up stronger and better pension systems that can deliver economic security throughout retirement follows.

4.1 The People's Republic of China

1. Policy options include:

- (i) improve transparency and governance for both state and private sector systems, with the government making timely and accurate information widely available;
- (ii) extend pension participation by improving compliance in the urban system and proceeding with implementation of the new Rural Pension System; and
- (iii) raise the normal retirement age by first raising the female normal retirement age to 60 years; then making actual retirement age flexible, but with fully enhanced pensions for late retirement and appropriately reduced pensions for early retirement; and then gradually raising the normal retirement age for males and females to age 65 over the next 25 years.

4.2 Indonesia

Policy options include:

- (i) achieve unity of direction and efficient enforcement of a national retirement policy;
- (ii) reduce disparities in social protection provided to different segments of the population;
- (iii) provide adequate and transparent information to build a sufficient consensus on minimum targets for postretirement income and protection against inflation and longevity that are affordable and sustainable;
- (iv) gradually adjust the normal retirement age to reflect increases in longevity and make future adjustment dynamically linked to longevity to ensure that programs remain affordable and sustainable;

- (v) make all lump sum payments convertible to a life annuity or programmed withdrawals over the remaining life time, and gradually phase out lump sum payments in favor of life pensions to increase financial security in retirement; and
- (vi) make pension rights portable between all programs without any adverse effects on tax treatment to enhance labor mobility.

4.3 Republic of Korea

Policy options include

- (i) clearly delineate the respective roles of the National Pension Scheme and the Basic Old Age Pension Scheme as the coverage of the Basic Old Age Pension Scheme is 70%, but the benefit level is very low, thus its purpose is unclear and its poverty-mitigation impact limited;
- (ii) extend coverage of the National Pension Scheme in real terms to increase the number of insurance years for the insured; and give more credit for social contributions such as child rearing;
- (iii) work to ensure financial sustainability of the public pension schemes in the long-term, and social sustainability by publicizing pension schemes to the public and educating the public about them to mobilize popular support for the schemes;
- (iv) improve equity between generations and between different public pension schemes; and
- (v) develop a multipillar system that clarifies the respective roles of public and private pensions in old-age income security.

4.4 Malaysia

Policy options include

- (i) begin to construct a multitier system for retirement income security;
- (ii) limit the role of the Mandatory National Provident Fund, the Employees' Provident Fund (EPF), therefore, limiting the role of the EPF, expanding social pension and social assistance systems, and encouraging private pension systems, whether employer-based or through financial institutions;
- (iii) reform the civil service pension;
- (iv) as civil servants do not contribute to their pensions and the disparity between pension methods (defined benefit for civil servants versus defined contribution for others) is wide, undertake modest reform to require future civil servants to contribute to the pensions; a more ambitious reform would require new civil servants to be part of the EPF, thus aligning them with private sector employees, improving portability, and improving the transparency of civil service pensions;
- (v) manage the political economy of pension reform; and
- (vi) address the lack of trust between the pension authorities and the general public by establishing a national social security council or other such agency, and improve transparency and accountability of existing social security institutions.

4.5 Philippines

Policy options include

- (i) establish a clear direction for the various pension systems to prevent further divergence and help rectify features that have resulted in departures from original goals by ensuring

- the mandatory system provides a replacement rate for the basic benefits, and establishing clear boundary lines between mandatory and voluntary systems;
- (ii) reduce the proportion of the defined benefit component and correspondingly increase that of a new layer of the defined contribution component to achieve the target replacement rate; subjected to ceilings, this would leave room for private supplementary plans to provide extra income beyond the basic needs of members;
 - (iii) implement a more formal system to address the needs of the first pillar, involving adding savings from a reformed system to other sources of revenues to support the system;
 - (iv) establish clear fiduciary responsibilities for fund administrators, preferably separating the professional investment function from administrative functions; an umbrella regulation is needed to impose consistent control over the policies of the various institutions; and
 - (v) adopt a more product-based, rather than institution-based, review for regulation and taxation to enable more consistent treatment of pension products relative to products geared for consumption.

4.6 Singapore

Policy options include the following:

- (i) Develop a multitier retirement income system. The current near-exclusive reliance on mandatory savings, administered by the Central Provident Fund (CPF), needs to be reduced by introducing budget-financed social pensions, and a better-designed supplementary retirement system. Social risk-pooling elements need to be introduced in the insurance schemes, in particular Medishield and Life Annuity, rather than basing them on individuals.
- (ii) Reform the governance structure of the CPF focusing on ending the implicit tax on the CPF and making CPF-related data a public good by making disaggregated data freely available. The CPF board needs to be more independent and accountable to members.
- (iii) Reform the Central Provident Fund Investment Scheme, aiming to limit investment choices, and reduce investment management and transaction costs.

4.7 Thailand

Policy options include the following:

- (i) Improve replacement ratios for the nongovernment formal sector and the informal sector, bearing in mind that the rural sector may have lower costs for food and housing by undertaking the following:
 - (a) assure a minimum retirement income, which may vary by region; and
 - (b) conduct means-testing based on income and wealth, if feasible;
 - (c) provide financing through national and local government revenues on a PAYG basis; and
 - (d) discourage lump sums and enable pension portability.
- (ii) Increase compliance in pension contributions and payment of taxes generally by
 - (a) enforcing existing laws and possibly introducing new laws;
 - (b) utilizing the deterrent effect of stronger, well-publicized enforcement;
 - (c) for malfeasance, considering imposing damage remedies, which may be more effective than fines paid to government;
 - (d) considering specialized courts for enforcing economic and fiduciary regulations;
 - (e) enforcing compliance in a less intrusive way;

- (f) using a funded system with transparency and individual accounts to promote enforcement efforts; and
 - (g) introducing better accounting rules and additional disclosure to improve enforcement.
- (iii) Ensure the national pension regulator is independent of finance and labor ministries to do accomplish the following, among other tasks:
 - (a) prioritize reforms;
 - (b) promote a rational combination of funded and PAYG systems;
 - (c) mediate among stakeholders, e.g., organized labor, investment, and financial service providers;
 - (d) ensure uniformity of accounting and actuarial principles with greater transparency and coordination of pension laws with tax policy, inheritance law, and spousal and family rights;
 - (e) develop investment policies and fiduciary norms and administrative costs for funded arrangements; and
 - (f) educate the population.
- (iv) Align pension commitments with available resources by
 - (a) moving toward greater reliance on funded pensions;
 - (b) reducing reliance on investment in government or government-directed investments;
 - (c) changing tax structures to reduce the use of pension law for wealth accumulation by the wealthy; and
 - (d) if lawful, aligning PAYG pensions with available government revenues so that entitlements to government pensions do not squeeze out necessary reforms in the informal sector by, for example, reducing the annual amount that has tax benefits or capping tax-favored accumulations, perhaps with cost-of-living adjustment.

4.8 Viet Nam

Policy options include activities addressing the following:

- (i) Coverage including
 - (a) enterprise registration to ensure that workers, who must join a compulsory pension scheme, will be registered; given Viet Nam's current demographic dividend status, such policy action will help increase the number of contributors and thus reduce the dependency ratio;
 - (b) informal sector participation via a voluntary system: the informal sector is still large in terms of the labor force, but wages are still low, which in turn dilutes the incentives for workers to join a compulsory pension system—a simple and transparent voluntary pension scheme would protect them in the long term and play a role in attracting them; and
 - (c) social pension expansion for the elderly based on a universal scheme: many elderly who are living in chronic poverty with no income source have difficulty coping with economic and social shocks; many studies show that a universal social pension scheme can be effective in reducing poverty incidence among the elderly, and in keeping them healthy and socially empowered.
- (ii) Investment, including
 - (a) diversifying, including investing in international financial markets: the current pension scheme investments have provided low rates of return—diversifying the investments will reduce domestic and international financial risks; and

- (b) reducing lending to the government budget as much as possible: such lending is prevalent in pension fund investment portfolios and may precipitate a vicious circle of rising government debt and insolvent pension funds.
- (iii) Financial stability, including moving to a system of individual accounts via a notional defined-contribution scheme to
 - (a) reduce intra- and intergenerational biases in terms of contributions and benefits,
 - (b) prevent the unsustainable build-up of implicit pension liabilities, and
 - (c) reinforce the development of financial markets.

5. ASIA-WIDE POLICY PRIORITIES FOR PENSION REFORM

Given the wide disparity in general income development and existing pension systems, different countries will have different priorities in pension reform. At the same time, a number of common themes have resonance for pension reform throughout the region and emerge from the analysis of the eight country studies. In terms of the sequencing of pension reform in developing Asia, the eight reforms are arranged in terms of urgency, with the first being the most urgent. In particular, any serious pension reform process will have to begin by drawing up a national blueprint for old-age income support and building a national consensus on old-age income support. An independent national social security council, along with an independent board and pension regulator, will play key roles in building and maintaining such a consensus. Improving transparency, accountability, and professionalism, as well as promoting equity and sustainability, will help to inspire public confidence and trust in the pension system. Once a pension system is set up, achieving adequate retirement income via expanded coverage and enhanced benefits, mitigating old-age poverty, and improving returns on pension assets will be key areas of reform.

5.1 Draw up a National Blueprint for Old-Age Income Support

Most East Asian countries currently have at least some provisions for old-age income support but these tend to be piecemeal and fragmented. The first step in replacing the current patchwork of fragmented, piecemeal provisions with an integrated, coherent, and viable system is to draw up a strategic national blueprint for old-age income support. Such a blueprint will provide the overall vision of how the country plans to cope with the challenge of providing for the growing number of elderly. The blueprint should take into account country-specific factors such as the current state of the support systems and their main problems; society's preferences for the appropriate division of risk between individual, employer, and state; overall income and development level; the political economy environment; and the current and projected age structure of the population. Top political leadership is required to provide unity of direction and efficient enforcement of old-age income support policies and to give substance to the blueprint.

5.2 Build a National Consensus on Old-Age Income Support through Constant Dialogue

The country studies indicate that in most cases no systematic recognition is given to the challenge of old-age income support. Furthermore, there is very little appreciation of the huge social and financial dimensions of the challenge, and no systematic strategy to address it. The government, backed up by senior political leadership, should take the lead in moving the issue

of old-age income support from the background to the front and center of public consciousness and public debate. It should also inform the debate by communicating relevant knowledge and information to the general public. For example, the costs of failing to undertake unpopular but necessary parametric reforms, such as raising the retirement age, should be clearly spelled out in an accessible way. To cite another example, to foster greater participation in pension systems, the government should educate the general public about the risks of shortsightedness and the benefits of saving for retirement. A national consensus would contribute to the establishment of the national blueprint and efficient enforcement of retirement policies under the blueprint.

5.3 Set Up an Independent National Social Security Council

An independent national social security council (NSSC) can play a key role in building and maintaining a strong national consensus behind a sensible and viable national blueprint. The NSSC can be both an advisory and research body, and should be independent of government ministries, employer associations, labor unions, and other stakeholders. A consultative process will reflect, balance, and reconcile stakeholder interests. Related to this, the NSSC would improve coordination between ministries with some responsibility for pensions, and promote better private–public partnerships. Such a body would take a long-term view that more closely aligns pension commitments with available resources. It could also push through consistent and harmonized reform efforts on a permanent basis through advocacy, dialogue, and communication, and protect the pension reform process from undue political interference motivated by short-term political gain. An independent board and pension regulator are also needed. In terms of personnel, the NSSC and the two bodies require a balanced set of skills and experience, along with a proven track record of serving the public interest. The NSSC should also monitor the adequacy of the regulatory framework, the efficiency of supervision, and the quality of professional expertise supporting the operation of the systems.

5.4 Improve Transparency, Accountability, and Professionalism

Pensions are ultimately promises to provide old-age income in the distant future in exchange for contributions today. Therefore, beneficiaries are understandably less than fully confident that the promises will be kept. Public trust and confidence is of utmost importance in building up pension systems with widespread participation and compliance. It follows that pension authorities such as an NSSC should publicize the pension system to the public and educate the public about its key features. To inspire trust and confidence, the pension system should be managed with a high degree of transparency and accountability. Information about individual contribution records, projected benefit amounts, and the management of pension assets should be readily available in a simple accessible format. An important additional means of inspiring trust and confidence is to enhance professionalism, including more integral and strategic use of information technology and management information systems in the performance of core functions such as collection of payments and payment of benefits.

5.5 Promote Equity and Sustainability

The country studies reflect much disparity between the various segments of the population in terms of coverage, net benefits, and retirement age. In particular, civil service and military pensions tend to pay more generous benefits than those received by the rest of the population. In some cases, privileged pensions and health care for the two groups pose a major risk to fiscal sustainability. Gradual rational reduction of such disparities will increase the general

public's sense of ownership of pension systems and thus strengthen popular support for pension reform. Many of developing Asia's pension systems, especially those based heavily on defined benefit schemes, are unsustainable in the long run. Without significant reform, the financial burden on future workers will reach levels likely to generate a great deal of resistance. Therefore, achieving an acceptable degree of intergenerational equity benefits not only future workers but future retirees as well. A high-priority reform area in all countries is to raise the retirement age, which has become obsolete in light of fast-rising longevity. In some cases, the contribution rate will have to be raised substantially.

5.6 Achieve Adequate Retirement Income

In many countries, large segments of the population are excluded from the pension system. This means that expanding coverage is a first step for securing adequate retirement income for the widest possible segment of the population. The PRC's efforts to set up a rural pension system provide a good example of such efforts. However, it is costly for the main pension system to cover everyone, so supplementary arrangements such as social pensions for the poor elderly are still required. At a broader level, ensuring an adequate retirement income dictates that individuals assume greater responsibility for their own retirement needs. In practice, this is likely to involve supplementing a national defined benefit scheme for basic needs with a defined contribution scheme based on individual earnings. Some specific additional measures for boosting adequacy include raising contribution rates, limiting early withdrawals for nonretirement uses, converting lump sums into annuities⁶ and taking innovative approaches to design pay-out during retirement, improving the operating environment for providers of private pensions, and enhancing portability.

5.7 Mitigate Old-Age Poverty

Rapid population aging, in combination with inadequate old-age income support systems, is heightening the risk of widespread old-age poverty. The old are especially vulnerable to long-term poverty since their ability to fully participate in the labor market remains limited. An important first step toward tackling old-age poverty is to define the problem. In this connection, the national or local income required for a minimum standard of living should be clearly defined and its definition periodically reviewed. Social pensions financed by the government budget should aim to provide the elderly poor with the minimum income. Ideally the benefits must be means-tested and target only those who need them. However, in some cases, it may be more practical to set up universal basic pension schemes that guarantee a minimum standard of living for all elderly and rely on the tax system to improve equity. Regardless of the exact modality of the transfer, fiscal sustainability dictates that the resources be transferred more efficiently and effectively. The protection of dependent spouses is another priority area in fighting old-age poverty.

5.8 Improve Returns on Pension Assets

In principle, realizing higher returns on pension systems assets provides a relatively painless avenue for boosting adequacy since major trade-offs are not required. While the returns performance of developing Asia's pension systems varies greatly, the country studies suggest

⁶ In practice, the conversion of lump sums into annuities and other regular payments, and the more general challenge of phasing the payouts in a way that maximizes old-age economic security is difficult and challenging, given the underdevelopment of financial markets in many Asian countries.

that overall the scope for improvement is significant. However, preceding the need for high returns is a strong prudential framework that would inspire public trust in the management of pension assets. Related to this, the diversion of pension funds for ad hoc fiscal uses should be minimized, and preferably eliminated altogether. Investment functions should be separated from administrative functions, and performed by professional investment managers. If institutional capacity is adequate, the managers can invest in a more diversified investment portfolio, including greater investment in equities, to increase returns. In the absence of such capacity, simple measures such as reducing administrative costs can increase pension benefits, which is the most relevant measure of returns.

6. CONCLUDING OBSERVATIONS

Although *Pension Systems and Old-Age Income Support in East and Southeast Asia: Overview and Reform Directions* focused sharply on developing Asia's pension systems and pension reform, it is unrealistic and unproductive to ignore the overall socioeconomic context and overall policy environment in the pension reform process (Park 2011). For example, the underdeveloped financial markets of many of the region's countries constrain the ability of the pension system's investment managers to improve the returns of their investments and conversion of lump sum benefits into annuities. Therefore, enhancing returns via portfolio diversification and increasing the use of annuities is more relevant for more developed countries with sound and efficient financial systems. Put differently, policies that promote financial development are complementary to pension system reforms aimed at improving returns and the use of annuities. Likewise, successfully raising the retirement age requires flexible labor markets that can productively deploy a large number of older workers. Fiscal reforms to provide incentives for retirement savings and to safeguard pension assets, and health care reform to deliver affordable health care for the old are key components of the package.

At the same time, pension reform can reinforce and speed up reform in other areas. For example, pension portability contributes to greater mobility of workers and hence a more flexible labor market. Therefore, increasing the portability of pensions can complement other labor market reforms such as greater flexibility in the terms and conditions of labor contracts. To cite another example, fully funded schemes can contribute to bigger, deeper, and liquid financial markets. Therefore, introducing such schemes can complement financial market reforms such as strengthening the legal and regulatory framework to promote good corporate governance. Pension reform can also serve as a catalyst for health care reform since both old-age income and health care are vital components of the well-being of retirees. A comprehensive policy package for the elderly should seek to provide adequate income as well as affordable health care. The need to protect the purchasing power of pension benefits can contribute to macroeconomic stability by highlighting the importance of low and stable inflation.

East Asian countries have traditionally prioritized growth over adequate, widely accessible, and robust social protection systems, including pension systems. However, the sheer speed and scale of Asia's demographic changes and the serious shortcomings of current pension systems means that putting off pension reform is no longer an option. For Asia's growing number of elderly, pension systems could deliver a number of major benefits, including consumption smoothing over lifetime, insurance against longevity risk, and poverty relief. However, these benefits have to be traded off against labor market efficiency and, most critically, overall economic growth. The challenge for the region is thus to achieve adequate old-age income support without jeopardizing rapid growth. Building up a good pension system entails large opportunity costs, including fewer resources available for health, education, infrastructure, and, more generally, meeting the needs of the nonelderly population. Exactly how a society allocates

the large costs and risks associated with old-age income support depends on its collective preferences, especially the relative weight of social risk pooling vis-à-vis individual risk taking. Regardless of the allocation, the book provides a number of concrete and specific guiding principles for moving forward on the biggest structural challenge looming on the region's horizon, that of coping with exceptionally rapid population aging. Finally, somewhat ironically, the fact that some countries currently have only rudimentary pension systems can be beneficial. This allows those countries to learn from the experiences of industrialized countries and avoid their mistakes.

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