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ABSTRACT

Population aging is a global phenomenon but what sets Asia apart is the sheer scale and speed of its aging. Pension systems will have to play a bigger role but in most Asian countries pension systems are still underdeveloped, fragmented, and poorly financed. Asian countries need to embark on systematic pension reform now to meet the challenge of delivering affordable, adequate, and sustainable economic security to their fast-growing elderly population.

I. INTRODUCTION: ASIAN DEVELOPMENT BANK STUDY ON EAST AND SOUTHEAST ASIAN PENSION SYSTEMS

Old-age income support will be one of the biggest social and economic challenges facing Asia in the 21st century. The growing spotlight on old age income support is largely due to a seismic demographic transition which is fundamentally reshaping Asia's demographic profile. It is in this context that the Asian Development Bank (ADB) launched a study analyzing the key structural features and weaknesses of national pension systems in eight Asian countries, namely the People's Republic of China (PRC), Indonesia, the Republic of Korea, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam. The study was published as a book in December 2011.[1] The eight countries differ widely in terms of their income and development levels, as well as in the history, legacy and maturity of their pension systems. Thus, each country chapter was prepared by a pension expert[2] with in-depth knowledge of the country's pension system.

Notwithstanding diversity across subregions and countries, demographic transition is one of developing Asia's (henceforth Asia) biggest structural shifts in the medium and long term. A young continent that for the past few decades was reaping the demographic dividends[3] of a large youthful workforce is giving way to a graying continent where falling fertility and increasing longevity are driving up the ratio of retirees to workers. As the relative share of the elderly in the population rises and the relative share of the working-age population falls, the demographic dividend turns to a demographic tax.

Social changes accompanying the region's robust growth have led to weakening of traditional family-based old-age support. This suggests that formal pension systems will have to play a bigger role. However, most Asian countries still do not have well established, robust, and efficient pension systems. Only limited segments of the population are covered by pension systems. Nor is the level of benefits adequate in many cases. As a result, many Asians will be unable to achieve old-age economic security from current formal pensions systems and are thus at risk of old-age poverty. What sets Asia apart from earlier episodes of aging in other parts of the world is the sheer scale and speed of its aging.

II. DISPARITIES IN EAST AND SOUTHEAST ASIAN PENSION SYSTEMS: FOLLOW-UP ADB STUDY

Pensions are ultimately the promise of future benefits in exchange for current contributions. To be effective, a pension system requires the general public's confidence that the promise will be kept. Lack of sustainability undermines public confidence and the national consensus required for building a strong pension system. Fairness and sustainability in pension systems matters since building a robust national consensus on old-age income support is difficult in the presence of disparities that dilute the general public's sense of ownership in pension systems and thus weaken popular support for pensions. The two issues are related to each other since we can

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1 *Pension Systems and Old-age Income Support in East and Southeast Asia: Overview and Reform Directions*, Park, Donghyun, ed. Routledge, December 2011.

2 The country experts included: Stuart Leckie for the People Republic of China; Yves Guérard for Indonesia; Seong Sook Kim for the Republic of Korea; Mukul Asher for Malaysia and Singapore, Ernesto Reyes for the Philippines; Orin Brustad for Thailand; and Giang Thanh Long for Viet Nam.

3 Demographic dividend is an increase in the rate of economic growth due to a rising share of working age people in a population. This usually occurs late in the demographic transition when the fertility rate falls and the youth dependency rate declines before increasing longevity pushes up the old age dependency ratio.

think of lack of fairness as horizontal or intragenerational disparity and sustainability as vertical or inter-generational disparity.

An important finding from the 2011 ADB study was the great deal of disparities between the various segments of Asia's population in terms of pension coverage, level of net benefits and retirement age, as well as concerns about financial sustainability. Greater disparities mean lack of fairness and wider gaps that are thus more expensive to fill or alternatively entail more painful cutbacks in the pursuit of sustainability. To identify appropriate remedies, ADB extended the initial study using the same team of country experts to explore in greater depth the issues of fairness and sustainability that are especially important in the pension reform process.

This article summarizes the findings of the follow-up study of Park (2012) and sets forth recommendations to mitigate the shortcomings in fairness and sustainability in Asia's pension systems. Since the road of pension reform is long and difficult, it is crucial that the process be initiated promptly. Policies implemented today will heavily influence the capacity of pension systems to deliver old-age economic security tomorrow.

A. Heterogeneity of Disparities

The study reveals a great deal of heterogeneity in the nature of disparities among the eight countries covered in the two studies. Some of them are relatively young while others are at a more advanced stage of the demographic transition. Asia is home to a large number of informal sector workers who do not enjoy the protection of labor regulations and social protection systems. There are also internal or external migrants who are excluded from pension coverage at their work location.

While the aging trend is regionwide, there is considerable heterogeneity even within the group. For example, the Philippines is relatively young while others such as the Republic of Korea are aging rapidly. The old age dependency ratios (DR) at age 65, defined as the population age 65+ over the population 15–64 vary from 6% in Philippines to 15% in the Republic of Korea in 2010, but the gap widens to 10% versus 37% in 2030 (United Nations Department of Economic and Social Affairs 2010). While Singapore is proposing to increase the retirement age to 67, Indonesia and Thailand have difficulty to move above 55.

Average incomes 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. There is also a wide range between the PRC, that has inherited a complex legacy of heavy entitlements and Indonesia—that essentially has no social security system. Employee contribution rates vary from 2% in Indonesia to 20% in Singapore. All types of financing paths are present as well as defined benefit (DB), defined contribution (DC), and hybrid designs. The PRC and Singapore are at the opposite ends of the population range. Therefore, we can expect the policy options for promoting fairness and sustainability in pension systems to differ substantially across countries depending on their capacities, needs, and circumstances.

B. Disparities in Allocation of Output

The focus is not on the distinction between designs or financing methods. Pension programs are primarily mechanisms to allocate future output between actives and retirees, not financial institutions that accumulate assets. Housing aside, a pensioner's living standard in old age will depend on his or her ability to consume goods and services produced by younger workers. Pay-as-you-go (PAYG) and funding are both ways of organizing claims on that output. It is therefore mistaken to focus excessively on how pensions are financed while ignoring future national output and its division between workers and pensioners. (Barr and Diamond, 2009). The real question is whether the share of output allocated to future retirees is fair and sustainable in the long term? DB, DC or notional defined contribution (NDC) programs are only mechanisms to allocate a given share of the output between individual retirees.

The focus is on annual cash flows, which measure the share of the output to be allocated to pensioners in future years rather than on the concept of liabilities or implicit public debt[4](IPD) as a test for sustainability. The fiscal burden can be expressed as a percent of GDP or other annual benchmark. There is no obvious benchmark like 100% for the level of the IPD but the trend of the IPD in percent of GDP can be monitored.

As all authors point out, the elderly ratio is rising with longevity while the growth of the labor force is slowed down by decreasing fertility rates. The ratio of active workers per retiree is dramatically decreasing starting with ratios of 6 to 12 and above in 2010 to reach 4.3 in Malaysia, 2 in the PRC, 1.7 in Singapore, 1.4 in the Republic of Korea, 1.24 in Thailand by 2050 unless the eligibility for retirement is delayed well in advance (Park 2012. Clearly, the division of the output between workers and pensioners will become a critical concern for sustainability.

The ultimate disparity in coverage is between people that have access to social protection and those that have none at all. But many forms of disparities other than coverage have been identified in most countries under review:

- Civil servants and military personnel tend to receive more generous benefits than the rest of the population. In some cases, privileged pensions and health care for the two groups are significant enough to pose a risk to fiscal sustainability.

- Lower retirement ages for some groups and gender differences are a more visible form of disparity that appears less acceptable than differences in amount of retirement income that reflect differences in earnings and contribution to the economy. As the difference in the ratio of years of work to years in retirement widens, there is a perception of increasing unfairness in the level of effort and the sharing of the longevity bonus.

- Coverage is lower in rural areas. In many countries, pension coverage is largely limited to urban areas and rural residents have little or no access to pension systems.

- Differences between the formal and informal sectors i.e., among members of the same generation—is a form of horizontal or intragenerational disparity.

- Varying degrees of longevity protection which exposes some individuals to the risk of surviving too long while others are guaranteed a life pension.

- Differences in the sharing of market risks and the consequences of uncertainty on the security of income protection.

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4 The implicit public debt is the present value of the payment stream that the pension scheme will have to pay to retirees and current participants and their survivors for their participation up to the current date, assuming the rules of the scheme remain the same.

C. Importance of Fairness and Sustainability in Pension Systems

Fairness implies that small changes in relative conditions for two individuals should not generate large differences in the outcomes. Sustainability is a broader concept than fiscal sustainability or solvency, and it applies both to costs and benefits. It implies fiscal sustainability meaning costs must be affordable. But benefits must also be adequate. A pension scheme that does not pay adequate benefits will sooner or later fail due to lack of support from its sponsor or members or both. If benefits fall below a reasonable level, the risk is that pressures may be building up in the background to provide higher, more reasonable pensions. The pressures may be exacerbated by disparities between groups or individuals due to a lack of fairness.

Intergenerational equity is a concept that applies to the wider economy not only to pensions, sustainability requires fairness in the sharing of the burden of financing retirement income for a growing number of retirees with longer life expectancies. Disparity between successive generations is a form of vertical inequity when the current generation is passing over to the next generations a burden heavier than the burden they themselves accept to support currently.

III. MAIN SOURCES OF DISPARITIES IN THE PENSION SYSTEMS OF EAST AND SOUTHEAST ASIA

In this section, we explore the main sources of disparities in the pension systems of East and Southeast Asia. While there are sizable disparities between the pension programs of the formal sector, these pale in comparison to the disparities between the pension systems of the formal and informal sectors. There are also additional sources of lesser disparities.

A. Main National Pension Programs

This subsection summarizes the main disparities in the pension programs covering the civil service and the formal sector in the eight countries covered by the ADB studies. It does not explicitly cover the armed forces which benefit generally from similar coverage through separate programs that obviously present disparities but these are deemed to respond to special conditions. Unless otherwise indicated the information in this article has been extracted from the follow-up study of Park (2012).

A pattern common to all countries is the presence of two national programs—one covering the civil service (including public service in the PRC) and the other covering either the urban workers or the formal sector depending on the way the labor force is structured. Table 1 summarizes key information on the main disparity issues. The number of participants is shown to help appreciate the relative importance of each sector and thus the impact of disparities in the distribution of social protection. The acronym NRA refers to normal retirement age under the program.[5] The expected replacement ratios (RR in Table 1) for DC or NDC programs have been taken from the Organisation for Economic Co-operation and Development's (OECD) Pensions at a Glance 2011 and are shown in italic for comparison purposes. The RR is unisex but depending on the mechanism applicable gender-based rates can apply which will result in lower amounts for females and higher amounts for males, reflecting the difference in life expectancies. Gender issues can be also fairness issues.

[5] As many programs allow retirement before the NRA the average effective retirement age is generally lower, thus the summary understates the retirement burden

Table 1: Sectoral Comparison

Country	Civil Service			Urban/Formal			
	Coverage	RR	NRA	Coverage	In %	RR	NRA
PRC	40,000,000	90%	60M 55F	180,000,000	51%	58%	60M 55F
Indonesia	5,000,000	75%	57 M&F	2,000,000	<25%	Vary	55–60M&F
Korea, Rep. of	1,4000,000	67%	60>65	13,000,000	43%	40%	60>65
Malaysia	1,240,000	<60%	58	5,800,000	50%	33%	60
Philippines	1,356,000	<90%	65	27,760,000	75%	40%	65
Singapore	228	<60%	55	3,500,000	±100%	14%	62/65>67
Thailand	1,186,691	±70%	60	9,800,000	27%	±45%	55
Viet Nam	7,440,000	<75%	60M 55F	1.860.000	5%	<75%	60< 55F

F = female, M = male, NRA = normal retirement age, PRC = People’s Republic of China, RR = replacement rate.

Notes:

1. In the People’s Republic of China, the current urban system inherited the pension obligations under the old state owned enterprise system, which means all the legacy pensions will remain part of the pension debt for many years. Those who retired before 1997 made either nil or minimal contributions but they are fully entitled to pension benefits, while new participants who joined the current pension system after 1997 have to make contributions for at least 15 years before becoming eligible for pension benefits, thus creating a fairness issue. Nevertheless, the target RR for urban workers will be achieved only if long-term investment returns on individual accounts now as low as 2% match the long-term growth in earnings that is currently 10% to 12%.
2. In Indonesia, although the Jamsostek program is often described a social security,[6] it is a misnomer for a commercial savings plans that provides no social protection and where contributions plus interest minus expenses are paid out at prior termination as lump sums; less than 10% (PT Jamsostek 2008) is paid at retirement age, being in fact just the last termination. Thus for the private formal sector, we refer to the coverage of private pensions plans, being mostly DB occupational plans or DC collective programs, open to all workers administered by insurance companies or banks that are used also by many small and medium-size employers.

Source: Author compilation from country chapters (Park Donghyun, ed 2012).

The RR ratios are expressed in percentage of pensionable pay. In some programs, especially for civil servants, the pensionable pay is only a fraction of total pay because a number of allowances are not included. In Indonesia for example, only about one-third of civil servants’ total pay is pensionable thus the apparent RR of 75% is in fact only about 25% of total pay on average, even lower for higher paid workers that receive more functional allowances.

The Republic of Korea and Singapore are in the process of increasing the retirement age. Only a few countries still discriminate by gender, stipulating a lower retirement age for women whereas their life expectancy is higher than men. This unfair practice affects adversely both the costs and the benefits. There are high disparities between the replacement ratios in the public and private sector. In some cases, privileged pensions for the public sector are significant enough to pose a risk to fiscal sustainability. However, it should also be recognized that seemingly generous net pension benefits are part of the total compensation package designed to attract the needed human resources into the civil service and may reflect a different apportionment of the package between take home pay and deferred compensation. Disparities in retirement age would be more difficult to justify since this would indicate a disparity in effort and in the sharing of the longevity bonus. Table 1 shows few significant disparities in retirement ages.

[6] For example, by default and for comparison purposes, *Pension at a Glance* reports a pension estimate for coverage in the private sector based on the fact that Jamsostek is a mandatory program but states that it is possible to start claiming pension at any age with a minimum of 5 years of contribution and that pensions are paid as a lump sum.

What remains as a major disparity is the coverage, virtually 100% in the public sector versus low percentages, most below 50% in most countries except the Philippines and Singapore. As a rule, participation in the civil service program is automatic and mandatory so the coverage is nearly 100%. Outside the civil service even when participation is mandatory, the coverage is below 100% when they are based on contributions. Evasion, laxity in collecting contributions, and no earnings in the contribution period are the main causes.

Therefore, there is a lack of fairness in the treatment of the current generation. But what is a greater disparity and a threat to sustainability is the contingent liability accumulating with regards to the large fraction of the current generation that has no coverage. As that generation retires, it risks becoming a burden on the next generation that will need to provide support through assistance programs supported by future taxes, creating an additional disparity. In many countries, due to the recent creation of the scheme and eligibility rules, only a small fraction of the population aged 65 and above is receiving benefits. In the Republic of Korea for example, 70% of the elderly do not receive old age pension even though the scheme was introduced 23 years ago, a serious breach of fairness towards people that built the Korean economy.

B. Rural and Informal Sectors and Migrants

However large the disparity between the sectors in the formal work force, it pales in comparison to the huge gap between the formal and informal sectors. In most countries in Asia, the coverage of the rural or the informal sector is embryonic or inexistent with the following exceptions:

- The PRC has launched in 2008 a rural pension program that is targeting to reach gradually the 674,000,000 rural population. The NRA is 60 for all and the expected RR is 17% to 30% depending on the chosen level of contributions.

- The Republic of Korea covers the self-employed through the same program, covering employees in the formal sector other than civil servants.

Therefore for most countries, the lack of access to coverage in the rural or informal sector is a major disparity that has proven difficult to resolve but becoming more urgent as family structures fall victim to urbanization. In some countries, rural and informal are just different labels for the same reality. In addition to the PRC, countries that have an important informal sector are Indonesia, the Philippines, Thailand, and Viet Nam.[7]

Migrant workers are in a similar situation as in many countries. They lack access to coverage both in their country of origin and in the country where they work. There are some temporary foreign workers in most countries that often do not participate or are not eligible to participate in the local program. In general, periods of less than 6 months are excluded. From a disparity point of view, what is more important is the presence of a substantial number of longer term migrant workers that have become an essential component of the local workforce but have no access to coverage for a substantial part of their working career. In the PRC, the same situation applies to workers from rural areas that migrate to urban areas in search of work but are deemed ineligible to the coverage for resident workers.

[7] There is no rural sector in Singapore.

In Malaysia, foreign workers represented nearly 18% of the labor force, more than half coming from Indonesia (Sani 2010). The only compensating factor is that they would not have more coverage in Indonesia.[8] In Singapore, those who are not citizens or permanent residents are excluded from the Central Provident Fund (CPF) system. The share of non-citizens to total population was 36% in 2009.

Given the size of the foreign workforce in Singapore, equity and sustainability could be improved by reducing the gross mismatch between fiscal revenue generated by foreign workers and social program benefits made available to them. Singapore's participation in region-wide arrangements to improve working and living conditions of foreign workers merits consideration. The same consideration applies to Malaysia although to a lesser degree.

C. Cost of Coverage Expansion

The current level of coverage in Table 1 provides an indication of how much it would cost to improve fairness by expanding the coverage to the whole formal sector. For instance if the coverage is 50%, the cost would double under the assumption that the non-covered workers present a similar distribution by age and average earnings. Some of the authors have estimated how much it would cost to eliminate or mitigate disparities for a given country.

In Indonesia, contributions towards social protection in retirement were 0.86% of GDP in 2009 covering only 14.7% of the labor force, an under-achievement compared to a GDP per capita over $3,000. To extend the average existing coverage and contributions to the formal sector would require 2.13% of the GDP or 5.83% of GDP if all workforce is covered, that is a jump of 248% for the formal sector only or 678% increase if extended to the whole workforce. That led the authors to recommend to provide leadership by increasing the career duration for civil servants. This will reduce disparities in the level of effort and percolate to the state-owned enterprises and other large employers changing the cultural bias in the labor market towards a more level playing field and a lower target more affordable for the needed extension.

In Malaysia, civil servants accounted for 4.5% of the workforce and their pension costs were 1.2% of GDP; applying this ratio to the entire laborforce yields 26.7% of GDP, that is 22 times the current burden. If all poor senior citizens were paid 720 ringgit (RM) per month—the official poverty line—the gross cost would be RM1.6 billion, equivalent to 0.23% of 2009 GDP and to more than a third of per capita income. The number of beneficiaries is estimated at 185 200, 14% of those older than 65 in 2010. If a similar benefit were provided to all elderly, the total cost would be RM11.7 billion or 1.7% of GDP (Othman 2010).

D. Tax Disparity

Tax treatment is seen as a source of disparity in many countries. For example, in Malaysia, taxes on pension schemes are complex and raise many fairness issues. In addition, there is considerable variation in taxes on providers of pension-like products. This creates an uneven playing field for providers and needs to be addressed.

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[8] That situation could change soon if Indonesia implements Law 40, promulgated in 2004, that stipulates the creation of mandatory pension and savings programs. The October 2009 deadline has been missed but the Parliament finally adopted, on 28 October 2011 Law 24, creating the Social Security Administrative Body. The issue of who would control the assets had become one of the main obstacles to implementation. Since Indonesia has essentially no social security system, any program design will increase the coverage.

Singapore presents a special case of indirect taxation that produces unfair results. The asset side of the CPF balance sheet comprises non-marketable government securities with interest determined ex-post as the rate credited to CPF members (Asher and Nandy, 2009). The proceeds from the securities are widely believed to be invested by the Singapore Government Investment Corporation (SGIC), but statutory provisions do not allow the operations or investment performance of SGIC (or of Temasek, another government holding company) to be disclosed.

From 1987 to 2008, the real annual rates of return to CPF members on their balances estimated by the authors from annual report data averaged only 1.2% which was substantially lower than the real annual GDP growth rate of 8.3% and the growth rate in wages of 5.2%. If rates of wage increases are higher than rates of return on balances, the replacement rate is adversely affected because it reflects the ratio of retirement income to pre-retirement income.

Eliminating the implicit tax on CPF wealth by moving towards a market-determined interest rate and away from the current administered rate of interest merits consideration. As the tax falls disproportionately on the bottom half of the income group, this will help improve fairness and equity.

E. Legal Framework

As a rule, the retirement policy and the delivery of social protection fall under multiple jurisdictions that lead to disparities and unfair treatment of some categories of workers. The commentary for the Philippines summarizes a typical situation:

> "Without a pension overseer, directions taken by the separate and independent pension programs tend to diverge. Efforts to establish a level playing field in regulation and taxation within and across the four tiers of the Philippine pension system is a continuing process. What is needed is an independent umbrella regulator or overseer that takes a holistic view of the overall pension system rather than as separate entities that compete against each other. This regulator should be mandated to harmonize the overall pension system and steer the various components consistently towards established goals. The mandate should include review actions taken by the various policymakers/institutional regulators and enforcement of changes if these diverge from a framework that is aimed at equity and sustainability of the pension system" (Park, 2012).

Pension provisions in the PRC are under the joint oversight of four ministries and a number of local authorities: Ministry of Human Resources and Social Security, Ministry of Finance, State Administration of Taxation, and Ministry of Civil Affairs. In Indonesia, the programs would fall under the jurisdiction of at least five ministries: finance, labor, state-owned enterprises, civil service, and welfare. The Thailand chapter suggests some remedy for such fragmentation.

(i) establishing an independent pension regulator to coordinate the various schemes on a long-term basis considering both social protection issues and macroeconomic issues,

(ii) improving pension portability when workers change jobs, particularly between the government and the formal private sector.

IV. THE CHALLENGE OF LONGEVITY

All countries in Asia covered by the study are experiencing aging and projected increases in the weight of the elderly population as reported by all authors. Around the world many pension schemes have not been designed on the basis of sound actuarial principles and are unsustainable in the long run. Asian countries are no exception. Consequently, these schemes are more vulnerable to changes in external conditions such as longevity. Unless there are far-reaching reforms, the financial burden on future workers may reach politically unacceptable levels as longevity increases.

The study indicates that in most cases the level of financing is lower than what would be required to ensure the solvency of the program in the long term. Most are short of having achieved sustainability for the existing level of promises. In the Republic of Korea, the PAYG will overtake the set rate of 9% by 2030 after which the fund will be slowly exhausted unless contributions are raised. In the Philippines, the civil service would last until 2055 but the formal sector fund will be exhausted by 2031. Assets of the Old Age Pension (sometimes referred to as Social Security), the cornerstone of the system in Thailand will be depleted in 30 years. In Viet Nam, it is 2044 (Park, 2012).

Instead of anticipating the aging trend sponsors struggling to meet the costs of current longevity, the next generation will need both to postpone its own retirement and support the higher cost of pensions payable to a generation that retired too early. Thus, there is not enough room in the current budgets and lifestyles for delivering on the promises made unless resources are increased significantly or promises are adjusted to the capacity to finance them.

Given the staggering cost of extending a coverage level that is hardly sustainable for the workers currently covered, it is necessary to look at gap-reducing alternatives by first lowering the target. Curtailing the accrual of benefits for the future service can reduce the gap. A quotation from The Economist becomes here very relevant:

"Nobody seriously disputes *that employees should keep the pension rights they have accrued so far, although they may receive the benefits later; the battle is over whether employees should be allowed to keep accruing the same perks in the future."* [Coogan (2011)]

As longevity increases, the same perks become more expensive. But unless the unfairness reaches a crisis level it is unlikely that the reduction will affect benefits in payment although it may be possible to reduce generous indexation provisions to the level necessary to maintain the purchasing power. Current promises to active workers can be redefined as starting at a later date for the same monthly pension payable but to share more fairly the longevity bonus. In certain cases, the reduction in the generosity of civil service programs has been effected by closing an existing expensive program to new participants and directing new hires to a more affordable program. This is not necessarily an optimal solution as it perpetuates the disparities for a long period and results in a lack of fairness between the existing and the new civil servants.

The context is that demographic changes will increase the burden of old age to the point where unfair sharing will become unacceptable especially if combined with scarcity. Improving sustainability through increasing coverage of those in need rather than reducing the coverage of the generously covered will be less painful but that requires increasing resources available by keeping people at work longer.

More transparency is necessary to minimize resistance to an increasing burden that will remain acceptable only if perceived as fairly distributed. The rationale is that disparities can be reduced only if there are common agreed targets. It should be done gradually and resistance minimized by avoiding to reduce the amounts payable to individuals while postponing the start of the payments. Increasing the duration of work has a double bang effect: it increases collective resources and it reduces the aggregate burden of old age.

A first step is to put in place a communication program to disseminate information relevant to the management of the old age burden to the public and to decision makers and ensure the quality of that information by increasing the capacity and quality of professionals involved in the supervision, management, or delivery of social protection. Then, a process to gradually increase the duration of participation for eligibility to a full pension starting with the more generous programs can be put in place, reducing the present value of entitlements without reducing the monthly income payable.

Table 2 has been constructed to summarize systematically both the anticipated impact of aging and the mitigating factors. The increase in the percentage age 60[9] and Table 2 from columns (2) to (3) is what each author has been pointing out: over the next few decades the percentage of elderly will increase dramatically if retirement age remains around 60 or less.

Column (4) for age 65+ in 2050 shows how much the sustainability can be improved by keeping workers at work for an additional 5 years. However, that extra 5 years is not enough to return the ratio to current levels as shown in column (2).

Table 2: Elderly Ratios and Longevity

Country	**Age 60 and Above** (%)		**Age 65 +** (%)	**Life Expectancy at Age**		
	Now	**2050**		**60 in 2025**	**65 in 2025**	**65 in 2050**
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
PRC	12.3	29.9	22.7	20.6	16.7	18.2
Indonesia	8.9	22.3	16.4	18.9	15.1	16.8
Korea, Rep. of	15.6	33.2	27.4	22.7	18.6	20.1
Malaysia	7.8	20.8	15.4	20.6	16.8	18.4
Philippines	6.7	19.5	13.9	19.6	15.8	17.4
Singapore	16.0	35.0	28.6	23.8	19.8	21.0
Thailand	11.5	27.1	21.1	20.7	16.8	18.3
Viet Nam	8.7	23.5	17.1	20.8	16.8	18.2

PRC = People's Republic of China.

Source: United Nations Population Division. http://www.un.org/esa/population/publications/worldageing19502050/countriesorareas.htm

The right section shows that the burden of providing a life pension at age 65 in 2050, column (7) would still be lower than at age 60 in 2025 in column (5) but solvency margins would be improved if retirement age were increased sooner as shown in column (6). Therefore, moving up the retirement age not only reduces the number of recipients but also further mitigates the burden because it reduces the period over which the pension will be paid. If the program is a DC, it means that the same capital will produce a higher pension. The combination of these two effects substantially enhances sustainability and can become the escape road for

9 Only the Philippines and Singapore already have retirement ages above 60 but the Republic of Korea is already moving to 65.

funds that would otherwise soon start to decline. But, if a country takes too much time to move up the retirement age, it loses the race against longevity that keeps increasing and the potential gain in moving from column (5) to (6) has gone by.

The passivity ratio (or passivity index) is the proportion of lifetime spent in retirement compared to the working period. Comparing columns (6) and (7) shows that if career durations remain fixed, the passivity ratio will increase at the expense of sustainability. The old model of working 30 years and surviving 10 years on average had a passivity ratio of 33%. Where career durations and retirement age have remained unchanged but longevity has increased to 18 or 21 years, the passivity ratio has jumped to 60% to 70%. Such ratios are unsustainable while longevity keeps increasing. Living longer should mean working longer.

Due to increasing longevity combined with relatively inflexible retirement age, the passivity ratio has increased significantly. Fairness issues arise between formal pension systems that use different eligibility rules, a frequent case being retirement at a lower age or after a short career in public sector programs. Disparities will increase if the longevity bonus is shared between active workers and retirees in some programs, but pension eligibility age is kept at current levels in other programs because of political constraints.

V. POLICY OPTIONS FOR REDUCING DISPARITIES AND ENHANCING SUSTAINABILITY

In this section, we spell out three broad policy directions for reducing disparities and enhancing sustainability of pension systems in East and Southeast Asian countries. In turn, this will lay the foundation for overall pension reform in those countries.

A. Recognize the Urgent Need for National Leadership

The study clearly demonstrates that in most countries in Asia reviewed, the pension systems are still underdeveloped, fragmented, and poorly financed. Large segments of the population lack adequate coverage especially in the rural or informal sector; even mature Asian pension systems need to undertake broad and deep reforms if they are to fulfill their central mandate of delivering adequate economic security for a fast-growing elderly population.

Worryingly, most countries lack a mechanism to identify this social and financial national challenge. As a result, there is only limited awareness of the pervasive nature and dimension of the challenge and most countries do not yet have a systematic strategy to cope with it. This lack of preparedness is perhaps understandable since just a generation ago the primary demographic concern was too many young people rather than too many old people. This led to Malthusian fears and policies such as the PRC's one child policy or Indonesia's two children policy. The Republic of Korea which has tried to limit population growth for decades, had to reverse course and is now offering a wide range of fiscal incentives to encourage larger families.

There must be recognition that aging has become a major national challenge reaching beyond pensions and social protection that must be addressed urgently at the highest level of government. There must be a clear mandate for developing an integrated set of policies that will coordinate and synchronize initiatives regarding retirement policy, labor market policies, fiscal and monetary policies while facilitating financial and capital market opportunities for pension and provident funds. This responsibility could be assigned to a minister who could, in consultation with the cabinet, consider forming a national body. The body's more specific responsibilities should include making actionable recommendations to the cabinet, monitoring the results, and enforcing national policies designed to meet the aging challenge. The absence of such a body has led to lower prominence and little awareness of aging issues in the political agenda of most Asian countries.

The pension systems are currently fragmented, providing significantly different levels and varying certainty of pension benefits to different groups. This has given rise to fairness and sustainability challenges. This body could thus help provide a systematic perspective and act as a coordinating body, improving communications among different provident and pension organizations. Such a body could help mitigate against the tendencies by organized groups to pursue their interests in a manner that could seriously affect fairness and sustainability of pension benefits for all sections of the population and could potentially impact on pursuit of growth that is broadly shared.

There is only one economy to manage but often different ministries pull in inconsistent directions, which is counterproductive. A national focal point is needed where the urgency and complexity of addressing resource deployment, financing mix involving government budgets and taxpayers, sharing of inflation and longevity risks, interaction between retirement policy and labor policy, and other issues can be discussed on a national level by all stakeholders.

With the full support of top-level political leadership, the government should educate the public, initiate and sustain public debate about the urgency of aligning the retirement policy with reality. It should also inform the debate by providing the public with relevant information as a national consensus would contribute to a viable and resilient national blueprint. Top-level political leadership is required to give substance to the blueprint.

It is worth repeating that fairness and sustainability are especially significant in connection with creating and maintaining a robust national consensus for drawing up a credible and feasible strategic national blueprint for old-age income support and for building sound and efficient pension systems.

B. Deliver on the Promises

All countries in Asia are strongly urged to ensure that benefit promises made under different tiers of the pension system remain credible over time. As these promises are of a long-term nature, the pension design, administration of pension (and provident fund) organizations, management of assets, quality of actuarial projections of long-term costs and liabilities, and their transparency and accountability should be structured to make pension promises deliverable. Old-age income basic protection is a public good, building wealth and inheritance is a private responsibility.

Transitional arrangements, including their costs, would need to be given requisite consideration. This would require innovations in design of pension schemes, in pension products, and in the delivery systems for payment of pensions. There is a considerable scope for such innovations, particularly in low and middle-income Asian countries where informal sector employment share is high. A well-established pension system should be designed to achieve sustainability. Lump sum retirement benefits are significantly inferior to a monthly pension, as the former does not provide protection to individuals regarding the risks of investment, longevity, and inflation. Policymakers should ensure not only the accumulation of sufficient pension wealth but also its effective conversion into sustainable financial security over the whole retirement period, through life annuities rather than lump sums.

The current pension arrangements in Asia insufficiently address the longevity, inflation, and survivor risks. This is particularly the case for mandatory and voluntary saving schemes, where lump sum withdrawals at retirement is not uncommon. However, even in civil service schemes in several Asian countries, inflation and survivors' risks remain inadequately addressed. More context-specific research is needed on such innovations such as phased or programmed withdrawals, group annuity schemes, and insuring longevity risk in financial and capital markets.

In some Asian countries, the management systems of public pension schemes do not seem to be well established or efficient. Error and fraud should be minimal. Personal information should be properly protected and the management of the schemes should be regularly improved. In case of pension schemes with considerable accumulated funds, the governing body should have the responsibility to manage it fairly, transparently, and efficiently.

Fairness will gain from narrowing the gap between best practices in various areas of pension systems and actual practices of pension and provident fund organizations. Development of professionalism and expertise including information technology in different areas of the pensions sector needs to be promoted.

C. Live Longer, Work Longer

As proportion of life spent in retirement increases, labor market policies must be adapted to transform added longevity into increased productive capacities of the economy by prolonging economically active life. The measures adopted should impact labor market in a structural rather than palliative manner in order to fully use the experience and acquired skills of older workers. This will require major rethinking of labor management policies that will require communication and education of all stakeholders.

Organizational structures and labor management policies must be adapted to the reality of longer life expectations as the reverse is not an available solution! Rigid structures do not yield optimal results and do not justify freezing the NRA. In a context of scarcity, unfair allocations of burden or benefits will generate more resistance, thus the way the risks are redistributed does matter. Sustainability is a desirable outcome for all stakeholders and is broader than financial sustainability since it must recognize real constraints on the availability of goods and services due to high dependency ratios.

Another frequent objection to increasing the retirement age is the importance of creating jobs for young workers entering the labor market. Creating jobs for the young is important but the objection rests on the fallacy of a fixed number of jobs where a young worker can find a job only if an older worker is retired. This fallacy may have originated in the public sector, where in the civil service for instance, the number of jobs is fixed in the short term by regulation or budgetary constraints. But that is not the case for the economy as a whole and it leads to the absurd conclusion that the labor force cannot grow. The government should be the first to lead in enforcing best practices. Optimal deployment will maximize both the output and the acceptability of the burden.

Keeping at work able and trained workers that have accumulated skills and experience increases the productive capacity available to develop the economy and create more jobs. This is supported by factual information from labor force statistics covering OECD countries. A study by OECD (2011) shows that there is a positive correlation between labor force participation in the age group 55–59 and in the age group 20–24: more older workers mean more young workers. It also hurts common sense if one extrapolates the logic of the fixed jobs fallacy: why not retire everybody at age 50?

If retiring older workers made room for younger workers, then as the employment rate of older workers falls, then that of the younger workers increases. But this is not the case. A likely explanation is that a lower retirement age increases the burden on the economy and makes labor more expensive due to the higher cost of pensions and the lower return on the investment made to recruit and train workers.

Previous estimates of future mortality improvements have generally underestimated increases in longevity and a fixed retirement age is likely to become unsustainable. Increasing the retirement age has also proven to be generally a difficult political decision while individuals need to plan ahead. Therefore, a dynamic approach is recommended stipulating automatic retirement age increases on par with longevity since it will be easier to delay an increase if it becomes unnecessary.[10] Prepare for the worse, hope for the best.

If longevity continues to increase as expected, modest incremental changes in retirement ages will become inadequate and a deeper re-thinking of the concept of retirement and the use of human resources will become necessary. Historically, fixed retirement ages are a relatively new concept.[11] The current linear career model will have to be dynamically adjusted to a new and more flexible lifestyle model. It may be that free time should be spread before and after retirement and that it would be a win-win solution, for example, to allocate more to the period when it can be used for personal development, participation in community activities, leisure, and quality time to make family life more enjoyable for all.

Although a radical change will take time, there are already efforts made to introduce more flexibility and we can find groups in the society that are actually following this pattern to a certain extent, general practitioners for example. The generalization of this approach would represent a major cultural change for the society in general and will extend over a generation. However, steps can be taken in that direction like continuing education and training that would help keep people longer at work. Increasing careers from 30 to 40 years of service needs to be done gradually, thus planning and communication must start now.

[10] According to the OECD publication quoted above 16 countries have already introduced life-expectancy links in their mandatory retirement income programs (OECD 2011).

[11] Bismarck introduced an Old Age Pension program in 1889, setting the retirement age at 70. Prior to 1950, the average pensionable age in OECD countries was about 64 for men and 63 for women. Despite increasing longevity it declined gradually reaching a low point in 1993. It has been increasing since.

VI. FINAL OBSERVATIONS

Making pension systems more equitable and sustainable is a necessary but not sufficient condition for overall pension reform since there are many other dimensions of pensions systems. One example is the choice of an optimal financing path to enhance affordability. In addition, pension system is only one part of old-age income support. Nevertheless, promoting fairness and sustainability in pension systems will go a long way toward establishing sound and efficient old-age income support in Asia against the backdrop of rapid demographic change and weakening family-based support.

Asian policymakers have been slow to recognize the central role of the retirement age in workers' career durations and its impact on economic output. They have generally been timid about proposing increases in retirement age and implicitly rely on future growth to bail them out of unsustainable pension commitments. However, reality is sinking as many schemes are simply unsustainable. Furthermore, no provisions are being made for the needs of the informal workforce or the segment of the formal workforce that is not covered by pension systems. The gaps are staggering and so is the gap in fairness.

A country's biggest asset is the capacity of its labor force to engage in productive work. Therefore, extending the duration of workers' careers is an optimal solution and more flexibility will help tap more human resources. Everytime an able worker is forced to retire, the government loses a taxpayer and GDP is reduced. The sooner this waste stops, the more human resources will be available to expand output, enhance the standard of living, and expand the coverage of social protection systems.

Rising pressure on costs has already led some countries to promote more sharing of the burden with the private sector and individual participants. However, incremental measures will not be sufficient—a paradigm shift is becoming necessary. A country cannot prosper if it keeps paying more and more people not to work. The world has changed, policies need to change too. It is becoming urgent to promote awareness, educate stakeholders, develop capacity, and initiate changes promptly as delays in adjusting to new realities will entail far higher future costs.

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Reducing Disparities and Enhancing Sustainability in Asian Pension Systems

Pension systems in Asia are still underdeveloped, fragmented, and poorly financed. The paper highlights the need to undertake systematic pension reform to provide affordable, adequate, and sustainable economic security to the region's large and growing elderly population.

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