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Sustainable Development Goals, Population Ageing, and Social Security in Asia.

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SUSTAINABLE DEVELOPMENT GOALS, POPULATION AGEING, AND SOCIAL SECURITY IN ASIA

Rafal Chomik[1]

1. INTRODUCTION

Broadening social security systems

There is a growing recognition that social security systems with a wide scope and comprehensive coverage are an essential part of sustainable development and an ambition worth pursuing vigorously.[2] This is also the case in countries with traditionally family-oriented support frameworks such as Asia.[3]

The 2030 Agenda for Sustainable Development, agreed by world leaders in 2015, put nationally appropriate social security programs at the centre of the Sustainable Development Goals, which replace the Millennium Development Goals (MDGs). The SDGs envision: (i) social protection with substantial coverage of the poor and vulnerable that insure against economic shocks and address inequality (SDG1 and SDG10); (ii) universally provided health programs, that insure against health shocks and offer access to quality essential health-care services and medicines, and an adequately resourced health workforce (SDG3); and (iii) social programs that recognise the gender dimension of unpaid care via appropriate public services and infrastructure (SDG 5) (UN 2015a).

Taking account of demographic dimensions

But the implementation of such programs will be in the context of monumental demographic changes, which will see increasing absolute and relative numbers of older people in developed as well as developing countries. These shifts were described at the Second World Assembly on Ageing in 2002, as *unprecedented* (with no parallel in human history), *pervasive* (taking place everywhere), *enduring* (with no return to younger populations) and *profound* (with implications for many facets of human life) (UN 2001). For developing countries, the challenge of overcoming development problems of high fertility and rapid population growth has been effectively replaced with responding appropriately to the demographic transition. Yet, population dynamics was ostensibly missing from the MDGs agenda and much of the SDGs discussion "are not informed by the projected changes in the number, geographic location, and age structure of the population (Herrmann 2015, p5).

Ageing-related concerns and the ways that social security systems perform through the demographic transition need to be part of the development agenda. As economies grow and greater numbers of people are lifted out of poverty through employment, there is a potential risk that the old, who have exhausted their human capital, will become the most vulnerable. Ensuring the social protection and health of older people will mean their human capital can in fact be raised, contributing to economic growth. The solution is therefore a well-functioning social security system that responds to the needs of the older population.

Nowhere is population ageing so dramatic as in East and South East Asia. It is taking place at different rates but even younger Asian countries will see transitions that take fewer years than observed in the west. By 2030, dependency ratios (65-and-over/15-64) in Japan, Korea, Hong Kong, and Singapore are expected to reach between 36 and 53%, and by 2050, between 62 and 71%. At that point, a number of current middle-income Asian countries, such as China, Thailand, and Vietnam can expect higher age-dependency than what is projected for the United States.[4] In absolute terms, the numbers are vast. The continent is home to about 60 million people aged 80+, the most likely group to require care. By 2030, this will increase to over 100 million and by 2050 to over 250 million, more than half the world's oldest old population (UN 2015b; Chomik and Piggott 2013).

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[2] Social security, as it applies to older people, is defined broadly here and includes elements of social assistance and social insurance that protect people against economic risks via the retirement income, healthcare, and long term care systems.
[3] The focus here is on East and South East Asia.
[4] Note that dependency ratios are a static way of thinking about ageing that don't take account of actual levels of health and economic dependency (See Chomik et al. 2016 for alternative dependency measures in Asia).

Rapid ageing, urgent response

Expanding social security offers potential for shared growth but it is often seen as an expensive next step in development. Nonetheless, delaying it could mean costly readjustments later. For many Asian countries, there is a narrow window of opportunity of around a decade or so before the proportions of working-age populations across East and South-East Asia start to substantially decline. Now is the time to set up policies, institutions, and economic structures that will be favourable in the later stages of demographic transition, before ageing becomes a headwind hindering economic growth.

Many Asian countries are seeing ageing at lower levels of GDP than was experienced in Europe and North America. Hence, they will also need to develop social security systems at a lower level of development (Chomik and Piggott 2015). But in designing such systems, developing countries can look to the developed world as well as middle-income countries for lessons on how to design policy and for pitfalls to avoid. As with technological progress, there is potential for policy design in developing countries to leapfrog preceding developments and achieve adequacy while maintaining sustainability.

Furthermore, well-designed social spending policies not only address the needs of older people and promote inclusive growth (IMF 2014), but also embody a macroeconomic opportunity to rebalance economic growth in Asia – allowing individuals to pool idiosyncratic income and health risks and reducing the need for households to accrue excessive precautionary savings (Chamon & Prasad, 2007; Baldacci et al., 2010).

Older people's needs as the starting point

The needs of older people are the starting point in designing appropriate social programs. Here we focus on three: income to finance retirement, essential healthcare and medicines, and long term care. Other needs commonly addressed via public programs in developed countries may also be relevant – e.g., housing and social or recreational needs.

Each need is addressed to a greater or lesser degree by government, community, family and the individuals themselves, and differences exist for sub-groups within each country's population. Figure 1 summarises these dimensions (breadth, scope, and depth). It's a framework for thinking about the extent to which public social security systems can serve older people.

**Figure 1. Stylised framework for coverage of older people's needs**
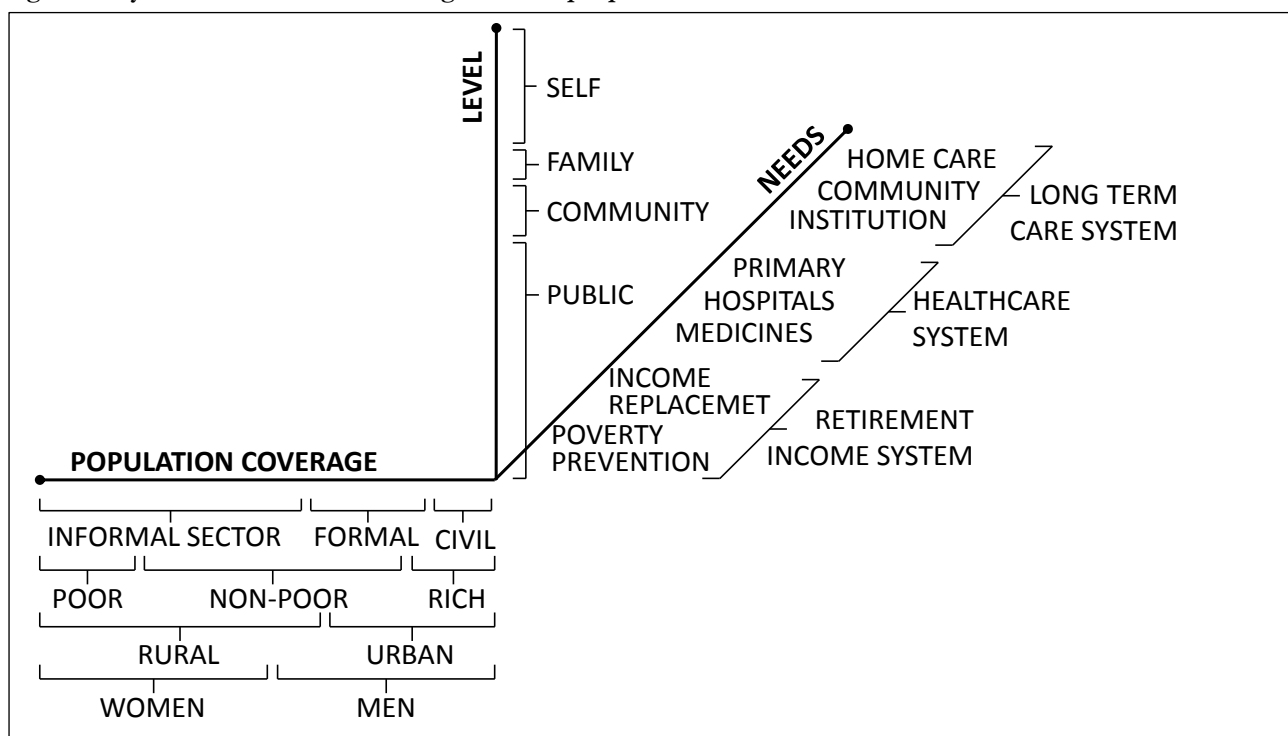
Asian societies usually see themselves as having strong family values, with high levels of cohabitation of different generations, and where the needs of the elderly are met by family members. Demographic, social, and urbanisation trends erode the family's capacity to meet these needs: children are fewer in number, they typically move to urban areas, and cohabitation declines. In

addition, trends related to the epidemiological transition, mean that health issues are dominated by non-communicable diseases (NCDs), with rising levels and potentially longer durations of morbidity and multi-morbidity.

The public system, with access to broader risk pooling and technology becomes the most viable model, while other actors retain some responsibility, whether via voluntary self-provision of savings, co-payment for healthcare, or the family's role as logistical support for public care services. Each society will find its own balance, often with a certain level of path dependence, for the contributions of each of the sources of support for different types of populations according to degree of need, capacity, fiscal considerations and appropriateness. The variations in circumstances mean the region is a laboratory for different responses to ageing. Asian countries have previously prioritised economic growth over social protection, but there is evidence of increasing expectations that government will increasingly step in to finance retirement compared to what exists now (see Figure 2). There is a potential to tap into that political desire for change (e.g., as took place in Thailand, through its social justice movement).

Figure 2. Current and preferred level of retirement income provision by source, selected Asian countries
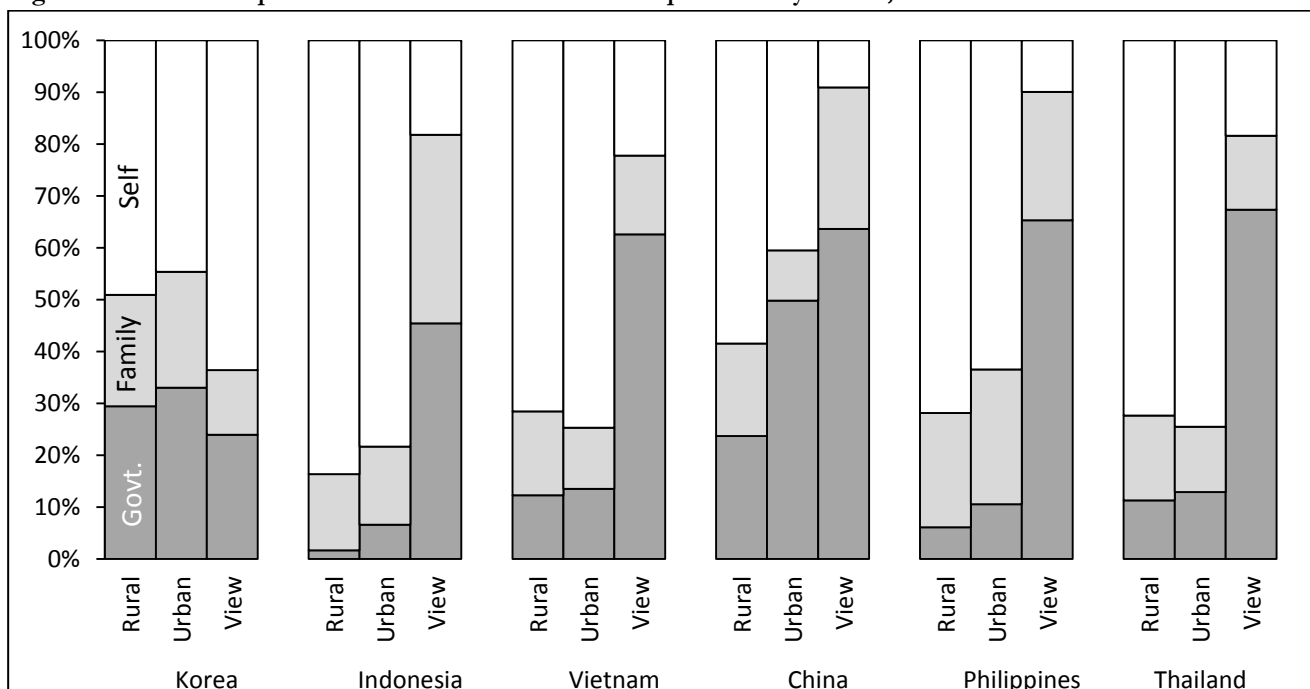
Source: World Bank (2016); Jackson and Peter (2015). Note: Current levels of income by source are for people age 60+ for years 2007-2011. Preferred level of retirement income by source based on survey question that asked "Who, ideally, should be mostly responsible for providing income to the retired?"

2. RETIREMENT INCOME SYSTEMS

Structures

Asian retirement income systems have diverse and shifting designs that to a greater or lesser degree address two forms of financial need among the elderly: (1) prevent poverty, usually via non-contributory, redistributive, social pensions; and (2) replace income by preventing an excessive drop in the standard of living after retirement, usually via contributory pensions. The systems and the challenges they face have been documented elsewhere and are only summarised here (much of the following draws on Chomik 2013a, OECD 2013a, SSA 2014, Chomik and Piggott 2015, and World Bank 2016).

With respect to social pensions, which tend to focus on the poor or informal sector, Asian countries are on a spectrum between those that have a universal pension to those using targeting (e.g., advanced age, rural regions, or low financial means), and those that have no social pension. Schemes that are broadly *universal* operate in Hong Kong (for those aged 70+), Timor (for those aged 60+), Thailand (for those with no other pension), and in Vietnam (for those aged 80+ with no other pension). A number of countries have *targeted* non-contributory schemes, including Hong Kong (for those aged 65-69), Korea, Malaysia, Philippines, and Vietnam (for those aged 60-79). Others bundle a targeted non-contributory element within an otherwise contributory scheme: China's rural and urban resident pension is heavily subsidised with (until recent reforms) immediate benefits to parents of working-age contributors, and a full basic pension after 15 years of contributions; Japan's flat-rate National Pension requires a minimum number of covered years but those with low income or broken work histories are

exempted. Cambodia, Indonesia, Laos, Myanmar, and Singapore lack any social pension provision, aside from certain pilots or limited social assistance schemes. See figure 3 for a tabulated-summary of these structures.

Contributory pensions that focus on formal private sector employees include defined contribution (*DC*) *schemes,* run publicly through provident funds in Singapore and Malaysia, and privately in Hong Kong. Some have expanded voluntary DC schemes, which tend to be used by the well off, but Thailand has just introduced a voluntary, heavily subsidized, publicly run DC scheme focusing on the informal sector. Defined Benefit (*DB*) *schemes* operate in Korea, Japan, Mongolia (which is moving to notional DC), Philippines, Thailand, and Vietnam. *Hybrid* schemes run in China (which has a pooled DB component and an effectively notional DC component) and in Indonesia (which has a provident DC fund and a new DB scheme). Cambodia, Laos, and Myanmar only have contributory schemes for civil servants but are in the process of implementing new programs.

Figure 3. Mandatory pension structures in Asian countries

	Social (Poverty alleviation)	**Contributory (Mandated income replacement)**
Cambodia	NONE	NONE
China	Targeted (for rural or non-workers)	DB/DC
Hong Kong	Targeted (65-69) Universal (70+)	DC
Indonesia	NONE	DC (adding new DB)
Japan	Targeted	DB
Korea	Targeted	DB
Laos	NONE	DB
Malaysia	Targeted	DC
Mongolia	Targeted	DB (soon NDC)
Myanmar	NONE	NONE
Philippines	Targeted (60-79) Universal (80+)	DB
Singapore	NONE	DC
Timor	Universal	NONE
Thailand	Universal (but includes pension test)	DB
Vietnam	Targeted (60-79) Universal (80+)	DB

Source: Author's compilation from SSA (various years), OECD 2013a, Chomik and Piggott 2015, and World Bank 2016

The challenges of the respective systems can be grouped in terms of coverage, adequacy and fiscal sustainability. Indeed, it is coverage and benefit levels that help us think about how well the retirement income system caters to older people in retirement as described earlier. These dimensions are summarised in figures 4 and 5 for social and contributory schemes. In general, where social schemes exist in Asia, they are often residual (covering only the poorest poor) or broad but have inadequate levels of benefit (figure 4). Contributory schemes suffer not only from coverage issues. When they come in a DC form, they can result in low adequacy, while in a DB form, they are subject to fiscal sustainability concerns. In many cases, progress is hampered by the existence of separate schemes for civil servants (not discussed here), which are commonly expensive, inequitable, and bad for portability.

Coverage

Low pension coverage of the population is by far the predominant challenge for most Asian countries. With the notable exception of Hong Kong, Japan, Korea, and Singapore, contributory scheme coverage of the working-age population across East and South East Asia is low. In China and Malaysia it is below 50%, in Indonesia, Philippines, Thailand, and Vietnam it is below 20%, and in Cambodia, Lao, and Myanmar only civil servants are covered. These levels appears consistent with stage of development seen worldwide (in turn related to workforce informality), but increasing coverage at a given level of GDP per capita appears to have become more difficult over time (Palacios 2014) even as the demographic imperative for higher coverage has grown. It's possible that too-rapid over-expansion of contributory schemes may in fact delay transition to formality.

Those that remain uncovered tend to be in the informal sector, poorer, rural, and women. They are typically not poor enough to qualify for social assistance but are either not within the scope of contributory schemes or have insufficient incentives to participate. In addition, their coverage has a time dimension – some participate in the formal sector sporadically so have low contribution densities. The typical tactic would be to lower the threshold for the size of employer or type of employee that is covered, but not so with high levels of informality. Policy-makers are realising that the solution is structural (Holzman et al 2009), requiring an expansion of tax-financed, non-contributory schemes (e.g. Thailand's 500 baht scheme), or heavily subsidised hybrid schemes (e.g., China's rural and urban resident pension or Thailand's yet to be implemented new scheme). Counting China's informal sector scheme increases coverage from 28% to over 60%. Such expansion in Asia is shown to be affordable (Lu et al. 2012, Schmitt & Chadwick 2014).

Figure 4. Social pension: coverage and adequacy, Asian and other countries, 2010-12
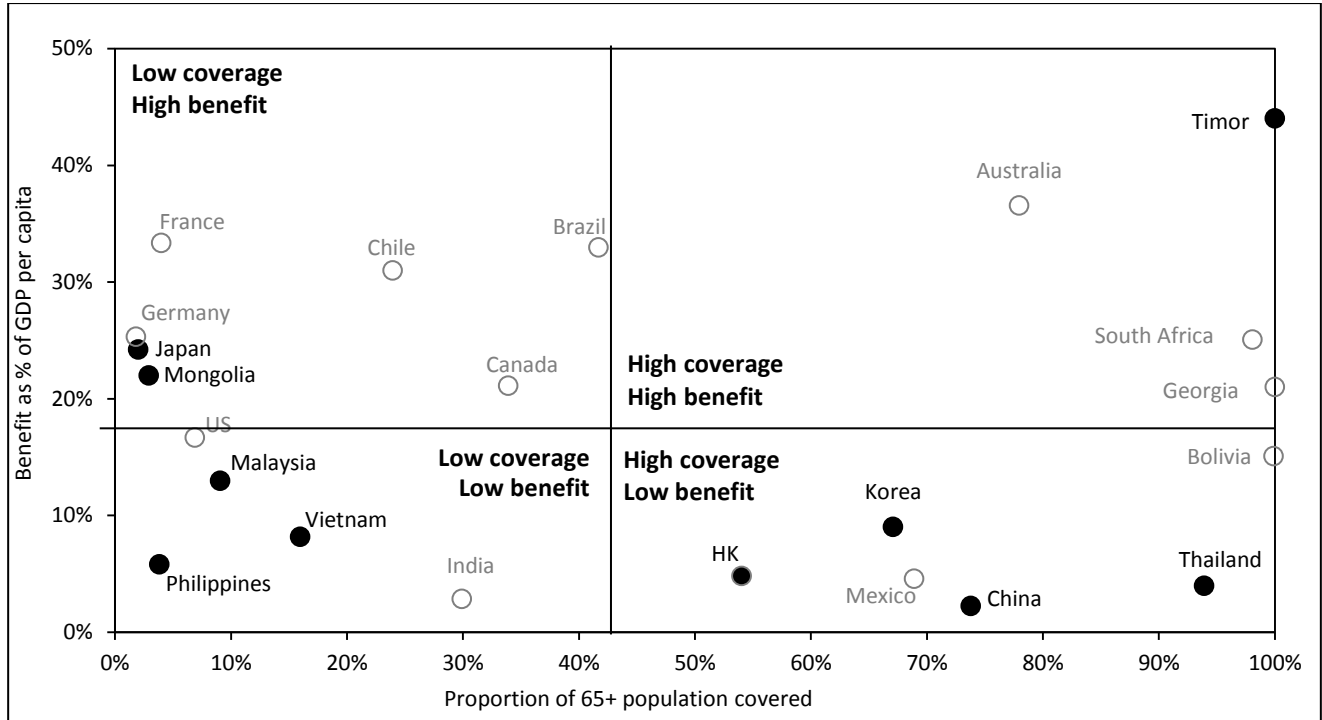
Source: World Bank (2016). Note: Coverage capped at 100% but can be higher where eligibility age is below 65. High-low thresholds are based on average.

Figure 5. Contributory pension: coverage and adequacy, Asian and other countries, 2010-12
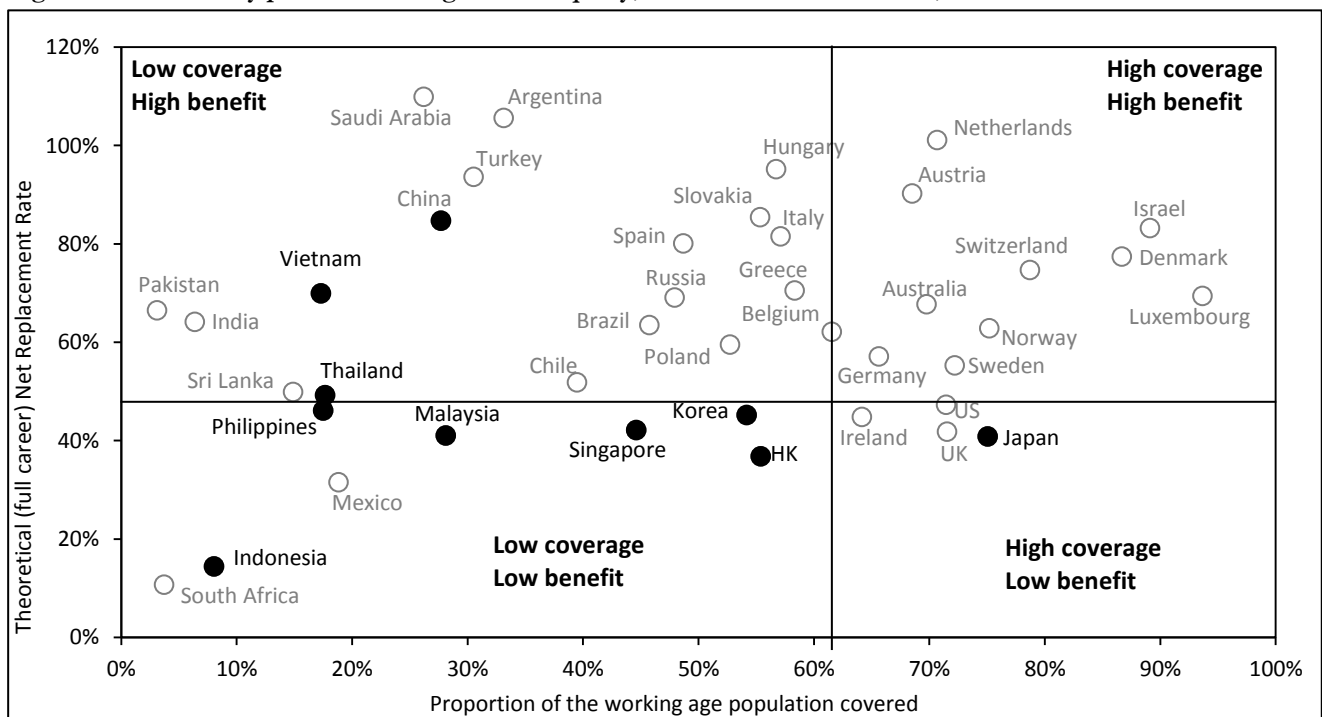
Source: OECD (2013a, 2013b); World Bank (2014a). Note: Net replacement rate based on average wage. High-low thresholds are based on average.

Adequacy

In addition to low coverage and density, low benefits in DC schemes are due to one or more of: (1) low contributions compared to equivalent OECD schemes (e.g., 5.7% in Indonesia; 10% in HK but up to a low cap; and temporary reductions in Malaysia); (2) low accessibility ages (e.g., 55 in Indonesia; 60 in Hong Kong, which has the world's highest life expectancy); (3) lower accessibility age for women (e.g., China, where, the theoretical net replacement rate could be 20% lower as a result); (4) low returns (well below wage growth in China and Singapore, mostly due to an overinvestment in bonds); (5) low preservation (e.g., Malaysia and Singapore; in Indonesia the balance can be withdrawn after one month of unemployment); and (6) lack of annuitisation (e.g., in Hong Kong, Indonesia and Malaysia payments are typically lump sums; China's DC element is designed to last 120 months but is bundled with a DB pension for life). Any development of these and particularly voluntary DC schemes also requires improvements in governance and financial sophistication (Piggott and Sane, 2012).

Sustainability

Unlike DC schemes, DB schemes can build up implicit public liabilities and become unsustainable. For now pension spending is low (figure 6). Most spend below 5% of GDP compared to OECD's 8% (e.g., China spends 3.2%, Korea 1.6%, and Philippines 1%). But many schemes are affordable only because they are still immature. The actuarial imbalances and demographic pressure are expected to result in most schemes running deficits by 2040. Design features that in DC programs result in low benefits, translate to fiscal problems in DB schemes – where governments over-promise what they are able to deliver in a mature, and ageing system. For example (1) low contributions (e.g. 6% in Thailand); (2) low and gendered retirement ages (e.g., China, Japan and Vietnam). Other problematic features include formulas that: (3) have high target benefits (e.g., China and Vietnam); (4) assess final earnings years instead of career average (e.g., Philippines and Thailand); (5) incentivise early retirement while punishing delays (e.g., Philippines and Vietnam); and (6) have poor portability (e.g., China).

Political economy

Many OECD countries (including Korea and Japan) have addressed many of these challenges after years of parametric and structural reforms (e.g., see Chomik and Whitehouse 2010; Whitehouse et al. 2009). These can act as lessons for Asian countries with existing schemes as well as those implementing new ones (e.g., Cambodia, Indonesia, Lao, and Myanmar are in the process of implementation of new schemes based on the DB model). Of course, a big challenge is political: pension reforms can be controversial and problems with adequacy or sustainability are often far in the future. A coherent vision, communication of benefits, and regular assessments and actuarial reports (e.g., Korea and Japan) are important because reforms need national engagement (e.g., as in Thailand).

Figure 6. Public pension expenditure by level of ageing, Asian and other countries, 2010 or latest
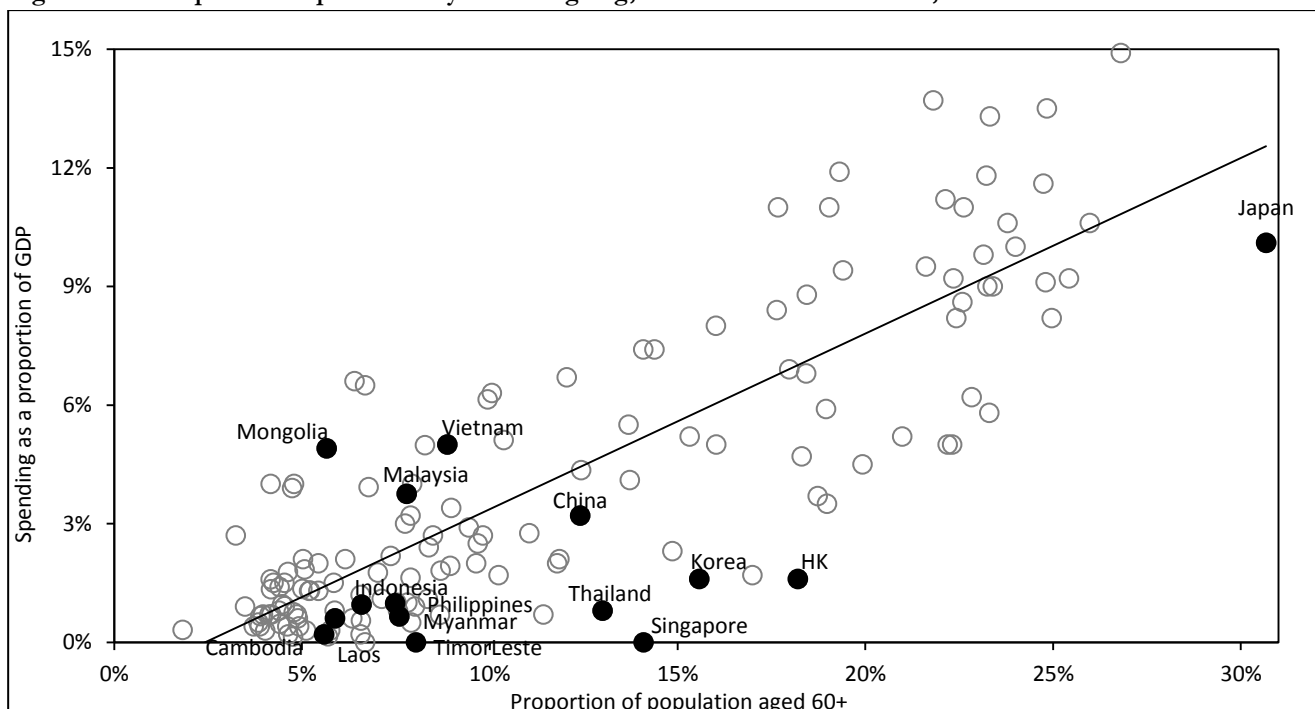
Source: UN (2015b), World Bank (2014a)

3. HEALTHCARE SYSTEMS

Spending and structures

As with pensions, healthcare systems in Asia are diverse and constantly evolving (see Chomik 2013c, World Bank 2016 for further analysis). Health outcomes also diverge *across* countries (e.g., life expectancy in Cambodia is about 69; in Japan it is 84; WHO 2016a) and *within* countries (e.g., men's life expectancy in Tibet is 68 compared to 80 in Shanghai; Zhou et al. 2013).

Financing and delivery structures affect fiscal sustainability, proportion of the population insured, scope of and access to benefit packages, and mix of public and private costs.

Public health spending in Asia, which includes tax and mandatory social insurance financing, is low for a given level of development and by level of ageing but has been increasing faster than GDP (figure 7). Even though there are some international targets for spending levels as a means of universalising healthcare, these are a crude way of setting health goals (Jowett et al. 2016). Increases are projected to continue due to coverage expansion, technological change, higher utilisation, as well as ageing. Therefore, any expansion of the system must be alongside efficiency gains, using a number of micro, macro, and demand-side controls (Oxley and Macfarlan 1995), again, learning from the experience of others (IMF 2010).

Figure 7. Public health expenditure by level of ageing, Asian and other countries, 2014
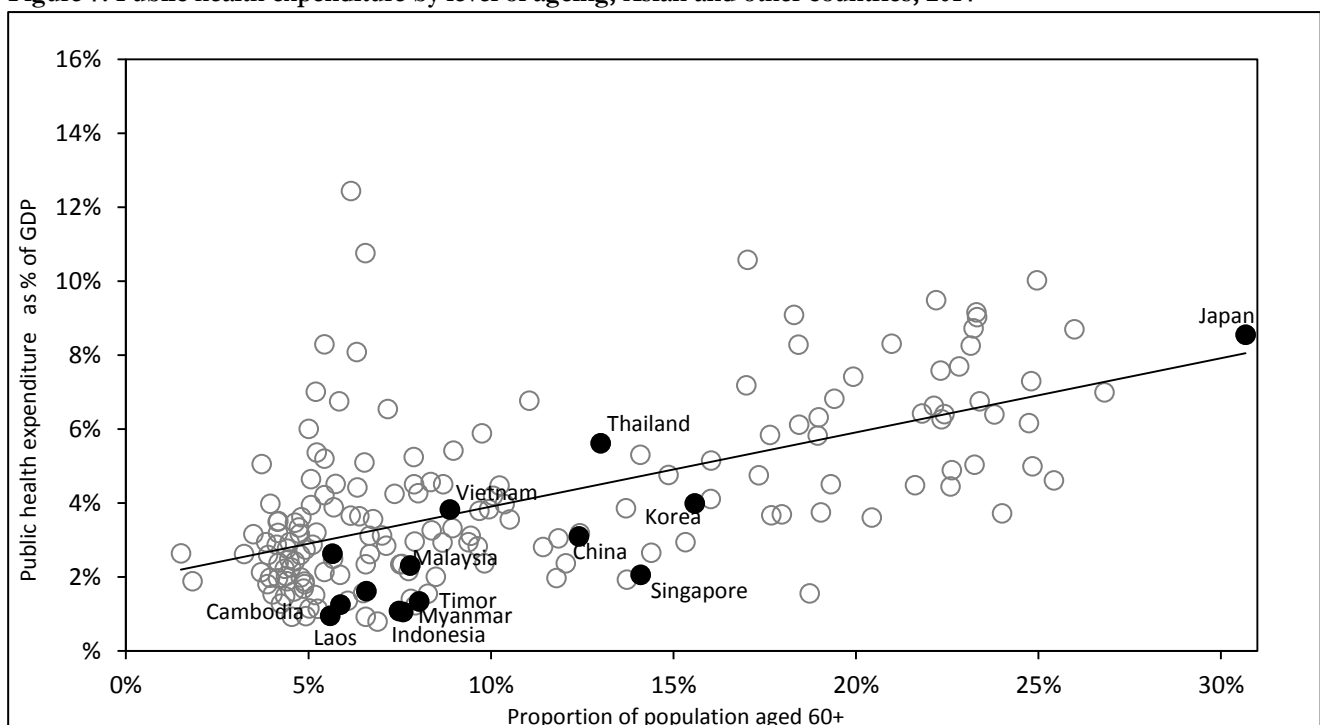
Source: WHO (2016b) UN (2015b)

Financing structures differ along a spectrum, from primarily tax-financed single systems (e.g., Malaysia) to single systems with an emphasis on social insurance (e.g. Japan) and a number of hybrid arrangements with multiple schemes. Parallel schemes for formal and informal sectors are common (e.g. China and Thailand are particular successes; other countries include Laos and Cambodia). Singapore's system covers all citizens with several layers: mandatory self-provision savings, a subsidised compulsory social insurance scheme, and a safety net for catastrophic expenses. The insured population ranges from 15 and 24% in Laos and Cambodia (Van Minh et al 2016) to universal in China, Japan, Korea, Malaysia, Singapore, and Thailand (figure 8). But while there may be a large breadth of population covered, the financial coverage (i.e. depth in figure 1) can often be low and differ by sub-scheme (e.g., in China informal sector scheme up to 75% of costs are *out-of-pocket*; Liang et al. 2013).

Needs of older people

But what about the scope of health services covered? Conventionally *universal coverage* refers to essential health related to newborns, immunisation, infectious disease, and sanitation. While the lifecycle approach to health is important there is less

focus on the direct needs of older people and how these are addressed through different tiers of the system. By far the most important area relates to preventing, diagnosing, and treating non-communicable diseases (NCDs). NCDs cause more than half of the global disease burden. There is an increasing need for interventions, with some relatively simple and cost-effective (e.g., for hypertension and diabetes). But it requires improvement of service delivery across healthcare tiers, particularly strengthening primary health care and the related workforce. This would save on hospital spending (e.g., a third and half of admissions in China are unnecessary; World Bank 2014b). Doing so would allow simple interventions, gate-keeping and care coordination that is crucial for managing NCDs. What about tracking progress? Indicators of coverage relating to NCDs are still deficient (Jowett et al. 2016).

Fragmentation is a particular issue. Places like China are sometimes cited as success stories, but even there the variability of healthcare provision is extraordinary. This is largely due to governance structures. Provinces and counties run very different types of schemes and services, with different incentives that can result in poor outcomes (e.g., low staff salaries and restrictions on some fees mean cost is recouped via expensive medications) or the space for corruption (though recent anti-corruption drives have been prominent). These provide a great number of policy experiments which central government has little control over. The constant change also means that evaluation of any one approach is difficult. Even at the top there is fragmentation, with different ministries responsible for formal and informal sector health insurance schemes, which means there is less pooling and cross-subsidisation. In practice, progress in how Asian countries respond to the needs of older people, and the extent to which they will be able to achieve the relevant SDGs, appears encouraging but slow.

Figure 8. Health insurance coverage and pooled benefit level, Asian countries, 2010-12
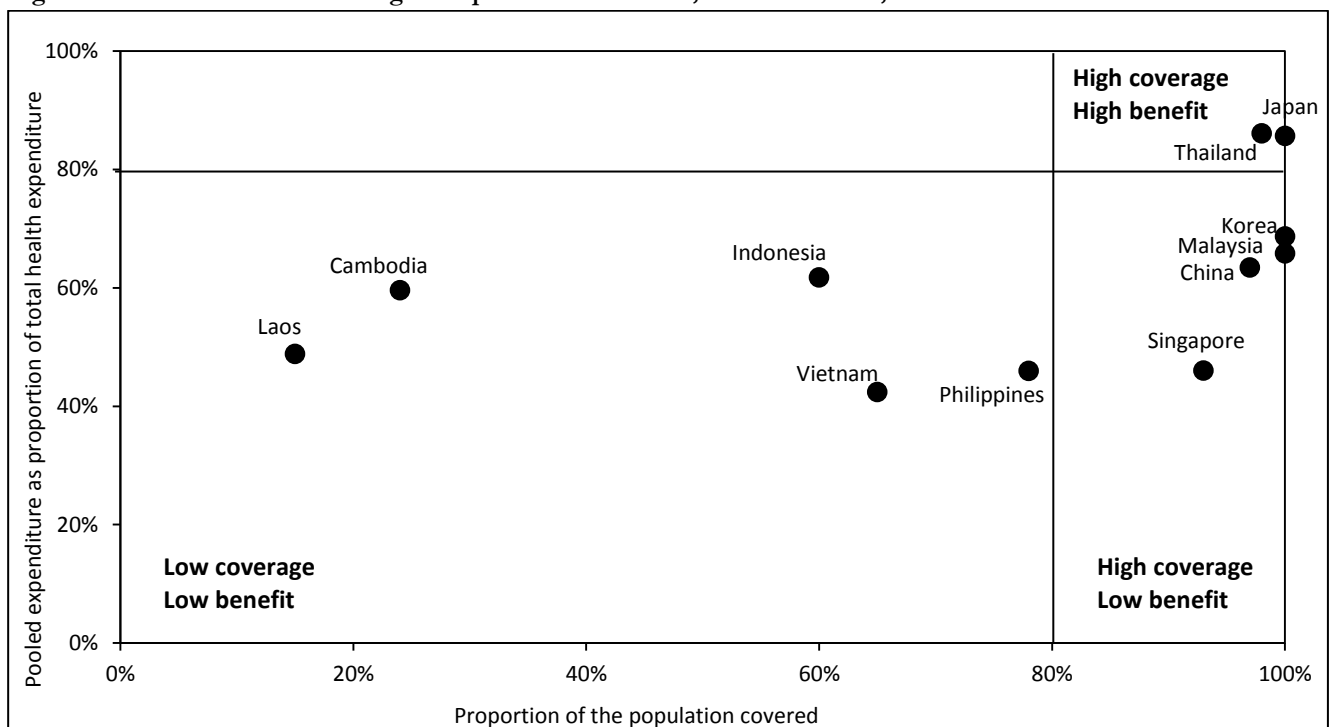
Source: Van Minh et al (2016); CMH (2012); WHO (2016a). Note: pooled benefit level includes public, employer and pre-pay; excludes out-of-pocket costs

4. LONG TERM CARE SYSTEMS

For some older people, a long life comes with chronic illness, disability, or general frailty. Long term care is the set of institutions that offers assistance in the absence of cure. The demand for long term care is likely to increase for the demographic and social reasons described above. But there are uncertainties, including for example age-specific changes in disability. The extent to which morbidity is compressing, extending or stabilising at the end of life is still unclear and differs by definition and age at which it is measured (e.g., some evidence from China shows compression in the number of years with disability while other evidence suggests expansion: Liu et al. 2009; Lu at al. 2016). Need varies by socio-demographic characteristics: those with unfulfilled care demands tends to be rural and women (World Bank 2016).

Much of the increased demand for care will be provided by family, with particular pressure placed on women. Increasingly, due to social and political pressures, and as countries strive to achieve the SDGs, it will need to be covered by some form of long term care system, financed via social insurance or tax, and appropriate co-payments. Policymakers in OECD countries have experimented with a number of models (Colombo et al. 2011; Chomik and MacLennan 2014). Except for Japan, Korea, and

Singapore, public responses in Asia are nascent and are isolated to residual programs for the very poor (e.g., HK subsidises institutions but not home care), community schemes (across S.E. Asia), and pilots (e.g., China has 15 pilots across different city regions carved out of health insurance) and some regulations for private sector provision at the top end. There are also fiscal arguments to develop public systems early. In the absence of alternatives, the health system absorbs the demand at much higher costs (e.g., as took place in Japan).

In addition to financing, design decisions that need to be borne in mind relate to: (1) how access to care is managed (e.g., single gateway and assessment); (2) modality of care (e.g., there is generally a preference and cost-effectiveness to invest in and incentivise home and community care programs, with institutional care acting as the safety net for complex care cases); (3) whether systems are devolved or centralised; (4) whether support is via cash-transfers (which can go to informal carer or care user) or in-kind; (5) how to respond to the workforce challenge (via recruitment, retention, and productivity); and (6) what quality assurance systems are in place (market mechanisms, regulations, complains procedures, licensing, and/or spot-checks).

5. CONCLUSION

Asian countries are at different stage of developing social security systems with a wide scope and comprehensive coverage. Many have seen great progress, but further work is needed. To this end, development assistance can build country's technical capacity to design, implement and monitor such systems. For example, in the absence of reliable databases social safety nets need to be based on means tests that are often crude and don't target the right people. The UN's technology facilitation mechanism should help.

While the focus here has been on the spending side, the tax and social security collection side is as important. Social security design needs to take account of incentives. Encouraging more women and older people into work will be a large part of adequately financing social security, a task that requires policy and behavioural change, which have long lead times.

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