

ERIA Discussion Paper Series**Social Protection in ASEAN:
Challenges and Initiatives for Post-2015
Vision***Mukul G. ASHER[†]*Professorial Fellow, National University of Singapore, Councillor,
Takshashila Institution*Fauziah ZEN[‡]*Economist, Economic Research Institute for ASEAN and East Asia
February 2015*

Abstract: *The Association of Southeast Asian Nations (ASEAN) is engaged in framing a post-2015 vision for social protection in ASEAN which would facilitate productive ageing. This paper assesses existing social protection systems in ASEAN and suggests initiatives which policymakers and other stakeholders could consider for progressing towards a more robust social protection system. The paper argues that progressing towards the post-2015 vision of social protection will require greater coordination between ASEAN's economic and social sector groups, as weak social protection systems existing today will increasingly constrain future economic growth. ASEAN as a group will also need to lessen its reliance on outside donors for funding and expertise. The specific initiatives suggested for facilitating productive ageing in ASEAN are (i) creating an ASEAN social protection forum for developing more robust databases, encouraging communication and indigenous research, and rendering technical assistance to members; (ii) pursuing measures to reduce expenditure needs of the elderly, including well-designed discount systems for public amenities and basic needs; (iii) giving greater priority to cross-border worker agreements to improve their living conditions, and encourage totalization agreements; and (iv) enhancing professionalism and systemic perspectives.*

Keywords: ASEAN, social protection, cross-border workers, pensions, severance payment, workers' compensation, labour market, demographic trends

JEL Classification: H55, J18, J21, E26

* The earlier version of this paper was presented at the Framing the ASEAN Socio-Cultural Community Post-2015: Engendering Equity, Resilience, Sustainability and Unity for One ASEAN Community workshop, organized by the Economic Research Institute for ASEAN and East Asia (ERIA), Jakarta, 16–17 January 2015. The authors thank participants at the workshop for comments and Keya Chaturvedi for research assistance. The authors are responsible for any errors and omissions.

[†] Email: sppasher@nus.edu.sg

[‡] Email: fauziah.zen@eria.org

1. Introduction

ASEAN countries in the past have demonstrated high rates of economic growth, creating capacities to take advantage of the demographic dividend offered by their young and growing populations. However, as ASEAN countries exhibit ageing populations at relatively lower per-capita income (Asher and Bali, forthcoming), and as they further integrate with the global community, they are not immune to structural challenges, including slower medium-term growth, and an older, and in some cases, a shrinking labour force. Rising longevity and falling fertility rates, along with urbanization, reduced family sizes and growing non-wage employment are expected to increase economic and societal insecurity, resulting in pressure on budgetary resources. Strong social security systems will thus be crucial in sustaining economic and political stability, and in ensuring social cohesion (Asher and Zen, 2014). This implies that ASEAN's economic integration activities must be effectively coordinated with its social sector initiatives.

There is growing divergence among ASEAN member states in their economic and security orientation. Bhaskaran (2015) has argued that member states are placing greater emphasis on strategic bilateral ties over the multilateral engagements, including commitments as ASEAN members. This will be a challenge for ASEAN as an institution as it seeks progress towards its visions as a community in economic, socio-cultural, security and other spheres.

Social protection is defined as preventing, managing, and overcoming situations that adversely affect people's well-being (UN RISD, 2010). It therefore consists of policies and programmes that are designed to reduce the incidence of poverty; limit the exposure of risks such as unemployment, sickness, and disability; and smoothen consumption throughout the economic lifecycle. This is a complex function and requires fiscal and administrative capacities and policy coordination across multiple sectors and organizations. The above implies that social protection is not synonymous with ad-hoc crisis related social assistance and related services.

This paper's focus is on pensions or old-age income arrangements component of social protection.¹ However other areas of social protection, such as healthcare, workers' compensations and severance and/or retrenchment benefits, are briefly discussed where appropriate.

The goal of any pension system should be to enable people in old age to obtain services which are adequate, affordable, and accessible. Countries use different financing-mixes and differing methods of social and household risk pooling arrangements to enable the elderly to obtain a retirement income for financing the services needed. The above has been the case in ASEAN countries. Singapore, Malaysia, and Thailand mostly rely on compulsory savings; Indonesia, the Philippines, and Viet Nam have employed social insurance principles to organize their pension systems.

These programmes or instrument mixes reflect historical legacies, institutional choices, and country-specific administrative and fiscal capacities. ASEAN countries are heterogeneous in level of economic development and economic structures, economic and institutional capacities, and in priority given to social protection goals. Thus, no single blueprint is appropriate for organizing and reforming the pension systems. Member countries will have to design their own reform path, including appropriate instrument-mix based on country-specific circumstances such as formality of labour markets, fiscal space to finance public pensions, professionalism of social protection organizations and regulatory capacity to supervise social protection organizations, albeit guided by sound pension economics and policy principles and practices (Asher and Bali, forthcoming).

It is in the above setting that this paper assesses the current pension systems in ASEAN member countries in the context of the ASEAN vision on social protection, identifies challenges, and suggests specific initiatives meriting consideration. The rest of this paper is organized as follows. Section 2 provides an overview of the ASEAN vision on social protection and its implementation. The current status of social protection schemes is discussed in Section 3. Section 4 discusses initiatives

¹ Given the large share of informal sector workers in ASEAN, social protection can play an important role in strengthening the livelihoods of informal sector workers including those working in the agricultural sector (farming, fisheries, etc.) This, however, is not discussed in this paper.

meriting consideration if progress towards a vision of social protection for ASEAN is to be attained.

2. ASEAN Vision on Social Protection

The ASEAN vision for social welfare and protection is to ‘enhance the well-being and livelihoods of the people of ASEAN through alleviating poverty, ensuring social welfare and protection, building a safe, secure and drug free environment, enhancing disaster resilience and addressing health development concerns’ (ASEAN, 2009, p.6). The seven social welfare and protection elements are: (i) poverty alleviation, (ii) social safety nets and protection from negative impacts of integration and globalization, (iii) enhancing food security and safety, (iv) access to healthcare and promotion of healthy lifestyles, (v) improved capability towards controlling communicable diseases, (vi) a drug-free ASEAN, and (vii) building disaster-resilient nations and safer communities (ASEAN, 2013, p.12). The notion of productive ageing is consistent with the above ASEAN vision. Productive ageing can be defined as focusing on public policies and private behaviour to enable individuals to have a good quality of life in old age (Asher, 2014).

ASEAN (2013) highlights that the implementation of the social protection vision was ‘satisfactory’, and that the initiatives implemented have been reviewed to have ‘potential to improve quality of life through better social protection mechanisms; institutionalized regional mechanism in addressing emerging infectious diseases; promotion of healthy lifestyles; adequate, accessible, affordable, and quality healthcare and services; access to adequate and safe food at all times and being better prepared to respond to pandemic diseases and disasters’ (ASEAN 2013, p.12). Table 1 highlights milestones recorded as sectoral and cross-sectoral achievements for social welfare and development and health as reported in the mid-term assessment document (ASEAN, 2013).

Table 1: Elements and Milestones under Social Welfare and Protection

Elements	Milestones
<p>1. Poverty alleviation</p> <p>2. Social safety net and protection from the negative impacts of integration and globalization</p> <p>3. Enhancing food security and safety</p> <p>4. Access to healthcare and promotion of healthy lifestyles</p> <p>5. Improving capability to control communicable diseases</p> <p>6. Ensuring a drug-free ASEAN</p> <p>7. Building disaster-resilient nations and safer communities</p>	<p>Social Welfare and Development</p> <p>2010: Establishment of the ASEAN Social Work Consortium (Dec 2008) with its terms of reference and work plan endorsed in Jan 2010</p> <p>2010: Hanoi Declaration on the Enhancement of Welfare and Development of ASEAN Women and Children (May)</p> <p>2011: Bali Declaration on the Enhancement of the Role and Participation of the Persons with Disabilities (Nov)</p> <p>2011: ASEAN Decade of Persons with Disabilities (2011–2020) (Nov)</p> <p>2012: Mobilisation Framework of the ASEAN Decade of Persons with Disabilities (2011–2012) (Sep)</p> <p>Health</p> <p>2010: ASEAN Strategic Framework on Health Development for 2010–2015 (July)</p> <p>2010: Establishment of Regional Mechanisms in Responding to Emerging Infectious Diseases including: ASEAN+3 EID Website (2008), ASEAN+3 Field Epidemiology Training Network (2010); ASEAN+3 Partnership Laboratories (2010), ASEAN Risk Communication Centre (2010)</p> <p>2010: Endorsement of ASEAN Strategic Framework on Health Development for 2010 to 2015</p> <p>2011: ASEAN Declaration of Commitment: Getting to Zero New HIV Infections, Zero Discrimination, Zero AIDS Related Deaths (Nov)</p> <p>2011: Launching of 15 June as ASEAN Dengue Day (15 June 2011 Jakarta) as endorsed by the 10th AHMM, July 2010</p> <p>2011: Policy on Smoke-free ASEAN Events (July)</p> <p>2011: ASEAN Position Paper on Non-Communicable Diseases at the High Level Meeting on Non-Communicable Diseases:</p>

	<p>Prevention and Control, UN General Assembly, September, New York</p> <p>2011: Four new Task Forces: Traditional Medicine, Mental Health, Non-Communicable Diseases, Maternal and Child Health</p> <p>2012: ASEAN Health Publications: ASEAN Health Profile; ASEAN Tobacco Control Report; ASEAN e-Health Bulletins</p> <p>2012: Signed Memorandum of Understanding Between the Governments of the Member States of The Association of Southeast Asian Nations (ASEAN) and the Government of the People's Republic of China on Health Cooperation (6 July 2012, Phuket, Thailand)</p> <p>2012: Establishment of ASEAN+3 Universal Health Coverage Network (11–12 December 2012, Bangkok)</p> <p>2012: Declaration of the 7th East Asia Summit on Regional Responses to Malaria Control and Addressing Resistance to Antimalarial Medicines Phnom Penh, Cambodia, 20 November 2012</p> <p>2012: Nomination of 13 sites for the ASEAN Cities Getting to Zeros Project in eight ASEAN member states</p> <p>2013: Four ASEAN Focal Points on Tobacco Control (AFPTC) Recommendations and One Endorsed Sharing Mechanism of Pictorial Health Warning. The four recommendations are: (i) AFPTC Recommendations on Providing Protection from Exposure to Tobacco Smoke; (ii) AFTPC Recommendations on Protecting Public Health Policy with Respect to Tobacco Control Industry Interference; (iii) AFPTC Recommendations on Price and Tax Measures to Reduce the Demand for Tobacco Products; and (iv) AFPTC Recommendations on Banning Tobacco Advertising, Promotion, and Sponsorship (TAPS) (May 2013)</p> <p>2013: Bandar Seri Begawan Declaration on Non-communicable Diseases in ASEAN endorsement at the 8th SOMHD Meeting (August 2013)</p>
--	--

Note: ASEAN = Association of Southeast Asian Nations; ASEAN+3 = ASEAN member states, plus China, Japan, and the Republic of Korea; AHMM = ASEAN Health Ministers' Meeting,

Republic of Korea; EID = Emerging Infectious Diseases; SOMHD = Senior Officials' Meeting on Health Development.
Source: ASEAN (2013).

It is important to underscore the variations in progress in achieving the ASEAN vision across member countries. This is due to differences in fiscal and administrative capacities and policy priorities given to social protection in the scale of aged people in various ASEAN countries. For instance, Indonesia will have to provide old-age income security for 33.2 million people by 2035, but Singapore will have to cater for only 1.6 million individuals above the age of 65 (Table 2).

3. Current Status of Social Protection in ASEAN

Current demographic trends suggest that most economies in ASEAN will age at relatively low incomes, and at a pace that will allow a smaller window of opportunity in terms of time for adjustments in the design of pension programmes and the reform of institutions that support social protection systems. Pension systems will have to finance retirement expenditure for an ageing population for a longer duration, and will therefore have to increase the share of society's resources devoted to the elderly. Additional funding will require changes in the financing mix used to provide pensions in these countries² (Asher and Bali, forthcoming).

² Funding refers to a proportion or a share of the total economic resources available to meet age-related spending. This will imply trade-offs with competing public and private expenditure priorities. Financing refers to the various instruments or mechanisms through which resources are accessed or allocated. These include, for example, social insurance contributions, mandatory and voluntary savings, general budgetary revenue, family and community support.

Table 2: Demographic Trends for ASEAN

	Population (million)		Population >65, in millions (% share in total population)		Population >80, in millions (% share in total population)	
	2010	2035	2010	2035	2010	2035
Brunei Darussalam	0.40	0.51	0.015 (3.7)	0.086 (16.6)	0.002 (0.6)	0.014 (2.6)
Cambodia	14.36	20.10	0.723 (5)	2.1 (10.6)	0.15 (1.1)	0.55 (2.7)
Indonesia	240.7	303.4	12.1 (5.0)	33.2 (10.9)	1.9 (0.8)	4.4 (1.4)
Lao People's Democratic Republic	6.39	9.31	0.23 (3.7)	0.59 (6.4)	0.033 (0.5)	0.085 (0.9)
Malaysia	28.3	38.5	1.4 (4.8)	4.3 (11.2)	1.8 (0.6)	0.7 (1.8)
Myanmar	51.92	59.26	2.6 (5.1)	6.3 (10.6)	0.37 (0.7)	0.77 (1.3)
Philippines	93.4	135.9	3.5 (3.7)	9.6 (7.0)	0.4 (0.4)	1.4 (1.0)
Singapore	5.1	6.8	0.5 (9.0)	1.6 (23.0)	0.1 (1.9)	0.4 (6.3)
Thailand	66.4	66.8	5.9 (8.9)	15.3 (22.9)	1.1 (1.6)	3.4 (5.1)
Viet Nam	89	103.3	5.8 (6.5)	15.9 (15.4)	1.6 (1.8)	3.3 (3.2)
World	6916.2	8743.5	530.1 (7.7)	1118.5 (12.8)	108.3 (1.6)	240.1 (2.8)

Source: Compiled from United Nations (2012), <http://esa.un.org/wpp/unpp/p2k0data.asp> (accessed 23 January 2105).

Even in the confined geographical area of ASEAN there is significant variation in total population and the level and pace of ageing. The total population in most economies, except Thailand and Brunei Darussalam, are projected to increase significantly over the next two decades. Table 2 portends a rapid pace of ageing. This share is projected to more than double in most economies (except the Philippines and the Lao People's Democratic Republic) over the next two decades. This is a short time to ensure adequately preparing for the ageing population. The data also suggest different scaling-up challenges across these economies. For instance, the pension arrangements of Singapore and Malaysia will have to cater for between 1 and 3

million *additional* individuals entering retirement; the Philippines, Thailand, and Viet Nam between 5 and 10 million; and Indonesia about 20 million. This suggests that there is a small window for reform in not only pension design to adapt to rapid ageing, but also in supporting institutions such as labour markets and in public financial management practices. The last two columns depict the share of those aged above 80 in the population. This share will also more than double in most economies, with the exception of Indonesia, the Lao People’s Democratic Republic and Viet Nam. The consumption patterns of those above age 80 can be expected to differ significantly from those at age 65. This suggests that adequate infrastructure, such as health and palliative care, to take care of the old-old (traditionally defined as those above age 80) will need to be developed rapidly.

Table 3: Employment and Labour Force Participation Rates (LFPR, percentage)

	LFPR (15–64) in 2010	LFPR (65+) in 2010	Change in LFPR (15–64) from 2010–2020	Change in LFPR (65+) from 2010–2020	% Change in the share of economically active in population 2010–2035
Brunei Darussalam	70.3	4.3	0.1	–1.9	–4.0
Cambodia	81.3	44	0.5	0.9	2.0
Indonesia	70.4	52.7	0.3	1.7	2.5
Lao PDR	80.9	34.6	1.1	2	8.0
Malaysia	64.7	23.8	–0.7	0.4	0.6
Myanmar	74.8	60	0.9	–0.1	1.5
Philippines	66.1	37.4	–0.2	–2.4	4.1
Singapore	71.5	18	1.6	2.0	–10.3
Thailand	77.8	30.6	0.1	1.0	–8.0
Viet Nam	77.9	13	0.0	–1.3	–1.5
World	69.9	19.5	1.0	0.4	–1.2

Note: LFPR = labour force participation rates; Lao PDR = Lao People’s Democratic Republic.
Source: Compiled from United Nations Secretariat (2012) and ILO (2014).

Table 3 presents labour market trends. Greater lifecycle labour supply enables individuals to sustain (for given trade-off) higher annual consumption during retirement. Theories of economic growth assume a strong role of employment in driving increased savings and investment, and contribution to the demographic dividend. While not illustrated in the table, in most economies labour force

participation rates (LFPR)³ for men are higher than for women. If pension programmes are designed on principles of commercial insurance and not on social insurance or solidarity principles, such trends will give rise to lower replacement rates⁴ for women and inequity within the pension system. This is because women (as a group) have lower lifecycle labour supply and lower incomes and, therefore, lower resources, but (as a group) live longer than men and will have to finance retirement spending for a longer period. The LFPR numbers also mask trends between rural and urban areas. In the developing economies of Indonesia, the Philippines, Thailand, and Viet Nam it is a reasonable assumption that improved access to basic amenities such as water, electricity, and sanitation will improve LFPR, in turn helping to plan for retirement savings.

In most economies the gains in LFPR for both age groups 15–64 and above 65 will be marginal over the next decade (Table 3). The Philippines and Viet Nam are expected to experience a reduction in LFPR for those above age 65. The last column in Table 3 is particularly relevant for pension systems. The share of economically active (that is, those between 15–64 years) is expected to decline for Singapore, Thailand, and Viet Nam, grow marginally for Indonesia and Malaysia and significantly for the Philippines over the next decade. When this is viewed in the context of the data presented in Table 2, it suggests that a smaller number of individuals can be part of the labour force and potentially employed to support the elderly population. While this share is a function of mortality and fertility rates and cannot be adjusted in the medium term, the policy goal is to improve sustainable livelihoods or gainful employment for the vast majority of those in the economically active age group so that the elderly population can be supported for a longer time. This would require separating institutional retirement age – which is often difficult to alter – from economically active retirement age, which is subject to policy initiatives such as exempting persons above a certain age from contributing to provident or pension programmes.

³ Labour force participation rate is the proportion of the population aged 15 years and older that is economically active.

⁴ A replacement rate is the share of income during retirement from all sources (including personal savings, pension income, family, government transfers, and property income) relative to an individual's salary prior to retirement.

The above demographic trends suggest that greater funding, that is, a higher proportion of gross domestic product (GDP), will have to be made available to meet old-age expenditure needs. With increasing longevity, current age-specific contributions by individuals and households to national savings, consumption and investment may change. As individuals will have to sustain consumption for a longer time, without transfers, this will have to be balanced with participation in the labour market for a longer time, or through higher savings, or reduced levels of current consumption or a combination of the above (Poterba, 2014).

The data presented in this section suggest that there will be marginal improvements over the next decade in labour force participation in both the economically active age groups and those above age 65, and therefore greater funding through transfers, particularly from the state, will play an important role in providing old-age income security to economies in ASEAN.

There are three broad dimensions to pension coverage. The first refers to the number of people or retirees that are enrolled in a programme that provides some form of insurance against risks during old age. The second refers to the range of risks covered. In pensions these usually include longevity, survivor and disability risks. The third dimension refers to the adequacy of pension benefits in providing a replacement rate that not only covers inflation risks and mitigates old-age income poverty, but also helps to prevent too large a fluctuation in consumption level over lifetime.

Table 4: Legal and Effective Coverage of Pensions and Healthcare Programmes

	Estimate of health coverage as a % of total population	Healthcare spending not financed by OOP spending (2011) (%)	Estimate of legal coverage for old age (% of working age population)	Active contributors to a pension scheme (% of working age population)	Proportion of elderly population above statutory pensionable age that receive old-age pensions (%)
Indonesia	59.0	50.1	<25	14.1	8.1
Malaysia	100.0	64.6	NA	63.8	19.8
Philippines	82.0	44.1	50–75	54.7	28.5
Singapore	100.0	39.6	50–75	NA	NA
Thailand	98.0	86.5	50–75	21.3	81.7 ^a
Viet Nam	42.0	43.9	<25	12.4	34.5

Note: ^a These proportions refer only to beneficiaries of the old-age or disability social pensions. NA= not available, OOP = Out of Pocket
Source: Asher and Bali (forthcoming).

In ASEAN countries coverage is focused mostly on increasing the number of individuals that are ‘covered’ under a statutory programme and the range of risks covered. This is commonly referred to as legal coverage. The data in Table 4 suggest that there is universal legal healthcare coverage in all economies except Indonesia and Viet Nam, however these programmes do not provide adequate benefit levels as most of healthcare spending is financed out of pocket (except in Thailand). This will reduce the real value of pension benefits, as retirees will have to draw down their pension balances to pay for healthcare. For pension programmes, the Philippines, Singapore, and Thailand have between half and three quarters of the current working age population covered by social security laws, while the ratio is smaller for Indonesia, Malaysia, and Viet Nam. However, there is wide variation in the active contributors to the pension programmes. In most direct contribution-type pension programmes the density of contributions is important to ensure adequate replacement rates. The share of active contributors is much lower than those covered by the

programmes. The last column in Table 4 is the share of the elderly population that receives pensions, again demonstrating large variations. It is high in Thailand, but less than 40 percent in other ASEAN economies. This suggests that there is scope to improve effective coverage. The low effective coverage suggests that significant shares of retirement and healthcare expenditure will have to be financed from individual and household savings. Improvements in organizational effectiveness and coverage ratios of public pension schemes are an urgent imperative in economies such as Indonesia, the Philippines, and Viet Nam.

The above analysis suggests that the challenge for ASEAN countries is to substantially increase the effective coverage of social protection programmes, particularly pensions, healthcare, and work injury or workers' compensation both in terms of population and coverage of workers from various risks. A related challenge is to improve benefit levels under each of these programmes.

3.1. Workers' Compensation and Severance Pay

This area of social protection has received little attention from policymakers and researchers, but it merits greater importance in social protection arrangements. Workers' compensation is defined as 'social insurance, which in effect extends the no-fault principle to share the costs of employment injury across society (or at least that part represented in the formal labour market) as a whole. Underpinning this approach is the principle that employers must provide their workers with a safe and healthy working environment, and that failure to do so renders them liable for the consequent losses suffered by workers or their family members' (ILO, 2014, p.46). Severance pay is defined as a 'form of income protection available to workers dismissed from certain forms of formal employment.' It is a 'lump-sum payment to laid-off workers proportionate to their prior job tenure' (ILO, 2014, p.32).

The extent to which the burden of all social protection programmes is distributed between workers, employers, government, and other stakeholders can only be ascertained with economic analyses incorporating behavioural adjustments by each of the economic agents in response to specific social protection programmes, and not *apriori*. The notion of cost-to-company in determining remuneration levels is

consistent with this proposition. Empirical analysis of the economic burden of social protection programmes in ASEAN merits consideration.

It should also be stressed that along with pensions, workers' compensation and severance pay programmes constitute the cost of hiring and retrenching labour. Thus for all social protection programmes, costs to the employers, to society, and to the workers should be considered together. Thus, Guérard (2012) has argued that Indonesia's severance pay and long service leave benefits substantially increase costs to the employer without commensurate benefits to the workers. As expected, practices in this area of social protection in ASEAN countries vary.

Table 5: Generosity of Severance Payments and Length of Service in Sample Countries

Countries	Length of service			3/1	3/2
	9 months (1)	4 years (2)	20 years (3)		
India ^a	12 days (approx.)	2 months	10 months	25	5
Malaysia	8 days (approx.)	2 months	13.5 months	45	6.8
Philippines	1 month	2 months	10 months	10	5
Singapore ^b	12 days (approx.)	4 months	20 months	50	5
Sri Lanka ^c	1.7 months (approx.)	9 months	46 months	27.1	5.1
Thailand ^d	1 month	6 months	10 months	10	1.7

Notes:

^a These refer to retrenchment benefits. The 'layoff' benefits are different. For firms employing more than 50 workers the layoff compensation is 50 percent of the basic pay plus dearness allowance. This is in addition to the worker's wages during the layoff period. This applies for those who have been employed for one year or more. For firms employing less than 50 workers, only the wages need to be paid.

^b Severance payments are not mandatory in Singapore. The figures used are based on recent retrenchment exercises in large companies.

^c While severance payments are mandatory, the benefit level is not indicated in the Act but is at the discretion of the Labour Commissioner. The figures in the table indicate average awards for 2000 and 2001. These levels therefore may not represent other years.

^d In Thailand, if the employer terminates the employment contract due to adoption of new labour-saving technologies, the employer must make a special severance payment, in addition to the normal severance payment, to employees serving the firm for more than six years. The benefit is calculated at the rate of half a month's wages per year of service with a cap of 12 months' wages. In the event that the employer relocates its place of business that affects normal living of the employee or his/her family, the employer must notify the employee of the relocation at least 30 days in advance or pay an amount in lieu of the advance notice equal to 30 days' wages. In this connection, if the employee refuses to move and work in new location, the employee has the right to terminate the employment contract and is entitled to receive a special severance pay of not less than 50 percent of the prescribed rates of severance pay.

Source: Asher and Mukhopadhaya (2004).

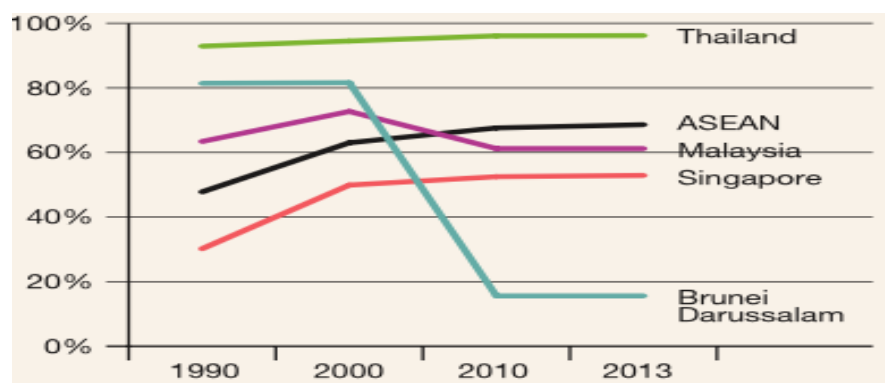
Table 5 highlights the range of severance payments across sample countries. Sri Lanka stands out as having the most generous benefits among the sample countries for all three cases of length of service. Sri Lanka's severance payment of 46 months (for 20 years of service) is nearly three and a half times that of Malaysia, and four and a half times that of the Philippines and Thailand. For workers with 20 years of service, Malaysia's benefits of 13.5 months of salary are moderately higher than the 10 months level in the Philippines and Thailand. Singapore's benefits levels at 20 months are higher but not mandatory. Comparatively, benefit levels for 20 years of service (as multiple of 9 months of service) are substantially higher in Malaysia and Singapore than in other countries (Asher and Mukhopadhaya, 2004). Asher and Mukhopadhaya (2004) argued that there is greater consistency between severance pay and other systems and the growth strategy in Malaysia and Singapore. While this has enabled emphasis on job creation it has also adversely impacted on labour rights and jobs protection.

There are two additional areas that merit a separate discussion in social protection. These are cross-border workers and social protection floor.

3.2. Cross-border Workers

ASEAN is an open region and has a stake in the cross-border flows of workers, with both receiving and sending countries are ASEAN members. The intra-ASEAN flow of migrants has steadily increased from 1.5 million in 1990 to 6.5 million in 2013 (Figure 1).

Figure 1: Intra-ASEAN Share of Member States' Total Migrant Stocks, 1990–2013



Note: ASEAN = Association of Southeast Asian Nations.

Source: ILO and ADB (2014), p.84.

The key destinations for intra-ASEAN migration are Singapore, Malaysia and Thailand, accounting for 97 percent of intra-ASEAN migration. For Singapore this accounts for 52.9 percent, for Malaysia 61.2 percent and for Thailand 96.2 percent. Intra-ASEAN migration from countries of origin has also increased from Myanmar, the Lao People's Democratic Republic and Cambodia by around 40 percentage points each in terms of their total nationals abroad. Most intra-ASEAN migrant workers are employed in low- and medium-skills jobs, such as domestic work, construction, agriculture and fishing sectors (ILO and ADB, 2014; Baruah, 2013).

Given the large flows of migrant labour in ASEAN, member countries receive significant remittances from foreign workers. The remittances, as a share of GDP, range between 0.4 and 9.8 percent (Table 6). In countries such as the Philippines and Viet Nam, remittances by foreign workers are approximately equivalent to government expenditure on healthcare and pension programmes.

Table 6: Migrant Remittances Inflow for ASEAN, Selected Years (US\$ million)

	1990	2000	2010	2013	Remittances as a share of GDP in 2013 (%)
Brunei Darussalam	NA	NA	NA	NA	NA
Cambodia	NA	121	153	176	1.2
Indonesia	166	1190	6916	7615	0.9
Lao PDR	11	1	42	59	0.5
Malaysia	185	342	1103	1396	0.4
Myanmar	6	102	115	566	NA
Philippines	1462	6957	21557	26700	9.8
Singapore	NA	NA	NA	NA	NA
Thailand	973	1700	3580	5690	1.5
Viet Nam	NA	NA	8620	11000	6.4
Total	2803	10413	42086	53202	NA

Note: All numbers are in current (nominal) US\$.

GDP = gross domestic product; Lao PDR = Lao People's Democratic Republic; NA = not available.

Sources: World Bank (2014).

The provisions concerning social protection services, particularly healthcare and workers' compensation for foreign workers, vary across ASEAN (Table 7). For instance, foreign workers in Thailand can access the public healthcare system at similar costs as citizens, but not so in Singapore. Foreign workers in ASEAN working in the manufacturing and construction sectors have limited access to workers' compensation. The recipient countries, particularly Singapore and Brunei Darussalam, receive considerable fiscal benefits but are not providing social protection services.

Table 7: Social Security Coverage of Migrant Workers by Country and Branch, 2014

Country	Branch of social security provided overall									Do these cover migrants?
	Medical care	Sickness	Unemployment	Old age	Work injury	Family	Maternity	Invalidity	Survivors	
Main destination countries										
Singapore	•	•		•	•		•	•	•	No
Brunei Darussalam	•	•		•	•		•	•	•	No
Malaysia	•			•	•			•	•	Yes ^(b)
Thailand	•	•	•	•	•	•	•	•	•	Yes
Main source countries										
Cambodia ^(a)	•	•		•	•		•	•	•	Yes
Indonesia	•	•		•	•			•	•	Yes
Lao PDR ^(a)	•	•	•	•	•	•	•	•	•	Yes
Myanmar ^(a)	•	•	•	•	•	•	•	•	•	Yes
Philippines	•	•		•	•		•	•	•	Yes ^(b)
Viet Nam ^(a)	•	•	•	•	•		•		•	Yes

Note: Information is based on social security laws and acts but does not consider any sub-level decrees or regulations that might hold relevant provisions; (a) Social security laws have been adopted though the implementing legal texts are still in draft form. (b) Excludes medical care. “Yes” means migrant workers are covered equally with non-migrants. “No” means only nationals and/or permanent residents are eligible.” • ” indicates a branch of social security is provided within a given country.

Source: ILO and ADB (2014), p.98.

Different member states also impose varying constraints that may restrict such movement. These constraints come in the form of levies, permits, and quotas.⁵ It is unclear as of January 2015 whether the ASEAN Economic Community (AEC) post-2015 arrangements will continue to permit such high levies on foreign workers. It is also unclear whether the ASEAN countries would use such levies to constrain the flow of professional workers among ASEAN countries. ASEAN policymakers are

⁵ For example, Singapore levies on foreign workers vary by sector from SGD 250 to 750 per month. The foreign domestic workers’ levy ranges from SGD 125 to 265 per month (Singapore Ministry of Manpower, 2015). In addition, ratios are specified for hiring local Singaporeans in relation to hiring of foreign workers. The enforcements of these ratios have become much stricter since the middle of 2014. Separate revenue data on levies on foreign workers are not published by the Singapore authorities. This may impact the business climate of Singapore, which is already regarded as being among the most expensive cities in the world (*The Economist*, 2014).

discussing a draft on working conditions and other migrant issues. But no official document has emerged. In 2007, the ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers was signed to ensure migrant worker rights for both sending and receiving countries (ASEAN, 2007).

If the AEC is to be a coherent economic community, it is essential that the flow of workers within ASEAN is managed with the overall interest of the AEC, rather than each country trying to maximize their own interests. Labour laws and management of regional flows are and will be critical challenges for ASEAN to overcome. As these economies continue to grow the need for labour will increase, with most demand likely to be met from within the region. Hence, governments must progress towards easing constraints for such flows, and enact legislation to ensure proper working and living conditions for migrant workers. Social protection, involving workers' access to basic health and other services in their country of work, and labour rights will need to be a key focus for the AEC. This highlights the importance of building a social protection floor.

3.3. Social Protection Floor – The Role of Social Pensions

The second challenge for strengthening social protection is building a social protection floor (SPF) in the AEC, but in a context-specific and gradual basis, without making formal commitments as it will increase demand immediately. Supply of services will take longer, and be subject to constraints, creating distortions and unduly raise expectations. The implications of an SPF on fiscal demands are likely to be less predictable due to potential for political economy environment. This leading to growing benefit levels, and to future inflation risk in these services that is borne by the government. The opportunity costs of an SPF in terms of other expenditure priorities such as education and infrastructure, can also be better managed if the SPF is not mandatorily established through legislation.

There is, however, increasing recognition of the role of social pensions, that is, non-contributory retirement income benefits that are financed from budgetary sources, in mitigating old-age income poverty and ensuring that inequalities present during the working age are not aggravated during retirement. But this should also be calibrated in line with capacity to deliver social pensions with low transaction costs,

and without unduly large errors of inclusion (that is, those who should not receive the benefit do), and of exclusion (those who should receive the benefit do not).

The United Nation’s 2014 *Road to Dignity* report also stresses the need for countries to increase domestic public revenue to develop core social functions such as the SPF. The report highlights ‘key sustainable development gaps left by the MDGs’ such as social protection and labour rights (UN 2014, p.14).

Table 8 provides an overview of the main features of social pension schemes in selected ASEAN countries.

Table 8: Non-contributory Pension Schemes: Main Features (latest available year)

	Date	Means test	Name of programme	Age	Monthly benefit US\$ (as % share of average wage)	No. of recipients (as % share of population above age 65)
Indonesia	2006	Assets, income, pensions	Elderly Social Security Programme	60	32.0 (23.2)	13250 (0.1)
Malaysia	1982	Income, pensions	Elderly Assistance Scheme	60	94.4 (12.7)	15252 (8.0)
Philippines	2011	Income, pensions	Social Pensions Scheme	77	11.5 (6.0)	148768 (4.0)
Singapore	Singapore does not have a social pension					
Thailand	1993	Income, pensions	Old Age Allowance	60	20.0 (6.0)	612370 (100%)
Viet Nam	2004	Income, pensions	Social Assistance Benefit	60 –79 80	6.3 (4.8) 9.4 (7.1)	808773 (2.4) 139338 (13.8)

Source: Asher and Bali (forthcoming).

All economies except Singapore have some element of social pensions in their financing mix. However, there is a large variation in the number of beneficiaries and the benefit level. While the benefit level (as share of average wage) is low in Thailand, all individuals above age 60 receive a social pension. Indonesia’s social pension is approximately one quarter of wages, but less than 0.1 percent of the population above age 65 receive it. The data suggest that there is room to develop social pensions as an integral component in the financing mix to support retirement.

Social pensions would provide an element of retirement security to those that have not been able to participate in formal contribution-based social security programmes.

How much would social pension schemes cost? Estimates in Asher and Bali (2014) on financing social pensions in developing Asia (which included most economies in ASEAN except Singapore) suggest that a universal social pension (covering everyone over age that is indexed to per capita income (that is, benefit level is 15 percent of per capita income) would cost between 0.6 percent (Philippines) and 1.33 percent (Thailand) of GDP in 2010 and will rapidly grow to between 1.4 percent (Indonesia) and 2.9 percent (Thailand) by 2030.

In developed economies such as New Zealand, fiscal costs in 2009–2010 were 4.3 percent of GDP and are expected to increase to 8 percent of GDP by 2050; in Australia, the fiscal costs of means-tested pensions were 2.7 percent of GDP in 2009, and are projected to be 3.9 percent of GDP in 2050 (Bateman and Piggott, 2011). For Singapore, Asher and Bali (2014) estimate that for a benefit level of 30 percent of median annual wage, the fiscal cost will range from 1.16 percent of GDP in 2012 to 2.60 percent by 2030 (for a universal social pension for all citizens above age 65). If the benefit level is indexed to 20 percent per capita income, the estimated cost of the social pension scheme will range between 1.26 percent in 2012 to 3.46 percent in 2030.

Table 9: Average Resource Position: Select Economies in ASEAN (2005–2011)

	Government level	Total revenue and grants	Total revenue current, and capital	Current revenue	Taxes	Non-taxes	Capital receipts	Overall budgetary surplus/deficit	Public debt to GDP in 2014 (%) (percentage point increase over past three years)
1	2	3	4	5	6	7	8	9	10
Indonesia	Central	17.4	17.4	17.4	12.1	5.3	N	-0.9	25.5 (1.2)
Malaysia	Central	20.8	20.8	20.8	14.6	6.2	N	-4.3	62.3 (8.9)
Philippines	Central	14.8	14.8	14.5	12.9	1.6	0.3	-2	47.4 (-3.8)
Singapore	Central	21.9	21.9	18.4	12.7	5.7	3.5	6.8	94.3 (-4.8)
Thailand	Central	16.9	16.9	16.9	14.9	2.0	N	-1.4	53.1 (8.6)
Viet Nam	Central	28.5	28.1	25.9	23.6	2.4	2.1	-1.6	47.3 (-5.1)

Note: Unless otherwise specified the above numbers are as share of GDP; N = negligible.

Sources: Das-Gupta (2014) and Economist Intelligence Unit (2014).

The fiscal cost of social pensions (Table 9) should be weighed against the resource position of ASEAN countries. Thus, Indonesia's tax to GDP ratio was 12.1 percent during 2005–2011. Indonesia's projected social pension cost of 1.4 percent will be one-eighth of its total tax revenue. This requires significantly large tax mobilization efforts. Moreover, there are other claimants for any revenue increase whose merits will need to be weighed against the merits of social pensions. Social pensions will have an opportunity cost in terms of other expenditure not being given a priority.

4. ASEAN Social Protection Vision: Suggested Initiatives

The issue of whether to create a social protection forum at AEC level for technical and other assistance merits consideration. It is essential that ASEAN as a group creates mechanisms and modalities whereby individual countries can be supported in their reform efforts. This is to ensure that all ASEAN countries are able to construct minimum social protection capabilities and support systems, requiring ASEAN to put much greater weight on the social protection agenda in its functioning than has been the case until now.

To be a coherent economic community it is essential that the flow of workers within the AEC are managed consistently with the overall interest of the AEC, rather than each country trying to maximise their own interests. In analysing labour migration, Holzmann and Koettl (2014) argued that '...legal and human rights based considerations are increasingly joined by economic considerations that help underpin the social policy objectives with a more analytical and empirical framework' (p.3). They propose a framework for analysing portability of pension and health benefits across borders which incorporates risk pooling, pre-funding and redistribution to improve efficiency and fairness. Such a framework can be used as a substitute and a complement to totalization agreements.

The vision's outcome should be to enable the elderly in all ASEAN countries to pursue productive ageing. ASEAN's role as an institution to enable individual members to plan and develop capacities for taking initiatives towards realising

productive ageing of its population merits consideration. Planning must be outcome based. This implies that outcomes be clearly stated in concrete initiatives and achieved within a stated timeframe. It is not just about allocating funds, but producing desired outcomes in terms of creating a bundle of services which the elderly population can access and afford. The discussion below enumerates some of the initiatives to enable the pursuit of productive ageing in ASEAN.

4.1. Reducing expenditure needs

Policies conducive to productive ageing facilitate the following avenues for reducing expenditure needs. First, they could lead to better understanding the reasons for certain diseases more prevalent in the elderly, reducing their incidence and treatment costs.

Second, they could assist in keeping individuals economically (and socially) active for a longer period. Increasing the effective retirement age⁶ has been one of the significant policy responses in Europe, Japan, Singapore the United Kingdom and the United States. Other Asian countries – most notably China, India, and Indonesia – may also consider reforms designed to increase the effective retirement age to reduce the number of years for which financing is needed in old age. Facilitating a gradual rather than an abrupt shift from full-time work to retirement also merits serious consideration.

Third, awareness of productive ageing facilitates more informed debates about ageing and equitable sharing of resources and amenities between generations. The state also has a responsibility to initiate high quality expertise and empirical evidence-based debate among all the stakeholders.

Fourth, a well-considered system of discounts for public amenities such as transport services, utilities, museums and parks could help reduce expenditure needs of the elderly. Having public spaces in community centres for the elderly could provide low-cost safe places for the elderly to gather and exchange information.

Fourth, social security needs of increasing numbers of cross-border workers also need to be addressed. Officially recorded remittance flows to developing countries reached an estimated \$401 billion in 2012, growing by 5.3 percent compared with

⁶ This is usually lower than the institutional or statutory retirement age.

2011. Remittance flows are expected to grow at an average of 8.8 percent annually from 2013–2015 to about \$515 billion in 2015. Stock of immigrants is projected to increase from 216 million in 2010 to 400 million by 2040 (Sutherland, 2013).

Cross-border workers provide vital economic services and fiscal benefits to the receiving community, but often do not receive commensurate public services. This issue should be addressed in individual countries and by ASEAN as a group.

4.2. Creating Fiscal Space

Avenues to generate resource savings and fiscal space, and finance for funding expenditure on the aged are noted below.

- There is considerable scope for economic resource savings, which can be obtained through increased professionalism in the design, administration and structure of provident and pension funds and healthcare systems, among others. The Philippines' Social Security System (SSS), for example, exhibits administrative costs of around seven percent of contributions, while the estimate for Malaysia's Employee Provident Fund is around three percent. A reduction in costs of the SSS through process and system reforms could thus improve benefits. The SJSN Law (*Sistem Jaminan Sosial Nasional* = National Social Security System) of Indonesia (2004) has insufficient clarity on financing and benefits among others, and does not adequately address the need for appropriate organizational incentive structures. This neglect may generate contingent fiscal liabilities. Skypala (2014) argued that separating charges for fund investments and for administration by pension fund managers could reduce pension management costs in the United Kingdom, thus improving benefits. There is a strong case for exploring avenues for reducing administration and compliance costs of pension and healthcare programmes.
- There is a need to enhance competence to generate resources from unconventional sources such as more efficient use of state assets (land and property rights such as airspace, oil and mining resources, and carbon trading among others). This is likely to involve better coordination among and

between pension and healthcare sectors for increased resource savings and greater policy coherence (Bali and Asher, 2012).

- Tax reform and improving compliance levels and efficiency is another avenue to generate savings. In Europe, the United States and the United Kingdom, corporate tax reforms, particularly those designed to protect the tax base have become a priority. The aggressive corporate tax planning is exemplified by reports that Google shifted €9 billion to Bermuda as part of its global tax planning (Houlder, 2013.) In 2012, the Organisation of Economic Co-operation and Development (OECD) created a forum on value added tax (VAT) to help counter aggressive tax planning of the VAT by the businesses.
- Sovereign wealth funds (SWFs) – set up to smoothen excess of current receipts over expenditure arising from energy resources, trade surpluses and other sources, and between generations – are another avenue for funding old age needs. In Asia, China, the Republic of Korea, and Singapore have been adept at using SWFs to fund future expenditure needs, including those of the aged. Countries such as Malaysia may also consider this avenue for enhancing social protection spending.
- Financial innovations, particularly at the pay-out phase, are accumulation schemes. The conventional practice of relying on annuities will be inadequate given limited financial instruments to mitigate longevity risk, and due to uncertainties in longevity trends in medical technology breakthroughs. Such innovations, which reduce transaction costs of service delivery and provide better risk sharing between the insurance company, the individual and the government, will be needed. Some high-income countries have attempted to finance old age by developing instruments which convert real estate into a retirement consumption stream. They have had some success, but greater research and innovation in this area is essential for it to play a significant role. In developing Asia, individuals and households will need to bear a greater proportion devoted to old-age financing.

Promoting a secure and stable policy and regulatory environment for long-term savings by individuals should therefore be an important instrument for financing old

age. But this needs to be undertaken without creating fiscal risks which ultimately must be borne by the citizens.

4.3. Enhancing Professionalism

It is imperative that the five core functions of provident and pension funds must be done with greater professionalism than has been the case in many ASEAN economies.⁷ This, in conjunction with strong regulation, would enable the ASEAN countries to provide much higher levels of pension benefits from lower contribution rates than is the case now. The focus of these organizations should be on providing benefits to their members, which are commensurate with the contribution rates and the transactions costs of administration and compliance.

Some ASEAN members such as Thailand and Malaysia have high administrative and compliance costs (Table 10). They have not been able to adequately undertake record-keeping and management information system tasks, even for a small proportion of the labour force comprising formal sector workers. Their plans to expand coverage to include informal sector workers could be undermined by their inadequate record-keeping capabilities.

Table 10: Administrative and Compliance Costs of Select Pension and Provident Fund Organizations in ASEAN

Variable	Employees Provident Fund (Malaysia) 2012	Social Security System (Philippines) 2012	Central Provident Fund (Singapore) 2012	Social Security Organization (Thailand) 2012
Operating expenses as share of gross income (%)	1.77	6.03	2.48	3.65
Operating expenses as share of contributions (%)	2.92	8.20	0.77	4.77
Operating expenses as share of assets (%)	0.25	2.13	0.09	0.63

Source: Asher and Bali (forthcoming).

⁷ The core functions of any pension or provident fund may be stated as a reliable collection of contribution and/or taxes and other receipts; payment of benefits for each of the schemes in a correct way; efficient financial management and productive investment of provident and pension fund assets; maintenance of an effective communication network, including development of accurate data and record-keeping mechanisms to support collection, payment and financial activities; and production of financial statements and reports which contribute to effective and reliable governance, fiduciary responsibility, transparency, and accountability of old-age institutions (Ross, 2011).

Investment policies and performance also remain a challenge in ASEAN. Limitations of domestic financial and capital markets, legal restrictions on international diversification (for example, Malaysia, Indonesia), and low importance given to fiduciary responsibilities (which require maximizing returns of provident and pension fund balances for the benefit of the members) have contributed to this outcome.

As pre-funding arrangements, through retirement savings or accumulation of reserves, become increasingly common (pension assets are expected to grow significantly in ASEAN countries), development of domestic financial and capital markets has become essential. Provident and pension funds will need to increasingly acquire competencies to deal with sophisticated investment strategies using diverse asset classes (for example, debt, equity, real estate, and currencies) and diverse players (such as hedge funds, private equity investors, and sovereign wealth funds).

Such sophisticated strategies however should not be attempted without adequate preparation and without understanding downside risks. In many low- and middle-income countries, it may be prudent to not fully attempt to obtain upside potential from investments or from financial innovations such as credit default risks, in order to minimize downside risks.

4.4. Systemic Perspective

Four aspects of this perspective need to be addressed. The first aspect, involving complementary reforms in other areas such as labour markets, fiscal policy, and financial and capital markets, is essential for effective social security reform.

Effective social security reform is facilitated by sustainable macroeconomic policies which lead to high and stable growth, benefits of which are distributed widely. This is because the single most important variable for the economic security of both the young and the old is the long-term trend of economic growth. Labour market regulations and functions must provide a balance between creating new jobs and preserving existing jobs. High employment is negatively correlated with poverty, and therefore creating economically viable and sustainable jobs is essential.

Civil service pension reform should form part of the fiscal policy reforms. These should be based on the full cost (including unfunded liabilities) of pension (and

health) benefits being provided to civil servants and to improve the delivery of government services (including social assistance or social pensions for the elderly). Without full costing of civil service benefits, it would be difficult to allocate society's resources devoted to the elderly equitably and efficiently. In many countries, without civil service pension (and healthcare) reforms, too large a share of national income devoted to all elderly will accrue to civil servants. This creates intra-generational inequities and may strain social cohesion.

Financial and capital market reform is essential as the demand for quality investments by provident and pension funds should be matched by the corresponding supply of financial assets, based on both debt and equity. Unlocking the value of state enterprises through partial or full divestments will be an important avenue in many ASEAN countries for increasing the supply of such assets.

The second aspect of the systemic perspective concerns the multi-tier framework to provide social security. While such a framework may have theoretical limitations (Barr and Diamond, 2008), it is essential for managing risks of financing old age in any realistic political economy setting, particularly in ASEAN.⁸ In a multi-tier framework, different tiers provide a balance between social risk pooling and individuals bearing investment, longevity and other risks; between contributory and non-contributory schemes; and flexibility in managing and accessing retirement contributions or savings. The World Bank in 2005 has suggested a five-tier framework but it should be adapted to specific country needs and contexts (Holzmann and Hinz, 2005).

The relative weight of each tier however may vary from country to country. Initial conditions would have an important bearing on these weights. Thus, the Philippines, Thailand, and Viet Nam have pension (and healthcare) systems based on social insurance principles (though coverage of the population in each country is far from being universal). Malaysia has primarily relied on a single tier of mandatory savings, which is also used for housing and healthcare. Countries also need to

⁸ Recent reforms in Chile which have strengthened and widened the coverage of social pensions financed from the budget are instructive in this regard (Asher and Vasudevan, 2008). There has been growing interest in design and implementation of social pensions financed from the budget and in co-contributing schemes involving pension savings by low-income individuals which are matched by governments (Holzmann, *et al.*, 2009).

expand their social assistance programmes and introduce social insurance and solidarity principles into their pensions systems.

These countries need to consider building other tiers, particularly social assistance (or social pension) type programmes financed from the budget, and individual retirement savings (Palacios and Sluchynsky, 2006). ASEAN countries such as Thailand and the Philippines have found it difficult to implement individual retirement accounts, whether mandatory or on a voluntary basis. Developing robust annuity markets, which are important for defined contribution pension systems, has been a major challenge.

The main constraints arise due to limited investment instruments to manage longevity and inflation risks during the pay-out phase. Uncertainties about longevity trends are also a constraining factor, as these lead to conservative pricing of annuities, making them unattractive in comparison to other investments (and in some cases unaffordable) creating adverse selection problems. Therefore, greater attention will have to be given to the pay-out phase, including phased withdrawals, with some social risk pooling in the form of above-market interest rates, financed from the budget. Greater experimentation and research on group annuities' phased withdrawal programmes and other such instruments merits consideration as alternatives to individual purchase of annuities. Lower fertility rates, urbanization, changing values, and expectations of both the young and the old are significantly increasing the need for more formal pension systems in ASEAN, consistent with the experiences of current industrialized countries which faced these trends earlier.

Nevertheless, public policies in ASEAN should continue to promote traditional family-oriented values and allocate resources and energies towards this goal. This is unlikely to reverse the trend towards the need for more formal pension systems but it may reduce the rate of transition, and somewhat reduce the scope of the formal systems.

It is also essential to recognize the importance of personal savings, home ownership, investing in human capital, including for children, and opportunities for participating in livelihood activities in old age as integral elements of any pension system. If their importance is reflected in tax, regulatory and government expenditure allocation decisions, these can play a useful supplementary role in

addressing pension challenges. In some countries with well-developed microfinance institutions, micro-pensions could also play a useful role.

It is important that policymakers enable households to use all the tiers, albeit to a varying extent, to obtain the required replacement rate for financial security in retirement. While the precise share cannot be prescribed *a priori*, both policymakers and households must consciously strive to make full use of all five tiers.

Regardless of whether social security systems of a country are based primarily on social insurance and social solidarity principles or on individual and family responsibility, a significant proportion of retirement financing needs in the 21st century will have to be met from individual savings (Spivak, 2008). This suggests that social norms and financial regulation should be structured in a way that does not undermine thrift and saving habits. The credit culture must be kept in reasonable check lest it undermine household saving which is the main component of national saving in countries such as India. It is also essential that the responsibilities of families and immediate communities taking care of the elderly are not too rapidly substituted by the state. This will require nurturing appropriate social norms and regulations.

The third aspect of the systemic perspective concerns the need for public policies in ASEAN to consider pension and healthcare financing arrangements in an integrated manner (Bali and Asher, 2012). As most healthcare services in ASEAN are paid for by out-of-pocket expenditure, it erodes the real value of pension benefits. Further, coordination between healthcare and pension policies can help better manage the total resource costs devoted to age related expenditure. A significant proportion of individuals above 80 years of age have difficulty performing daily functions. With decreased fertility and greater mobility, healthcare givers for the aged have become scarce. Developing countries – such as Indonesia and the Philippines, and, to a lesser extent, Thailand – will also have to address the challenge of long-term care.

The fourth aspect includes accounting and budgeting reforms, including procurement, and a move from accounting-based budgets to accrual-based budgets. This would enable governments to better manage their fiscal risks that stem from inadequate appreciation of current and future contingent liabilities.

4.5. Financial Education and Literacy

Provident and pension schemes require a greater degree of financial education and literacy on the part of all stakeholders, particularly individual members. The growing complexity of financial products and multiplicity of new financial players underscore the importance of financial education and literacy. Financial education and literacy should not be interpreted narrowly as only provident and pension funds in providing leadership and finances in designing and delivering these services to members. The lessons of financial education and literacy should be incorporated in the design and governance structures of the provident funds. This unfortunately is not the case with many provident funds in ASEAN.

ASEAN member countries need to make more systematic efforts in promoting financial education. Such education is needed at all levels – the general public, officials and trustees of provident and pension fund organizations, those involved in designing, marketing and advising of pension products, media and policymakers. National campaigns for enhancing financial literacy will be needed, with a greater emphasis on literacy for government officials, trustees and managers of social protection agencies. An important aspect of literacy in this regard concerns the need to impress those involved in ASEAN economic initiatives to consider social protection as an integral part of sustaining economic growth with social cohesion and not as an afterthought. Without such education, which is effective in changing mindsets, ASEAN's post-2015 vision of social protection will be severely constrained.

4.6. Indigenous Research Capability

ASEAN member countries will need to substantially enhance their capacity to undertake rigorous empirical evidence-based, policy-relevant research on pensions and healthcare issues. This will require strengthening the existing databases on morbidity and mortality patterns and enhancing the behaviour of individuals and firms concerning saving and retirement. The challenges of ageing are too immense and complex to delay building such capacity, and not adopting a mindset which translates research findings into timely policy measures. ASEAN countries may benefit from studying the experiences of the OECD countries, such as Sweden and

Germany, and of Chile's experience in encouraging a culture of solid analytical, policy-oriented indigenous research on pension issues and making available a robust database to undertake such research.

Finally, consideration could be given to establishing a social protection forum at the AEC level to discuss technical and other assistance for member states. Such a forum should bring together public officials and other stakeholders such as trade unions, employer organizations, academics, researchers, and pension industry representatives.

The ASEAN vision will require construction of a robust social security system. To this extent, each member will have to rely on a multi-tiered approach (Holzmann and Hitnz, 2005). The weight assigned to each of the tiers, and the organizational and institutional capacity required to support them will vary between member countries. To this extent, each country will have to develop its own financing mix relying on multiple instruments. Relying on a blueprint or replicating a pension system from another economy will serve limited use.

Concluding Remarks

The analysis in this paper suggests that ASEAN as an organization and its individual member countries should consider the following initiatives in progressing towards its Socio-cultural Community Vision 2025. These are broad initiatives under which countries can contextualize various sub-initiatives.

1. Consider creating an ASEAN social protection forum to enable development of a more robust database on social protection to undertake policy-relevant research, to enable regular communication in exchange of ideas and information among all the stakeholders to provide technical and other assistance to members as needed. Such a forum should have adequate and secure funding, preferably from the member countries themselves.
2. There must be a cross-border worker agreement which recognizes the social protection needs of migrant workers. Totalization agreements among ASEAN

members involving formal social security programmes should also be encouraged.

3. Consideration by each ASEAN member of how it can enhance professionalism in the core function of its social protection systems and how it can incorporate systemic perspectives in social protection merits serious consideration.
4. Initiatives to reduce expenditure needs of the elderly through productive ageing, and through a well-considered system of discounts for public amenities – such as transport, healthcare, and utilities – warrant consideration. Such initiatives could also be considered at an ASEAN-wide level.
5. There is merit in not separating the social sector in general, and social protection programmes in particular, from the ASEAN Economic Community deliberations. This is because without progress in social protection adequacy and coverage, essential reforms needed to sustain growth and economic restructuring while maintaining social cohesion is and will be progressively difficult. It is no longer appropriate to compartmentalize and prioritize the economic aspects in the current and foreseeable global economic, technological, and political environment. Post-2015, ASEAN should also consider reducing the reliance on donors for funding and for expertise, and create mechanisms for generating resources for progressing towards the social protection vision from sources within the region.

References

- Association of Southeast Asian Nations (ASEAN) Secretariat (2007), ‘ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers’, Available at <http://www.asean.org/communities/asean-political-security-community/item/asean-declaration-on-the-protection-and-promotion-of-the-rights-of-migrant-workers-3>
- ASEAN Secretariat (2009), *ASEAN Socio-Cultural Community Blueprint (2009–2015)*. Jakarta: ASEAN, pp.6–9.
- ASEAN Secretariat (2013), *Mid-Term Review of the ASEAN Socio-Cultural Community Blueprint*. Jakarta: ASEAN, pp.19–21.

- Asher, M. G. (2014), 'The Future of Old Age Income Security'. *Robert Butler Memorial Lecture, Future of Ageing Symposium*, International Longevity Centre Singapore and Tsao-NUS Ageing Research Initiative, National University of Singapore, 21 June 2013.
- Asher, M. G. and A. S. Bali (2012), 'Malaysia'. In D. Park (ed.), *Pension Systems in East and Southeast Asia: Promoting Fairness and Sustainability*, pp. 53–65, Manila: Asian Development Bank.
- Asher, M. G. and A. S. Bali (2013), 'Fairness and Sustainability of Pension Arrangements in Singapore: An Assessment', *Malaysian Journal of Economic Studies*, 50(2), pp.175–191.
- Asher, M. G. and A. S. Bali (2014), 'Financing Social Protection in Developing Asia: Issues and Options', *Journal of Southeast Asian Economies*, 31(1), pp.68–86.
- Asher, M. G. and A. S. Bali (forthcoming), 'Public Pensions in Southeast Asia: An Assessment', *Asian Economic Policy Review*.
- Asher, MG and Deepa Vasudevan. (2008), "Lessons for Asian Countries from Pension Reforms in Chile", #381, *PIE/CIS Discussion Paper*, Center for Intergenerational Studies, Institute of Economic Research, Hitotsubashi University.
- Asher, M. G. and P. Mukhopadhaya (2004), 'Severance Pay in Selected Asian Countries: A Survey.' Paper presented at the *World Bank-International Institute for Applied System Analysis-Ludwig Boltzmann Institute International Workshop on Severance Pay Reform: Towards Unemployment Savings and Retirement Accounts*, Luxemburg/Vienna, 7–9 November.
- Asher, M. G. and F. Zen (2014), 'Jakarta Framework and the Design of the Social Safety Nets for ASEAN Countries'. In Intal, *et al.* (eds.), *ASEAN Rising: ASEAN and AEC Beyond 2015*. Jakarta: Economic Research Institute for ASEAN and East Asia.
- Bali, A. and M. G. Asher (2012), 'Coordinating Healthcare and Pension Policies: An Exploratory Study', *ADB Working Paper No. 24*, Tokyo: Asian Development Bank Institute.
- Economist* (2014), 'Sing on a Shoestring', 7 March. Available at <http://www.economist.com/blogs/banyan/2014/03/world-s-most-expensive-city>
- Barr, N. and P. Diamond (2008), *Reforming Pensions: Principles and Policy Choices*. Oxford, UK and New York, US: Oxford University Press.
- Barrientos, A. (2014), 'Is There a Role for Social Pensions in Asia?' *Asia and the Pacific Policy Studies*. DOI:10.1002/app5.63.
- Baruah, N. (2013), 'Trends and Outlook for Labour Migration in Asia.' In *the 3rd ADBI-OECD-ILO Roundtable on Labour Migration in Asia: Assessing Labour Market Requirements for Foreign Workers and Developing Policies for Regional Skills Mobility*. Bangkok: International Labour Organization.

- Bateman, H., and J. Piggott, (2011). *Structuring the Payout Phase in a Defined Contribution (DC) Scheme in High Income Countries: Experiences of Australia and New Zealand*. Jakarta: Economic Research Institute for ASEAN and East Asia.
- Bhaskaran, M. (2015), 'My Say: This May Not be a Banner Year for ASEAN'. *The Edge*, 15 January. Available at <http://www.theedgemarkets.com/my/article/my-say-may-not-be-banner-year-asean>, (accessed 19 January 2015).
- Das-Gupta, A. (2014), 'Fiscal Resources for Inclusive Growth', *ADB Economics Working Paper Series*, No. 416, Manila: Asian Development Bank.
- Economist* (2014), 'Sing on a Shoestring', 7 March. Available at <http://www.economist.com/blogs/banyan/2014/03/world-s-most-expensive-city>
- Guérard, Y. (2012), 'Indonesia'. In D. Park (ed.), *Pension Systems in East and Southeast Asia: Promoting Fairness and Sustainability*, pp. 21–37, Manila: Asian Development Bank.
- Holzmann, R. and J. Koettl (2014), 'Portability of Pension, Health, and other Social Benefits: Facts, Concepts and Issues', CESifo Economic Studies Advance Access, doi:10.1093/cesifo/ift017, Oxford University Press, Munich. Available at: <http://cesifo.oxfordjournals.org/content/early/2014/01/12/cesifo.ift017.full.pdf> (accessed 24 February 2014).
- Holzmann, R., D. Robalino and N. Takayama (eds.) (2009), *Closing the Coverage Gap: The Role of Social Pensions and Other Retirement Income Transfers*, Washington, D.C.: World Bank.
- Holzmann, R., and R. Hinz (2005), *Old Age Income Support in the 21st Century: The World Bank's Perspective on Pension Systems and Reform*. Washington, D.C.: World Bank.
- Houlder, V. (2013), 'Google Shifts €9bn to Bermuda,' *Financial Times*, 11 October.
- International Labour Organization (ILO), (2010). *World Social Security Report 2010–2011: Providing Coverage in Times of Crisis and Beyond*. Geneva: ILO.
- International Labour Organization (ILO), (2014). LABORSTA. Available at <http://laborsta.ilo.org/STP/guest> (accessed 13 January 2015).
- International Labour Organization (ILO), (2014). *World Social Protection Report 2014–2015: Building Economic Recovery; Inclusive Development and Social Justice*. Geneva: ILO.
- International Labour Organization (ILO) and Asian Development Bank (ADB) (2014), *ASEAN Community 2015: Managing Integration for Better Jobs and Shared Prosperity*. Bangkok: ILO and ADB.
- Singapore Ministry of Manpower (2015), 'Labour Summary Table Force'. Singapore: Ministry of Manpower. Available at

- <http://stats.mom.gov.sg/Pages/Labour-Force-Summary-Table.aspx> (accessed 13 January 2015).
- Palacios, R. and O. Sluchynsky (2006). 'Social pensions Part I: their role in the overall pension system', *Social Protection Discussion Papers* 36237, The World Bank: Washington D.C.
- Poterba, J. M. (2014) 'Retirement Security in an Aging Society', *Working Paper* No. 19930, National Bureau of Economic Research. Available at <http://www.nber.org/papers/w19930>
- Ross, S. (2011), 'Collection of Social Contributions: Current Practice and Critical Issues'. In N. Takayama (ed.), *Priority Challenges in Pension Administration*. Tokyo: Maruzen.
- Skypala, P. (2014), 'UK Funds Geared Up for Fees Price War', *Financial Times*. Available at: <http://www.ft.com/intl/cms/s/0/6eac4f0a-8526-11e3-86f700144feab7de.html#axzz2uDaA4axo> (accessed 24 February 2014).
- Spivak, A. (2008), 'The Social Contract Revisited – The Rise in Uncertainty and Reforms of Social Security Systems in Chile and Sweden', *The Foundation for Law, Justice and Society*. Available at <http://www.fljs.org/uploads/documents/Spivak.pdf>
- Sutherland, P. (2013), 'Migration is Development', *Project Syndicate*, 15 March. Available at <http://www.project-syndicate.org/commentary/migrants-and-the-post-2015-global-development-agenda-by-peter-sutherland> (accessed 20 January 2015).
- United Nations (UN) (2014), *The Road to Dignity by 2030: Ending Poverty, Transforming All Lives and Protecting the Planet, Synthesis Report of the Secretary-General On the Post-2015 Agenda*. New York: United Nations. Available at http://www.un.org/disabilities/documents/reports/SG_Synthesis_Report_Road_to_Dignity_by_2030.pdf
- United Nations Population Division of the Department of Economic and Social Affairs (2012), *World Population Prospects: The 2012 Revision*. Available at <http://esa.un.org/wpp/unpp/p2k0data.asp> (accessed 23 January 2015).
- United Nations Research Institute for Social Development (UNRISD) (2010), 'Combating Poverty and Inequality: Structural Change, Social Policy and Politics'. In *UNRISD Flagship Report: Combating Poverty and Inequality* (August). Available at <http://www.unrisd.org/unrisd/website/document.nsf/%28httpAuxPages%29/92B1D5057F43149CC125779600434441?OpenDocument&panel=additional>
- World Bank (2014), *Annual Remittances Data: October 2014*. Available at <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROJECTS/0,,contentMDK:22759429~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html> (accessed 10 January 2015).

ERIA Discussion Paper Series

No.	Author(s)	Title	Year
2015-06	Mukul G. ASHER and Fauziah ZEN	Social Protection in ASEAN: Challenges and Initiatives for Post-2015 Vision	Feb 2015
2015-05	Lili Yan ING, Stephen MAGIERA, and Anika WIDIANA	Business Licensing: A Key to Investment Climate Reform	Feb 2015
2015-04	Gemma ESTRADA, James ANGRESANO, Jo Thori LIND, Niku MÄÄTÄNEN, William MCBRIDE, Donghyun PARK, Motohiro SATO, and Karin SVANBORG-SJÖVALL	Fiscal Policy and Equity in Advanced Economies: Lessons for Asia	Jan 2015
2015-03	Erlinda M. MEDALLA	Towards an Enabling Set of Rules of Origin for the Regional Comprehensive Economic Partnership	Jan 2015
2015-02	Archanun KOHPAIBOON and Juthathip JONGWANICH	Use of FTAs from Thai Experience	Jan 2015
2015-01	Misa OKABE	Impact of Free Trade Agreements on Trade in East Asia	Jan 2015
2014-26	Hikari ISHIDO	Coverage of Trade in Services under ASEAN+1 FTAs	Dec 2014
2014-25	Junianto James LOSARI	Searching for an Ideal International Investment Protection Regime for ASEAN + Dialogue Partners (RCEP): Where Do We Begin?	Dec 2014
2014-24	Dayong ZHANG and David C. Broadstock	Impact of International Oil Price Shocks on Consumption Expenditures in ASEAN and East Asia	Nov 2014
2014-23	Dandan ZHANG,	Enhanced Measurement of Energy Market	Nov

No.	Author(s)	Title	Year
	Xunpeng SHI, and Yu SHENG	Integration in East Asia: An Application of Dynamic Principal Component Analysis	2014
2014-22	Yanrui WU	Deregulation, Competition, and Market Integration in China's Electricity Sector	Nov 2014
2014-21	Yanfei LI and Youngho CHANG	Infrastructure Investments for Power Trade and Transmission in ASEAN+2: Costs, Benefits, Long-Term Contracts, and Prioritised Development	Nov 2014
2014-20	Yu SHENG, Yanrui WU, Xunpeng SHI, Dandan ZHANG	Market Integration and Energy Trade Efficiency: An Application of Malmqvist Index to Analyse Multi-Product Trade	Nov 2014
2014-19	Andindya BHATTACHARYA and Tania BHATTACHARYA	ASEAN-India Gas Cooperation: Redefining India's "Look East" Policy with Myanmar	Nov 2014
2014-18	Olivier CADOT, Lili Yan ING	How Restrictive Are ASEAN's RoO?	Sep 2014
2014-17	Sadayuki TAKII	Import Penetration, Export Orientation, and Plant Size in Indonesian Manufacturing	July 2014
2014-16	Tomoko INUI, Keiko ITO, and Daisuke MIYAKAWA	Japanese Small and Medium-Sized Enterprises' Export Decisions: The Role of Overseas Market Information	July 2014
2014-15	Han PHOUMIN and Fukunari KIMURA	Trade-off Relationship between Energy Intensity-thus energy demand- and Income Level: Empirical Evidence and Policy Implications for ASEAN and East Asia Countries	June 2014
2014-14	Cassey LEE	The Exporting and Productivity Nexus: Does Firm Size Matter?	May 2014
2014-13	Yifan ZHANG	Productivity Evolution of Chinese large and Small Firms in the Era of Globalisation	May 2014
2014-12	Valéria SMEETS, Sharon TRAIBERMAN, Frederic WARZYNSKI	Offshoring and the Shortening of the Quality Ladder: Evidence from Danish Apparel	May 2014

No.	Author(s)	Title	Year
2014-11	Inkyo CHEONG	Korea's Policy Package for Enhancing its FTA Utilization and Implications for Korea's Policy	May 2014
2014-10	Sothea OUM, Dionisius NARJOKO, and Charles HARVIE	Constraints, Determinants of SME Innovation, and the Role of Government Support	May 2014
2014-09	Christopher PARSONS and Pierre-Louis Vézina	Migrant Networks and Trade: The Vietnamese Boat People as a Natural Experiment	May 2014
2014-08	Kazunobu HAYAKAWA and Toshiyuki MATSUURA	Dynamic Tow-way Relationship between Exporting and Importing: Evidence from Japan	May 2014
2014-07	DOAN Thi Thanh Ha and Kozo KIYOTA	Firm-level Evidence on Productivity Differentials and Turnover in Vietnamese Manufacturing	Apr 2014
2014-06	Larry QIU and Miaojie YU	Multiproduct Firms, Export Product Scope, and Trade Liberalization: The Role of Managerial Efficiency	Apr 2014
2014-05	Han PHOUMIN and Shigeru KIMURA	Analysis on Price Elasticity of Energy Demand in East Asia: Empirical Evidence and Policy Implications for ASEAN and East Asia	Apr 2014
2014-04	Youngho CHANG and Yanfei LI	Non-renewable Resources in Asian Economies: Perspectives of Availability, Applicability, Acceptability, and Affordability	Feb 2014
2014-03	Yasuyuki SAWADA and Fauziah ZEN	Disaster Management in ASEAN	Jan 2014
2014-02	Cassey LEE	Competition Law Enforcement in Malaysia	Jan 2014
2014-01	Rizal SUKMA	ASEAN Beyond 2015: The Imperatives for Further Institutional Changes	Jan 2014
2013-38	Toshihiro OKUBO, Fukunari KIMURA, Nozomu TESHIMA	Asian Fragmentation in the Global Financial Crisis	Dec 2013
2013-37	Xunpeng SHI and Cecilya MALIK	Assessment of ASEAN Energy Cooperation within the ASEAN Economic Community	Dec 2013
2013-36	Tereso S. TULLAO, Jr. And Christopher James CABUAY	Eduction and Human Capital Development to Strengthen R&D Capacity in the ASEAN	Dec 2013
2013-35	Paul A. RASCHKY	Estimating the Effects of West Sumatra Public	Dec

No.	Author(s)	Title	Year
		Asset Insurance Program on Short-Term Recovery after the September 2009 Earthquake	2013
2013-34	Nipon POAPONSAKORN and Pitsom MEETHOM	Impact of the 2011 Floods, and Food Management in Thailand	Nov 2013
2013-33	Mitsuyo ANDO	Development and Resructuring of Regional Production/Distribution Networks in East Asia	Nov 2013
2013-32	Mitsuyo ANDO and Fukunari KIMURA	Evolution of Machinery Production Networks: Linkage of North America with East Asia?	Nov 2013
2013-31	Mitsuyo ANDO and Fukunari KIMURA	What are the Opportunities and Challenges for ASEAN?	Nov 2013
2013-30	Simon PEETMAN	Standards Harmonisation in ASEAN: Progress, Challenges and Moving Beyond 2015	Nov 2013
2013-29	Jonathan KOH and Andrea Feldman MOWERMAN	Towards a Truly Seamless Single Windows and Trade Facilitation Regime in ASEAN Beyond 2015	Nov 2013
2013-28	Rajah RASIAH	Stimulating Innovation in ASEAN Institutional Support, R&D Activity and Intelletual Property Rights	Nov 2013
2013-27	Maria Monica WIHARDJA	Financial Integration Challenges in ASEAN beyond 2015	Nov 2013
2013-26	Tomohiro MACHIKITA and Yasushi UEKI	Who Disseminates Technology to Whom, How, and Why: Evidence from Buyer-Seller Business Networks	Nov 2013
2013-25	Fukunari KIMURA	Reconstructing the Concept of “Single Market a Production Base” for ASEAN beyond 2015	Oct 2013
2013-24	Olivier CADOT Ernawati MUNADI Lili Yan ING	Streamlining NTMs in ASEAN: The Way Forward	Oct 2013
2013-23	Charles HARVIE, Dionisius NARJOKO, Sothea OUM	Small and Medium Enterprises’ Access to Finance: Evidence from Selected Asian Economies	Oct 2013
2013-22	Alan Khee-Jin TAN	Toward a Single Aviation Market in ASEAN: Regulatory Reform and Industry Challenges	Oct 2013

No.	Author(s)	Title	Year
2013-21	Hisanobu SHISHIDO, Shintaro SUGIYAMA, Fauziah ZEN	Moving MPAC Forward: Strengthening Public-Private Partnership, Improving Project Portfolio and in Search of Practical Financing Schemes	Oct 2013
2013-20	Barry DESKER, Mely CABALLERO-ANTH ONY, Paul TENG	Thought/Issues Paper on ASEAN Food Security: Towards a more Comprehensive Framework	Oct 2013
2013-19	Toshihiro KUDO, Satoru KUMAGAI, So UMEZAKI	Making Myanmar the Star Growth Performer in ASEAN in the Next Decade: A Proposal of Five Growth Strategies	Sep 2013
2013-18	Ruperto MAJUCA	Managing Economic Shocks and Macroeconomic Coordination in an Integrated Region: ASEAN Beyond 2015	Sep 2013
2013-17	Cassy LEE and Yoshifumi FUKUNAGA	Competition Policy Challenges of Single Market and Production Base	Sep 2013
2013-16	Simon TAY	Growing an ASEAN Voice? : A Common Platform in Global and Regional Governance	Sep 2013
2013-15	Danilo C. ISRAEL and Roehlano M. BRIONES	Impacts of Natural Disasters on Agriculture, Food Security, and Natural Resources and Environment in the Philippines	Aug 2013
2013-14	Allen Yu-Hung LAI and Seck L. TAN	Impact of Disasters and Disaster Risk Management in Singapore: A Case Study of Singapore's Experience in Fighting the SARS Epidemic	Aug 2013
2013-13	Brent LAYTON	Impact of Natural Disasters on Production Networks and Urbanization in New Zealand	Aug 2013
2013-12	Mitsuyo ANDO	Impact of Recent Crises and Disasters on Regional Production/Distribution Networks and Trade in Japan	Aug 2013
2013-11	Le Dang TRUNG	Economic and Welfare Impacts of Disasters in East Asia and Policy Responses: The Case of Vietnam	Aug 2013
2013-10	Sann VATHANA, Sothea OUM, Ponhrith KAN, Colas CHERVIER	Impact of Disasters and Role of Social Protection in Natural Disaster Risk Management in Cambodia	Aug 2013
2013-09	Sommarat CHANTARAT,	Index-Based Risk Financing and Development of	Aug

No.	Author(s)	Title	Year
	Krirk PANNANGPETCH, Nattapong PUTTANAPONG, Preesan RAKWATIN, and Thanasin TANOMPONGPHANDH	Natural Disaster Insurance Programs in Developing Asian Countries	2013
2013-08	Ikumo ISONO and Satoru KUMAGAI	Long-run Economic Impacts of Thai Flooding: Geographical Simulation Analysis	July 2013
2013-07	Yoshifumi FUKUNAGA and Hikaru ISHIDO	Assessing the Progress of Services Liberalization in the ASEAN-China Free Trade Area (ACFTA)	May 2013
2013-06	Ken ITAKURA, Yoshifumi FUKUNAGA, and Ikumo ISONO	A CGE Study of Economic Impact of Accession of Hong Kong to ASEAN-China Free Trade Agreement	May 2013
2013-05	Misa OKABE and Shujiro URATA	The Impact of AFTA on Intra-AFTA Trade	May 2013
2013-04	Kohei SHIINO	How Far Will Hong Kong's Accession to ACFTA will Impact on Trade in Goods?	May 2013
2013-03	Cassey LEE and Yoshifumi FUKUNAGA	ASEAN Regional Cooperation on Competition Policy	Apr 2013
2013-02	Yoshifumi FUKUNAGA and Ikumo ISONO	Taking ASEAN+1 FTAs towards the RCEP: A Mapping Study	Jan 2013
2013-01	Ken ITAKURA	Impact of Liberalization and Improved Connectivity and Facilitation in ASEAN for the ASEAN Economic Community	Jan 2013
2012-17	Sun XUEGONG, Guo LIYAN, Zeng ZHENG	Market Entry Barriers for FDI and Private Investors: Lessons from China's Electricity Market	Aug 2012
2012-16	Yanrui WU	Electricity Market Integration: Global Trends and Implications for the EAS Region	Aug 2012
2012-15	Youngho CHANG, Yanfei LI	Power Generation and Cross-border Grid Planning for the Integrated ASEAN Electricity Market: A Dynamic Linear Programming Model	Aug 2012
2012-14	Yanrui WU, Xunpeng SHI	Economic Development, Energy Market Integration and Energy Demand: Implications for East Asia	Aug 2012
2012-13	Joshua AIZENMAN,	The Relationship between Structural Change and	July

No.	Author(s)	Title	Year
	Minsoo LEE, and Donghyun PARK	Inequality: A Conceptual Overview with Special Reference to Developing Asia	2012
2012-12	Hyun-Hoon LEE, Minsoo LEE, and Donghyun PARK	Growth Policy and Inequality in Developing Asia: Lessons from Korea	July 2012
2012-11	Cassey LEE	Knowledge Flows, Organization and Innovation: Firm-Level Evidence from Malaysia	June 2012
2012-10	Jacques MAIRESSE, Pierre MOHNEN, Yayun ZHAO, and Feng ZHEN	Globalization, Innovation and Productivity in Manufacturing Firms: A Study of Four Sectors of China	June 2012
2012-09	Ari KUNCORO	Globalization and Innovation in Indonesia: Evidence from Micro-Data on Medium and Large Manufacturing Establishments	June 2012
2012-08	Alfons PALANGKARAYA	The Link between Innovation and Export: Evidence from Australia's Small and Medium Enterprises	June 2012
2012-07	Chin Hee HAHN and Chang-Gyun PARK	Direction of Causality in Innovation-Exporting Linkage: Evidence on Korean Manufacturing	June 2012
2012-06	Keiko ITO	Source of Learning-by-Exporting Effects: Does Exporting Promote Innovation?	June 2012
2012-05	Rafaelita M. ALDABA	Trade Reforms, Competition, and Innovation in the Philippines	June 2012
2012-04	Toshiyuki MATSUURA and Kazunobu HAYAKAWA	The Role of Trade Costs in FDI Strategy of Heterogeneous Firms: Evidence from Japanese Firm-level Data	June 2012
2012-03	Kazunobu HAYAKAWA, Fukunari KIMURA, and Hyun-Hoon LEE	How Does Country Risk Matter for Foreign Direct Investment?	Feb 2012
2012-02	Ikumo ISONO, Satoru KUMAGAI, Fukunari KIMURA	Agglomeration and Dispersion in China and ASEAN: A Geographical Simulation Analysis	Jan 2012
2012-01	Mitsuyo ANDO and Fukunari KIMURA	How Did the Japanese Exports Respond to Two Crises in the International Production Network?: The Global Financial Crisis and the East Japan Earthquake	Jan 2012
2011-10	Tomohiro MACHIKITA and Yasushi UEKI	Interactive Learning-driven Innovation in Upstream-Downstream Relations: Evidence from	Dec 2011

No.	Author(s)	Title	Year
		Mutual Exchanges of Engineers in Developing Economies	
2011-09	Joseph D. ALBA, Wai-Mun CHIA, and Donghyun PARK	Foreign Output Shocks and Monetary Policy Regimes in Small Open Economies: A DSGE Evaluation of East Asia	Dec 2011
2011-08	Tomohiro MACHIKITA and Yasushi UEKI	Impacts of Incoming Knowledge on Product Innovation: Econometric Case Studies of Technology Transfer of Auto-related Industries in Developing Economies	Nov 2011
2011-07	Yanrui WU	Gas Market Integration: Global Trends and Implications for the EAS Region	Nov 2011
2011-06	Philip Andrews-SPEED	Energy Market Integration in East Asia: A Regional Public Goods Approach	Nov 2011
2011-05	Yu SHENG, Xunpeng SHI	Energy Market Integration and Economic Convergence: Implications for East Asia	Oct 2011
2011-04	Sang-Hyop LEE, Andrew MASON, and Donghyun PARK	Why Does Population Aging Matter So Much for Asia? Population Aging, Economic Security and Economic Growth in Asia	Aug 2011
2011-03	Xunpeng SHI, Shinichi GOTO	Harmonizing Biodiesel Fuel Standards in East Asia: Current Status, Challenges and the Way Forward	May 2011
2011-02	Hikari ISHIDO	Liberalization of Trade in Services under ASEAN+n : A Mapping Exercise	May 2011
2011-01	Kuo-I CHANG, Kazunobu HAYAKAWA, Toshiyuki MATSUURA	Location Choice of Multinational Enterprises in China: Comparison between Japan and Taiwan	Mar 2011
2010-11	Charles HARVIE, Dionisius NARJOKO, Sothea OUM	Firm Characteristic Determinants of SME Participation in Production Networks	Oct 2010
2010-10	Mitsuyo ANDO	Machinery Trade in East Asia, and the Global Financial Crisis	Oct 2010
2010-09	Fukunari KIMURA, Ayako OBASHI	International Production Networks in Machinery Industries: Structure and Its Evolution	Sep 2010
2010-08	Tomohiro MACHIKITA, Shoichi MIYAHARA, Masatsugu TSUJI, and	Detecting Effective Knowledge Sources in Product Innovation: Evidence from Local Firms and MNCs/JVs in Southeast Asia	Aug 2010

No.	Author(s)	Title	Year
	Yasushi UEKI		
2010-07	Tomohiro MACHIKITA, Masatsugu TSUJI, and Yasushi UEKI	How ICTs Raise Manufacturing Performance: Firm-level Evidence in Southeast Asia	Aug 2010
2010-06	Xunpeng SHI	Carbon Footprint Labeling Activities in the East Asia Summit Region: Spillover Effects to Less Developed Countries	July 2010
2010-05	Kazunobu HAYAKAWA, Fukunari KIMURA, and Tomohiro MACHIKITA	Firm-level Analysis of Globalization: A Survey of the Eight Literatures	Mar 2010
2010-04	Tomohiro MACHIKITA and Yasushi UEKI	The Impacts of Face-to-face and Frequent Interactions on Innovation: Upstream-Downstream Relations	Feb 2010
2010-03	Tomohiro MACHIKITA and Yasushi UEKI	Innovation in Linked and Non-linked Firms: Effects of Variety of Linkages in East Asia	Feb 2010
2010-02	Tomohiro MACHIKITA and Yasushi UEKI	Search-theoretic Approach to Securing New Suppliers: Impacts of Geographic Proximity for Importer and Non-importer	Feb 2010
2010-01	Tomohiro MACHIKITA and Yasushi UEKI	Spatial Architecture of the Production Networks in Southeast Asia: Empirical Evidence from Firm-level Data	Feb 2010
2009-23	Dionisius NARJOKO	Foreign Presence Spillovers and Firms' Export Response: Evidence from the Indonesian Manufacturing	Nov 2009
2009-22	Kazunobu HAYAKAWA, Daisuke HIRATSUKA, Kohei SHIINO, and Seiya SUKEGAWA	Who Uses Free Trade Agreements?	Nov 2009
2009-21	Ayako OBASHI	Resiliency of Production Networks in Asia: Evidence from the Asian Crisis	Oct 2009
2009-20	Mitsuyo ANDO and Fukunari KIMURA	Fragmentation in East Asia: Further Evidence	Oct 2009

No.	Author(s)	Title	Year
2009-19	Xunpeng SHI	The Prospects for Coal: Global Experience and Implications for Energy Policy	Sept 2009
2009-18	Sothea OUM	Income Distribution and Poverty in a CGE Framework: A Proposed Methodology	Jun 2009
2009-17	Erlinda M. MEDALLA and Jenny BALBOA	ASEAN Rules of Origin: Lessons and Recommendations for the Best Practice	Jun 2009
2009-16	Masami ISHIDA	Special Economic Zones and Economic Corridors	Jun 2009
2009-15	Toshihiro KUDO	Border Area Development in the GMS: Turning the Periphery into the Center of Growth	May 2009
2009-14	Claire HOLLWEG and Marn-Heong WONG	Measuring Regulatory Restrictions in Logistics Services	Apr 2009
2009-13	Loreli C. De DIOS	Business View on Trade Facilitation	Apr 2009
2009-12	Patricia SOURDIN and Richard POMFRET	Monitoring Trade Costs in Southeast Asia	Apr 2009
2009-11	Philippa DEE and Huong DINH	Barriers to Trade in Health and Financial Services in ASEAN	Apr 2009
2009-10	Sayuri SHIRAI	The Impact of the US Subprime Mortgage Crisis on the World and East Asia: Through Analyses of Cross-border Capital Movements	Apr 2009
2009-09	Mitsuyo ANDO and Akie IRIYAMA	International Production Networks and Export/Import Responsiveness to Exchange Rates: The Case of Japanese Manufacturing Firms	Mar 2009
2009-08	Archanun KOHPAIBOON	Vertical and Horizontal FDI Technology Spillovers: Evidence from Thai Manufacturing	Mar 2009
2009-07	Kazunobu HAYAKAWA, Fukunari KIMURA, and Toshiyuki MATSUURA	Gains from Fragmentation at the Firm Level: Evidence from Japanese Multinationals in East Asia	Mar 2009
2009-06	Dionisius A. NARJOKO	Plant Entry in a More Liberalised Industrialisation Process: An Experience of Indonesian Manufacturing during the 1990s	Mar 2009
2009-05	Kazunobu HAYAKAWA, Fukunari KIMURA, and	Firm-level Analysis of Globalization: A Survey	Mar 2009

No.	Author(s)	Title	Year
	Tomohiro MACHIKITA		
2009-04	Chin Hee HAHN and Chang-Gyun PARK	Learning-by-exporting in Korean Manufacturing: A Plant-level Analysis	Mar 2009
2009-03	Ayako OBASHI	Stability of Production Networks in East Asia: Duration and Survival of Trade	Mar 2009
2009-02	Fukunari KIMURA	The Spatial Structure of Production/Distribution Networks and Its Implication for Technology Transfers and Spillovers	Mar 2009
2009-01	Fukunari KIMURA and Ayako OBASHI	International Production Networks: Comparison between China and ASEAN	Jan 2009
2008-03	Kazunobu HAYAKAWA and Fukunari KIMURA	The Effect of Exchange Rate Volatility on International Trade in East Asia	Dec 2008
2008-02	Satoru KUMAGAI, Toshitaka GOKAN, Ikumo ISONO, and Souknilanh KEOLA	Predicting Long-Term Effects of Infrastructure Development Projects in Continental South East Asia: IDE Geographical Simulation Model	Dec 2008
2008-01	Kazunobu HAYAKAWA, Fukunari KIMURA, and Tomohiro MACHIKITA	Firm-level Analysis of Globalization: A Survey	Dec 2008