
Population Ageing and Social Security in Asia

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POPULATION AGEING AND SOCIAL SECURITY IN ASIA*
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POPULATION AGEING AND SOCIAL SECURITY IN ASIA

Abstract

Asian countries are at different stages of demographic transition. While Central and South Asian countries are relatively young and will remain so for some time, East and South-East Asia is expected to age at an unprecedented rate in the next few decades. Japan has reached the future first. Other nations, such as China, are still young but ageing faster than many advanced economies, including Australia and the United States. This demographic shift has considerable implications for the development of social policy. Here too, countries differ widely.

This chapter sets the context for the rest of the volume. The focus is mostly on countries in East and South-East Asia, but it includes contrasting comparisons to key regional countries such as India and Australia. Firstly, the chapter presents the context: the demographic, urbanisation and social trends facing Asia. Secondly, it tackles the allocation of resources for the elderly, in particular, by summarising approaches to two areas of social policy most pertinent to population ageing: retirement income and healthcare.

Key words: Population Ageing; Social policy; Asia; Pensions; Healthcare

Population Ageing

JEL codes: I18, I38, J1
1. INTRODUCTION

Asian countries are at different stages of demographic transition. While Central and South Asian countries are relatively young and will remain so for some time, East and South-East Asia is expected to age at an unprecedented rate in the next few decades. Japan, for instance, has reached the future first. Other nations, such as China, are still young but ageing faster than many advanced economies, including Australia and the United States. This demographic shift has considerable implications for the development of social policy. Here too, countries differ widely. This chapter sets the context for the rest of the volume. The focus is mostly on countries in East and South-East Asia, but it includes contrasting comparisons to key regional countries such as India and Australia, and occasional references to US and European countries.

Section two presents the background: the demographic, urbanisation and social trends facing Asia. Section three tackles the allocation of resources for the elderly more generally and sections four and five summarise approaches to two areas of social policy most pertinent to population ageing: retirement income and healthcare. Here we compare the structure, parameters, outcomes and identify issues with respective systems.

Well-developed social policies can address the challenges of population ageing but also represent a macro-economic opportunity to rebalance growth across Asia – allowing individuals to pool idiosyncratic risks associated with income and health shocks and reducing the need for households to accrue excessive precautionary savings. Section six concludes.

2. DEMOGRAPHIC AND SOCIAL CHANGE

2.1 Population age structure

By 2050 many countries in Asia will have an age structure comparable to that seen in the rest of the OECD. Figure 1 groups Asian countries based on the expected trajectory of their old-age dependency ratio.

![Figure 1 Old-age dependency ratio](image)

Those ageing the fastest include Japan, Korea and Singapore, where the ratio of the older population (65+) compared to the working-age population (15-64) will be between 58 and 70 percent by 2050. For
Singapore, this means a quadrupling of the dependency ratio from 14 to 58 percent in less than two generations. By 2050, these countries will have a higher level of age-dependency than the overall level in Europe, which is expected to double.

At the other extreme are a number of countries with much younger populations that, despite some ageing, will have an age-dependency ratio that is broadly at or below today’s Europe-wide, Australian and US levels. These countries include India, the Philippines and Pakistan.

In between are countries that, although still relatively young, will achieve a level of age-dependency similar to that expected for Australia and the USA. These consist of several countries in South-East Asia as well as China, which is projected to have a dependency ratio of 42 percent in 2050.

There is also considerable sub-national demographic variation. Rural and urban populations tend to have significantly different fertility rates, life expectancy, and migration patterns. For example, in 2000, life expectancy in rural China was about 6 years less than in urban areas (Wang and Mason, 2008). Fertility rates in Shanghai are less than half of the national rate and these same populations are now ageing faster than other parts of the country. It is estimated that nearly a third of Shanghai’s residents will be aged 60 and above by 2015 (SMPFPC, 2012).

2.2 Demographic dividend

The demographic transition has been associated with the rising levels of per capita output. The phenomenon has come to be known as the ‘demographic dividend’. Rising life expectancy means that a higher proportion of each cohort is living long enough to work and decreasing fertility means a greater proportion of them can participate in the labour market (Guinnane, 2011). The phenomenon may have accounted for between one quarter to one third of the growth rates in the “East Asian miracle” (Bloom and Williamson, 1998; Lee et al., 2011; Golley and Tyers, 2012). This concentration of working-age people, before the population ages, provides a window of opportunity to set up social policies favourable in the later stages of demographic shift, when demography will result in a headwind hindering economic growth.
The size and change of the working-age population as a proportion of the total population illustrates the scale and timing of the demographic dividend and the window of opportunity available to each society. Figure 2 groups countries into three categories according to when the relative size of their working-age population reaches its peak.

Most advanced economies have already experienced their peak and are now seeing their working-age population decrease, relative to the population as a whole. But Japan is seeing an absolute drop in working-age population. Declines have been softened by more women joining the labour force, so most countries have seen ratios of employment to population increase.

A large number of Asian countries, including most of South-East Asia, are currently at the top of this hump – for them the window of opportunity to prepare for an older population will close within the next decade. Bloom and Williamson (1998) estimated that demographics in East Asia will reduce annual GDP growth by up to 0.44 percentage points in the three decades to 2025. The Chinese government noted the effect of demography when first lowering the country’s GDP growth target to a seven-year low of 7.5% (Government of PRC, 2012). By contrast, South Asia is projected to gain from demographic changes – there the window of opportunity will close within the two decades.

A key difference between advanced countries and those in emerging Asia is that the speed of demographic transition in the latter means that many risk growing old before they become rich. Figure 3 plots GDP estimates and the age-dependency ratio for selected countries between 1980 and 2050. It shows that many East and South-East Asian countries will reach a much older age structure at a given level of GDP per capita than in countries such as Australia and the US.

Of course many factors will influence economic growth, including the labour force participation rate (see section 4) and the effect of an increasing burden of chronic disease (see section 5). Some also point to the ‘second demographic dividend’, where the demographic transition leads to an accumulation of assets that spurs investment and long term productivity improvements.
2.3 Urbanisation & migration

Another big demographic change – also a driver of GDP growth – has been the rapid increase in urbanisation. Many East and South-East Asian countries, particularly China, have been able to take advantage of greater amounts of labour moving from farms to factories, which act as a motor for their industrial revolutions.

Past and projected trajectories are presented in Figure 4. Advanced countries, and some emerging economies such as Malaysia, already have high levels of urbanisation. China, which has urbanised very rapidly and currently has just over 50% of its population living in cities, is expected to continue the transition from a rural to an urban society for some time to come. It could encourage further rural migration by restructuring its system of household registration – something it has recently started to do. India is urbanising gradually – it is projected to hit 50% urbanisation in the 2040s. Given the size of Asia, the percentages translate to extremely large numbers of people. India and China are expected to add approximately half a billion to Asia’s urban population in the next 20 years.

The two demographic shifts described above are related. Urban centres not only boast higher incomes; they also allow greater access to health services, education, and social networks – factors associated with longer lives (Quinn, 2008). In advanced countries, about 80 percent of older people already live in cities. By 2050, about a quarter of urban populations in less developed countries are expected to be aged over 60 (UNFPA, 2007).

Asia’s dynamism is reflected in a high level of international labour mobility. Based on bilateral migrant stocks (people born in or nationals of another country) in 2010, East and South-East Asia countries were the source of 25 million migrants and the destination for 13 million, nine million of whom were migrants within East and South-East Asia (World Bank, 2012). Labour migration in the region has grown six percent annually and flows are likely to intensify ILO (2011).
2.4 Social changes

Demographic change has been accompanied by a number of social ones. For example, increasingly educated women have been prioritising a career over marriage. Many are delaying marriage or not marrying at all – perhaps unsurprising, given the enduring pressure of unpaid work. For example as their economic participation has increased, Japanese women still spend an average of 3.5 more hours of their day on unpaid work compared to men, well above the OECD average (OECD 2011). In turn, investment in education and higher salaries increase the opportunity cost of withdrawing from the labour force to rear children. And in China, the unprecedented increase in the proportion of male to female births means that over 10% of men in cohorts born between 1980 and 2000 are expected to grow old without ever having married (Ebenstein and Sharygin, 2009).

In Asia 74 percent of people over the age of 60 still live in households with children and/or grandchildren (UN, 2005). Such cohabitation has complex interdependencies and impacts but the support structures that they provide are increasingly strained by smaller family units.

A combination of independent unmarried living, fertility declines and high levels of internal migration has meant that families and households have been getting smaller across East and South-East Asia (Figure 5). This has profound implications on the structures of support available to older people. Evidence suggests that in most countries overall financial transfers are still from older to younger people (see section 3). But as societies age and welfare systems become more comprehensive, transfers are likely to switch, as has happened in Japan and Germany (Lee and Mason, 2011).

![Figure 5. Average household size](image-url)

Source: Jones (2010); National Statistics Offices

2.5 Economic changes

The most visible and often cited characteristic of transformation in East and South-East Asia has been its level of industrialisation. The Asian miracle is born of technical innovation and formalisation and the result of forces described above: a surplus of prime age workers, their move from farms to factories, and social changes that accentuate labour force mobility and participation rates of women.
The relationship between economic development and social security is non-linear and different countries develop welfare systems at different rates. It is instructive, however to compare the two. Figure 6 shows the level of development over time and the stage at which selected countries introduced universal social security systems. Some countries have done so at an earlier stage of development than others. Some, such as Japan had various fragmented social security schemes which were reformed into a comprehensive system of support in 1961, covering all citizens. Singapore and Hong Kong, while maintaining insurance schemes for employees and emphasising family responsibilities, are unique in deprioritising the development of publicly funded universal support. Malaysia, Thailand, China and Indonesia are now at a stage of economic development where welfare states tend to flourish. China, for example, has recently moved to integrate different programs under one social security law, which at present acts as a guiding principle rather than a fully implemented framework. We discuss the different approaches to social security next by looking at broad levels of support for old people from family, public and asset based transfers, and at specific formal programs for pensions and healthcare.

![Figure 6. Economic development and universal social security](image)

Source: Authors’ compilation; Bolt and Zanden (2013)

3 DEMOGRAPHY AND SOCIAL TRANSFERS

Intergenerational transfers can be mediated through public programs, informal family arrangements, or by claims on future resources through the private sector. In this section we plan to present some results from the creation of National Transfer Accounts pioneered by Lee, Mason and others. These give a macro picture of transfer flows between generations, through the conduits of the government and family, as well as the market.

The Australian accounts have only just appeared, however, and we wish to understand those first, in the context of Australian institutions, before presenting an international comparison. For this reason, this material has yet to be prepared.
4 RETIREMENT INCOME POLICY

Retirement income programs rarely comprise a single and integrated system. The evolution of such systems has been gradual, with different tranches of the labour force and population being covered at different levels of adequacy and with differing degrees of certainty.

The provision of financial security at later ages, when human capital is depleted, is important for both individuals and the cohesion of society as a whole. While no system delivers everything, certain criteria should be met for a policy to be considered as robust to demographic change. In what follows, we look at three commonly used criteria of sustainability, adequacy and integrity (e.g., as used in the Mercer Global Pension Index). Fiscal sustainability refers to the capacity of the system to remain affordable despite demographic aging. Adequacy combines ideas of poverty alleviation and consumption smoothing between working life and retirement. Integrity channels the trust that individuals and the community at large have in the system. Capricious or arbitrary changes in taxation, expropriations of asset pools accumulated for retirement, and reduction in pension benefits, especially at short notice or in response to some crisis, are all examples of challenges to the integrity of the retirement income system concerned.

4.1 Fiscal sustainability

The demographic dividend experienced by OECD countries in the late 20th century meant that for a period pension systems could and did become more generous and people were able to retire much earlier than they had in the past or will in the future. Before this same demographic dividend gives way to population ageing, Asia has an opportunity to reform its retirement income provision and avoid the imbalances experienced in OECD countries. Areas requiring attention relate to the basic system structure, over-promising benefits, low benefit access ages, and impacts on labour force participation.

Structure

We compare the structure of retirement income systems across Asia in table 1. Several countries, including China, India, Japan, Korea, the Philippines, Thailand and Vietnam, have a retirement income structure that revolves around defined benefit schemes, which pay earnings-related pensions. The design of such schemes, once popular in Europe, can result in unfunded liabilities when the ratio of pension recipients to contributors increases (OECD, 2011b). Asian countries would do well to reconsider how these schemes function and either overhaul them or look to at least introduce features that take account of demographic changes (as has been done in, for example, Sweden and Germany).

Another structural issue is the integration between different pension pillars (e.g., contributory and non-contributory; see adequacy discussion, below) and different schemes within a given pillar (e.g., public and private; rural and urban). Recent announcement of integration notwithstanding, nowhere is fragmentation more evident than in China’s rural-urban system, limiting mobility and flexibility of an ageing labour force. Piggott and Lu (2012) propose using Notional Defined Contribution (NDC) accounts to ensure pension entitlements for migrating workers. The plan would remove mobility barriers, increase migrants’ retirement benefit, and reduce future government liability in other pension systems.
A separate civil service pension scheme can also be problematic. Such schemes are often regarded unfair by the general population, and in practice tend to be generous, largely unfunded, liable to cause fiscal stress and particularly difficult to reform (see Takayama, 2011, for a review).

Table 1. Summary of pension systems in selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Safety Net</th>
<th>Compulsory income replacement</th>
<th>Supplemental saving</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Universal</td>
<td>Targeted</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>Age Pension: 28% of AW</td>
<td>Super-annuation Guarantee: 9% of earn.</td>
<td>Voluntary contrib.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td>China</td>
<td>Urban Resident Pension, Rural Pension</td>
<td>Urban Employee Pension DB+NDC</td>
<td>Urban Enterprise Annuity</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Higher Old Age Allowance for age 70+, 5% of AW</td>
<td>Normal Old Age Allowance for age 65-69, 5% of AW</td>
<td>Mandatory Provident Fund: 10% of earn.</td>
</tr>
<tr>
<td>India</td>
<td>National Old Age Pension</td>
<td>Employee Pension Scheme</td>
<td>Group Super-annuation, 15% of earn.</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Employees’ Pension Insurance</td>
<td>PT Jamsostek: 6% of earn.</td>
<td>Employer Pension Funds</td>
</tr>
<tr>
<td>Japan</td>
<td>National Pension 16% of AW</td>
<td>Various private plans are popular</td>
<td>Financial Institution Pension Funds</td>
</tr>
<tr>
<td>Korea</td>
<td>New Basic Age Pension, 31% of AW</td>
<td>National Pension Programme</td>
<td>Individual Retirement Accounts</td>
</tr>
<tr>
<td>Laos</td>
<td>Old Age Pension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
<td>Employee Provident Fund: 23-24% of earn.</td>
<td>Private Retirement Scheme</td>
</tr>
<tr>
<td>Philippines</td>
<td>Old Age Pension Basic, 4% of AW</td>
<td>Old Age Pensions</td>
<td>Pag-IBIG Fund: 3-4% of earn.</td>
</tr>
<tr>
<td>Singapore</td>
<td></td>
<td>Central Provident Fund: 11.5-36% of earn.</td>
<td>Supplemental Retirement Scheme</td>
</tr>
<tr>
<td>Thailand</td>
<td>500 Baht scheme</td>
<td>Old-age Pension Fund</td>
<td>Voluntary provident funds</td>
</tr>
<tr>
<td>Vietnam</td>
<td></td>
<td>Social Security Fund</td>
<td>Retirement Mutual Funds; Informal sect. schemes</td>
</tr>
</tbody>
</table>

Source: OECD (2011a); Swiss Life (2012); Park and Estrada (2012). Note: For safety net schemes the percentage amount indicates benefit level in relation to Average Wage (AW), while for funded income replacement schemes the percentage amount indicates the level of total mandatory contribution. Not all contributions are for retirement savings (e.g., Malaysia and Singapore). References are to main private sector employee schemes. DC denotes Defined Contribution. DB denotes Defined Benefit. China’s individual account-based urban employee pensions are unfunded in practice (i.e. Notional Defined Contribution or NDC).

Sustainable benefits

One way of gauging the fiscal sustainability of pension schemes is to look at the proportion of earnings necessary to fund the intended benefit level (Figure 7). For example, China promises to pay relatively generous replacement rates in its main, urban workers’ scheme. This is compounded by the relatively early...
availability of the pension (age 55 for women and 60 for men; see below). The estimates made by the OECD (2011a) show that an individual making contributions between age 20 and normal pension age would need to put away nearly half their earnings to obtain the replacement rate offered by the system. Its current affordability relies on low coverage and relative immaturity. A similar situation exists in other countries, such as Vietnam and Thailand. Importantly, the calculation is made at the level of the individual. The situation would be worse if the increasing dependency ratio were considered. That is, the pension promise that current workers are saving for would need to be scaled to the increasing size of the pensioner cohort. There are some, though not clearly substantiated, estimates that at the aggregate level the Chinese pension system is already facing a large deficit (China Daily, 2012).

**Figure 7. Sustainability: Contributions to reach promised replacement rate**

![Graph showing sustainability: Contributions to reach promised replacement rate](image)

Many OECD countries have sought to curtail fiscal expense through various forms of direct or indirect cuts to benefits. Examples of such cost limitations exist in Asia itself. In the 1980s the Korean government also set up a generous public pension plan for the elderly only to cut benefits once the realities of population ageing set in. The statutory replacement rate was reduced from 70 to 40 percent in two reforms. It is likely that more benefit cuts in Korea will need to take place or contributions into the scheme will need to increase (Park, 2012).

Cuts to the rate at which pension entitlements accrue for each year of contributions have also taken place in Japan (Whitehouse et al. 2009). Of course, any cuts need to be timed and targeted to allow for intra- and intergenerational equity: between those who are better off and those requiring a base level of benefits; and between those retiring now and those who will retire in, say, 20 years’ time, when Asia’s citizens are expected to have become more prosperous.

**Benefit access age**

One area of immediate action is encouraging longer working lives. Financial incentives to exit the labour force, specifically low pension eligibility ages, can exacerbate fiscal pressures if people retire early. The average pensionable age in the OECD fell between 1950 and the mid 1990s. Naturally, the average age at which people chose to retire followed. The majority of OECD countries are now closing early retirement pathways for privileged occupations, equalising pension eligibility ages between men and women and most commonly increasing them to age 65. Some (e.g., US, UK, and Australia) are increasing pension ages to...
between 67 and 68 for both men and women (Chomik and Whitehouse, 2010). Australia has announced plans to increase it to 70.

Official pension access ages are relatively low in Asian countries: on average 59 for men and 57 for women. This is low even adjusting for the lower life expectancies in the region. For example, the life expectancy after pension age for women is on average 24 years in the OECD but 27.3 years in non-OECD Asian-Pacific countries. And even this is an under-estimate since life expectancy of those who are currently covered by pensions in Asia (i.e. formal sector workers) tends to be higher than that of the general population (OECD 2011a).

**Labour force participation**

Early pension access can have knock-on effects on labour force participation rates at older ages. Malaysia, for instance, has a low pension age of 55 despite a higher level of income and life expectancy than many countries in Asia. Its labour force participation rates of older people have in fact been declining. Those aged 60 to 64 had a participation rate of 51 percent in 1975, which decreased to 37 percent by 2008 (Park, 2012), consistent with the incentives provided by the pension system.

Evidence from China is also instructive. Giles et al. (2012) find a clear inverse relationship between the age at which urban pensions can be accessed and the rate of employment by age (Figure 8). This is not necessarily a bad thing. Such a relationship is absent for rural employees, whose pensions are worth very little and who have to toil into their later years. But as populations become healthier and live longer it would be a missed opportunity if older cohorts are relegated to early retirement and their potential overlooked. Mature-age labour force participation can offset the fiscal impacts of population ageing and there are a number of policy levers that can act as sticks and carrots to encourage people to remain in the labour force longer (Chomik and Piggott, 2012).

**Figure 8. Pension access and labour market participation**

Source: Giles et al. (2012)

**4.2 Adequacy of pension benefits**

Specific issues related to the adequacy of benefits include low coverage of the population, a lack of minimum benefits, and a poor design of the pension decumulation phase.
**Coverage**

Formal pension systems in Asia cover a much smaller fraction of workers than in OECD countries. This is related to the region’s level of general economic development. Rural populations with modest incomes and high levels of informal employment are less likely to rely on formal pension arrangements. As countries progress toward higher levels of development and income, coverage tends to rise (Figure 9). Still, the nature of the demographic transition means that Asian countries may need to expand coverage to a greater proportion of the population at lower levels of GDP per capita and greater levels of informal employment.

In some countries the rate of expansion in the covered population is indeed impressive. China has doubled the number of people who are covered by public pensions since the mid-2000s. Thailand has also been enrolling informal sector workers at a considerable rate thanks to cost-sharing and aggressive marketing (Park, 2012).

The adequacy and of pensions also depends on how well these cater to rural and migrant communities. Urban-rural and public-private sector inequality in working life is translating to inequality in retirement. Migrant workers can be particularly difficult to cover, especially under segregated systems with unequal rules such as China’s or Singapore’s. Additionally, ensuring adequate support for international migrants will require cooperation between countries and agreements relating to the reciprocity of benefits and avoidance of dual payment of premiums. China and Korea signed one such agreement in late 2012.

**Figure 9. Pension coverage of working-age population (mid-2000s)**

[Diagram showing pension coverage rates across different countries.]

**Social pensions**

Social pensions help to close the coverage gap (Holzmann et al. 2009). In Asia, social safety-net pensions are either non-existent, have low benefits, or have very low coverage: five percent of retirees in Hong Kong and less than one percent in Singapore (OECD 2011a). Others, such as Laos, Malaysia, and Vietnam also lack a basic level of support. Demographic, economic, and social change means that without non-contributory pensions a cohort of workers is emerging with little or no resource availability to cover living expenses once they are too old to work. Policies that provide at least some material aid to these older people will be necessary, at least until the formal sector comes to predominate in these emerging economies.
In China, despite the expansion of pensions, more than half of China’s population has little cash benefit entitlement in later life. Lu et al. (2012) calculate the revenue costs of a universal social pension scheme for China with benefits equal to the poverty line. Cost estimates range between 0.5 and 1.5 percent of GDP annually, over a 40 year horizon, assuming that those with urban pension entitlement are excluded.

Korea has recently reformed its safety net for older people by significantly increasing the value of the basic benefit and means testing it against other pension income (SSA, 2014).

**Withdrawal options**

In many Asian countries, the pension system does not deliver on its main promise: to provide regular retirement income. Annuities can insure the purchaser against longevity, investment and inflation risk. But in Malaysia, for example, a country with one of the oldest mandatory defined contribution schemes in the world, benefits are almost entirely paid as lump sums. In Indonesia a lump sum is accompanied by payments for only five years.

The withdrawal stage of a defined contribution pension can also be a challenge for developed countries such as Hong Kong, Singapore and Australia. The option to annuitise is often limited by a poorly developed market and lack of government support. Singapore has recently introduced mandatory annuitisation that involves government provision through the Central Provident Fund. Some schemes have particularly low preservation levels and do not even require people to reach retirement before withdrawing money. India is an example – around 6.8 percent of balances are withdrawn annually by people who are below normal pension age (OECD 2011a).

**4.3 Integrity**

Many policy analysts see pre-funding of at least part of the retirement system as a way to retain sustainability while delivering adequate retirement benefits. In the context of retirement provision, pre-funding makes considerable demands on the integrity of the financial system, and for that matter, the consistency of government policy. This section aims to briefly discuss the readiness of countries to support such long term commitments with credibility and integrity.

**Need for private pension markets**

Asian populations will need new, innovative financial products and markets to intermediate the investment and insurance needed by a rapidly aging population and rising levels of affluence. A survey by Jackson et al. (2012) showed that a greater proportion of people in higher income East and South East-Asian countries thought retirees themselves should be most responsible for their retirement income. By contrast, in middle income countries such as Malaysia and China, a greater proportion of individuals believe that most of the responsibility falls on government.

Since larger, more mature and more competitive private pension systems tend to earn higher and less volatile real rates of return (Musalem and Pasquini, 2012), the reward for a well-functioning private pension market is higher and more reliable income for future retirees. China’s managed funds sector, which also includes pension funds, already has over US$370 billion in assets under management (State Street, 2011). And total pension assets in the Asia-Pacific region (excluding Australia, New Zealand and Japan) were worth nearly US$500 billion in 2011 (see Figure 10). This expected to grow considerably – at present Asia
and Oceania account for 61 percent of the world population, younger though it may be, and only 12 percent of total funds under management (Investment Company Institute, 2013).

![Figure 10. Pension funds’ assets for selected OECD and Asian countries, 2011, USD billion](image)

Source: OECD Global Pension Statistics; Hu (2012); Note: Singapore and Malaysian assets pertain to provident funds and are year 2010; Excludes pension assets of UK and US which were US$ 2.1 and 10.6 trillion.

**Regulation and sovereignty risks**

To function well, private pension markets require certain preconditions, including appropriate and transparent regulations, a level of compulsion or incentives to save, competition or regulation to keep costs low, risk oversight, deep and flexible markets that can match the long term liabilities and adequately cope with risk-pooling necessary for pension saving and payout, robust record-keeping systems, accounting standards that encourage trust, and sophisticated funds management skills. Piggott and Sane (2012) find that while Japan, Korea, Hong Kong and Singapore compete with the developed-world group on these governance and financial sophistication indices most economies in emerging-Asia rank poorly. Some have even seen falls on governance indicators such as rule of law, regulatory quality, and voice and accountability between 1996 and 2006. The disparity suggests a need for continued reform.

Currently, regulation that would enable such an expansion is still lacking in some countries. For example, while preliminary legislation for voluntary occupational pension schemes (known as ‘Enterprise Annuities’) has existed in China since 2004, there are no centrally set regulations on private pension plans for foreign-funded companies (Swiss Life, 2012). The Asian Development Bank in its ‘Asia 2050’ report (2011, p59) noted that: “[Asia’s] fund management, insurance and pension schemes lack institutional depth, [and] ...are constrained by overly inward looking portfolios constraints ...and capital controls.”

Some countries are slowly strengthening and liberalising their financial and insurance markets. For example, the China Securities Regulatory Commission has been simplifying licenses for domestic and foreign institutional investors (Government of People’s Republic of China, 2012). Financial services providers, including international market data producers and financial advisors, are reportedly also preparing to enter the Chinese market (State Street, 2011). APEC countries are discussing a multilateral pilot called the Asia Region Funds Passport, which would allow approved financial products in one country to be sold in another (APEC, 2013).
Finally, the field could benefit from a solid regional research effort that would help business and policymakers understand the effectiveness of regulatory regimes and support systems (e.g., public sector underwriting) and the risks around regional projections (e.g., longevity).

5 HEALTHCARE

Richer and better-educated populations across Asia will demand more from their health systems than they have in the past. It is now clear that developments in this field will not merely involve a transition from poor to rich or from low to high levels of health spending. Changes will be layered with demographic and epidemiological dimensions, requiring specific responses and financing and provision. In most cases, the speed of Asia’s demographic transition will dictate a level of healthcare development that is more advanced at a given level of income than was necessary in the evolution of western national health systems.

5.1 Systems in transition

Asia’s health systems have diverse origins, levels of development and expected trajectories. This heterogeneity is, for example, apparent in the range of health outcomes proxied by average life expectancy – from 64 in Cambodia to 84 in Japan. At the cost of some oversimplification, it is possible to classify these systems using the same types of categories into which one might group a set of economies: developing, emerging and advanced (e.g., see Kanzler and Ng, 2012). The classification corresponds to the level of spending on healthcare as well as income per capita, which are highly correlated (see Figure 11).

Health systems which are in the ‘developing’ category, including those of Cambodia, India, Indonesia, Pakistan, the Philippines, and Vietnam, can be characterised by high out-of-pocket costs, poor use of technology, low and uneven coverage of financing and service availability, inadequate preventative care, and inequality in the health status of the population.

Emerging health systems, including those of China, Malaysia, and Thailand share some of these characteristics but to a lesser degree; for example, access to services can still be variable. In addition, emerging systems experience growing levels of private insurance and medical tourism, particularly in Malaysia and Thailand. Both developing and emerging systems face challenges relating to the dual burden of infectious as well as non-communicable diseases (see Section 5.5). All countries, but particularly those with advanced health systems, are experiencing public cost increases as an area of concern.

All these elements are coloured by the changing demographics. Increasing costs are being driven by greater use of costly technology, higher levels of utilisation, as well as growing elderly populations. Older people, especially the older-old, have higher rates of disease; health treatments for older people are on average more expensive than those for younger people; and the decreasing size of families and level of cohabitation means that a greater proportion may rely on public financing rather than private, familial support.

Countries which are further advanced with demographic transition may be thought of as a model for the still younger, emerging countries in designing effective healthcare systems. Japan, for example, has the oldest population in the world but its health system is still one of the most efficient and, compared with developed countries, one of the cheapest.
China can also act as a model for other developing countries. It has achieved near universal coverage at a fraction of the income of countries that have put it in place in the past and at an unprecedented pace.

5.2 Health insurance coverage

The coverage of a country’s health insurance system has several dimensions. The most popular meaning refers to the proportion of the population insured by the scheme. Advanced countries (with the notable exception of the United States) and many emerging countries have reached universal coverage. This ensures that all or almost all citizens are entitled to some level of health care.

But even where the whole population is covered by health insurance, the depth or scope of the benefits package that is available through the system – or the proportion of costs covered – may be limited. The concept is demonstrated visually in Figure 12. Furthermore, effective coverage can be poor despite the official level of entitlement when, for example, clinics are far away. Malaysia may have achieved universal health coverage in the 1980s, but in 2004 key generic medicines were only available in a quarter of public health facilities.

Table 2 summarises the main public health insurance systems in place and the extent of their coverage across selected Asian countries. Countries with emerging health systems, such as India, Indonesia, Laos, Philippines, and Vietnam still have low levels of coverage, though some, such as the Philippines and Vietnam are en route to achieving universal levels.

Countries with tax-financed systems, such as Malaysia, tend to have more comprehensive coverage, compared to those with social health insurance coverage, where only formal sector employees have traditionally been covered.
<table>
<thead>
<tr>
<th>Country</th>
<th>Health Financing Scheme</th>
<th>Public Pop cover</th>
<th>Costs cover</th>
<th>Benefit cover / Access issues</th>
<th>Private market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Tax financed Medicare</td>
<td>100%</td>
<td>68%</td>
<td>Hospitals and medical service free/subsidised, medical purchase scheme to lower costs/subsidies for poor</td>
<td>$11.4b</td>
</tr>
<tr>
<td></td>
<td>(1984)</td>
<td></td>
<td></td>
<td>Ancillary at public hospitals, Medicare purchase scheme to lower costs/subsidies for poor</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>Urban Employee Basic</td>
<td>95%</td>
<td>54%</td>
<td>Mostly catastrophic and inpatient care, Tiered public hospitals, Median availability of selected generic medicines: 18% in 2006</td>
<td>$29.5b</td>
</tr>
<tr>
<td></td>
<td>Medical Insurance</td>
<td></td>
<td></td>
<td>Tiered public hospitals, Median availability of selected generic medicines: 18% in 2006</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1998; mandatory)</td>
<td></td>
<td></td>
<td>Decentralised, with variable benefit packages, access and quality</td>
<td></td>
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<tr>
<td></td>
<td>Urban Residents Basic</td>
<td></td>
<td></td>
<td>Oversubscribed/wait periods</td>
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<td></td>
<td>Medical Insurance</td>
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<td></td>
<td>(2007; voluntary)</td>
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<td></td>
<td>New Rural Cooperative</td>
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<td></td>
<td>Medical Scheme</td>
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<td>(2003; voluntary)</td>
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<td>Medical Financial</td>
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<td>Assistance covers</td>
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<td>premiums/extra costs of</td>
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<td></td>
<td>rural poor</td>
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<tr>
<td>Hong Kong</td>
<td>Tax financed Dept of</td>
<td>100%</td>
<td>29%</td>
<td>Hospitals /medical: free/subsidised, But long waiting periods</td>
<td>$1.1b</td>
</tr>
<tr>
<td></td>
<td>Health and Hospital</td>
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<td></td>
<td>Authority</td>
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<tr>
<td>India</td>
<td>Employee State</td>
<td>low</td>
<td>49%</td>
<td>Medical free/subsidised through tiered hospital system</td>
<td>$6.6b</td>
</tr>
<tr>
<td></td>
<td>Insurance Corporation</td>
<td></td>
<td></td>
<td>Median availability of selected generic medicines: 21% in 2004</td>
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<tr>
<td></td>
<td>(1948)</td>
<td></td>
<td></td>
<td>Oversubscribed/waiting lists</td>
<td></td>
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<tr>
<td>Indonesia</td>
<td>Jamsostek Medical Scheme</td>
<td>63%</td>
<td>83%</td>
<td>Jamskesmas medical free at public or private hospitals, and generic medicines at special pharmacies</td>
<td>$2.3b</td>
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<tr>
<td></td>
<td>(1992). Mandatory for</td>
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<td></td>
<td>Variable access and quality</td>
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<td></td>
<td>employees unless they</td>
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<td></td>
<td>have better private</td>
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<td></td>
<td>cover</td>
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<td></td>
<td>tax funded for poor</td>
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<td></td>
<td>Asks for public sector</td>
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<tr>
<td>Japan</td>
<td>Employees Health</td>
<td>100%</td>
<td>46%</td>
<td>Universal access to any facility: public and private hospitals / clinics (for-profit hospitals don’t exist)</td>
<td>$16.3b</td>
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<tr>
<td></td>
<td>Insurance (1961)</td>
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<td>for employees and</td>
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<td>families</td>
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<td></td>
<td>National Health Insurance</td>
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<td></td>
<td>for others</td>
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<tr>
<td></td>
<td>Integrated aged care/</td>
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<td></td>
<td>healthcare for older</td>
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<tr>
<td>Korea</td>
<td>National Health</td>
<td>100%</td>
<td>56%</td>
<td>Free choice of facilities, almost entirely by private providers</td>
<td>$6.6b</td>
</tr>
<tr>
<td></td>
<td>Insurance (1977)</td>
<td></td>
<td></td>
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<td>for employees,</td>
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<td>subsidised by</td>
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<td></td>
<td>Medical Aid Programme</td>
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<td></td>
<td>for others</td>
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<tr>
<td>Laos</td>
<td>Health insurance for</td>
<td>Low</td>
<td>35%</td>
<td>Medical care in hospitals and clinics</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>employees and family</td>
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<td></td>
<td>Medicine subsidised</td>
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<td></td>
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<td></td>
<td>Median availability of selected generic medicines: 25% in 2004</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>Tax financed system run</td>
<td>100%</td>
<td>36%</td>
<td>Medical care in hospitals and clinics</td>
<td>$1.1b</td>
</tr>
<tr>
<td></td>
<td>by Ministry of Health</td>
<td></td>
<td></td>
<td>Medicine subsidised</td>
<td></td>
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<tr>
<td></td>
<td>(1957)</td>
<td></td>
<td></td>
<td>Median availability of selected generic medicines: 25% in 2004</td>
<td></td>
</tr>
<tr>
<td>Philippine</td>
<td>National Health</td>
<td>82%</td>
<td>75%</td>
<td>Benefits on schedule up to a ceiling, Medical and hospitals provided at different govt levels</td>
<td>$0.8b</td>
</tr>
<tr>
<td></td>
<td>Insurance Programme (1995) for formal employees</td>
<td></td>
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<td></td>
<td>Sponsored Programme (1996) for poor</td>
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<td></td>
<td>Individual-Paying</td>
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<td></td>
<td>Programme (1999) for</td>
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<td></td>
<td>informal and self-employed</td>
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<td></td>
<td>Overseas and retiree</td>
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<tr>
<td></td>
<td>programmes</td>
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<tr>
<td>Singapore</td>
<td>Mediave (1984) –</td>
<td>100%</td>
<td>38%</td>
<td>Heavily subsidised hospitals, Mediave used for basic treatment</td>
<td>$0.8b</td>
</tr>
<tr>
<td></td>
<td>mandatory savings</td>
<td></td>
<td></td>
<td>Serious treatment from MediShield, MediShield covers deficit beyond Mediave/ MediShield /own means</td>
<td></td>
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<td></td>
<td>Medishield (1990) –</td>
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<td></td>
<td>group insurance</td>
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<td></td>
<td>Medifund (1993)</td>
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<td></td>
<td>means-tested cover</td>
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<tr>
<td></td>
<td>ElderShield (2002) for</td>
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<td></td>
<td>aged care</td>
<td></td>
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<tr>
<td>Thailand</td>
<td>Civil Servant Medical</td>
<td>99%</td>
<td>68%</td>
<td>Basic medical and hospital, Median availability of selected generic medicines: 75% in 2006</td>
<td>$1.4b</td>
</tr>
<tr>
<td></td>
<td>Benefit Scheme</td>
<td></td>
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<td></td>
<td>Social Security Scheme</td>
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<tr>
<td></td>
<td>(1990)</td>
<td></td>
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<tr>
<td></td>
<td>Universal Coverage</td>
<td></td>
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<td></td>
<td>Scheme (2001) - former</td>
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<td>ly 30-Balt Scheme for</td>
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<tr>
<td></td>
<td>poor</td>
<td></td>
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<tr>
<td>Vietnam</td>
<td>Compulsory Health</td>
<td>65%</td>
<td>54%</td>
<td>Basic inpatient/outpatient package, Variable access and quality</td>
<td>$0.3b</td>
</tr>
<tr>
<td></td>
<td>Insurance (2009) with tax financing for poor</td>
<td></td>
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<td></td>
<td>Voluntary Health</td>
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<tr>
<td></td>
<td>Insurance (2009)</td>
<td></td>
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</tbody>
</table>

Source: Swiss Life (2012); WHO (2013); China’s Ministry of Health (2012); Barber and Yao (2010); UHC Forward (2013); European Observatory on Health Systems and Policies (2013); government health insurance provider web sites; Author’s calculations. Note: Dates denote scheme inception. Private sector insurance market based on value of prepaid premiums in US$ in 2010. Costs cover relates to public sector expenditure as proportion of total health expenditure – it may be different essential healthcare since above figures may reflect levels of discretionary health spending (e.g., in Japan public cover for essential treatment is 70-90%).
China’s expansion of health coverage has been staggering. It has enrolled 1.2 billion people into the health insurance system within the last decade and coverage for rural citizens increased from near-zero to almost universal in the space of just five years. Much of this has been the result of the central government subsidising local governments and decentralising decision-making rather than by mere mandate. While successful in covering the population, it has meant uneven benefit packages across provinces (Barber and Yao, 2010).

Filling out the box in Figure 12 in a way that is financially sustainable is often the stated aim for health systems. Governments that have achieved universal coverage are now looking to improve the generosity of their respective systems, in particular, reducing high out-of-pocket costs. For example, in 2010, out-of-pocket spend was nearly 40 percent of total health expenditure in Indonesia and China, compared to 14 percent in Thailand and Japan (Figure 13).
Yet, reducing private spending is not uniformly pursued by all governments. For example, Singapore aims to foster personal responsibility for health: while it offers extensive subsidies within the public system, it has instituted a compulsory, tax-deductible savings scheme from which families must pay a varying proportion of costs or purchase their own private health insurance.

5.3 Containing costs

The increase in health expenditure resulting from improvements in coverage, technology and ageing is replete with challenges and opportunities. The IMF, in Soto et al. (2012), estimates that in the next 20 years public health spending in Asia will see an increase of between 0.5 percent of GDP in Pakistan and 5.5 percent of GDP in Korea (Figure 14), with more than half of that increase due to population ageing. While OECD countries are expected to see higher proportional levels of growth than emerging Asia, the projected GDP growth in the latter translates to a considerable amount of money in absolute terms. China’s Ministry of Health (2012) notes that between 1978 and 2011 the average annual real growth rate of total health expenditure was over 11 percent, well above annual GDP growth.

Figure 14. Projected increases in public health spend 2011–30, by driver, (%GDP)

![Graph showing projected increases in public health spend](image)

Source: Soto et al. (2012); Excess cost growth relates to non-demographic factors (e.g., technology, utilisation)

The IMF believes that emerging economies have the fiscal space to increase health expenditure, but warns that this be done in a “fiscally sustainable manner while avoiding the inefficiencies and resulting high costs of the health systems of advanced economies” (Gupta et al., 2012, p7).

So how can governments restrain health costs? There are a number of macro, micro and demand-side measures that various countries have implemented with varying degrees of success (Tyson et al., 2012; Jenkner et al., 2012). These are summarised in Table 3, and range from budgetary caps to introducing co-payments.

Japan has been very successful in using price controls across the entire health system to keep costs down, while Thailand has been a regional leader in moving from fee-for-service payments to location-specific caps, hospital budgets, and a Diagnosis Related Groups system of reimbursement. China follows other
countries in announcing a pilot to use collective market power and negotiate pharmaceutical contracts at a provincial level (Government of People’s Republic of China, 2012).

**Table 3. Measures for containing healthcare costs**

<table>
<thead>
<tr>
<th>Macro-level controls</th>
<th>Budget caps</th>
<th>Limits on overall or subsector spending (e.g., hospital budgets or GP expenditure ceilings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply constraints</td>
<td></td>
<td>Limiting volume of inputs or outputs in healthcare (e.g., GP numbers, controlling the pharmaceuticals or benefits schedule)</td>
</tr>
<tr>
<td>Price controls</td>
<td></td>
<td>Regulating prices (e.g., wages, reference pricing of pharmaceuticals or benefits, payment by capitation or Diagnosis Related Group (DRG))</td>
</tr>
</tbody>
</table>

| Micro-level reforms | Public management and coordination | Organisational changes to improve accountability, incentives, or reduce overlap (e.g., fewer management levels, gate-keeping by GPs to screen out unnecessary specialist treatment) |
| Market mechanisms   | Contracting | Changing arrangements with physicians, hospitals and other providers (types are: salaries or budgets, capitation or DRG, fee-for-service) |
| Demand-side reforms |                         | Introducing market mechanisms between supply and demand side to stimulate competition (e.g., internal market of GPs buying services from hospitals, separating financing and provision, patient choice) |
|                      | Increasing share of costs borne by patients (e.g., lump sum or co-payments, tax treatment of private health insurance) |

Source: Adapted from Oxley and MacFarlan (1995) and IMF (2010)

Future-proofing health systems against population ageing will require more work, however. Even though Japan is thought to have a successful health system model, it still suffers from poor incentives and over-utilisation issues. Even excluding long-term care costs, elderly Japanese (aged 65+) are responsible for per capita health expenditure that is four times that of the rest of the population (Li, 2012).

### 5.4 Role of private sector

Differences in the level of development, values and political priorities will influence how much prominence countries place on private sector involvement in healthcare. Yet private sector financing has its benefits in limiting public expenditure, supplementing basic socialised coverage, reducing Out-Of-Pocket expenses, and stimulating the supply of more advanced, specialised treatments. Based on the conceptual framework in Figure 12, private health insurance allows us to expand the breadth, depth and height of the box.

Private health insurance in the region is still a relatively niche market, worth an estimated US$50 billion in 2010 across East, South-East and South Asia (see Table 2; total excludes Australia and Japan). More than half of that is attributed to China, which saw the value of private health insurance revenues approximately double each year between 2008 and 2011.

With appropriate regulations in place, the benefits of an active private sector health insurance market can be reaped while limiting inequality. Examples of these regulations include fixed private insurance premiums for basic coverage that encourage competition on quality rather than cost, mandatory acceptance of all patients regardless of pre-existing conditions, and the creation of risk funds that equalise risk across insurers and therefore reduce the targeting of low-risk populations (Kanzler and Ng, 2012).

As noted in Table 3, private sector involvement is one way to introduce market mechanisms to drive efficiency and innovation – the third wave of reforms in the development of the health system (following reaching universal coverage and pursuing rationing and expenditure caps; Cutler, 2001). Thailand is one example. Viriayh, one of its established private health insurers, has recently developed micro-insurance
products to meet the demands of the lower-income population within the universal healthcare system (International Insurance News, 2010).

But private insurer competition must be managed correctly to avoid the pitfalls seen in the dysfunctional market in the USA, where the proliferation of insurers weakens their individual market power to negotiate with providers and results in increased costs (Porter and Teisberg, 2006). In general, a greater share of private insurance across OECD countries is associated with lower non-demographic cost increases (Tyson et al., 2012).

Private sector involvement can come in different forms. In addition to acting as payors themselves, private institutions can help public health insurers in purchasing, claims processing, IT, quality control and cost control under competitive contracting. Taiwan has managed to run its national health insurance with administrative costs accounting for only 1.3 percent of the budget thanks to effective use of health information technology (Cheng, 2012).

Encouraging private payors to run health facilities, including physician networks, could create incentives to improve provider quality and efficiency (Kanzler and Ng, 2012). The total health sector spending in East and South-East Asia was worth over US$1 trillion in 2010. That level of expenditure allows opportunities for private providers, from private hospitals to specialised facilities, IT providers, pharmaceuticals and consumer health. For example, China has pledged to double the patient volume at private hospitals, which is likely to involve large-scale privatisations (Government of People's Republic of China, 2012).

### 5.5 Changing needs

Demographic changes described in this chapter are coupled with, and in many ways linked to, the epidemiological transition. This trend involves an adjustment of the burden of disease from infectious to non-communicable diseases (NCDs; see Singapore in Figure 15, for an example). NCDs are often those associated with lifestyle, urbanisation and ageing, and include cardiovascular disease, cancer, chronic respiratory diseases, and diabetes.

![Figure 15. Epidemiological transition in Singapore](source: Chongsuvivatwong et al. (2011))

Like other parts of the world, even as overall mortality rates have decreased, Asia has experienced a rapid relative increase in the prevalence of NCDs leading to considerable human and economic costs (Abegunde,
2007). According to the International Diabetes Federation (2012) there are already some 125 million diabetics in East Asia and the Pacific, which has seen rates quadruple since the 1970s, and China reports to have a total of 260 million people diagnosed with various chronic diseases (China’s Ministry of Health, 2012).

The region faces a double burden of disease, where NCD rates are increasing even as communicable diseases are still prevalent. Indeed, vulnerable populations are the hardest hit, with NCD related death rates inversely proportional to GDP (Dans et al., 2012).

Even though the age- and sex-specific burden of disease from chronic illness may be expected to decline, the demographic profile of populations will mean that total burden of non-communicable disease will likely increase across all regions (except possibly for lung cancer).

There are some significant implications. In terms of financing, it will be important to design essential benefit packages that include NCD screening and treatment. Screening and response capacity will also need to be strengthened across the region. Currently, the availability of key NCD tests in the public system and medicines at primary healthcare level are limited in many Asian countries (Figure 16).

There is also a public health imperative to focus on preventative care and managing lifestyle factors. For example, strategies to reduce salt intake and control tobacco in emerging countries can cost as little as US$1-2 per person and avert millions of deaths and billions of dollars of loss in economic output (Lim et al, 2007).

![Figure 16. Proportion of key NCD tests available in public health system and medicines available at primary healthcare level, 2010](source: WHO (2013))

Developing institutional capacity for research can be one early tactic. The successes of the Thai health system in tackling NCDs may in part be the result of investment in research and health promotion directly funded by tobacco and alcohol taxes.

Indeed, there are strands of research in this area that remain unexplored. For example, the relationships between urbanisation and the health of a population are well known, but there is far less knowledge about the health effects of urban living on an ageing population (Black et al., 2011).
6 CONCLUSION

This century has been characterised as the Asian Century; but even more, it is the Ageing Century. This chapter has tried to provide an overview of these demographic and economic developments, as well as explore the implications of policy formulation around retirement incomes and health care in the context of population ageing.

Rapid demographic transition will challenge many Asian countries, with the peak of the challenge arriving before economic growth and affluence have been consolidated into social support structures. Managing public policy with rapid demographic change is especially challenging because as societies become more affluent, expectations regarding public provision of services disproportionately drawn upon in later age, such as income transfers and health care, increase. Promises made when societies are young become burdensome with population ageing. Fiscal stress almost always results. These policies, once introduced, may generate not just the adverse incentive effects familiar from analysis of developed economy regimes, but may also inhibit formalisation of the labour force, with consequent impacts on economic growth.

Governments will have to consider various macro, micro, and demand-side measures to manage these dynamics. Growing demand for healthcare means pressure on state-provided services and high out-of-pocket costs. Population ageing will increase such pressures further, requiring public reforms as well as creating market opportunities for private sector insurers and providers. At the level of the macro-economy, stronger welfare provision has the potential to rebalance growth in the region – where individuals can pool income and health risks and have less need for excessive precautionary savings (Chamon and Prasad, 2001; Baldacci et al., 2010).

One response to this is to increase reliance on self-provision. This can be done, for example, through managing expectations so that successive cohorts increase the age at which they retire, through mandatory retirement saving programs, or mandatory private health insurance. But for such strategies to be successful, workplace cultures must be accommodating to older workers, robust and sophisticated governance structures must be developed, and business sophistication must reach a point where risk diversification mechanisms are available to insurers. This requires not only some minimum degree of affluence, but also cultural change, as reputations of businesses and government come to have value in the community.

In this chapter we have focused on retirement incomes and health care as our major policy domains. We have omitted detailed treatment of Aged Care (or Long Term Care) from consideration. This is at the frontiers of policy even in developed countries with advanced societal ageing. Japan developed a LTC policy only in 2001; Australia consolidated its approach with major reforms initiated just a couple of years ago. It will undoubtedly challenge many Asian societies in coming decades, as regional migration scatters families, declining fertility reduces the capacity for informal care, and increasing longevity impacts the years in frailty. Many of the forces at work in the retirement and health domains are relevant here also. This will be an important part of future research on population ageing in Asia.
REFERENCES


UHC Forward (2013) http://uhcforward.org


