

# Asia in the ageing century: Part II – Retirement income



CEPAR research brief 2013/02



## Summary

- *This is the second research brief in a three-part series that looks at Asia in the ageing century, with a particular focus on the countries of East and South-East Asia.*
- *The context is outlined in the first brief, which describes population, urbanisation and social trends in the region. Specifically, it notes that population ageing in East and South-East Asia is happening faster and at a lower level of economic development than in the West. Many Asian countries now have a decade or so to prepare for the later stages of demographic transition.*
- *With the challenges set out, we turn to responses and opportunities. In this regard, Parts II and III of the series focus on two areas of economic activity which are both pertinent and have enormous scale: providing retirement income (covered in the present brief) and healthcare (outlined in Part III). Getting these right could result in favourable macro-economic rebalancing of growth in the region – where individuals can pool risks and reduce the need for excessive precautionary savings.*
- *As in Europe, Asia's reliance on defined benefit schemes may result in unfunded liabilities when the ratio of pension recipients to contributors increases, unless sustainability features are built in. China's generous urban workers' scheme is only affordable because it is not yet mature or widespread. And poorly designed access arrangements can result in excessive costs and disincentives to work that waste the potential of healthy older people. For example, pension access ages are low in East and South-East Asian countries: on average 59 for men and 57 for women.*
- *Alongside issues of sustainability, adequacy of pension benefits remains important. Many Asians have no pension entitlements. This is not surprising given the region's economic development, but if demographic and social development is considered, the situation demands more urgent action. Adequacy also depends on ensuring regular retirement income, which is unlikely in the absence of preservation and annuities.*
- *There are also private sector opportunities, including providing financial services to help Asian workers transition into retirement as has happened with assets accrued by baby boomers in the West. The size of pension assets already offers opportunities, but there are varying strategies for foreign entrants to choose from with different levels of capital investment – from opening local branches to building long-term links.*
- *Lastly, a viable private pension sector requires the right set of preconditions. Here, experts from countries such as Japan and Australia have an opportunity to contribute to developing the region's pension and insurance infrastructure. Both countries have experience in population ageing research and policy implementation.*

## 1. Introduction

That changes taking place across Asia offer opportunities for governments, business and individuals has been apparent for some time. What is often less appreciated is the demographic dimension to these opportunities. Seen through such a prism, new and varied prospects come into focus – from age-friendly cities (Beard and Petitot, 2010), to appropriate tourism infrastructure (Glover and Prideaux, 2009), and age-tailored consumer products and services

This is the second research brief in a three part series that examines ageing in Asia, with a particular focus on the countries of East and South East-Asia, but with contrasting comparisons to key regional countries such as India and Australia. Part I set the demographic context, showing that the scale and speed of ageing and urbanisation in the region is unprecedented, and that employment and social trends will erode familial support networks.

Parts II and III of the series look at the necessary responses and potential opportunities arising from Asia's population ageing. The present brief considers retirement income systems while the third and final brief covers healthcare.

Retirement income and healthcare provision are not only pertinent to population ageing, they have enormous scale. They 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 (Chamon and Prasad, 2007, Baldacci et al., 2010).

There are other, social impacts. Formal financial security in old age in the form of pensions appear to lower the high preference for sons in China, which has driven sex-selective abortion and a distorted sex ratio at birth (Ebenstein and Leung, 2010).

For governments, the demographic transition and relative immaturity of pension systems (low coverage and many more contributors than recipients) presents the perfect opportunity to ensure the right balance between fiscal sustainability and adequacy. In this regard, lessons can be learned from the mistakes and successes of advanced economies.

The private sector, too, can benefit by providing financial services that will help Asian workers transition into retirement.

## 2. Fiscal sustainability of pensions

There are some key lessons that East and South East-Asia can learn from the mistakes and successes of advanced economies. These relate to the retirement income system's structure, generosity and benefit access, as well as how it

interacts with incentives to labour force participation. 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.

### *Structure*

**First, governments could reconsider the reliance on defined benefit schemes**

Several countries across Asia, 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 (See Table 1 for a summary). These are the type of schemes that were popular in Europe but that, through flawed design, have resulted in unfunded liabilities and are problematic with an increasing ratio of pension recipients to contributors (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) and different schemes within a given pillar (e.g., public and private; rural and urban). Nowhere is this more evident than in China's fragmented rural-urban system, which may need reform if policy makers wish to ensure mobility and flexibility of an ageing labour force (see Box 1).

### *Generosity*

**Second, they could be more realistic about pension promises**

One way of gauging the fiscal sustainability of such schemes is to look at the proportion of earnings that would be necessary to fund the intended level of pensions (figure 1.A). For example, China promises to pay relatively generous replacement rates in its main, urban workers' scheme. The year-to-year benefit adjustment is based on changes to wages and prices rather than just prices, which grow slower, and pensions are available relatively early (age 55 for women and 60 for men).

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 40 per cent of earnings to obtain the replacement rate offered by the system. This represents a very expensive scheme – its current affordability relies on low coverage and relative immaturity. 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).

**Table 1. Summary of pension systems in selected countries**

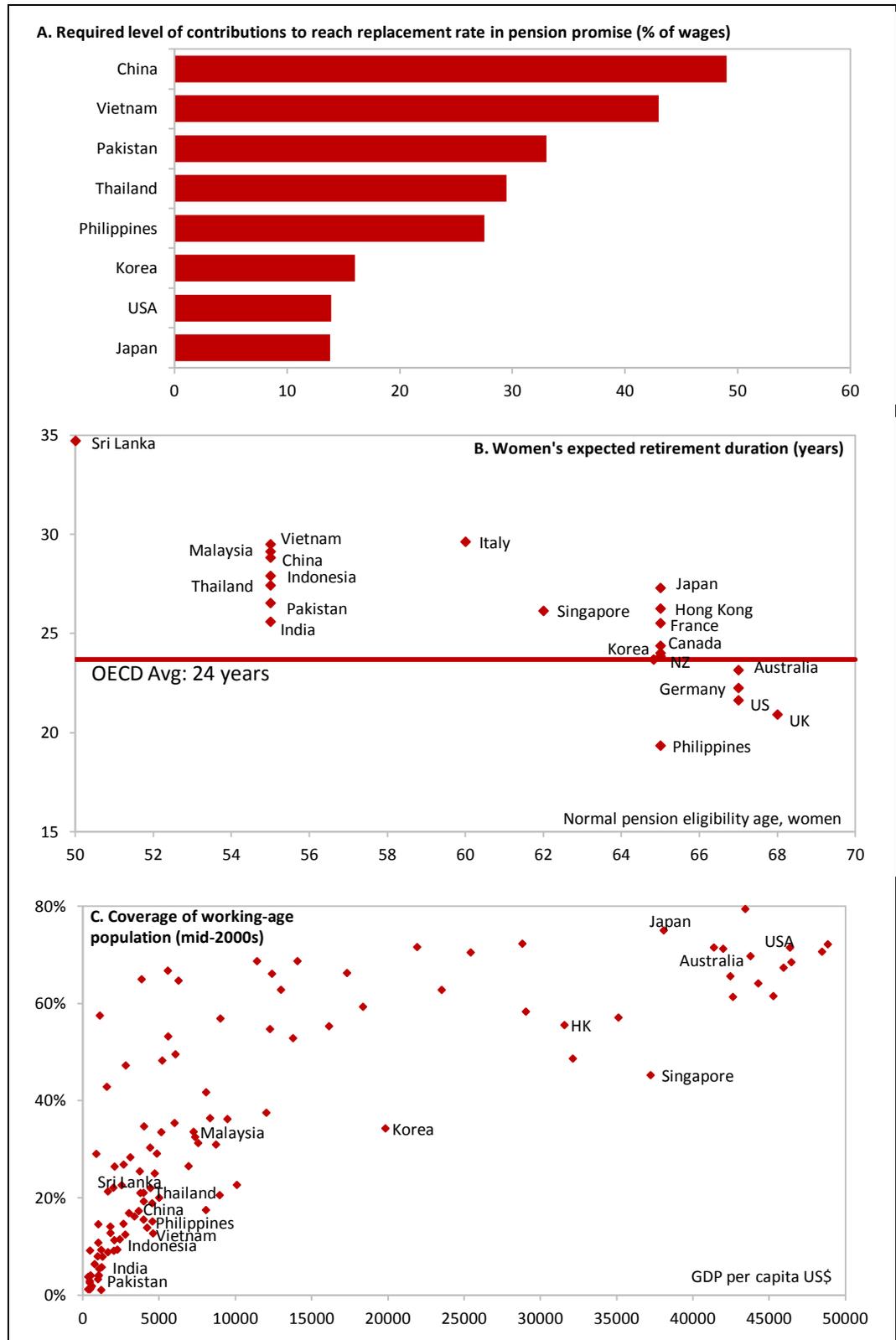
	Safety Net		Compulsory income replacement			Supplemental saving	
	Universal	Targeted	Pay-As-You-Go (mostly DB)	Funded		Employment related	Other tax preferred
				Public	Private		
Australia		Age Pension: 28% of AW			Super- annuation Guarantee: 9% of earn.	Voluntary contrib.	Housing
China	Urban Resident Pension, Rural Pension		Urban Employee Pension DB+NDC			Urban Enterprise Annuity	
Hong Kong	Higher Old Age Allowance for age 70+, 5% of AW	Normal Old Age Allowance for age 65-69, 5% of AW			Mandatory Provident Fund: 10% of earn.		
India		National Old Age Pension	Employee Pension Scheme	Employee Provident Fund, 24% of earn.		Group Super- annuation, 15% of earn.	National Pension Scheme
Indonesia				PT Jamsostek: 6% of earn.		Employer Pension Funds	Financial Institution Pension Funds
Japan	National Pension 16% of AW		Employees' Pension Insurance			Various private plans are popular	
Korea	Basic Age Pension, 5% of AW		National Pension Programme		Retirement Benefit Scheme: DB or DC		Individual Retirement Accounts
Laos			Old Age Pension				
Malaysia				Employee Provident Fund: 23- 24% of earn.		Private Retirement Scheme	
Philippines	Old Age Pension basic, 4% of AW		Old Age Pensions	Pag-IBIG Fund: 3-4% of earn.			
Singapore				Central Provident Fund: 11.5- 36% of earn.		Supplemental Retirement Scheme	
Thailand	500 Baht scheme		Old-age Pension Fund			Voluntary provident funds	Retirement Mutual Funds; Informal sect. schemes
Vietnam			Social Security Fund				

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).

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 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 per cent 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).

**Figure 1. Sustainability and coverage of pension systems**



Source: OECD (2011a)

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*

**Third, they should look at eligibility and align access age with life expectancy...**

One area of immediate action may be the encouragement of 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. Both men and women retired 5 years earlier in the 1990s than they had in the 1970s. The majority of OECD countries are now 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). Some countries still offer early pathways into retirement: Australia, for example, has increased the age of access to the mandatory savings element of its retirement income system, but this will still be as low as age 60.

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 (Figure 1.B). 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*

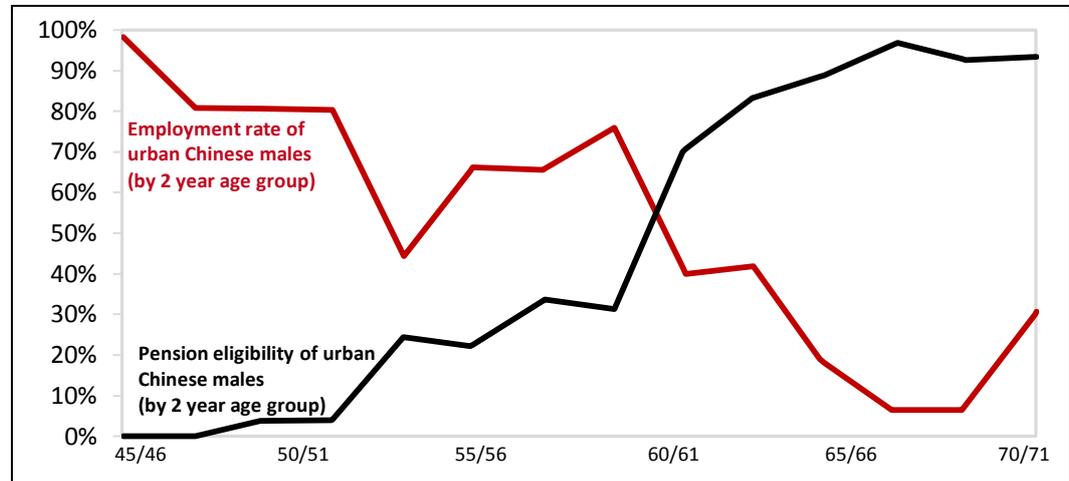
**... ensuring that labour market incentives are not distorted**

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 per cent in 1975, which decreased to 37 per cent 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 2). 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 (Chomik and Piggott, 2012).

**Figure 2. Pension access and labour market participation**



Source: Giles et al. (2012)

### 3. Adequacy of pension benefits

**But governments should balance sustainability with adequacy concerns**

Another area of opportunity concerns the adequacy of pension benefits. Specific issues that stand out include low coverage by the pension system, a lack of withdrawal options and the ability to withdraw pension savings early.

#### *Coverage*

**In particular, tackling the low levels of coverage...**

Formal pension systems in Asia cover far fewer 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 1.C). 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. Social safety-net pensions are either non-existent or have very low coverage: five per cent of retirees in Hong Kong and less than one per cent in Singapore (OECD 2011a).

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. After all, by 2009, its GDP per capita was higher and informal employment was lower than Sweden, Spain or Denmark when they first introduced rural social insurance (OECD, 2010). Thailand has also been enrolling informal sector workers at a considerable rate thanks to cost-sharing and aggressive marketing (Park, 2012).

### **Box 1. CEPAR research spotlight: Pensions in China**

China's New Rural Pension scheme is partly motivated by concern about the widening inequality between urban and rural workers. Research conducted by CEPAR Postdoctoral Fellow, **Lu Bei**, (2012) reveals that rural pensions do not crowd out private transfers, such as money being sent from a family member working in the city. The finding means that inequality with and without the rural public pension can be calculated with some confidence. Thus, Lu shows that rural pensions significantly lower rural income inequality in Gansu (a low-income province) but make little difference in Zhejiang (a rich province).

A key benefit of China's rural pensions is that they allow income-risk-pooling, which is absent when people rely solely on intra-family transfers. CEPAR Research Fellow, **Chung Tran** and colleague Juergen Jung (2012), studied such schemes for informal sector workers and show that even if private transfers are crowded out, the pensions offer gains due to insurance and redistribution effects.

Related to rural pensioner support are pension arrangements for migrants. Young rural workers have been moving to urban areas at an unprecedented rate, often working in a different province for substantial periods of their lives. Piggott and Lu (2012) propose using Notional Defined Contribution (NDC) accounts to ensure pension entitlements for migrating workers. An NDC plan is shown to be viable by reference to a previously developed model in Zhejiang Province. The plan would remove mobility barriers, increase migrants' retirement benefit, and reduce future government liability in other pension systems.

Despite the expansion of pensions, more than half of China's population has little cash benefit entitlement in later life. Lu, He and CEPAR Chief Investigator, **John Piggott** (2012) calculate the revenue costs of a universal social pension scheme for China with benefits equal to the poverty line. Calculations take account of longevity improvements based on the Lee-Carter approach and alternative fertility scenarios. Cost estimates range between 0.5 and 1.5 per cent of GDP annually, over a 40 year horizon, assuming that those with urban pension entitlement are excluded.

Finally Lu, Yang, Piggott and Mi (2012) assess the accuracy of individuals' life expectancy in China. Preliminary results indicate that demographics and family relationships are more important than economic status in people's perceptions of their life expectancy. Women and those over the age of 60 tend to underestimate their life expectancy relative to national data, while younger men overestimate it.

The adequacy and of pensions also depends on how well these cater to rural and migrant communities (see Box 1). 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. 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.

#### *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 (See Box 2). 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 a classic example – around 6.8 per cent of balances are withdrawn annually by people who are below normal pension age (OECD 2011a).

## 4. Private pensions

#### *Greater private demand*

As societies become more affluent, they not only tend to shift focus toward basic adequacy of retirement incomes, but also seek to reduce the drop in income between work and retirement. Such populations also become more financially literate and may assume greater individual responsibility for retirement beyond the basic, state support. For example, 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 (Figure 3.A). 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.

These trends bode well for the private sector, which could play a larger role in retirement income provision. 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, and growing – at present Asia and Oceania account for 61 per

**Finally, retirement income systems need to offer retirement income on a regular and sustained basis**

**At some level of development there is excess private demand beyond the basic government offer**

**Individuals then have the means to take responsibility for financing their retirement with the help of the private sector**

cent of the world population, younger though it may be, and only 12 per cent of total funds under management (Investment Company Institute, 2013).

### **Box 2. CEPAR research spotlight: Annuity Markets**

Life annuity products provide a regular retirement income stream that can insure the purchaser against investment, inflation, and longevity risks. In countries where the conversion of retirement savings to annuities is voluntary, the demand for such products tends to be low. But one problem is the lack of suitable products in the first place, a case that is common across the Asia-Pacific region.

CEPAR Chief Investigator, **Michael Sherris**, and Associate Investigator, **John Evans**, have looked at the major risks that can impede the provision of attractive long-term annuities and some potential solutions (Sherris and Evans, 2009). A key issue relates to the lack of developed risk transfer mechanisms available to annuity issuers. They conclude that there are three broad options to encourage a sustainable annuity market that is attractive to retirees.

The first option involves the private sector providing annuities but with government support in hedging the major risks, including in the creation of long-term inflation-indexed bonds and a longevity bonds market. The second is for the public sector to provide annuitisation on a compulsory basis. The last option would involve a combination of private-public provision – the private sector providing fixed annuities up to, say, the current projected life expectancy, and the public sector supplying a ‘deferred annuity’ from that age until death. This would allow insurers to do what they do best: pool insurable risk of different life expectancies within a population. The government would step in to cover the systemic component of longevity risk.

In a related project, CEPAR Research Fellow, **Joelle Fong**, and CEPAR Partner Investigator, **Olivia S. Mitchell** looked at how the government of Singapore has opted for the second option of those described above (Fong et al, 2011). They find that while adverse selection in the annuity market was low, annuity costs in Singapore were shaped by insurance company costs (e.g., advertising and administration). By mandating annuitisation and entering the market (starting in 2013), the government hopes to maximise value for money for pensioners. However, since the scheme has limits on the sum that is annuitised, it could still allow private providers to offer products related to the excess.

### *Regulations*

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

**But such markets  
require certain  
preconditions**

cope with risk-pooling necessary for pension saving and payout, robust record-keeping systems, accounting standards that encourage trust, and sophisticated funds management skills. 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 that is bolstered by foreign market entrants is higher and more reliable income for future retirees.

**Larger, competitive markets can be of benefit...**

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.*” It acknowledged that allowing private sector participation and relaxing the restrictions on foreign investments would catalyse improvements in the sector and diversify risk.

**...but regulations for foreign entrants is sometimes lacking**

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).

**Still, there are positive signs coming from China and from APEC**

Some bilateral agreements that allow approved financial products in one country to be sold in another have already been signed (e.g., between Australia and Hong Kong) and 13 APEC countries are discussing a multilateral pilot called the Asia Region Funds Passport, which would facilitate such a system across the Asia-Pacific (APEC, 2013). Some sovereign funds, such as the Malaysian Employee Provident Fund, have also been contracting out fund management functions, providing another area of opportunity, albeit currently modest in size (Reuters, 2011).

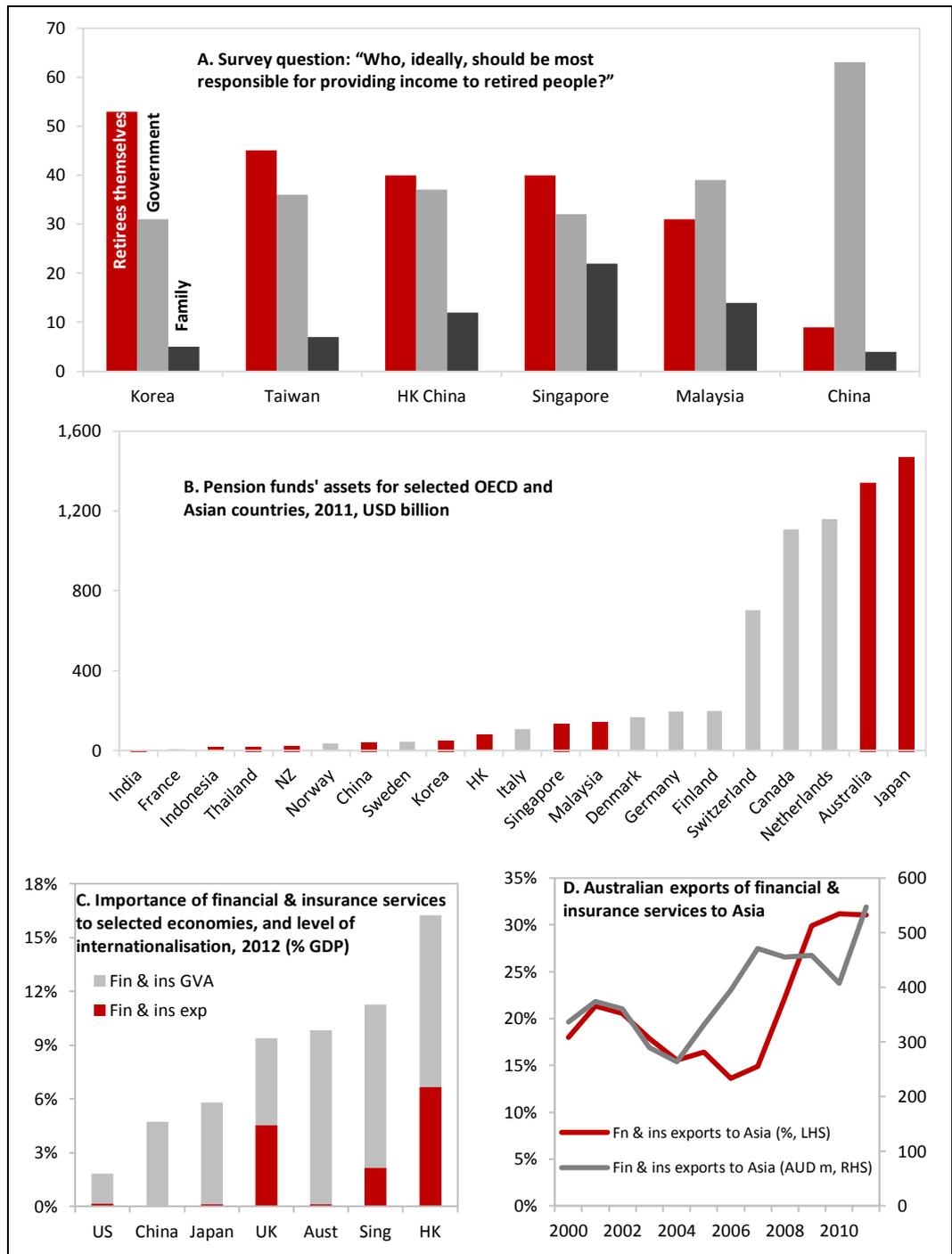
#### *Opportunities for regional players*

Countries such as Japan and Australia have a competitive advantage to contribute to the development of the pension and insurance market across Asia (Commonwealth of Australia, 2012 and AFCF 2009). Both countries have extensive experience in population ageing research and pension policy implementation. They have the largest pools of pension assets under management in the region (3rd and 4th largest in the world; see Figure 3.B), and a private sector “*with world class asset consultancy businesses, a well developed*

**In theory, Japan and Australia have a competitive advantage in pensions and fund management**

financial advisory sector, leading edge technology platforms and strong legal and accounting services” (AFCF 2009, p11).

**Figure 3. Financial and insurance services**



Source: Jackson et al. (2012); OECD Global Pension Statistics; Hu (2012); ABS Cat. 5368.0.55.004; ABS Cat. 5368.0; ABS Cat. 5204.0; Authors' calculations. Note: In panel B, Singapore and Malaysian assets pertain to provident funds and are year 2010. Panel B comparison excludes pension assets of UK and US which were US\$ 2.1 and 10.6 trillion. In panel C, GVA denotes Gross Value Added of the industry.

**But expansion in financial exports and foreign branches has been slow**

The financial and insurance services industry in Australia is sizeable. Along with mining it is the equal largest industry by Gross Value Added (GVA), at approximately 10 per cent of GDP; and larger relative to the rest of the economy than the UK's financial sector. Yet, so far, as noted by the AFCF, the industry's level of internationalisation is low – the proportion of output that is exported is

less than two per cent (Figure 3.C). And this has declined by 3.5 percentage points over the last two decades, even as the size of the industry in Australia has grown by four percentage points of GDP (ABS Cat. 5368.0, ABS Cat. 5204.0).

The trends do show growing financial and insurance services exports in absolute terms. Exports to Asia have doubled since 2004 to reach A\$500 million in 2011. The proportion of such exports going to the region has also increased, but mostly due to declines in other markets (Figure 3.D).

This low level of exports is, in fact, unsurprising. The data describes cross-border sales but overlooks the establishment of foreign offices – a common way of providing services to clients overseas. Some Australian banks and financial institutions have been aggressively expanding retail operations in Asia; others have taken a longer, less capital intensive strategy, which includes setting up subsidiaries or partnerships that specialise in asset management and advisory for the region’s institutional investors such as public and corporate pension funds. The figures also overlook the opportunities that individuals can pursue. AFCF (2009) estimated that around 50,000 Australians are working in finance in Asia. A very large proportion expects to return to Australia. Should business be ready for it, this would provide a chance to capitalise on both region-specific skills and regional demographic trends.

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. Conclusion

This second brief in a three-part series looked at retirement income systems across Asia. Such systems need to be prepared for the rapid demographic shift taking place, especially given the decline of traditional, familial support networks. Policymakers should consider future-proofing the system by paying attention to its structure, generosity and benefit access, as well as ensuring adequacy through expanded coverage, appropriate preservation and withdrawal options. Business leaders would also do well to start building capacity that will enable them to cater to older, wealthier Asian cohorts even before they move into retirement.

At the scale of the macro-economy, getting this right could result in a favourable rebalancing of growth in the region – allowing individuals to pool risks and have less need for excessive precautionary savings. ■

Some firms have chosen a less capital intensive strategy of building long term links in the region

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## About CEPAR

The ARC Centre of Excellence in Population Ageing Research (CEPAR) brings together researchers, government and industry to address one of the major social challenges of this century. It aims to establish Australia as a world leader in the field of population ageing research through a unique combination of high level, cross-disciplinary expertise drawn from Economics, Psychology, Sociology, Epidemiology, Actuarial Science, and Demography.

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