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Gender and Pensions

The "Gender Pension-Gap" in the Aging Societies of East Asia

A Policy Note from the East Asia and Pacific Umbrella Facility for Gender Equality

Over the years pension systems have been an essential policy tool for the economic protection of older adults across countries and regions. But in a context of widespread inequality, not everyone enjoys the same level of protection. Because women's life courses are different from men's, pension systems often have different outcomes for women and men. With populations aging in East Asia, the gender pension gap is affecting more and more women. This note summarizes the results of a study that examined pension policies and their gender dimensions in several countries of East Asia.

East Asia and the Pacific (EAP) is aging faster than any other region in history. The region is already home to 36 percent of the world's population over 65 years old and, by 2040, the working-age population of countries such as China, Japan and Thailand will shrink by 10 percent. To address the challenges to development posed by these changes, more women will have to join the labor force, and labor, health, and pensions systems must be reformed to protect popular welfare and ensure economic growth.

Gender equality is a challenge confronting pension systems around the world as growing numbers of women enter, participate in, and exit the labor market, challenging contributory pension systems to guarantee universal and adequate pension benefits for women. The issue has received insufficient attention in the developing world, including in East Asia, often for lack of gender-disaggregated data.

This note presents findings from a World Bank review of pension policies and their gender dimensions in eight countries of the East Asia region where the aging of the population is already advanced or expected to accelerate in coming years.[1] The review examined the labor force behavior of women aged 45 years and over in China, Vietnam, Thailand, Indonesia, Mongolia, Republic of Korea, Malaysia, and the Philippines, investigating the key policy and behavioral drivers of their observed labor force participation and withdrawal. The review supplements

empirical and policy analysis with qualitative insights from focus groups and individual interviews with women in the focus countries who are nearing retirement age or have already withdrawn from the workforce.
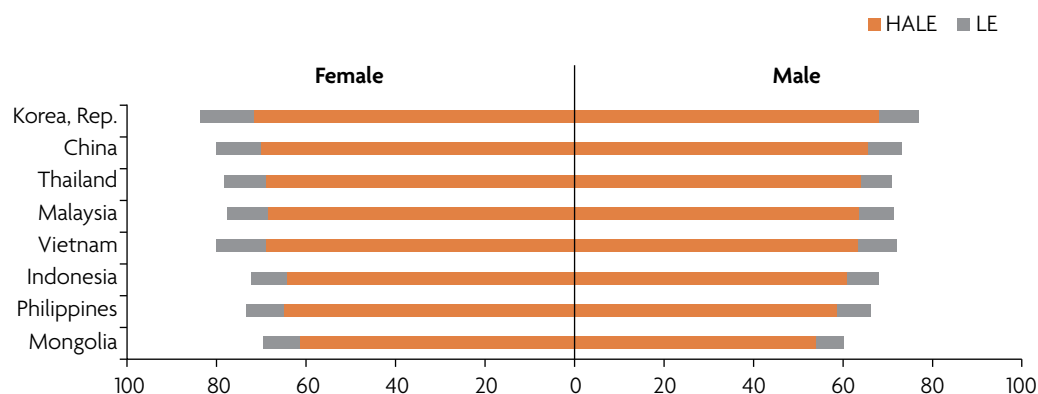
The results presented here fill important and policy-relevant knowledge gaps on pensions and retirement and on gender differentials in endowments, economic opportunities, and well-being at older ages.

Pension systems

Pension systems serve two main goals: consumption smoothing and poverty reduction in old age. In most pension systems, the individual's employment and earning history is the basis for calculation of the benefit, thus serving the consumption-smoothing goal. The second goal—poverty reduction—is achieved through use of a variety of instruments, including redistribution in the benefit formula, guaranteed minimum benefits, and universal benefits in the form of a social pension (Palacios and Knox-Vydmanov 2014). Among the aspects of pension system design that have gender-differentiated effects are, in addition to retirement age, vesting periods, survivor benefits, maternity leave, and pension indexing.

The gender pension gap, a cousin to the better-known gender pay gap, reflects gender differences in three areas: demographics, the realities of the labor market, and the design of pension systems. Women tend to live longer than men (figure 1), swelling the share of women among the elderly and stretching their pension benefits across more years. Women are paid less than men (table 1), so their pension contributions are lower. And they are less

Figure 1.
Life expectancy (LE) at birth and healthy life expectancy (HALE) at birth for both sexes in eight EAP countries in 2013

Source: Murray et al. (2015).

Table 1.
Gender wage gap in eight EAP countries, latest available year

Country	Gender pay gap (% difference in average wage earned by women and men)
China (2011)	30.0
Indonesia (2010)	30.4
Korea, Rep. (2006)	36.9
Mongolia (2011)	18.9
Vietnam (2010)	13.9
Malaysia (2013)	4.5
Thailand (2011)	3.5
Philippines (2013)	−6.1

Source: ILO (2016); for China, Li and Song (2011); for Indonesia, Taniguchi and Tuwo (2014).

likely than men to work, particularly at jobs that offer pension benefits (table 2). Those who do take formal jobs tend to have shorter careers than men, either because they start later (in order to pursue additional education), because they interrupt their careers to raise children, or because they retire earlier—to care for elderly relatives, for example, or simply because the law in some countries permits them to do so.

Pension systems in the eight EAP countries covered in this note emerged at different times. In four countries the pension system was introduced in the 1950s: China (1951), Malaysia (1951), Mongolia, and the Philippines (1954). The other four introduced their systems more recently: Korea (1988), Indonesia (1992), Thailand (1991), and Vietnam, where in 2005 the small system for public sector workers (1961) was expanded to the private sector (Palacios 2014).

The eight systems also differ in their design (table 3). Six have mandatory defined-benefit pensions, whereas three have defined-contribution schemes. The level of benefits is high in three countries; in the rest it remains low. Seven countries also have noncontributory (social) pensions, three of which are significant; the other four, less so. The degree of redistribution is large in four countries, moderate in one, and small in three. Countries also differ with respect to the degree of integration of the civil service into the pension system.

Table 2.
Ratio of employed women to employed men in EAP countries, 1992–2012

	1992	1997	2002	2007	2012
Vietnam	93.8	94.9	94.0	93.8	93.5
Mongolia	87.2	87.1	87.4	86.6	84.9
Thailand	85.8	86.0	86.4	86.0	84.6
China	81.8	81.8	81.5	79.7	78.6
Korea, Rep.	65.2	68.6	69.7	71.7	71.4
Philippines	56.5	58.4	63.2	62.9	65.1
Malaysia	52.1	51.1	55.1	60.2	62.6
Indonesia	60.0	59.4	56.9	58.5	59.6

Source: ILO (2015).
Note: The overall ratio includes all forms of employment.

Table 3. Combined elements of pension systems in eight EAP countries

Country	Social pensions	Type of scheme DB	Type of scheme DC	Target benefit	Degree of redistri-bution	Member risk	Civil servants	Normal retirement age (M/W)
China	Significant	X	X	High	Large	Low returns on DC	Parallel	60/55
Indonesia	None		X	Low	Small	Low returns on DC; longevity risk	Parallel	55/55
Korea, Rep.	Significant	X		Low	Large	Sponsor risk/default	Integrated	60/60
Malaysia	Small		X	Low	Small	Low returns on DC; longevity risk	Parallel	55/55
Mongolia	Small	X		Low	Large	Inflation risk; sponsor risk/default	Integrated	60/55
Philippines	Small	X		High	Large	Inflation risk; sponsor risk/default	Parallel	65/65
Thailand	Significant	X		Low	Moderate	Inflation risk; sponsor risk/default	Parallel	55/55
Vietnam	Small	X		High	Small	Sponsor risk/default	Partly integrated	60/55

Source: Palacios (2014).
Note: DB = defined benefit; DC = defined contribution. The "target benefit" expresses the share of the beneficiary's former income that is to be replaced by the pension.

The level of benefits and the extent of coverage are particularly critical aspects of the pension system. The gender pension gap created by demographic and labor-market differences between men and women can be mitigated by ensuring that pension systems provide broader coverage (i.e., through social pensions), greater redistribution, survivor benefits, and regular indexing to maintain adequate income at older ages, thus taking into account women's longer life expectancy.
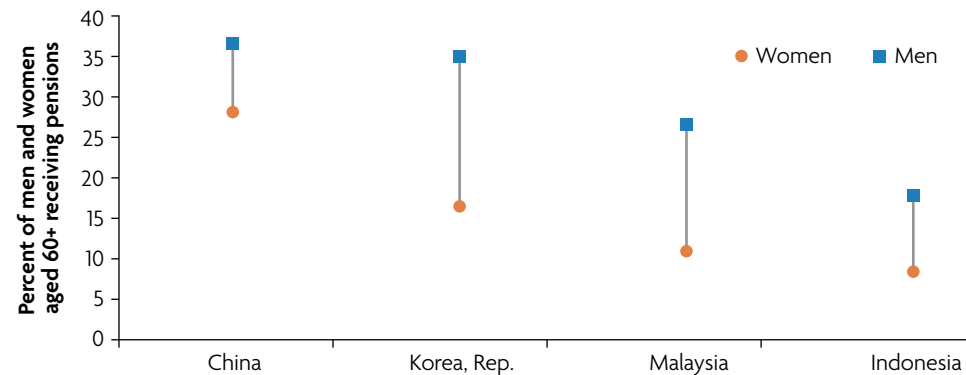
Coverage

The period between 2006 and 2010 was notable for the spread of noncontributory (social) pensions in EAP countries (Palacios 2014). This major element in the 2007 reform in Korea expanded coverage significantly in that country (Kim 2013). China and Thailand have followed a policy of extending social pension coverage to the vast majority of those not eligible for contributory pensions. Vietnam's social pension, by contrast, was designed for a narrow population and still covers only a very small proportion of the elderly. Coverage is high in Mongolia among the elderly but shrinking for those of working age. In Indonesia the coverage of the defined-contribution system is very low, and no social pension or other broad form of social assistance addresses this challenge (Palacios 2014).

In the analyzed countries, the clear divide in coverage by gender is paralleled by an urban–rural divide. Pension coverage for elderly women is lower than for men in China, Indonesia, Korea, and Vietnam (figure 2). In absolute terms, older women's access to pension benefits is best in Thailand and urban areas of China. Their coverage is lowest in Indonesia, Korea, Vietnam, and rural China.

The data do not allow us to make conclusive statements about the gender gap in coverage in Mongolia or the Philippines. But available evidence suggests that Filipino women are discriminated against in terms of pension coverage, both as a result of the labor-market structure and because of the policy governing inclusion in social insurance (Casals n.d.; Mesa-Lago, Viaja, and Castillo 2011). On the other hand, Mongolia has relatively high overall pension coverage, which, combined with small differences in men's and women's labor participation, suggests that pension coverage for women in Mongolia does not differ significantly from that for men.

In terms of pension system design, policies related to vesting periods and maternity leave contribute to the lower coverage of women. The vesting periods in the EAP countries under study are 10 years (Philippines), 15 years (China, Indonesia, Thailand, Vietnam), and 20 years (Korea and Mongolia). There is no vesting period in Malaysia. Considering the employment-to-population ratio for women in various age groups, combined with the share of women in wage employment, we can calculate the average expected years of wage employment for women until the age of 60: in six of the countries (the exceptions being Malaysia and the Philippines), the average expected years are not sufficient to meet the vesting period.

Figure 2.
Pension coverage by gender in China, Korea, Indonesia, and Malaysia

Source: Palacios (2014), based on CHARLS data; for Malaysia, Masud, Haron, Hamid, and Zainaluddin (2006).

The result reveals a need for pension and labor policy coordination that would, on the one hand, encourage women to spend more time in wage employment and, on the other hand, adjust the vesting requirements to the existing labor-market patterns.

Although women in EAP countries have access to maternity benefits, that access differs in duration, source of financing, coverage, and effective implementation (or enforcement). Coverage is lowest in Indonesia and highest in the Philippines. However, in no case are periods of maternity counted as employment for purposes of computing pension levels. In developed OECD economies, by contrast, periods of childcare are counted in one way or another, depending on the structure of the country's pension system (D'Addio 2013).

Benefit level

The second key dimension of the gender pension gap is the level of benefit. Overall, the benefit calculations practiced in the region do not contribute much to the size of the gender pension gap in the EAP countries under study. In countries where the gender gap is larger (China and Vietnam), the overall replacement rate is also larger.

As noted, women receive lower pensions owing to shorter working careers and lower wages. These differences can be accentuated if retirement ages for women are lower and benefits are linked to lifetime contributions. On the other hand, they can be mitigated by universal social pensions or by redistribution in the pension formula (as often found in defined-benefit plans). Finally, because women tend to live longer (and spend more years in retirement), pension indexing can affect the gender pension gap. Ad hoc indexing and indexing to prices can put older women at risk of falling into poverty.
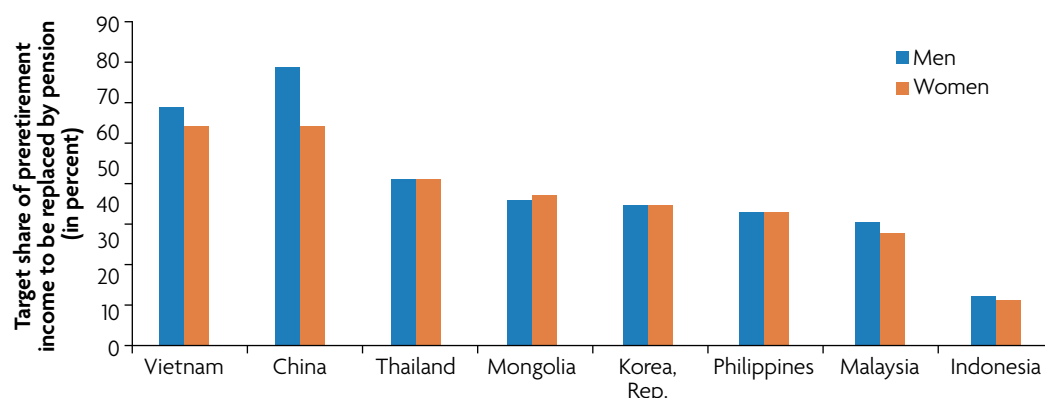
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A key indicator of adequacy of the pension level is the replacement rate, that is, the value of an individual's pension as a percentage of earnings when working. Men's replacement rates in most EAP economies are not only roughly similar but also comparable to the level found in the 34 countries of the OECD, which, in 2012 was around 54 percent (OECD 2013). Replacement rates for women in the region tend to be lower than men's, primarily because women take their pensions earlier. Differences in the mandatory retirement ages for men and women, or in the ages of pension eligibility (where retirement is not mandatory at a certain age), will obviously reinforce gender differences in participation in the workforce later in life, with important effects on relative pension wealth and financial security of older men and women.

When women have access to pensions after a full working life they can expect benefits that are around the OECD average level—as in China and Vietnam. In other countries, as shown in figure 3, the target benefit level (implied in pension policy by the combination of accrual rates and assumed career history) is around 40 percent. The precise levels are artifacts of the design and targeting of individual pension systems. Korea relies on a combination of partial funding and modest benefit targets in order to ensure sustainability. Thailand's main pension scheme aims at modest benefits, but even so, because of long retirements and low

Figure 3.
Target gross replacement rates for average wage earners in East Asia countries

Source: OECD (2013); Wiese (2006) for Mongolia.

contribution rates, is projected to run deficits in about two decades.[2] Mongolia offers a mix of social pension and non-defined-contribution benefits. The low replacement rate for Indonesia reflects the small size of the mandatory contribution.

Comparing the level of target gross replacement rates for men and women, figure 3 reveals three cases. There are no differences in projected replacement rates in Korea, the Philippines, or Thailand, as the retirement age for men and women in these countries is the same. In Mongolia, the expected replacement rate for women is *higher* than for men despite the lower retirement age of women. This apparent anomaly reflects the presence of social pensions and the rules of the non-defined-contribution system (Wiese 2006). In the third group of countries—China, Indonesia, and Vietnam—one finds a gender gap in the expected pension level owing to the lower retirement age for women. The difference is greatest in China.

Only two of the analyzed countries offer systematic and regular adjustment of pension benefits. Korea and Vietnam are the two exceptions (table 4), and the first is only partial: Vietnam indexes benefits to prices in principle, but in practice indexing is subject to available budget and further adjusted each year by the legislature. In other countries indexing is based on governmental discretion or done only infrequently. In these countries, women are exposed to the risk of inflation or declines in benefit levels (relative to prices). These practices can exacerbate the pension gap between men and women, putting elderly women at risk.

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2. By contrast, the pensions of civil servants in Thailand are much higher than for private sector workers (Palacios 2014).

Table 4.
Pension indexing in EAP countries

China	No formal indexation rule, though historically periodic adjustments have kept pensions largely in line with price increases.
Indonesia	The pension is a price-indexed annuity based on sex-specific mortality rates.
Korea, Rep.	Pensions are price-indexed.
Malaysia	For civil servants benefits are not indexed to prices but are changed periodically when salaries are revised.
Mongolia	The scheme has no automatic indexing and historically had years of under-indexing of benefits after retirement, reducing their real value.
Philippines	Indexing is done periodically based on price inflation, wage growth, and the financial state of the fund. The underlying assumption is that this ad hoc adjustment will keep up with price inflation.
Thailand	Indexing is discretionary.
Vietnam	Pensions increase in line with prices, subject to budget availability and annual action by the National Assembly.

Source: OECD (2013); Park (2012) for Malaysia; national sources for Mongolia.

Survivor benefits

Derived pension rights for survivors (usually widows) can compensate for some of the pension gap created by the higher participation of men in salaried employment and wider pension coverage for men. In all the studied countries, some form of survivor benefit is provided.

The level of benefits is set at different levels but usually ranges around 50 percent of the decedent's pension amount—a bit lower than in the developed countries. In Malaysia and Philippines, full benefits are paid; in Korea and Mongolia, a fraction. In Vietnam the benefit is a fraction of the minimum wage. China, Indonesia, and Thailand offer lump-sum survivor benefits, which do not protect widows against poverty in later years.

It is important to ensure that long-term provision of adequate benefits is provided to older women through survivor benefits, especially if they are not covered by a pension from their own economic activity.

Putting it all together: Ranking the pension systems

To assess the adequacy of the pension system and the gender pension gap in the eight EAP countries studied, six indicators were combined: (i) pension system coverage (the share of women receiving benefits); (ii) expected years in wage employment (that is, the average period of contributing to the pension system); (iii) the projected pension benefit for female average earners, which reflects the absolute level of pension provision in different countries; (iv) the difference between the level of men's and women's pension benefits at average wage levels; (v) the degree of redistribution toward retirees who earned lower wages (to take into account the larger share of women at lower wage levels); and access to and level of survivor benefits.

Photo: World Bank

Table 5.
Ranking of the pension systems of eight EAP countries

	Coverage, in terms of the share of women receiving pension benefits (2)	Expected years in wage employment (1)	Pension level for women earning average wage (2)	Difference between men's and women's benefits at average wage (1)	Degree of redistribution toward those who earned lower wages (1)	Survivor benefit (0.5)	Overall ranking
Mongolia	1	7	4	1	4	3	1
China	3	3	2	6	2	8	2
Thailand	2	5	3	2	5	8	3
Vietnam	4	6	1	5	5	3	4
Korea, Rep.	5	4	5	2	1	3	5
Philippines	7	2	6	2	3	1	6
Malaysia	6	1	7	4	5	1	7
Indonesia	8	8	8	3	5	6	8

For each selected indicator, the countries are ranked in order from 1 (the highest or more equal value) to 8 (the lowest or least equal value). The overall indicator is calculated as the weighted average of ranking in the six areas. Two indicators (coverage and pension level) are given a weight of 2; survivor benefit is weighted at 0.5; the other three indicators have a weight of 1.

Table 5 presents the results of the ranking. Overall, women are in a relatively good situation in Mongolia, China, Thailand, Vietnam, and Korea. Larger challenges are found in Indonesia, Malaysia, and the Philippines.

The adequacy of a country's pension system and the size of the gender pension gap must be understood in light of the country's demographics and its labor market. In terms of demographics, the key questions are these: How fast is the society aging? Are sufficient numbers of younger workers paying into the system to keep it solvent? How much longer than men are women living? In terms of the labor market, the questions are these: Are women as likely to be employed as men and for as long? Are they equally or differentially likely to work in

jobs that generate pension contributions? How close are their wages to men's? Are women being rewarded for their better education?

Taking all of these dimensions into account reveals significant diversity in the EAP countries. The situation of women in the labor market is most equal to that of men in Thailand, the Philippines, and Vietnam; it is least equal in China, Indonesia, and Malaysia. In the last two, inequality in the labor market interact with pension policies to create particularly large gender pension gaps. The countries that offer the most equal pension policy for men and women are Mongolia, Thailand, and China. The population is aging fastest in China, Thailand, and Korea; most slowly in Indonesia and the Philippines. But in all eight countries the demographic challenge is becoming increasingly important.

Photo: World Bank

Policy recommendations

Several overarching policy issues are apparent.

- Social and labor market policies will have to adapt to population aging throughout the region.

- Women are an underused asset for sustaining economic growth, especially given their growing tendency to become better educated. Their potential can be realized only if they have equal opportunities for employment as well as equal social protection.

- To address poverty among elderly women, access to wage employment and pension benefits are critical.

- Women have shorter working careers owing chiefly to family responsibilities (and secondarily to longer periods of study). Policies to compensate these breaks in formal employment are an important and missing component of pension schemes.

- Universal social pensions can shrink the gender pension gap and protect against poverty in old age.

- Regular and predictable adjustment of pension benefits can prevent retirees from falling suddenly into poverty.

Given these challenges, there is a need for further research and analytical work to support evidence-based policy reform in the region. The work to be done includes understanding women's life courses and the interactions among employment, family activity, and future pension rights. Presently there is a dearth of information on the level of pension provision for women; in some countries, information on pension benefits is not broken down by gender. Increasing the availability of such statistics would enable a better understanding of current policy outcomes from the gender perspective.

Future modeling work should explore the causes of the gender pension gap to determine which factors—labor market participation, wage gaps, retirement age, or longer life—contribute most to the gender pension gap. Further exploration of possible policy reforms in the area of maternity leave and survivor benefits is also warranted.

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The UFGE aims to strengthen awareness, knowledge, and capacity for gender-informed policy making. It supports the priorities identified in the East Asia and Pacific Regional Gender action Plan as well as in the EAP Country Gender Action Plans.

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