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Population change and the economic security of older people in Asia

Populations are growing older everywhere in the world, but the pace of population aging in Asia is unprecedented, primarily due to fertility decline. Fewer children in a population mean that the proportions at working and older ages grow larger compared to the proportion of young people. And as these fewer children grow up, the proportion at working age also declines, causing the proportion in the old-age group to expand. Improvements in longevity also lead to larger proportions of elderly.

Asia's unprecedented rate of population aging has led to policy concerns about how the region's growing elderly populations are being cared for and supported. How many of today's elderly remain in the workforce, and how much do they earn? To what extent do they support themselves from assets acquired during their working years? How do families and governments meet the needs of elderly people who consume more than they produce? And what does the future hold? The National Transfer Accounts (NTA) project is helping to answer these important questions by providing estimates of labor income, asset income, public and private transfers, and consumption and saving by age in more than 50 countries around the world.

In 2015, the Asia Pacific Regional Office of the United Nations Population Fund (UNFPA APRO) and the East-West Center launched a project to expand and update NTA analysis in Cambodia, China, India, Indonesia, Lao People's Democratic Republic (PDR), the Philippines, Thailand, and Vietnam. Since then, Bangladesh and Malaysia have also joined the project. This issue of the *NTA Bulletin* highlights early findings on support systems for the elderly in these and other countries. Some of the results reported here are preliminary and should be interpreted with caution.

Growing proportions of the elderly

In countries such as Japan, expanding elderly populations have been making headlines for decades, but populations are also aging in Asia's middle- and lower-income countries. According to current United Nations projections (2015), the proportion of Vietnam's population age 65 and older will increase from 6.7 percent in 2015 to 18.8 percent in 2045. In fact, over this 30-year period, the proportion in the 65-and-older age group will more than double in every NTA country in the region.

The oldest age groups are growing even more quickly. In Indonesia, the population age 75 and older is projected to increase from 1.6 percent to 4.4 percent of the total population between 2015 and 2045. In China, the projected increase is from 3.4 percent to 12.9 percent of the total, and in Bangladesh, the projected increase is from 1.8 percent to 5.2 percent. In Thailand, the proportion of the population age 85 and above is projected to increase more than four times—from 0.9 percent of the total population in 2015 to 4.0 percent in 2045.

Because women generally live longer than men, elderly populations tend to have a high proportion of women. Thus population aging is an important women's issue. In 2015, there were 136 women age 65 and older for every 100 men in the Philippines (United Nations 2015). Among Filipinos age 75 and above, there were 162 women for every 100 men.

What are their consumption needs?

In Asia's lower- and middle-income countries, elderly people consume at about the same level as working-age adults or at a slightly lower level. In these countries, consumption by elderly populations as a whole tends to be quite low because these populations are still small. In India, for example, per capita consumption at age 70 is the same as at age 50, but aggregate consumption by all 70-year-olds is one-third less than consumption by all 50-year-olds because the population of 70-year-olds is relatively small. As elderly populations expand, however, aggregate consumption by the elderly will go up.

Individual-level consumption is also likely to rise with economic development. Today, elderly people in wealthy countries have high levels of consumption, composed largely of health services and other types of care. In Japan, for example, men and women age 70 consume, on average, 25 percent more than people age 40. As other countries in Asia experience social modernization and economic growth, individual-level consumption by the elderly can also be expected to rise.

Combine this increase in per capita consumption with the expansion of elderly populations, and the outcome will be a much higher level of consumption needs in the years ahead. One important objective of NTA analysis is to estimate how these needs might be met.

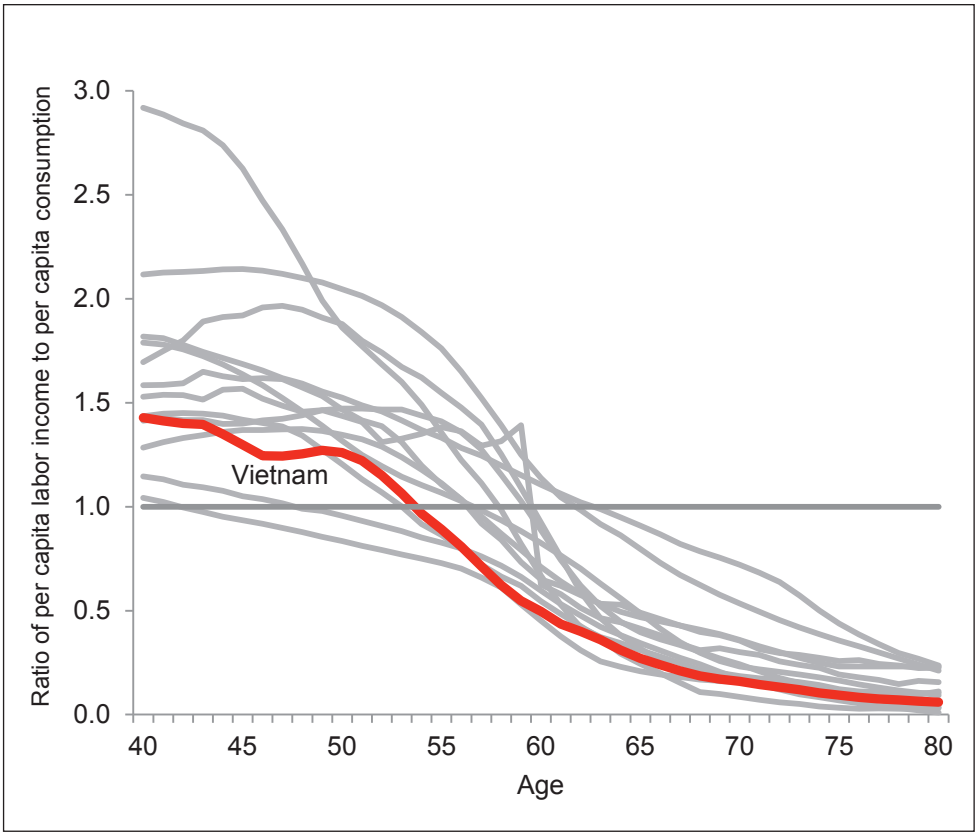

Figure 1. Average per capita labor income as a percentage of per capita consumption in a recent year, 13 economies in Asia.

Source: NTA data, 2016.

Note: In addition to Vietnam, countries represented in the figure are Bangladesh, Cambodia, China, India, Indonesia, Japan, Lao People's Democratic Republic (PDR), Malaysia, Philippines, Taiwan Province of China, Thailand, and Timor-Leste. Values below 1.0 mean that per capita labor income is less than per capita consumption.

How do the elderly support themselves?

Everywhere in the world, the elderly rely on four sources to support their consumption —labor income, public transfers such as pensions and healthcare programs funded by tax revenues, private transfers that generally come from their adult children, and income from assets, such as owner-occupied housing and saving from their working years. NTA analysis shows the relative contribution of these four sources of support for elderly populations in countries at a wide range of socioeconomic development.

Labor income

In many countries, older people support themselves, at least in part, by labor income. Their wages tend to be low, however. In high-income countries, workers are likely to be employed in the formal sector, where they are often subject to mandatory retirement provisions and inflexible labor markets. As a result, many workers leave the labor force in their 60s or even in their 50s.

Although older people are more likely to be employed in low-income countries, they generally earn very little. This may be because they are employed in low-productivity jobs, such as in agriculture or the informal sector, or because they have less education than young workers.

Throughout the region, per capita labor income tends to drop rapidly after the mid-40s (Figure 1). At age 60, workers earn less than they consume in every country but Bangladesh and Lao PDR. The pattern in Vietnam is typical. At age 60, Vietnamese on average support 50 percent of their consumption needs by labor income. At age 70, they earn 16 percent of what they consume. Raising labor income at older ages, for example by delaying retirement, might provide one important mechanism for improving support of the elderly in countries that are aging rapidly.

Asset income and support from families and governments

There is broad variation among old-age support systems among countries in Asia, but there are also general patterns that distinguish Asia from other regions of the world. Figure 2 shows the relative importance of the three other sources of old-age support in eight countries in Asia. The figure also includes five countries in Latin America, ten countries in Europe, the United States, and Australia.

The three components are public transfers, private transfers, and income from assets. Looking at populations age 65 and older, reliance on public and private transfers is measured as net transfers—transfers received minus transfers given—as a percentage of consumption in excess of labor income. Reliance on assets is measured as asset-based reallocations—asset income minus saving—also as a percentage of consumption in excess of labor income. Consumption minus labor

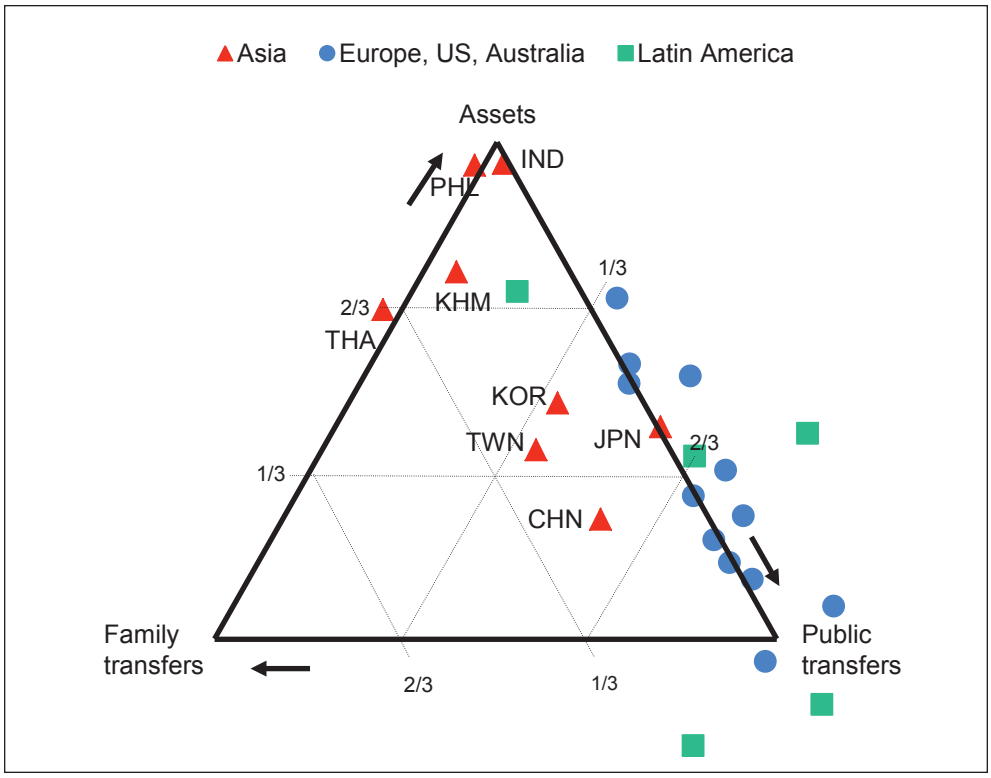

Figure 2. Public transfers, family transfers, and asset-based income as percentages of the lifecycle deficit (gap between consumption and labor income) at age 65 and older in 25 countries in a recent year.

Source: NTA data, 2016.

Note: Country designations are Cambodia (KHM), China (CHN), India (IND), Japan (JPN), Philippines (PHL), Republic of Korea (KOR), Taiwan Province of China (TWN), and Thailand (THA).

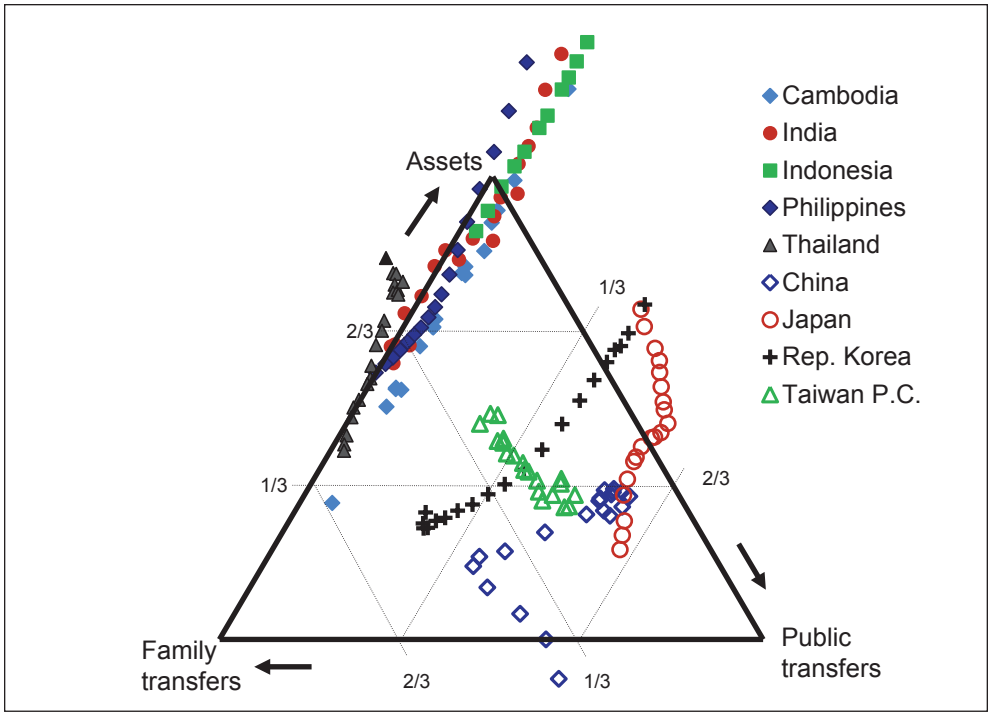

Figure 3. Public transfers, family transfers, and asset-based reallocation as a proportion of the lifecycle deficit (gap between consumption and labor income) for one-year age groups from 65 to 84 in nine Asian countries in a recent year.

Source: NTA data, 2016.

income—termed the lifecycle deficit—must equal net public transfers plus net private transfers plus asset-based reallocations.

The importance of each component is represented by how close it is to the points of the triangle. Thus the elderly in Indonesia and the Philippines, near the point representing assets, rely almost exclusively on income from assets to support their consumption. The elderly in Cambodia and Thailand support about two-thirds of their consumption with asset income.

By contrast, the elderly in many European countries rely heavily on public sources of support. Apart from China and Japan, public transfers tend to be less important in Asia. In Thailand and the Philippines, located outside the triangle to the left, the elderly pay more in taxes than they receive in public benefits.

When elderly people live with their adult children, financial transfers between the generations can be substantial, but the flow is often in both directions. Family support for the elderly, although a tradition in many Asian countries, has lost importance in recent years. Family support is more important in Cambodia, China, the Republic of Korea, Taiwan Province of China, and Thailand than in other countries, but even in these countries it accounts for about one-third or less of total old-age support. In the European and Latin American countries that fall outside the triangle to the right, the elderly actually provide more support to their children and grandchildren than they receive.

Figure 2 depicts sources of support averaged for all people age 65 and older. As such, it masks important variations between more specific age groups. Figure 3 shows sources of support for one-year age groups from age 65 to 84 in nine Asian countries. For each country, the direction of change is downward, indicating that people at age 65 depend primarily on asset-based income to support their consumption, but that at older ages, the importance of asset income declines and is replaced to varying degrees by private or public transfers.

In Cambodia, India, Indonesia, the Philippines, the Republic of Korea, and Thailand, the importance of both assets and public transfers declines at the oldest ages in favor of private transfers. Support from public transfers is probably low because very old people tended to have been employed before the introduction of old-age pensions. In Japan and China, by contrast, the decline

in support from assets is balanced by an increase in both family and public transfers, while in Taiwan Province of China, the increase is mostly in public transfers.

Challenges for public support systems

A potential problem arising from population aging is the strain on public transfer systems when governments are called upon to provide support to expanding elderly populations. To assess the extent of this challenge, NTA estimates a "fiscal support ratio" that predicts changes in the relationship between tax revenues and public transfers relative to values in a base year. Table 1 indicates the likely evolution of fiscal support ratios in selected Asian economies and the United States. The ratio is calculated by holding age-specific public transfer inflows and outflows constant while allowing the population's age structure to change.

Table 1. Fiscal support ratios (projected tax revenues relative to public transfers as percent of values in 2015) in selected Asian economies and the United States, 2020–2050.

	2015	2020	2030	2050
Cambodia (KHM)	100	102	104	104
China (CHN)	100	97	88	78
India (IND)	100	101	102	101
Indonesia (IDN)	100	102	104	108
Japan (JPN)	100	97	91	79
Philippines (PHL)	100	102	105	111
South Korea (KOR)	100	98	89	80
Taiwan P.C. (TWN)	100	100	93	74
Thailand (THA)	100	102	102	96
Vietnam (VNM)	100	100	96	86
United States (USA)	100	98	92	88

Source: NTA data, 2016.

Note: Revenues and expenditures are projected assuming that per capita taxes and public expenditures by single year of age remain constant at base-year values.

Values for 2015 are set at 100. Higher fiscal support ratios in future years suggest that tax revenues will rise faster than the cost of benefits, indicating a favorable financial situation. Lower support ratios suggest that government finances will come under strain. This projection shows substantial challenges for Japan, the Republic of Korea, and Taiwan Province of China, where public transfers to older people are relatively generous and populations are aging rapidly. By contrast, many of Asia's developing countries provide only modest benefits to elderly people. Unless benefits increase, population aging should not impose a serious strain on government finances.

Many of these countries are currently expanding their benefit programs, however. For example, the Thai government introduced a Universal Pension Scheme in 2009, and the government budget for old-age pensions jumped from 10.6 billion Baht to 22.0 billion Baht in one year (Lowhachai et al. 2016). Healthcare for the elderly is also a large and increasing cost in many developing countries in Asia, often heavily subsidized by governments.

Implications for policy

One strategy for responding to population aging emphasizes capital accumulation. If the needs of a growing elderly population are met through greater reliance on saving during the working years, then population aging will lead to an increase in assets with favorable implications for economic growth. Through this mechanism, changes in age structure can lead to a "second demographic dividend" (Mason and Lee 2007), providing higher standards of living that persist over time.

Programs that foster capital accumulation include sound banking systems, access to credit, and financial literacy, as well as general economic stability. Another strategy is to give older workers better access to labor income by offering training and reducing impediments to continued employment.

To increase saving and investment, the government of Singapore introduced a Central Provident Fund, which provides pension benefits but requires citizens to save a high fraction of their earnings through mandatory contributions. The fund has already played a role in increasing saving and investment and encouraging economic growth. Given Asia's traditionally high saving and investment rates, however, population aging is likely to lead to substantial capital deepening in the region (Mason and Lee 2012), even without mandatory schemes.

Investment in human capital is also an important response to population aging. Improvements in the productivity of each worker—fostered by investment in child health and education—can help maintain economic growth even as the working-age population shrinks relative to the elderly. In contemplating the feasibility of increasing support for older people, governments in Asia must be careful to maintain or increase levels of support for the health and education of children.

The sheer speed and scale of population aging in Asia add a sense of urgency as policymakers start planning for a grayer future. East Asia's most advanced economies —Japan, the Republic of Korea, and Taiwan Province of China—all have fairly generous public pension programs, which, in the absence of reform, will become difficult to sustain as their old-age populations expand. Thailand and Vietnam, where generous public pension programs have been implemented more recently, may face similar problems in the future.

Leaders would do well to learn from the policy mistakes of advanced economies, including fiscally unsustainable pension systems and rigid requirements for early retirement. Once inappropriate old-age support programs become entrenched, they become politically very difficult to reverse. By contrast, programs that invest in children's health and education and foster capital accumulation will ensure support for tomorrow's elderly populations while sustaining economic growth that benefits everyone.

Further reading

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