

**ERIA Discussion Paper Series****Addressing Poverty and Vulnerability in  
ASEAN: An Analysis of Measures and  
Implications Going Forward**

Sudarno SUMARTO\*§

Sarah MOSELLE

*The SMERU Research Institute*

September 2015

---

**Abstract:** *This paper aims to review and analyse the mechanisms through which the Association of Southeast Asian Nations (ASEAN) quantifies progress vis-à-vis poverty and socio-economic development. Drawing on analytic literature and international experience, this paper details specific reforms that the ASEAN Socio-Cultural Community could consider adopting to holistically capture the specific vulnerabilities faced by the ASEAN region and more accurately measure progress in implementing the ASEAN post-2015 vision. These recommendations most significantly include revising the formulation of the purchasing power parity poverty line, harmonising data collection efforts and introducing an ASEAN panel survey, and leveraging the comparatively rich availability of household data among member states to create an ASEAN-specific multidimensional poverty index.*

**Keywords:** ASEAN Socio-Cultural Community; vulnerability; regional coordination; statistical harmonisation; non-income-based poverty measures

**JEL Classification:** I3, D63, I32

---

---

\* Address correspondence to lead author: Sudarno Sumarto, [ssumarto@smeru.or.id](mailto:ssumarto@smeru.or.id), The SMERU Research Institute, Jl. Cikini Raya No. 10A, Jakarta, 10330, Indonesia.

§ This research was conducted as part of the project of the Economic Research Institute for ASEAN and East Asia (ERIA) and the ASEAN Secretariat (ASEC), ‘Framing the ASEAN Socio-Cultural Community (ASCC) Post 2015: Engendering Equity, Resiliency, Sustainability and Unity for One ASEAN Community’. We would like to express our appreciation to Jan Priebe for helping us prepare the document, and to Indunil De Silva and Christopher Roth for providing valuable inputs to the first draft. The authors are deeply indebted to the members of this project for their invaluable suggestions. The opinions expressed in this paper are the sole responsibility of the authors and do not reflect the views of ERIA or the ASEAN Secretariat.

## 1. Introduction

The ASEAN Socio-Cultural Community (ASCC) Department collected thought papers from which ASCC bodies can draw guidance in their implementation development of the ASCC Blueprint (Appendix A) post 2015. At the 25th ASEAN Summit in Nay Pyi Taw, Myanmar, representatives of the ASEAN member states (AMSs) agreed that one of the overarching elements of the ASEAN Community’s post-2015 vision is to ‘promote development of clear and measurable “ASEAN Development Goals” to serve as ASEAN benchmarks for key socio-economic issues’ (Nay Pyi Taw Declaration, 2014). This reiterates suggestions in the midterm review of the ASCC Blueprint calling for reforms to monitoring and measurement tools. Specifically, the review recommends that monitoring tools be enhanced and expanded, and notes the need for an ASCC database with ASEAN-relevant statistics and measurements. Building on these recommendations, this paper explores current poverty and vulnerability measures employed by AMSs, and identifies strategies that will enable the ASEAN region to better address these pressing issues.

Given that poverty and vulnerability are vast and multidimensional issues, this analysis has narrowed its focus to the following three guiding criteria:

- 1) concerted (national) efforts by AMSs to achieve the goals and targets set out in the ASCC Blueprint via policies and institutional developments;
- 2) cooperation initiatives, including regional (ASEAN) initiatives as well as global or extra-ASEAN (e.g. East Asia-wide) partnerships; and
- 3) technology and innovation considerations, or community-based dimensions.

We begin with an overview of key indicators within the ASEAN region. These indicators were selected to illustrate developments and trends within ASEAN, as they relate to the ASEAN vision and ASCC Blueprint. The subsequent section contextualises our discussion of poverty and vulnerability measures within the goals and strategies of the ASCC Blueprint, making note of successes and challenges encountered in implementation, and the strategies contained within the midterm review to overcome these challenges. In particular, this thought piece addresses the call by the midterm review team to adapt measurement tools and fill data gaps that

exist within the ASCC. Section 4 delves into these issues substantively by identifying current poverty measures employed and suggesting strategies to reform these measures to better capture the specific vulnerabilities faced by the ASEAN region. This section highlights the lack of specificity in current measurement tools, and the potential for the ASCC to mine the rich and comparable household data in AMSs to develop a holistic measurement scheme that better encompasses the multidimensional inputs that foster development.

## **2. Development of Key Indicators within ASEAN**

### **2.1. ASEAN Socioeconomic Conditions at a Glance**

Below is a brief overview of ASEAN's socioeconomic landscape. The following data are based on averages calculated using data available from 2000 to 2012, with the exception of the human development section, which draws on data from 2000 to 2013. See Appendix C for details.

#### *1) Poverty Rate*

The poverty rate in the ASEAN region exhibits a declining trend. According to the World Bank's poverty measure of \$1.25 or \$2 purchasing power parity (PPP), poverty rates are highest in the Lao People's Democratic Republic (Lao PDR). On the other hand, according to national poverty line definitions, the Philippines has the highest rate of poverty in the ASEAN region.

Viet Nam has been most successful in terms of reducing poverty, according to the \$1.25 and \$2 (PPP) measure, while Thailand has led the trend when comparing national poverty lines.

#### *2) Gini Coefficient*

Income inequality in the ASEAN region is declining. Indonesia, Lao PDR, and Malaysia were the only countries to experience an increase in income and consumption inequality. Meanwhile, Cambodia, the Philippines, Thailand, and

Viet Nam successfully reduced income inequality. Cambodia led the regional trend in reducing inequality as measured by the Gini coefficient.

### 3) *Infant and Under-Five Mortality*

The health of infants and children under five has improved in the ASEAN region as evidenced by the decline in infant and under-five mortality rates during 2000–2013. Only Brunei Darussalam experienced increased mortality rates for infants and children under five. Thailand was most successful in reducing the mortality rates of newborns, while Cambodia was most successful in reducing the mortality rate of children under five.

### 4) *Maternal Mortality*

Maternal health in the ASEAN region tends to vary from country to country. In Cambodia, Lao PDR, Malaysia, Thailand, and Viet Nam, maternal health is improving. In Indonesia and the Philippines, however, maternal health has taken a turn for the worse. Thailand has been most successful in reducing maternal mortality.

### 5) *Education Participation*

Across the ASEAN region, the rate of participation in primary and secondary education has improved. In general, the secondary gross enrolment rate (GER) increased except in Brunei Darussalam, Indonesia, the Philippines, and Viet Nam where it declined. Cambodia, Lao PDR, Thailand, and the Philippines experienced increases in primary net enrolment rates (NER), and participation in secondary education as a whole improved. Cambodia was most successful in increasing primary GER, while Lao PDR experienced the greatest improvements in primary NER. Both secondary NER and GER also improved in Lao PDR.

## 6) *Human Development*

Human development in the ASEAN region has also improved, with significant progress being made in Cambodia, Lao PDR, and Myanmar. The Human Development Index in these countries, however, continues to be lower than in other ASEAN nations.

## **3. Review of ASEAN Socio-Cultural Community Blueprint**

### **3.1. Background**

ASEAN leaders adopted the Declaration of ASEAN Concord II (Bali Concord II) in Bali, Indonesia on 7 October 2003, which includes a mandate to establish the ASEAN Community by 2020. The purpose of the ASEAN Community is to ensure durable peace, stability, and shared prosperity in the region. Thus, the ASEAN Community will comprise three closely intertwined and mutually reinforcing parts: political and security community, economic community, and socio-cultural community. At the 12th ASEAN Summit on 13 January 2007 in Cebu, Philippines, ASEAN leaders affirmed their strong commitment to accelerate the establishment of the ASEAN Community by signing the Cebu Declaration on the Acceleration of an ASEAN Community by 2015. The 13th ASEAN Summit held in Singapore on 20 November 2007 agreed to develop the ASCC Blueprint to ensure that concrete actions are undertaken to promote the establishment of the ASEAN Socio-Cultural Community (ASCC).

The ASCC Blueprint was adopted by ASEAN leaders at the 14th ASEAN Summit on 1 March 2009. The ASCC Blueprint is a framework for action and is structured into six characteristics or strategic-level development and cooperation outcomes and impacts toward ASEAN Community building. These include

- i: human development,
- ii. social welfare and protection,
- iii. social justice and rights,
- iv. ensuring environmental sustainability,

- v. building ASEAN identity, and
- vi. narrowing the development gaps.<sup>1</sup>

Underlying each characteristic are elements or inter-woven cross-pillars and thematic, sectoral, and cross-sectoral outcomes. Each element is in turn buttressed by 339 action lines, which are specific results or activities to be achieved or undertaken through programs, projects, or special activities. The ASCC Blueprint contains an implementation arrangement laying out a schedule of key milestones and a coordination mechanism or governance structure delegating roles to the ASCC Council, Sectoral Ministerial Bodies, Senior Officials Meetings, and other ASEAN-affiliated bodies and associated entities. In carrying out the Blueprint, the ASCC is required to identify and address resource requirements, and to provide a communications plan to enhance awareness, broaden understanding, and raise funds.

To monitor progress on the defined outcomes, results, and activities, the ASCC Blueprint relies on the ASCC scorecard tool to quantify the achievement of goals, targets, and outcomes of the ASCC. The indicators of this scorecard were endorsed by the Sectoral Ministerial Bodies and corresponding subsidiary groups of the ASCC Department. The ASCC Blueprint is a work in progress. The indicators signal the degree to which ASCC goals and objectives have been achieved, through the efforts of regional cooperation programs and projects and other development interventions.

### **3.2. Results from the Midterm Review of the ASCC Blueprint**

The midterm review of the ASCC Blueprint found that the implementation process has been successful thus far, with about 90 percent of all action lines having been addressed through the conduct of various activities by ASCC Sectoral Ministerial Bodies. However, the following recommendations for improvements were made:

- Concerning indicator development
  - The ASCC Blueprint's guidelines should be followed for practical implementation. Given the need to prioritise and focus resources in the

---

<sup>1</sup> Except for number vi, each characteristic is further broken down into a number of 'elements', which are defined by a number of identifiable actions, or 'action lines'.

run-up to 2015, review and re-targeting should be conducted at the sectoral level; the potential to re-cluster overlapping targets and the option of cross-sectoral, cross-pillar cooperation should be considered.

- There is a need to further refine and enhance the scorecard for the ASCC Community and the implementation-focused monitoring system for the ASCC Blueprint. The feasibility of an enhanced and expanded monitoring system across other pillars, with which there are crosscutting and cross-sectoral interests, should be examined. A corollary to this is the establishment of a data bank for the ASCC at regional and national levels. The indicators and statistics should be relevant to the needs of AMSs, and the system should ensure the long-term impact and sustainability of undertaken initiatives.
- Concerning monitoring tools
  - In many of the national reports, certain sectors reported that **ASCC monitoring tool scorecards** and the implementation monitoring system are complicated and not useful. Some national reports indicated that monitoring tools are useful and should be simplified. *It was also indicated that indicators are unclear and that statistics are not fully integrative and need simplification. Progress has been made in tabulating the indicators for the ASCC scorecard. However, data gaps across sectors and countries are challenging.* It is recognised that the ASCC scorecard is a work in progress.
  - An **accurate and reliable data bank** on all ASCC regional and national levels should be developed and maintained, and reinforced with effective monitoring and evaluation, using common and easy-to-use templates.

#### **4. Addressing Poverty and Vulnerability in ASEAN**

Addressing poverty is a complicated project for which there is no omnibus blueprint; poverty reduction strategies tend to work best when they originate from

and are designed for specific communities, cultures, and countries. However, certain crucial elements are shared across contexts. Among these are

- i. promoting good governance and cooperation at the local and national level,
- ii. empowering the poor,
- iii. maintaining sustainable growth,
- iv. targeting expenditure for the poor,
- v. improving the quality of education and health,
- vi. improving infrastructure that benefits the poor,
- vii. creating better systems of coordination,
- viii. reducing income inequality,
- ix. managing shocks,
- x. monitoring community development and improving data collection and analysis, and
- xi. reducing vulnerability to natural disasters.

The sequencing and prioritisation of these elements will necessarily vary across AMSs, and evolve as growth and welfare increase. For those AMSs facing ongoing socio-economic challenges, such as Lao PDR and the Philippines, creating infrastructure that benefits the poor and managing shocks for those households that hover on the poverty line are crucial elements that will need to be prioritised to reduce poverty and vulnerability. For other AMSs, most notably Singapore, many of these critical elements of socio-economic development have already been addressed and focus can be shifted to reducing income inequality and enhancing opportunities for sustainable growth.

This section deals predominantly with two of the aforementioned elements: targeting and systems of coordination and cooperation. While these elements are addressed independently in this paper, they must be understood as part of an interlinked collection of interventions that should be undertaken concomitantly to meaningfully tackle poverty. For example, improving the quality and accessibility of education should proximally benefit the poor and thereby mitigate income inequality. In some AMSs, establishing a centralised office to target beneficiaries and monitor the progress of interventions has proven effective in coordinating cross-sectoral



poverty reduction strategies. (See case study, below.) The ASEAN poverty research centre the authors propose in Section 4.3.4 could similarly act as a regional hub to monitor progress vis-à-vis ASEAN development goals and hold governments accountable to their commitments.

***Case Study: Indonesia’s National Team for Accelerating Poverty Reduction (TNP2K)***

In the years after the 1997–1998 crisis, Indonesia’s government implemented a suite of social safety-net programs designed to protect vulnerable and chronically poor households. These programs include a health insurance scheme, a rice subsidy program, and a collection of conditional and unconditional cash transfer programs. Since 2010, the government has shifted its priority from providing reactive risk-coping mechanisms and universal subsidies to implementing a well-targeted, sustainable social protection system that will create lasting upward mobility for poor and near-poor families. This social protection system is composed of national assistance programs (health insurance, cash transfer programs), a community empowerment program to strengthen local governance (PNPM), and collection of initiatives to foster micro- and small enterprises.

To efficiently manage this system, the government allocated leadership to the National Team for Accelerating Poverty Reduction (TNP2K). Under the auspices of the Vice President’s office and with representatives from all relevant government agencies, TNP2K is charged with oversight and coordination of social protection programs. Part of TNP2K’s model involves the creation of working groups that analyse specific poverty reduction programs and challenges. The Targeting Working Group has collaborated with Indonesia’s national statistical body (BPS) and the World Bank to create a unified database of the poorest 40 percent of households, drawing from the 2010 census data and participatory input from poor communities. Ministerial bodies responsible for specific poverty reduction programs can use this unified database, rather than create program-specific recipient databases of varying quality. Using this database, and knowledge gathered from other working groups, TNP2K is able to identify effective targeting mechanisms, areas of impact overlap, and sustainable programs. Similar teams have been established under the guidance of TNP2K at the sub-national, provincial, and municipal levels (TKPKD) to oversee the implementation of poverty reduction programming at the local level.

This thought piece is primarily concerned with recommending ways to improve the measurement of progress towards poverty and vulnerability benchmarks within ASEAN to facilitate the design and implementation of effective social protection policies. The need for improvements was pointed out in the midterm review of the ASEAN Blueprint, which highlighted that the selected indicators are unclear and that significant data gaps exist in obtaining the relevant information for one or several countries. For Southeast Asia in particular, the Asian Development Bank (ADB) cites the following as the official poverty lines, in 2005 PPP dollars/person/day: Malaysia, \$3.02 (2010); Cambodia, \$1.88 (2009); Philippines, \$1.84 (2012); Thailand, \$1.75 (2009); Lao PDR, \$1.48 (2010); Indonesia, \$1.43 (2012); and Viet Nam, \$1.29 (2011–2015). Thus, the Africa-based \$1.25 norm is too low to be relevant for ASEAN region. Based on the midterm review team’s recommendations, this paper points to possible improvements with respect to poverty and vulnerability indicators. Broadly speaking, this section makes two significant claims. First, as Sections 4.1 and 4.2 note, poverty and welfare measurements need to be re-conceptualised to intelligently encompass the full range indicators that inhibit poverty reduction in the ASEAN region. Second, as discussed in Section 4.3, the scope for meaningful collaboration among AMSs to sustainably reduce poverty in the region has not been fully explored thus far. We suggest specific ways in which these areas can be developed to better meet the goals of the ASCC.

#### **4.1. Development of New Poverty and Welfare Indicators Relevant to ASEAN**

##### *Reforming Income-Related Poverty and Vulnerability Indicators*

The ASEAN Blueprint specified several indicators that rely heavily on the use of the World Bank’s \$1/\$1.08/\$1.25 per day (PPP) poverty definition. Over recent years, exclusive reliance on utility-based welfare measures expressed in monetary (expenditure/income) terms as well as the reliability of resting welfare comparisons on global PPPs has been heavily criticised. Some of the main points of critique are summarised in Section 4.1.1.

#### *4.1.1. General Critiques of Monetary-Based Poverty Measurements*

##### *1. Irrelevance of international poverty line for national policy making*

The World Bank approach draws on international poverty lines that have little relation to existing national poverty lines. As a result, the resonance of the international poverty line as a tool to monitor and analyse poverty in individual countries or groups of countries has been limited. Instead, countries rely largely on their own income poverty lines, which have more resonance and legitimacy.

##### *2. Lack of robustness to measurement issues*

A second problem relates to the updating of the international poverty line and the associated PPP comparisons over time. With each new PPP round, the international poverty line has been updated (from \$1.02 in 1985 prices to \$1.08 in 1993 prices, which was used for the first Millennium Development Goal [MDG] target, to \$1.25 in 2005 prices). In the case of the last update, both the country sample of national poverty lines to estimate the international poverty line, as well as the PPPs, were changed. After updating the line, the entire time series of poverty measurement is then changed (going all the way to 1981) using the new poverty line and the new PPP exchange rates. As has been noted by many, this update led to a substantial upward revision of the number and share of poor people in the developing world (from around 29 percent in 1990 using the \$1.08 line, to 41 percent in 1990 using the \$1.25 line, with similar discrepancies in other years). The effect on measured trends in poverty reduction has been small, but there is huge uncertainty about the levels of poverty in the world as well as regional distribution. It is also not obviously clear which international poverty line and which PPP adjustment is ‘better’.<sup>2</sup>

---

<sup>2</sup> While there are good arguments that the 2005 PPP process was superior to the 1993 process in many regards, it had its own biases. Moreover, even if it is the best way to generate comparable prices and poverty lines for 2005, it is unclear whether it generates comparable prices and poverty lines for 1990, let alone 1981. After all, the 2005 PPPs only try to ensure comparable prices across the world in 2005 but say nothing about comparable prices in the past (or future). We are now eagerly awaiting the results of the [2011 international comparison of prices](#), which will generate a new international poverty line in 2011 PPPs, and also lead to recalculations of poverty across the world today and as far back as 1981. But the uncertainties generated by these procedures are immense, so it is well worth thinking about alternatives.

#### 4.1.2. ASEAN-Specific Arguments

##### 1. *Insufficient consideration of AMS' consumption data*

For ASEAN as a region—and for many individual economies—the \$1.25 poverty line is too low. It was derived from the world's 15 poorest countries, only two of which are in Asia. However, consumption patterns vary by region and change over time: in Asia today, for example, a mobile phone is considered a necessity, which is not necessarily the case in the poorest countries.

##### 2. *Insufficient consideration of ASEAN price levels*

As explained in detail in Deaton (2010) and Deaton and Dupriez (2011), poverty levels and the trend over time in AMS poverty levels depend, for instance, on changes in the relative price of shoes between Argentina and the United States (US). It is unclear why measuring (progress on) poverty within ASEAN should depend on such remote price relationships that are irrelevant to poverty measurement within the region.

##### 3. *Insufficient consideration of the impact of volatile and rising costs associated with food insecurity*

Food prices have increased due to both supply- and demand-side factors. On the supply side, rapid urbanisation continues to absorb farmland, extreme weather or water shortages cut into yields, and rising ethanol production restricts food supply. On the demand side, rising incomes increase both the quantity and quality of food consumed, with higher-quality food using up more resources. Over 2000–2012, the global food price increased by an average of about 7.4 percent per year. Although there are some variations in trend, developing Asia's food consumer price index (CPI) increased faster than general CPI for most countries in most years, both before and after the 2008 food crisis. The difference was largest in the People's Republic of China (PRC) and Indonesia, while in India it remained small due to government intervention. Rapidly rising food prices increase food insecurity, threatening the very survival of the poor, particularly the landless and urban

---

poor. This is because poor people tend to spend proportionately more on food than wealthier people, therefore a general CPI based on the consumption profile of a representative consumer would not capture the full impact of rising food prices when these go up faster than other prices. Therefore, food insecurity should be considered when measuring poverty.

4. *Failure to account for the ASEAN region's increasing vulnerability to natural disasters, climate change, economic crises, and other shocks*

In recent years, vulnerability to natural calamities has been increasing in both frequency and severity—especially in East, South, and Southeast Asia. Asia is home to seven of the world's 10 most disaster-prone countries. In addition, globalisation has led to the increased possibility of economic shocks affecting the region. Poor and low-income households are particularly vulnerable to natural disasters, financial crises, or illness because they have little or no savings. Many low-income households live just above extreme poverty and can easily fall back into poverty due to a shock. Consequently, coping with vulnerability increases the poor's minimum costs.

5. *Exclusion of evidence of weakly relative poverty lines*

Lastly, it is worth considering whether a very low absolute poverty line is still relevant for AMSs. The \$1.25 per person a day poverty line is increasingly irrelevant for the majority of people in developing countries whose poverty lines are substantially above this line. Incorporating a 'relative' element into the setting of poverty lines across the world, either by following the proposition by Ravallion and Chen (2011) of a 'weakly relative' international poverty line, or by systematically including such considerations in the setting of national poverty lines, will be a fruitful way forward for international income poverty measurement.

4.1.3. *Updating Poverty Indicators in the ASCC Blueprint*

An important and innovative step in developing poverty measures that are more region specific in terms of taking into account regional expenditure patterns and prices as well as food price shocks and vulnerability concerns was provided in ADB's (2014b) *Key Indicators for Asia and the Pacific 2014*. The main results were

as follows: under the latest World Bank revisions, extreme poverty had declined from 54.7 percent in 1990 to 20.7 percent in 2014, benefitting 745 million Asians. Thus, the early attainment of the first target of the Millennium Development Goals (halving extreme poverty globally) would not have been possible without Asia. In Southeast Asia, extreme poverty dropped by 31 percent according to these latest World Bank revisions. If these trends continue, Asia—including Southeast Asia—would have eradicated extreme poverty (below 3 percent poverty rate) by 2025. ADB (2014b) re-estimates the World Bank’s extreme poverty line by determining an Asia-specific extreme poverty line. Applying a methodology similar to the World Bank’s, the authors obtain an Asia-specific extreme poverty line that amounts to \$1.51 per person per day (PPP). Using this new Asia-specific extreme poverty line, the authors find that extreme poverty would increase by 9.8 percentage points in 2010 (from 20.7 percent to 30.5 percent), which increases the number of poor by 343.2 million. In this scenario, Indonesia’s poverty rate would increase by 9.9 percentage points. The authors go even further by including in their model the impact of food insecurity and of vulnerability to risks such as natural disasters, climate change, illness, and economic crises. Taking into account food insecurity raises Asia’s poverty rate in 2010 by another four percentage points, or an addition of 140.52 million poor. Integrating vulnerability to risks increases Asia’s poverty rate by 11.9 percentage points—an addition of 417.99 million poor.

While the approach presented by ADB (2014b) is not free of critique either, it presents an important illustration of how poverty measurement in Asia can be made more comparable and meaningful. In this context it seems advisable to think of developing an ASEAN-specific extreme poverty line (similar to the approach adopted by ADB) that would be tailored to the specific conditions of ASEAN members. Furthermore, and adding a step to ADB’s model (2014b), it would be worthwhile to consider constructing ASEAN-specific PPPs. This way, many of the distortions and time inconsistencies that plague the World Bank poverty approach could be further mitigated.

Besides the proposal presented by ADB (2014b), two others could be adopted to develop an ASEAN-specific extreme poverty line that is methodologically appealing and more relevant to the ASEAN region than the current World Bank approach. The

first model builds on Reddy and Pogge's (2010) suggestion that poverty at the global level should be measured using a coordinated effort of consistent and comparable poverty measurement at the national level. While this approach necessitates a prohibitively high degree of coordination at the global level, it might be well suited to the ASEAN region. Another approach is advocated by Deaton (2010), who suggests that global poverty be measured using each country's national poverty lines, following the rationale that national poverty lines were determined in each country taking into account the relevance of poverty measurement for policy making. In this scenario—which would be the easiest to implement—poverty rates across AMSs could simply be based on the already existing national poverty lines.

#### *4.1.4. Scope for Reform*

- The World Bank's PPP income-based poverty measures do not account for national and regional variations in consumption and price levels, nor do they take into account contextual vulnerabilities such as natural disasters and food security
- The ASCC Blueprint's poverty indicators should be updated to better reflect the ASEAN context by developing an ASEAN-specific extreme poverty line and PPPs by following some combination of the following strategies:
  - Adopt ADB's (2014b) Asian-specific re-estimation of the extreme poverty line at \$1.51 per person per day
  - Base regional poverty measures on reasonably comparable national poverty lines
  - Base poverty rates across ASEAN on existing national poverty lines
  - Adopt sub-national poverty PPPs for regions within a country, especially large countries such as Indonesia

## **4.2. Adaptation of Multidimensional Poverty Measurement Models for Use in the ASEAN Region**

The problems mentioned above gave rise to the development of alternative welfare measures. One strand of the literature (Section 4.1) tries to continue working with income–expenditure-based welfare measures but looks for ways to make international comparisons more meaningful. A second strand of the literature has

distanced itself from income–expenditure-based measures. This move has given rise to the development of new measurement paradigms, including the multidimensional poverty index by the Oxford Poverty and Human Development Initiative as supported by the United Nations Development Programme (UNDP).

#### *4.2.1. Non-Income Poverty Measures*

Poverty is a multidimensional phenomenon and therefore poverty measurement should not be confined to the income–expenditure dimension. In line with this reasoning, several indices have been developed at the international level that aim to measure non-income dimensions across countries in a comparable way. The most famous of these measurement tools is probably the Human Development Index published in UNDP’s Human Development Reports, which recently adopted the multidimensional poverty index proposed by Alkire and Foster (2011).

A recent study in Indonesia (Sumarto and De Silva, 2014) compared conventional consumption-based poverty measures with Alkire and Foster’s multidimensional measurement model using national socio-economic household data. The results (Table 1) found little overlap between those who are poor as measured by consumption and those populations that can be considered to be multidimensionally poor. That is to say, households that are income poor are not necessarily multidimensionally poor and vice versa. The study also yielded divergent patterns of change for consumption poverty and multidimensional poverty. Based on these findings, the authors conclude that there is no clear-cut identification of poor populations; rather, different measurement schemes convey unique information about differently poor people.



**Table 1: Lack of Overlap Between Income and Multidimensional Poverty in Indonesia**

<b>% of Population</b>	<b>K=1</b>	<b>K=2</b>	<b>K=3</b>	<b>K=4</b>	<b>K=5</b>
Income non-poor, but multidimensionally poor	45.83	28.43	10.35	5.45	1.46
Income poor, but multidimensionally non-poor	1.93	3.92	7.67	8.81	10.31

*Source:* BPS-Susenas (2013).

Given that there are multitudes of distinct ways in which poverty can affect people, a range of policy options is required. Oftentimes, concurrent interventions will be needed in a number of areas. A multidimensional framework is better suited to identifying areas that would most benefit from intervention, and to leveraging the linkages that exist between dimensions.

A common feature of all multidimensional indices is that they involve decisions about selecting indicators and weighting the different dimensional components. Given that the purpose of the existing indices is to include as many countries as possible, many simplifications have had to be adopted since countries are bound to have uneven data about given indicators. Almost all AMSs employ some form of national household or welfare survey coordinated by a national statistics body (e.g. Malaysia’s Department of Statistics, Cambodia’s National Institute of Statistics). Since almost all AMSs possess a comparatively rich amount of household data (compared with Sub-Saharan African countries), the AMSs could think of creating their own multidimensional welfare index to track welfare improvements over time. Such an index could be made ASEAN-specific by selecting welfare dimensions that are important to AMSs and weighting them accordingly.

#### *4.2.2. Scope for Reform*

- Creation of a multidimensional poverty index that takes advantage of the availability of rich household data sets across the AMS
- Adaptation of existing multidimensional poverty index models to the ASEAN context by identifying and accounting for welfare dimensions most

significant to the ASEAN region, including post-2015 development benchmarks

### **4.3. Harmonisation of Data Collection Efforts**

The midterm review of the ASCC Blueprint emphasises that welfare comparisons across AMSs can suffer from incomparability. In principle, each AMS has developed its own monitoring and information systems as well as its own set of socio-economic household surveys that provide the data foundation for all welfare indicators among AMSs. While it is important for each country to develop these data tools to match domestic demand and policy planning, the lack of comparability across AMSs in how data on welfare is collected makes comparisons difficult. Improvements in this direction would be essential to reliably compare welfare across AMSs. In the following subsections we propose three possible improvements to make welfare indicators more comparable.

#### *4.3.1. Statistical Harmonisation*

Each AMS conducts its own socio-economic household surveys. The ways these surveys are implemented often differ strongly across countries. To achieve more comparability in the data collection of the defined target welfare indicators, we suggest stronger coordination efforts between national statistical agencies to create more comparable measurements of consumption–expenditure and income of each country’s population. The measurement of these indicators must occur in a more comparable way if any meaningful comparison of welfare across AMSs is to take place.

#### *4.3.2. Development of an ASEAN Household Module Covering Shocks, Risks, and Vulnerability*

The ASEAN region shows an increasing vulnerability to natural disasters, climate change, economic crisis, and other shocks. In recent years, vulnerability to natural calamities has been increasing in both frequency and severity—especially in East, South, and Southeast Asia. In addition, globalisation has led to the increased possibility of economic shocks affecting the region. Poor and low-income households are particularly vulnerable to natural disasters, financial crises, or illness

because they have little or no savings. Unfortunately, little is known about the shocks and risks the poor face in the various AMSs due to a lack of data collection on vulnerability in the majority of household surveys. In many developing and developed countries around the world, such shock and risk modules have been developed and integrated into standard household surveys. We encourage ASEAN to commit to developing such shock and risk modules to fill the data gap. Below are two examples of shock and risk modules from two continents which can be adopted by AMSs.

### ***Case Study 1: Shock and Risk Module Variables: Examples from Africa***

Some developing countries have recognised the severity of vulnerability to poverty and taken action by integrating questions about shock and coping mechanisms into household surveys or have launched supplementary surveys. In Rwanda, the Comprehensive Food Security and Vulnerability Analysis and Nutrition Survey was conducted in 2006, 2009, and 2012, with the ultimate goal of eliminating food insecurity and malnutrition. In 2012, the survey questionnaire was administered to 7,498 households to characterise and locate the vulnerable households, to identify the trends in and the causes of vulnerability (types of shocks), and, beyond that, to conduct vulnerability outlooks as well as to forecast shock scenarios: What are the effects on food insecurity or poverty caused by specific shocks in certain areas? The most common type of idiosyncratic (household level) shock reported was ‘household member illness, death or loss of employment’ (39 percent of households that reported a shock) whereas the most common type of covariate (community level) shock was ‘rainfall deficit, irregular rains, or prolonged dry spell’ (21 percent of households that reported a shock). The most reported coping strategies were ‘increased casual labour’ (21 percent of households), ‘reliance on less expensive or less preferred food’ (16 percent of households), ‘a reduction in the number of meals eaten per day’ (11 percent of households) and the ‘spending of savings’ (10 percent of households). Of course, the indication of the most common shocks and coping mechanisms heavily depends on the household’s livelihood and wealth status, respectively.

Similarly, the Nigerian General Household Survey Panel comprises questions about the most common shocks faced by the household and its main coping

mechanism. The two most common shocks in Nigerian rural and urban areas in 2010–2011 were identified as ‘death or disability of an adult working member of the household’ and ‘an increase in the price of food items consumed’. This is followed by ‘illness of an income-earning member of the household’ for urban areas and ‘poor rains that caused harvest failure’ for rural areas. The Nigerian example illustrates the multidimensionality of shocks—macroeconomic price shocks, health shocks, and natural disasters. Most common coping mechanisms were ‘borrow from friends and family’, ‘the receipt of assistance from friends and family’, ‘the reduction of food consumption’, and ‘the sale of livestock’.

In Kenya, the Integrated Household Budget Survey was conducted in 2005–2006. It collected detailed information on agricultural, financial, and health shocks, which could be further divided into idiosyncratic and community shocks. The survey report finds that only few households are able to borrow in the face of shocks, particularly shocks that affect their friends and neighbours as well. The results showed that the most common strategy was to run down savings; sell assets, including livestock; and cut consumption. Only three percent of households borrowed, with four percent of households resorting to more prayers.

The previous examples have discussed vulnerability and risk- and shock-related questionnaires and surveys that were conducted by the national statistical offices in each country. In addition, many surveys have been conducted in Africa over the last decades that were inspired by universities, donors, or local non-governmental organisations. The two most famous household surveys in this field in Africa that cover extensively shock- and risk-related welfare measurement are panel data sets from Ethiopia and Tanzania. The Ethiopian Rural Household Survey was conducted in 1989, 1995, 1997, 1999, 2004, and 2009 and comprises extensive questionnaire modules on agriculture, migration, health, household expenditure, and finance-related shocks. Given the rare nature of panel data sets in Africa in combination with an extensive set of shock modules, the Ethiopian Rural Household Survey has led to several publications that influenced research and policy making. Among others, there are Dercon and Krishnan (2000), who look at the impact of idiosyncratic and community shocks in agriculture and their short- and medium- term impact on poverty and consumption smoothing. The authors find that particularly poor rural

households face difficulties in smoothing consumption in times of shocks and that poor households tend to discriminate within the household on food shares. Specifically, female spouses are more likely to suffer within the household from negative shocks, as evidenced by lower food intakes and worse nutritional status. Likewise, Dercon (2004) finds that rainfall shocks have a substantial impact on consumption growth, which persists for many years but is mitigated in cases of better access to infrastructure. Another famous welfare- and shock-related household panel data set on Africa is the Tanzanian Kagera Health and Development Survey, which was conducted in 1991, 1992, 1993, 1994, 2004, and 2010. The survey collects rich data on agriculture, asset, expenditure, health, and migration-related shocks, tracking individuals and households over long periods. Similar to the Ethiopian survey discussed above, this data set has led to several influential publications such as Beegle (2005) and Beegle et al. (2011). Beegle (2005) examines the impact of adult mortality, partly related to high prevalence rates of HIV/AIDS in the study region, on the ability of households to sustain their main agricultural activities. The author finds that while some farm activities are temporarily scaled back and wage employment falls after a male death, households did not shift cultivation towards subsistence food farming and less diverse income sources more than six months after a death. Beegle et al. (2011) investigate to what extent migration has contributed to improved living standards. The authors find that migration has resulted on average in 36 percentage points in consumption growth, particularly if migration was related to moving out of agriculture.

Over recent years the policy framework on shocks and risks has extended to comprise migration issues. Due to the growing awareness and importance of the role of migration for regions and countries, the World Bank conducted within its Africa Migration Project household surveys in Burkina Faso, Ethiopia, Kenya, Nigeria, Senegal, South Africa, and Uganda in 2010 to shed more light on the impact of migration and remittances on the economic and social situation of the staying (not migrating) household members. The surveys find that a significant portion of international remittances are spent on purchasing land, building a house, conducting business, improving a farm, buying agricultural equipment, and other investments. As a share of total investment, investment in these items represented 36.4 percent in

Burkina Faso, 55.3 percent in Kenya, 57.0 percent in Nigeria, 15.5 percent in Senegal, and 20.2 percent in Uganda. A substantial share of within-Africa remittances was also used for these purposes in Burkina Faso, Kenya, Nigeria, and Uganda. The share of domestic remittances devoted to these purposes was much lower in all the countries surveyed, with the exception of Nigeria and Kenya. Across all countries, migration and the related remittances led to poverty reduction, improved health and education outcomes, and increased business investments.

## References

The 2012 Rwanda CFSVA & Nutrition Survey Report (<http://www.wfp.org/food-security>).

Nigeria General Household Survey Panel Report 2012

(<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CB0QFjAA&url=http%3A%2F%2Fwww.nigerianstat.gov.ng%2Fpages%2Fdownload%2F194&ei=gpLUVKPACNC7uASa3oEI&usg=AFQjCNHJDwczKxQ0fSNV0hd18heynd5jbQ&sig2=Z6rD5HQGaYjUeIM8bWxTBA&bvm=bv.85464276,d.c2E>).

Kenya Integrated Household and Budget Survey 2005/2006

(<http://siteresources.worldbank.org/INTAFRREGTOPGENDER/Resources/PAKENYA.pdf>).

Africa Migration Project

(<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21681739~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>)

(<http://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Leveraging%20Migration-P4-rev-3.31.2011.pdf>).

The Ethiopian Rural Household Surveys for 1989, 1995, 1997, 1999, 2004, 2009

(<http://www.csae.ox.ac.uk/datasets/Ethiopia-ERHS/ERHS-main.html>).

Tanzanian Kagera Health and Development Survey for 1991, 1992, 1993, 1994, 2004, 2010

(<http://www.edi-africa.com/research/khds/introduction.htm>).

Dercon, S. and P. Krishnan (2000). 'In sickness and in health: Risk sharing within households in rural Ethiopia', *Journal of Political Economy*, 108(4), pp. 688–727.

Dercon, S. (2004). 'Growth and shocks: evidence from rural Ethiopia', *Journal of Development Economics*, 74(2), pp. 309–329.

Beegle, K., J. de Weerd and S. Dercon (2011), 'Migration and economic mobility in Tanzania: Evidence from a tracking survey', *Review of Economics and Statistics*, 93(3), pp. 1010–1033.

Beegle, K. (2005), 'Labor effects of adult mortality in Tanzanian households', *Economic Development and Cultural Change*, 53(3), pp. 655–683.

## **5. Case Study 2: Panel Data to Study Vulnerability and the Impact of Shocks and Risks: Examples from Asia**

To measure the extent of vulnerability and to understand the impact of shocks and coping mechanisms, it would be ideal to track the same individuals, households, and communities over time. Therefore, the collection of household survey panel data becomes useful and important. In developed countries, the collection of such panel data has a long tradition. The longest still-running panel survey in the world is the US Panel Study of Income Dynamics, which started in 1968 with a nationally representative sample of over 18,000 individuals living in 5,000 households. Another example includes the German Socioeconomic Panel, which has run continuously since 1984 and sampled over 25,000 persons in 15,000 households across Germany.

Some national statistical offices in Asia have already tested or integrated panel elements into their core socio-economic household surveys to allow for panel structures. For instance, the national statistics office of Viet Nam uses a rotational panel structure for its biennial Vietnam Household Living Standards Survey whereby households can be followed up to two years. Likewise, the national statistics office of Indonesia has integrated a panel structure into Indonesia's socio-economic household survey (Susenas), whereby panel data exist for 2002–2004, 2005–2007, 2008–2010, and 2011–2015.

In addition, there are a few long-term panel data sets in which socio-economic individual, household, and community information has been collected over a long period. These data sets have become a cornerstone of academic research and policy making with respect to learning about poverty dynamics, vulnerability, and the long-term impact of shocks and risks on a variety of human development outcomes. All of these data sets were collected by private institutions, international and national organisations, or universities. The most well-known data sets in this field are from the PRC, India, Indonesia, Thailand, and Viet Nam.

In the PRC, the Carolina Population Center at the University of North Carolina at Chapel Hill and the Chinese Center for Disease Control and Prevention have partnered to collect the China Health and Nutrition Survey since 1989. The original sample consisted of 19,000 individuals in 4,400 households, who were interviewed

again in 1991, 1993, 1997, 2000, 2004, and 2006.

In India, the International Crops Research Institute for the Semi-Arid Tropics started in the 1970s with community and household surveys in the states of Madhya Pradesh and Gujarat and extended to Maharashtra and Andhra Pradesh in the 1980s. Panel data for the latter two states are available for 1985, 1989, 1993, 2000, 2001, 2004, and 2008.

In Indonesia, SurveyMETER has collected the Indonesia Family Life Surveys in 1993, 1997, 2000, 2007–2008, and 2014–2015, which have followed about 90 percent of the original 1993 household sample. The sample comprises approximately 43,500 individuals in 13,500 households.

In Thailand, the Townsend Thai project has collected data since 1997 in regular intervals through household and business surveys. Before 2006, data were available only for selected years. Since 2006, the data are collected on an annual basis. The sample comprises 2,900 households in 192 communities.

Further socio-economic household panel data for Thailand and Viet Nam are available from a large-scale research project on vulnerability to poverty and risk hosted by the University of Goettingen, University of Hannover, and the University of Frankfurt. The related surveys were conducted in 2006, 2008, 2010, and 2012 and comprise household- and community-level information for about 4,400 households in 220 villages.

## References

China Health and Nutrition Survey  
([http://www.cpc.unc.edu/projects/china/about/proj\\_desc/survey](http://www.cpc.unc.edu/projects/china/about/proj_desc/survey)).

Indian ICRISAT surveys (<http://vdsa.icrisat.ac.in/vdsa-vls.htm>).

Indonesia Family Life Survey (<http://www.rand.org/labor/FLS/IFLS.html>).

Townsend Thai project (<http://cier.uchicago.edu/data/data-overview.shtml>).

Risk and vulnerability surveys of the University of Goettingen, University of Frankfurt, and University of Hannover in Thailand and Viet Nam  
(<http://gepris.dfg.de/gepris/OCTOPUS;jsessionid=2FE53A758A50DEF8AF850D926209670C?context=projekt&id=5484187&language=en&task=showDetail>).



### *5.1.1. Development of an ASEAN Panel Survey*

As noted in the midterm evaluation of the ASCC Blueprint as well as by ADB (2014b), there is a lack of reliable and comparable panel data within AMSs. Panel data would allow researchers to analyse a number of important welfare questions that cannot be addressed using cross-sectional or time-series data. In particular, for analysing issues of socio-economic shocks, risk, and vulnerability, panel data present a huge improvement over cross-sectional surveys, which cannot follow an individual or household over time. In the US and European Union, several panel surveys have been established over the last decades that measure various welfare dimensions. A short list of such panel surveys is shown below:

- European Panel on Migration and Asylum
- European Community Household Panel
- European Adult Education Survey
- European Union Labor Force Survey
- European Value Study
- European Social Survey
- Survey of Health, Aging and Retirement in Europe
- US Consumer and Expenditure Survey
- US National Longitudinal Surveys

Like the European Union, ASEAN could promote the collection of a common panel survey that is coherent and allows for comparison and close examination of specific welfare dimensions. The Asian Barometer Survey, which collects comparable data on political attitudes, is a great example of a well-functioning data set delivering high-quality data for several Asian countries. While the survey is headquartered in Taiwan, data are gathered by a network of national research teams in almost 20 East and South Asian countries. In spite of the varying stages and trajectories of political systems among the survey countries, national research teams, guided by the administrative body, employ a shared methodology and framework so as to gather comparable data on political attitudes in Asia.

### *5.1.2. Creation of an ASEAN Poverty Research Centre*

Reforming ASEAN poverty measures is a large project but an achievable one. As noted in the section on statistical harmonisation, these changes will require sustained collaboration among AMSs. To facilitate this process, we propose the establishment of an ASEAN poverty research centre that would act as a coordination hub through which AMSs may work together to intelligently identify ASEAN's most pressing inequalities, vulnerabilities, and opportunities, and consider strategies to address them. Political will among AMSs would be crucial in establishing this proposed centre, as member states will need to commit to equitable participation, data harmonisation and implementation of an ASEAN panel survey, and cooperation on the part of AMSs' national statistical agencies. Developing ASEAN-relevant poverty measurement would be an integral component of the centre's mandate: using the approaches contained in this paper and other thought pieces, new poverty measures could be combined with existing household data and innovative panel surveys to improve measurement and share knowledge among AMSs about what works and what does not work in addressing poverty and vulnerability.

As discussed in Section 4.1, global standardised poverty indicators, including the ubiquitous income-based measures, tend to misinterpret or ignore pressing trends among AMSs. We note that these measures do not consider country-specific consumption data; price levels; inequality and opportunity; and vulnerabilities to shocks, natural disasters, and insecurities. To illustrate these shortcomings, let us take the example of targeting practices in Indonesia: Indonesia is a geographically and demographically diverse country and, consequently, research has shown that district-specific models of targeting are important. Moreover, recent research (Sumarto and DaSilva, 2014) has shown that local concepts of poverty vary widely across Indonesia and that different measures yield different results and may have an idiosyncratic flavour even within one country. Yet, little is understood in terms of underlying features of differences in understanding of poverty. In the proposed ASEAN poverty research centre, different member states would have a forum through which they could share information about local concepts of poverty. Efficient public expenditure—which is crucial to reducing different types of poverty—is dependent on the strength of poverty monitoring and impact evaluation

systems. Continual monitoring and evaluation will enhance the transparency and accountability of policy makers and systems. To meet the target post 2015, it is important to have an extensive array of data available on poverty and social conditions that can assist in the formulation of policy. However, real-time survey data are not always available in many developing countries. In addition, the quality of household surveys can vary over time and across countries. We have learned that national and international efforts to strengthen statistical data gathering and analysis are still limited. This poses the need for more systematic data collection and analysis, as well as the need to consider community-level monitoring and evaluation when policy progress is being evaluated. Moreover, sharing know-how and expertise on how to maintain the high quality of large consumption surveys could be beneficial for many AMSs.

### *5.1.3. Scope for Reform*

- Statistical harmonisation of the main socio-economic household surveys within ASEAN
- Adoption of an ASEAN module in the main socio-economic household survey in each country that measures welfare dimensions as well as risks, shocks, and vulnerability as most important for AMSs
- Development of an ASEAN panel household survey that measures poverty in a consistent way in all AMSs
- Establishment of an ASEAN poverty research centre to coordinate poverty reduction strategies and measure their impact.

## **6. Conclusion**

The progress demonstrated in achieving the ASCC Blueprint's action lines shows strong commitment on the part of AMSs to realise the ASCC goal of a 'people-centred and socially responsible ASEAN Community' (ASEAN, 2013). Underlying the ASCC Blueprint is a commitment to development and social welfare.

Accurate data are integral for the implementation and monitoring of ASCC's goal to 'narrow the development gap'. To date, monitoring mechanisms have depended largely on conventional tools and best practices adopted from international systems. This paper highlights the potential for ASEAN to look inward and develop an endogenous data collection system that leverages the strengths of AMSs and focuses specifically on those dimensions of welfare and social development that are most relevant to the ASEAN region.

A key area to consider for reform is reassessment of the poverty line. This paper discussed a variety of methods to create a useful poverty line, noting the need for any reassessment to expand the range of inputs to include ASEAN-specific concerns such as vulnerability, shocks, food security, and natural disasters. Decisions pertaining to the selection of poverty indicators will require consensus and reflection among ASCC bodies about what indicators most accurately capture the needs and situation within ASEAN's social welfare landscape. In addition to reassessing poverty lines, this paper also highlighted the importance of harmonising data collection efforts, introducing an ASEAN panel survey, and leveraging the comparatively rich household data among member states to create an ASEAN-specific multidimensional poverty index. Further, the scope of coordinated data collection efforts has not been fully exploited; we suggest that stronger coordination between national statistical agencies—facilitated via the establishment of an ASEAN poverty research centre—could yield more comparable and productive data. These coordinated efforts would ultimately engender a more people-oriented measurement scheme to track progress in meeting ASEAN's development goals.

## References

- ADB (2013), *The Social Protection Index—Assessing Results for Asia and the Pacific*. Manila: Asian Development Bank.
- ADB (2014a), Statistical Database System Online. <https://sdfs.adb.org/sdfs/index.jsp> (accessed 5 November 2014).
- ADB (2014b), *Key Indicators for Asia and the Pacific 2014*. Manila: Asian Development Bank.

- Alkire, S. and J. Foster (2011), 'Counting and multidimensional poverty measurement', *Journal of Public Economics*, 95(7–8), pp. 478–487.
- Alkire, S. and R. Kumar (2012), 'Comparing Multidimensional Poverty and Consumption Poverty Based on Primary Survey in India'. Presented at the Oxford Poverty and Human Development Initiative Dynamic Comparison Between Multidimensional Poverty and Monetary Poverty Workshop, 21–22 November 2012, Oxford, UK.
- Alkire, S. and S. Seth (2013), 'Multidimensional Poverty Reduction in India between 1999 and 2006: Where and How?' *Oxford Poverty and Human Development Initiative Working Paper* 60, Oxford Poverty and Human Development Initiative, University of Oxford, Oxford, UK.
- Alkire, S., and M.E. Santos (2010), 'Indonesia Country Briefing', *Oxford Poverty and Human Development Initiative Multidimensional Poverty Index Country Briefing Series*. <http://www.ophi.org.uk/multidimensional-poverty-index/mpi-2014/mpi-country-briefings/> (accessed January 2015).
- Apablaza, M. and G. Yalonetzky (2013), 'Decomposing Multidimensional Poverty Dynamics', *Young Lives Working Paper* 101, Oxford Department of International Development, University of Oxford, Oxford, UK.
- ASEAN (2012), 'ASEAN Secretariat Paper: Agenda Item 3: Progress Report on the Implementation of the ASCC Blueprint', ASEAN secretary papers. Jakarta, June 2012.
- ASEAN (2013), 'Mid-term review of the ASEAN Socio-cultural Community Blueprint'. <http://www.asean.org/resources/item/mid-term-review-of-the-asean-socio-cultural-community-blueprint-2009-2015>
- ASEAN (2014), 'Framing the ASEAN Socio-Cultural Community (ASCC) post 2015: Engendering equity, resilience, sustainability and unity for one ASEAN community'. Draft from 3 October 2014.
- Asia Society and International Rice Research Institute (2010), 'Never an Empty Bowl: Sustaining Food Security in Asia'. Laguna, Philippines.
- Association of Southeast Asian Nations (ASEAN) (2009), 'ASEAN Socio-Cultural Community Blueprint'. <http://www.asean.org/archive/5187-19.pdf>
- Atkinson, A.B. (2003), 'Multidimensional Deprivation: Contrasting Social Welfare and Counting Approaches', *Journal of Economic Inequality*, 1(1): 51–65.
- Ballon, P. and M. Apablaza (2013), 'Multidimensional Poverty Dynamics in Indonesia: Research in Progress,' Oxford Poverty and Human Development Initiative, University of Oxford, Oxford, UK.
- Bonapace, T., S. Srivastava, and S. Mohanty (2012), *Reducing Vulnerability and Exposure to Disasters: Asia-Pacific Disaster Report 2012*. Bangkok, Thailand: United Nations Economic and Social Commission for Asia and the Pacific and United Nations International Strategy for Disaster Reduction.
- Bourguignon, F. and S.R. Chakravarty (2003), 'The Measurement of Multidimensional Poverty', *Journal of Economic Inequality*, 1(1): 25–49.
- Bundnis Entwicklung Hilft (BEH, Alliance Development Works) (2011), *World Risk Report 2011*. Berlin, Germany: BEH.
- Carter, M. and C. Barrett (2006), 'The Economics of Poverty Traps and Persistent Poverty: An Asset-Based Approach', *Journal of Development Studies*, 42(2), pp. 178–199.

- Chaudhuri, S., J. Jalan, and A. Suryahadi (2002), 'Assessing Household Vulnerability to Poverty from Cross-Sectional Data: A Methodology and Estimates from Indonesia', *Discussion Paper Series* No. 0102-52. New York, NY: Department of Economics, Columbia University.
- Chen, S. and M. Ravallion (2013), 'More Relatively-Poor People in a Less Absolutely-Poor World', *Review of Income and Wealth*, 59(1), pp. 1–28.
- Clark, A. and A. Oswald (1996), 'Satisfaction and Comparison Income', *Journal of Public Economics*, 61(3), pp. 359–381.
- Deaton, A. (2010), 'Price Indexes, Inequality, and the Measurement of World Poverty', *American Economic Review*, 100(1), pp. 5–34.
- Deaton, A. and O. Dupriez (2011), 'Purchasing Power Parity Exchange Rates for the Global Poor', *American Economic Journal: Applied Economics*, 3(2), pp. 137–166.
- Emergency Events Database (EM-DAT), The Office of Foreign Disaster Assistance (OFDA)/ Centre for Research on the Epidemiology of Disasters (CRED) International Disaster Database. Brussels, Belgium: Universite Catholique de Louvain. [www.emdat.be](http://www.emdat.be) (accessed February 2015).
- Food and Agriculture Organization of the United Nations. FAOSTAT. <http://faostat.fao.org> (accessed 5 November 2014).
- Fujii, T. (2013), 'Vulnerability: A Review of Literature.' Background paper. Manila: Asian Development Bank.
- Gain, A. and S. Dasgupta (forthcoming), 'Integration of Climate Change Adaptation, Disaster Management and Poverty Reduction Policies in Bangladesh', in A. Heshmati, E. Maasoumi, and G. Wan (eds.), *Poverty Reduction Policies and Practices in Developing Asia*. Manila: Asian Development Bank.
- Hur, S.-K. (forthcoming), 'Government Spending and Inclusive Growth in Developing Asia', *ADB Economics Working Paper Series*. Manila: Asian Development Bank.
- Joint United Nations Programme on HIV/AIDS (UNAIDS) (2013), 'HIV in Asia and the Pacific', *UNAIDS Report 2013*. Geneva: UNAIDS.
- Ravallion, M. (2012), 'Benchmarking Global Poverty Reduction', *Policy Research Working Paper* No. 6205. Washington, DC: The World Bank.
- Ravallion, M. (2013), 'How Long Will It Take to Lift One Billion People out of Poverty?' *The World Bank Research Observer*. <http://wbro.oxfordjournals.org/content/early/2013/03/11/wbro.lkt003.short>
- Ravallion, M. and S. Chen (2011), 'Weakly Relative Poverty', *Review of Economics and Statistics*, 93(4), pp. 1251–1261.
- Reddy, S. and T. Pogge (2010), 'How Not to Count the Poor', in S. Anand, P. Segal, and J. E. Stiglitz (eds.), *Debates on the Measurement of Global Poverty*. Oxford, UK and New York, NY: Oxford University Press.
- Salim, Z. (2010), 'Food Security Policies in Maritime Southeast Asia: The Case of Indonesia', *Series on Trade and Food Security—Policy Report 1*. Winnipeg, Canada: International Institute for Sustainable Development.
- Sumarto, S. and I. De Silva, I. (2014), 'Beyond the Headcount: Examining the Dynamics and Patterns of Multidimensional Poverty in Indonesia', *TNP2K Working Paper Series 21-2014*. Jakarta, Indonesia: Tim Nasional Percepatan Penanggulangan Kemiskinan (TNP2K).

- Timmer, C. (2014), 'Food Security in Asia and the Pacific: The Rapidly Changing Role of Rice', *Asia and the Pacific Policy Studies*, 1(1), pp. 73–90.
- United Nations Children's Fund (UNICEF) (2012), *Violence Against Children in South Asia*. Kathmandu: UNICEF.
- World Bank (2010), *Food Price Increases in South Asia: National Responses and Regional Dimensions*. Washington, DC: The World Bank.
- World Bank. Povcalnet: An Online Poverty Analysis Tool. <http://iresearch.worldbank.org/PovcalNet/index.htm?0,0> (accessed 5 November 2014).
- World Bank. World Development Indicators Online. <http://data.worldbank.org/data-catalog/world-development-indicators> (accessed 5 November 2014).
- Yoshida, N., H. Uematsu, and C. Sobrado (2014), 'Is Extreme Poverty Going to End? An Analytical Framework to Evaluate Progress in Ending Extreme Poverty', *Policy Research Working Paper* No. 6740. Washington, DC: The World Bank.

## Appendix A

### ASEAN Socio-Cultural Blueprint

#### B. Social Welfare and Protection

The Association of Southeast Asian Nations (ASEAN) is committed to enhancing the well-being and the livelihood of the peoples of ASEAN by alleviating poverty; ensuring social welfare and protection; building a safe, secure, and drug-free environment; enhancing disaster resilience; and addressing health development concerns.

##### B.1. Poverty Alleviation

*Strategic objective.* Fully address socio-economic disparities and poverty that persist across ASEAN Member States, including achieving the United Nations (UN) Millennium Development Goal (MDG) of eradicating extreme poverty and hunger.

##### Actions

- i. Develop and implement an ASEAN road map towards realising the MDGs in consultation among concerned sectoral bodies with a view to identify and extend technical assistance required in the field of poverty reduction.
- ii. Support ASEAN Member States' community-driven initiatives for poverty reduction towards narrowing the development gap within ASEAN.
- iii. Intensify efforts to implement projects related to poverty alleviation, particularly in the area of rural infrastructure, water supply, sanitation under the Initiative for ASEAN Integration and other sub-regional cooperation frameworks.
- iv. Improve ASEAN capacity in simple and applicable assessment and monitoring poverty reduction strategies through a targeting system that ensures low exclusion and leakage rates.
- v. Aid families living under poverty with appropriate support systems to enable them to become self-reliant.
- vi. Strengthen ASEAN cooperation in microfinance, including by strengthening cooperation and networking between microfinance institutions in poverty-stricken areas, with due regard to local values and traditions as well as by addressing the phenomenon of the feminisation of poverty.
- vii. Work towards the establishment of an ASEAN data bank on poverty incidence and poverty reduction program, which can be shared among ASEAN Member States.



- viii. Continue sharing experiences and best practices through regular workshops and seminars on poverty alleviation in ASEAN Member States and their dialogue partners.
- ix. Establish the ASEAN Network for Family Development and facilitate the rural volunteers' movement and the exchange of young professional in rural development in ASEAN.

## **B.2. Social Safety Net and Protection from the Negative Impacts of Integration and Globalisation**

*Strategic objective.* Ensure that all ASEAN peoples are provided with social welfare and protection from the possible negative impacts of globalisation and integration by improving the quality, coverage, and sustainability of social protection, and increasing the capacity of social risk management. Expand the role of civil society and citizens' groups in integrity efforts and governance.

### **Actions**

- i. Undertake a survey of existing social protection regimes in ASEAN.
- ii. Enhance exchange of best practices in social security systems.
- iii. Include social protection in ASEAN's cooperation in progressive labour practices.
- iv. Explore the establishment of the social insurance system to cover the informal sector.
- v. Establish a network of social protection agencies to promote the well-being and living conditions of the poor, vulnerable, underserved, and disadvantaged groups affected by adverse impacts of integration process and globalisation.
- vi. Study how to enhance support for natural disaster risk safety mechanism in agriculture, forestry, and fisheries.
- vii. Conduct research studies on the impact of economic integration and globalisation from a gender perspective to have concrete bases in formulating appropriate gender-responsive interventions.
- viii. Develop appropriate actions and preventive measures against the use of the Internet and pornography, which exploit women, children, and other vulnerable groups.
- ix. Develop appropriate actions and preventive measures against the use of the Internet to disrupt social harmony by inciting hatred, discrimination, and intolerance.
- x. Strengthen ASEAN cooperation in protecting female migrant workers.

### **B.3. Enhancing Food Security and Safety**

*Strategic objective.* Ensure adequate access to food at all times for all ASEAN peoples and ensure food safety in ASEAN Member States.

#### **Actions**

- i. Harmonise national food safety regulations with internationally accepted standards, including quarantine and inspection procedures, for the movement of plants, animals, and their products.
- ii. Strengthen the work of ASEAN Coordinating Committee on Food Safety to better coordinate all ASEAN food bodies and subsidiaries and the implementation of their work programs.
- iii. Promote production of safe and healthy food by producers at all levels.
- iv. Develop a model food legislative framework and guidelines and strengthen food inspection and certification systems from farm to table in ASEAN Member States.
- v. Develop further the competency of existing network of food laboratories in ASEAN to facilitate the exchange of information, findings, experiences, and best practices relating to food laboratories and new technology.
- vi. Strengthen the capability of ASEAN Member States to conduct risk analysis.
- vii. Enhance consumer participation and empowerment in food safety.
- viii. Enhance the roles of ASEAN Food Security Reserve Board and increase regional staple food reserves.
- ix. Strengthen cooperation with regional and international institutions, including private organisations, to secure food for the region.
- x. Establish a network to enhance intra and extra ASEAN food trade cooperation to ensure stability in regional food distribution.
- xi. Ensure that food is available at all times for all ASEAN citizens.
- xii. Encourage the application of environmentally sound technologies in farming and food processing.
- xiii. Improve the quality of surveillance and the effectiveness of responses to food-borne diseases and food poisoning outbreaks through, among others, information sharing and exchange of expertise.

## Appendix B

### Summary Included in ASEAN Socio-Cultural Blueprint: Midterm Review Report

#### Social Protection and Welfare

<b>Characteristics and Elements</b>
<ol style="list-style-type: none"><li>1. Poverty alleviation</li><li>2. Social safety net and protection from the negative impacts of integration and globalisation</li><li>3. Enhancing food security and safety</li><li>4. Access to healthcare and promotion of healthy lifestyles</li><li>5. Improving capability to control communicable diseases</li><li>6. Ensuring a drug-free ASEAN</li><li>7. Building disaster-resilient nations and safer communities</li></ol>
<b>Milestones</b>
<p>Labour</p> <ul style="list-style-type: none"><li>• ASEAN Guidelines on Classification Labelling and Packaging of Hazardous Chemicals (Apr 2010)</li></ul> <p>Rural Development and Poverty Alleviation</p> <ul style="list-style-type: none"><li>• Joint Declaration on the Attainment of MDGs in ASEAN (Mar 2009)</li><li>• ASEAN Roadmap for the Attainment of MDGs (Aug 2011)</li><li>• The first annual ASEAN Forum on Rural Development and Poverty Eradication was held (Jun 2012, Viet Nam) as a platform of dialogue between governments and non-governmental organisations (NGOs) and civil society organisations (CSOs) in ASEAN Member States following its establishment in Oct 2011.</li><li>• Development of the regular ASEAN Rural Development and Poverty Eradication Leadership Awards (Oct 2011). The first of the biennial awards were presented to nine accomplished NGOs and CSOs from ASEAN Member States in conjunction with the 8th AMRDPE in Aug 2013.</li><li>• ASEAN+3 Youth Rural Activist Exchange Programme (Sept 2012, Indonesia), the time the ASEAN Volunteers Programme was implemented in the rural development and poverty eradication sector.</li></ul>

- 2012: Rural Development and Poverty Eradication Framework Action Plan 2011–2015

#### Social Welfare and Development

- 2010: Establishment of the ASEAN Social Work Consortium (Dec 2008), with its terms of reference and work plan endorsed in Jan
- 2010: Hanoi Declaration on the Enhancement of Welfare and Development of ASEAN Women and Children (May)
- 2011: Bali Declaration on the Enhancement of the Role and Participation of the Persons with Disabilities (Nov)
- 2011: ASEAN Decade of Persons with Disabilities (2011–2020) (Nov)
- 2012: Mobilisation Framework of the ASEAN Decade of Persons with Disabilities (2011–2012) (Sep)
- 2010: ASEAN Strategic Framework on Health Development for 2010–2015 (July)
- 2010: Establishment of Regional Mechanisms in Responding to Emerging Infectious Diseases, including ASEAN Plus Three EID Website, ASEAN Plus Three Field Epidemiology Training Network, ASEAN Plus Three Partnership Laboratories, ASEAN Risk Communication Center
- 2010: Endorsement of ASEAN Strategic Framework on Health Development for 2010–2015
- 2011: ASEAN Declaration of Commitment: Getting to Zero New HIV Infections, Zero Discrimination, Zero AIDS Related Deaths (Nov)
- 2011: Launching of 15 June as ASEAN Dengue Day (15 June, Jakarta, Indonesia) as endorsed by the 10th ASEAN Health Ministers Meeting, July 2010)
- 2011: Policy on Smoke-Free ASEAN Events (July)
- 2011: ASEAN Position Paper on Non-Communicable Diseases at the High Level Meeting on Non-Communicable Diseases: Prevention and Control, UN General Assembly, September, New York
- 2011: Four new task forces: traditional medicine, mental health, non-communicable diseases, maternal and child health

#### Health

- 2012: ASEAN health publications: *ASEAN Health Profile*, *ASEAN Tobacco Control Report*, and *ASEAN E-Health Bulletins*
- 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, Phuket, Thailand)
- 2012: Establishment of ASEAN Plus Three Universal Health Coverage (UHC) Network (11 - 12 December 2012, Bangkok - Thailand)
- 2012: Declaration of the 7th East Asia Summit on Regional Responses to Malaria Control and Addressing Resistance to Antimalarial Medicines

Phnom Penh, Cambodia (20 Nov)

- 2012: Nomination of 13 sites for the ASEAN Cities Getting to Zeros Project in eight ASEAN Member States
- 2013: Four ASEAN Focal Points on Tobacco Control (AFPTC) Recommendations and one endorsed sharing mechanism of pictorial health warning. The four recommendations were on 1) Providing Protection from Exposure to Tobacco Smoke; 2) Protecting Public Health Policy with Respect to Tobacco Control Industry Interference; 3) Price and Tax Measures to Reduce the Demand for Tobacco Products; 4) Banning Tobacco Advertising, Promotion, and Sponsorship (May)
- Bandar Seri Begawan Declaration on Non-Communicable Diseases in ASEAN endorsed at the 8th Senior Official Meeting on Health Development (Aug)

#### Disaster Management

- 2009: Assignment of Secretary-General of ASEAN as the ASEAN Humanitarian Assistance Coordinator by the ASEAN Leaders at the 14th ASEAN Summit (Mar)
- 2009: Entry into force of the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) (Dec)
- 2009: Cooperation with the AADMER Partnership Group to get civil society to support implementation of AADMER (Jul)
- 2010: Adoption of the AADMER Work Programme for 2010–2015 (Mar) and launch to the partners at the First AADMER Partnership Conference (May)
- 2010: Closing of the ASEAN-led coordinating mechanism in Myanmar in response to Cyclone Nargis, and launch of the ASEAN Book Series on Post-Nargis Response (Jul)
- 2010: Adoption of the Joint Declaration on ASEAN–UN Collaboration in Disaster Management (Oct)
- 2011: Launch and signing of the Agreement on the Establishment of the ASEAN Humanitarian Assistance (AHA) Centre (November 2011)
- 2011: Launch of the ASEAN Disaster Risk Financing and Insurance Roadmap adopted by three ASEAN sectors (Nov)
- 2012: Convening of the First Meeting of the Conference of the Parties to the AADMER (Mar)
- 2012: Setting up of the ASEAN Disaster Management and Emergency Relief (ADMER) Fund (Mar)
- 2012: Setting up of the annual and equal contributions for the AHA Centre Fund (Mar)
- 2012: Adoption of the ASEAN–UN Strategic Plan on Disaster Management (Mar)
- 2012: First AHA Centre's response and deployment of the logistic stockpile to a disaster within the region (Nov)
- 2012: Launch of the ASEAN Disaster Emergency Logistic System for ASEAN in Subang, Malaysia (Dec)

- 2012: Launch of the ASEAN Disaster Monitoring and Response System at the AHA Centre (Nov)

## Appendix C

### ASEAN Socioeconomic Conditions, 2000–2013

**Table 1. Poverty Rate and Line, US\$1.25 PPP (%)?**

Country	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Brunei Darussalam	*	*	*	*	*	*	*	*	*	*	*	*
Cambodia	*	*	*	32.77	*	*	30.82	20.89	12.93	11.25	10.05	*
Indonesia	*	29.39	*	*	21.56	*		22.71		18.04	16.20	*
Lao PDR	*	41.22	*	*	*	*	35.10	*	*	*	*	30.26
Malaysia	*	*	*	0.54	*	*	0.00	*	0.00	*	*	*
Myanmar	*	*	*	*	*	*	*	*	*	*	*	*
Philippines	24.59	*	22.88	*	*	22.58	*	*	18.10	*	*	18.96
Singapore	*	*	*	*	*	*	*	*	*	*	*	*
Thailand	3.03	1.64	*	*	*	1.01	*	0.32	*	0.31	*	*
Viet Nam	*	40.07	*	31.40	*	21.44	*	16.82	*	3.93	*	2.44

Note: \* = Data not available, Lao PDR = Lao People's Democratic Republic, PPP = Purchasing Power Parity.

Source: World Bank (2014), *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/16092> License: CC BY 3.0 IGO

**Table 2. Poverty Rate and Line, US\$2 PPP (%)?**

Country	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Brunei Darussalam	*	*	*	*	*	*	*	*	*	*	*	*
Cambodia	*	*	*	64.43	*	*	59.39	51.05	40.74	40.88	41.26	*
Indonesia	*	67.13	*	*	54.13	*	*	54.71	*	46.32	43.33	*
Lao PDR	*	74.89	*	*	*	*	68.25	*	*	*	*	62.01
Malaysia	*	*	*	7.81	*	*	2.93	*	2.27	*	*	*
Myanmar	*	*	*	*	*	*	*	*	*	*	*	*
Philippines	47.29	*	44.84	*	*	45.00	*	*	41.14	*	*	41.72
Singapore	*	*	*	*	*	*	*	*	*	*	*	*
Thailand	18.03	13.40	*	*	*	7.61	*	4.56	*	3.50	*	*
Viet Nam	*	68.73	*	60.39	*	48.08	*	43.32	*	16.84	*	12.45

Note: \* = Data not available, Lao PDR = Lao People's Democratic Republic, PPP = Purchasing Power Parity.

Source: World Bank (2014), *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/16092> License: CC BY 3.0 IGO

**Table 3a. National Poverty Rate and Line (%)?**

Country	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Brunei Darussalam	*	*	*	*	*	*	*	*	*	*	*	*	*
Cambodia	*	*	*	50.20	*	*	45.00	34.00	23.90	22.10	20.50	*	*
Indonesia	*	18.20	17.40	16.70	16.00	17.80	16.60	15.40	14.20	13.30	12.50	12.00	11.40
Lao PDR	*	33.50	*	*	*	*	*	27.60	*	*	*		
Malaysia	*	6.00	*	5.70	*	*	3.60	*	3.80	*	*	1.70	
Myanmar	*	*	*	*	*	*	*	*	*	*	*	*	*
Philippines	*	*	24.90	*	*	26.60	*	*	26.30	*	*	25.20	
Singapore	*	*	*	*	*	*	*	*	*	*	*	*	*
Thailand	42.60	32.60		26.90	*	23.40	20.90	20.50	19.10	16.90	13.20	*	*
Viet Nam	*	*	*	*	*	*	*	*	*	20.70	*	17.20	

Note: \* = Data not available, Lao PDR = Lao People's Democratic Republic, PPP = Purchasing Power Parity.

Source: World Bank (2014), *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/16092> License: CC BY 3.0 IGO

**Table 3b. Gini Coefficient**

Country	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Brunei Darussalam	*	*	*	*	*	*	*	*	*	*	*	*
Cambodia	*	*	*	35.53	*	*	41.25	35.15	34.67	33.55	31.82	*
Indonesia	*	29.74	*	*	34.01	*	*	34.11	*	38.00	41.00	41.00
Lao PDR	*	32.47	*	*	*	*	35.46	*	*	*	*	36.22
Malaysia	*	*	*	37.91	*	*	46.00	*	46.21	*	*	*
Myanmar	*	*	*	*	*	*	*	*	*	*	*	*
Philippines	46.09	*	44.48	*	*	44.04	*	*	42.98	*	*	43.03
Singapore	*	*	*	*	*		*	*	*	*	*	*
Thailand	42.84	41.98	*	*	*	42.35	*	40.51	*	39.37	*	*
Viet Nam	*	37.55	*	36.81	*	35.75	*	35.57	*	39.25	*	35.62

Note: \* = Data not available, Lao PDR = Lao People's Democratic Republic, PPP = Purchasing Power Parity.

Source: World Bank (2014), *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/16092> License: CC BY 3.0 IGO



**Table 4. Infant Mortality Rate (measuring unit?)**

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Brunei Darussalam	7.7	7.5	7.6	7.5	7.5	7.4	7.4	7.5	7.5	7.6	7.8	7.9	8.2	8.4
Cambodia	81.7	75.9	69.2	62.5	56.8	52.1	48.1	44.7	41.8	39.3	37.3	35.5	33.9	32.5
Indonesia	41.0	39.4	37.8	36.3	34.8	33.4	32.2	30.9	29.7	28.6	27.4	26.4	25.4	24.5
Lao PDR	83.0	80.3	77.6	75.0	72.5	70.0	67.7	65.4	63.2	61.1	59.0	57.1	55.4	53.8
Malaysia	8.7	8.1	7.6	7.3	7.1	7.0	6.9	6.9	7.0	7.1	7.2	7.3	7.3	7.2
Myanmar	58.9	57.3	55.6	54.0	52.4	50.8	49.3	47.8	46.3	44.9	43.7	42.4	41.0	39.8
Philippines	30.1	29.5	29.0	28.5	28.0	27.5	27.0	26.5	26.0	25.5	25.0	24.5	24.0	23.5
Singapore	3.1	2.9	2.6	2.5	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2
Thailand	19.1	18.3	17.5	16.7	16.0	15.2	14.6	14.0	13.4	12.9	12.5	12.0	11.6	11.3
Viet Nam	27.0	26.3	25.6	24.9	24.3	23.6	23.0	22.4	21.8	21.2	20.6	20.0	19.5	19.0

Note: \* = Data not available, Lao PDR = Lao People's Democratic Republic, PPP = Purchasing Power Parity.

Source: World Bank (2014), *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. Available at; <https://openknowledge.worldbank.org/handle/10986/16092> License: CC BY 3.0 IGO

**Table 5. Under-Five Mortality Rate (measuring unit?)**

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Brunei Darussalam	9.5	9.3	9.3	9.2	9.1	9.0	9.0	9.0	9.0	9.1	9.3	9.4	9.7	9.9
Cambodia	110.5	100.8	89.7	79.2	70.5	63.6	57.9	53.4	49.5	46.4	43.8	41.6	39.7	37.9
Indonesia	52.2	49.8	47.5	45.4	43.3	41.4	39.6	37.9	36.3	34.7	33.2	31.8	30.5	29.3
Lao PDR	117.4	113.2	108.9	104.8	100.8	97.0	93.3	89.7	86.2	82.9	79.6	76.7	74.0	71.4
Malaysia	10.1	9.5	8.9	8.5	8.3	8.2	8.1	8.1	8.2	8.3	8.5	8.5	8.5	8.5
Myanmar	79.5	76.9	74.3	71.7	69.3	66.8	64.4	62.1	60.0	57.9	56.1	54.2	52.2	50.5
Philippines	39.9	39.0	38.2	37.4	36.6	35.8	35.0	34.3	33.5	32.8	32.1	31.4	30.6	29.9
Singapore	4.0	3.7	3.4	3.2	3.0	2.9	2.9	2.9	2.8	2.8	2.8	2.8	2.8	2.8
Thailand	22.5	21.5	20.5	19.5	18.6	17.8	17.0	16.3	15.6	15.0	14.5	14.0	13.5	13.1
Viet Nam	35.1	34.0	32.9	31.9	31.0	30.0	29.2	28.3	27.5	26.7	25.9	25.2	24.5	23.8

Note: \* = Data not available, Lao PDR = Lao People's Democratic Republic, PPP = Purchasing Power Parity.

Source: World Bank (2014), *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. Available at; <https://openknowledge.worldbank.org/handle/10986/16092> License: CC BY 3.0 IGO

**Table 6. Maternal Mortality Rate (measuring unit?)**

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Brunei Darussalam	*	*	*	*	*	*	*	*	*	*	*	*	*
Cambodia	440	*	*	*	*	472	*	*	460	*	206	*	*
Indonesia	*		307	*	*	*	*	230	*	*	*	*	360
Lao PDR	*	*	*	*	*	410	*	*	*	*	*	*	360
Malaysia	*	*	*	30	*	28	30	29	29	30	26	*	*
Myanmar	*	*	*	*	*	320	*	*	*	*	*	*	*
Philippines	*	*	*	*	*	*	160	*	*	*	*	221	*
Singapore	*	*	*	*	*	*	*	*	*	*	*	*	*
Thailand	*	24	*	*	*	12	*	*	*	*	*	*	*
Viet Nam	*	170	*	*	*	*	162	*	75	69	*	67	*

Note: \* = Data not available, Lao PDR = Lao People's Democratic Republic, PPP = Purchasing Power Parity.

Source: World Bank (2014), *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. Available at; <https://openknowledge.worldbank.org/handle/10986/16092> License: CC BY 3.0 IGO

**Table 7. Gross Enrolment Rate—Primary (%)?**

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Brunei Darussalam	111.3	107.7	108.0	111.1	111.8	111.3	111.7	110.8	107.3	104.2	101.0	98.3	95.5
Cambodia	106.3	115.1	128.4	131.0	132.7	133.5	133.5	134.5	131.2	130.5	129.9	126.4	124.2
Indonesia	110.3	111.2	111.6	111.3	110.7	109.8	108.1	111.1	109.5	109.9	109.9	109.1	108.5
Lao PDR	105.6	102.8	104.0	105.9	107.2	109.0	110.9	112.4	115.7	119.3	123.2	123.4	122.7
Malaysia	98.1	97.3	95.9	97.0	100.1	101.4	*	*	*	*	*	*	*
Myanmar	98.2	97.7	98.4	101.3	102.7	103.5	104.8	106.7	110.1	111.5	114.2	*	*
Philippines	109.6	109.0	108.4	108.3	107.4	106.5	104.6	104.4	105.1	105.8	*	*	*
Singapore*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thailand	97.7	97.2	98.1	*	98.9	98.1	96.6	97.0	97.4	96.7	94.9	94.9	95.4
Viet Nam	107.2	104.2	100.8	98.3	97.7	97.3	98.5	100.9	102.8	102.8	104.9	105.0	104.7

Note: \* = Data not available, Lao PDR = Lao People's Democratic Republic, PPP = Purchasing Power Parity.

Source: World Bank (2014), *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. Available at; <https://openknowledge.worldbank.org/handle/10986/16092> License: CC BY 3.0 IGO

**Table 8. Net Enrolment Rate—Primary (%)?**

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Brunei Darussalam	*	*	*	*	*	*	*	*	92.97	93.40	93.21	92.69	91.66
Cambodia	91.96	*	*	97.35	*	*	98.28	98.31	98.20	*	98.19	98.28	98.38
Indonesia	*	93.19	92.71	92.09	91.21	90.41	93.37	95.38	94.57	94.92	94.90	93.67	92.22
Lao PDR	74.90	74.06	74.98	77.29	77.70	78.71	80.04	82.44	85.24	88.49	94.35	95.35	95.88
Malaysia	97.81	97.03	95.87	96.73	97.62	97.03	*	*	*	*	*	*	*
Myanmar*	*	*	*	*	*	*	*	*	*	*	*	*	*
Philippines	*	89.74	89.92	90.28	89.79	89.03	87.31	87.27	87.55	88.22	*	*	*
Singapore*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thailand	*	*	*	*	*	*	93.85	94.22	94.63	95.61	*	*	*
Viet Nam	95.81	94.08	91.53	*	*	90.30	92.18	*	98.53	98.58	98.01	99.32	98.06

Note: \* = Data not available, Lao PDR = Lao People's Democratic Republic, PPP = Purchasing Power Parity.

Source: World Bank (2014), *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/16092> License: CC BY 3.0 IGO

**Table 9 Gross Enrolment Rate—Secondary (%)?**

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Brunei Darussalam	86.2	87.8	88.8	89.2	91.7	93.6	96.4	96.0	96.7	99.2	100.7	103.0	107.8
Cambodia	17.0	18.7	22.7	27.3	31.1	*	39.4	42.4	45.0	*	*	*	*
Indonesia	55.8	56.3	58.1	61.4	63.3	61.7	64.4	72.4	71.4	76.5	78.4	81.2	82.5
Lao PDR	34.1	36.0	38.6	41.2	42.9	43.1	42.1	42.2	42.6	43.6	44.8	43.6	46.5
Malaysia	66.2	65.9	66.1	71.2	72.0	68.7	68.0	66.2	66.1	65.5	66.9	67.2	*
Myanmar	35.9	37.0	38.8	39.5	42.7	44.0	46.2	46.5	49.3	49.3	50.2	*	*
Philippines	*	74.7	79.2	81.3	83.4	83.0	81.4	81.5	82.4	84.6	*	*	*
Singapore*	*	*	*	*	*	*	*	*	*	*	*	*	*
Thailand	*	62.7	64.4	*	66.7	71.4	71.6	77.3	78.0	80.7	83.5	87.4	87.0
Viet Nam*	*	*	*	*	*	*	*	*	*	*	*	*	*

Note: \* = Data not available, Lao PDR = Lao People's Democratic Republic, PPP = Purchasing Power Parity.

Source: World Bank (2014), *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/16092> License: CC BY 3.0 IGO

**Table 10 Net Enrolment Rate—Secondary (%)?**

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Brunei Darussalam	*	*	*	*	*	85.5	88.4	87.9	88.2	90.0	*	92.6	94.7
Cambodia	15.4	16.6	22.0	26.3	27.3	*	32.0	35.6	38.2	*	*	*	*
Indonesia	*	50.2	51.7	54.6	56.2	54.8	59.2	66.5	65.6	66.4	68.4	74.8	76.1
Lao PDR	27.4	29.0	29.9	33.2	34.7	34.8	33.9	34.6	35.3	36.6	38.2	38.7	41.4
Malaysia	66.0	65.6	65.8	70.9	71.7	68.4	67.7	65.9	65.8	65.2	66.4	66.3	
Myanmar	32.1	35.0	34.9	35.5	39.9	40.7	43.1	43.7	46.0	46.1	47.0	*	*
Philippines		50.8	54.6	57.4	59.3	59.0	59.2	60.0	60.7	61.4	*	*	*
Singapore	*	*	*	*	*	*	*	*	*	*	*	*	*
Thailand	*	*	*	*	*	*	67.1	71.4	74.3	77.0	78.1	81.7	79.5
Viet Nam	*	*	*	*	*	*	*	*	*	*	*	*	*

Note: \* = Data not available, Lao PDR = Lao People's Democratic Republic, PPP = Purchasing Power Parity.

Source: World Bank (2014), *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/16092> License: CC BY 3.0 IGO

**Table 11. Human Development Index, 2000–2013**

Country	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Singapore	0.80	0.84	0.85	0.86	0.87	0.87	0.89	0.90	0.90	0.90
Brunei Darussalam	0.82	0.84	0.84	0.84	0.84	0.84	0.84	0.85	0.85	0.85
Malaysia	0.72	0.75	0.75	0.76	0.76	0.76	0.77	0.77	0.77	0.77
Thailand	0.65	0.69	0.69	0.70	0.70	0.71	0.72	0.72	0.72	0.72
Indonesia	0.61	0.64	0.65	0.65	0.65	0.67	0.67	0.68	0.68	0.68
Philippines	0.62	0.64	0.64	0.64	0.65	0.65	0.65	0.65	0.66	0.66
Viet Nam	0.56	0.60	0.60	0.61	0.62	0.62	0.63	0.63	0.64	0.64
Cambodia	0.47	0.54	0.55	0.56	0.56	0.57	0.57	0.58	0.58	0.58
Lao PDR	0.47	0.51	0.52	0.53	0.53	0.54	0.55	0.56	0.57	0.57
Myanmar	0.42	0.47	0.48	0.49	0.50	0.51	0.51	0.52	0.52	0.52

Source: United National Development Programme (2014), *Human Development Report*.

## ERIA Discussion Paper Series

No.	Author(s)	Title	Year
2015-63	Sudarno SUMARTO and Sarah MOSELLE	Addressing Poverty and Vulnerability in ASEAN: An Analysis of Measures and Implications Going Forward	Sep 2015
2015-62	Rafaelita M. ALDABA	The Philippines in the Electronics Global Value Chain: Upgrading Opportunities and Challenges	Sep 2015
2015-61	Olivier CADOT and Lili Yan ING	Non-tariff Measures and Harmonisation: Issues for the RCEP	Sep 2015
2015-60	Jacob KUMARESAN and Suvi HUIKURI	Strengthening Regional Cooperation, Coordination, and Response to Health Concerns in the ASEAN Region: Status, Challenges, and Ways Forward	Sep 2015
2015-59	Kaliappa KALIRAJAN, Kazi Arif Uz ZAMAN, Gaminiratne WIJESEKERE	Strengthening Natural Resources Management in ASEAN: National and Regional Imperatives, Targets, and Opportunities	Sep 2015
2015-58	THAM Siew Yean and Andrew KAM Jia Yi	Trade in Value Added: The Case of Malaysia	Sep 2015
2015-57	S. KUMAR	Engendering Liveable Low-Carbon Smart Cities in ASEAN as an Inclusive Green Growth Model and Opportunities for Regional Cooperation	Sep 2015
2015-56	Shandre THANGAVELU	Services Productivity and Trade Openness: Case of ASEAN	Aug 2015
2015-55	Lili Yan ING and Chandra Tri PUTRA	Imported Inputs in Indonesia's Product Development	Aug 2015

<b>No.</b>	<b>Author(s)</b>	<b>Title</b>	<b>Year</b>
2015-54	Cassey LEE	The Objectives of Competition Law	Aug 2015
2015-53	Burton ONG	Competition Law and Policy in Singapore	Aug 2015
2015-52	Robin SAKAMOTO	Investing in Higher Education, and Its Potential Impact on Research and Development for Technological Upgrading, Innovation, and Competitiveness	Aug 2015
2015-51	Xiao JIANG and Jose CARABALLO	The Employment Effects of GVCs on Asian Countries and the Phenomenon of Value-Added Erosion	Aug 2015
2015-50	Mun-Heng TOH	Singapore's Participation in Global Value Chains: Perspectives of Trade in Value-Added	July 2015
2015-49	Ben SHPEHERD	Developing Domestic and Export Markets and Levelling Up Trade in Value-Added: Lessons Learnt	July 2015
2015-48	Siwage Dharma NEGARA	How Labour Market Policies Affect Innovation and Trade Competitiveness	July 2015
2015-47	Hank LIM, Bernard AW, LOKE Hoe Yeong	AEC Scorecard Phase IV: Furthering the Implementation of the AEC Blueprint Measures The Singapore Country Report	June 2015
2015-46	Saowaruj RATTANAKHAMFU, Sumet ONGKITTIKUL, Nutthawut, LAKSANAPUNYA KUL, Nichamon THONGPAT, Natcha O-CHAROEN	Thailand Country Study ASEAN Economic Community Blueprint Mid-term Review Project	June 2015

<b>No.</b>	<b>Author(s)</b>	<b>Title</b>	<b>Year</b>
2015-45	Koji KUBO	Evolving Informal Remittance Methods of Myanmar Migrant Workers in Thailand	June 2015
2015-44	Philippa DEE	Monitoring the Implementation of Services Trade Reform towards an ASEAN Economic Community	May 2015
2015-43	Shandre THANGAVELU	FDI Restrictiveness Index for ASEAN: Implementation of AEC Blueprint Measures	May 2015
2015-42	Rully PRASSETYA and Ponciano S. INTAL, Jr.	AEC Blueprint Implementation Performance and Challenges: Standards and Conformance	May 2015
2015-41	Ponciano INTAL Jr.	AEC Blueprint Implementation Performance and Challenges: Trade Facilitation	May 2015
2015-40	Fukunari KIMURA, Tomohiro MACHIKITA, and Yasushi UEKI	Technology Transfer in ASEAN Countries: Some Evidence from Buyer-Provided Training Network Data	May 2015
2015-39	Dionisius NARJOKO	AEC Blueprint Implementation Performance and Challenges: Services Liberalization	May 2015
2015-38	Kazunobu HAYAKAWA, Nuttawut LAKSANAPANYA KUL, Shujiro URATA	Measuring the Costs of FTA Utilization: Evidence from Transaction-level Import Data of Thailand	May 2015
2015-37	Kazunobu HAYAKAWA, Nuttawut LAKSANAPANYA KUL, Pisit PUAPAN, Sastra	Government Strategy and Support for Regional Trade Agreements: The Case of Thailand	May 2015

<b>No.</b>	<b>Author(s)</b>	<b>Title</b>	<b>Year</b>
SUDSAWASD			
2015-36	Dionisius A. NARJOKO	AEC Blueprint Implementation Performance and Challenges: Non-Tariff Measures and Non-Tariff Barriers	May 2015
2015-35	Kazunobu HAYAKAWA, Tadashi ITO, and Fukunari KIMURA	Trade Creation Effects of Regional Trade Agreements: Tariff Reduction versus Non-tariff Barrier Removal	Apr 2015
2015-34	Kazunobu HAYAKAWA, Tadashi ITO	Tariff Pass-through of the World-wide Trade: Empirical Evidence at Tariff-line Level	Apr 2015
2015-33	Kazubobu HAYAKAWA, Nuttawut LAKSANAPNYAK UL, and Shujiro URATA	Firm-level Impact of Free Trade Agreements on Import Prices	Apr 2015
2015-32	Ponciano INTAL, Jr.	AEC Blueprint Implementation Performance and Challenges: Investment Liberalization	Apr 2015
2015-31	Emily Christi A. CABEGIN	The Challenge of China and the Role of Deepening ASEAN Integration for the Philippine Semiconductor Industry	Apr 2015
2015-30	Venkatachalam ANBUMOZHI, Alex BOWEN and Puthusserikunnel Devasia JOSE	Market-Based Mechanisms to Promote Renewable Energy in Asia	Apr 2015
2015-29	Venkatachalam ANBUMOZHI	Low Carbon Green Growth in Asia: What is the Scope for Regional Cooperation?	Apr 2015
2015-28	Tan LI and Larry D.	Beyond Trade Creation: Free Trade	Mar



<b>No.</b>	<b>Author(s)</b>	<b>Title</b>	<b>Year</b>
	QIU	Agreements and Trade Disputes	2015
2015-27	Mai Anh NGO	Exporting and Firm-Level Credit Constraints – Evidence from Ghana	Mar 2015
2015-26	Sunghoon CHUNG, Joonhyung LEE, Thomas OSANG	Did China Tire Safeguard Save U.S. Workers?	Mar 2015
2015-25	Esther Ann BØLER, Beata JAVORCIK, Karen Helene ULLTVEI-MOE	Globalization: A Woman’s Best Friend? Exporters and the Gender Wage Gap	Mar 2015
2015-24	Tristan Leo Dallo AGUSTIN and Martin SCHRÖDER	The Indian Automotive Industry and the ASEAN Supply Chain Relations	Mar 2015
2015-23	Hideo KOBAYASHI and Yingshan JIN	The CLMV Automobile and Auto Parts Industry	Mar 2015
2015-22	Hideo KOBAYASHI	Current State and Issues of the Automobile and Auto Parts Industries in ASEAN	Mar 2015
2015-21	Yoshifumi FUKUNAGA	Assessing the Progress of ASEAN MRAs on Professional Services	Mar 2015
2015-20	Yoshifumi FUKUNAGA and Hikari ISHIDO	Values and Limitations of the ASEAN Agreement on the Movement of Natural Persons	Mar 2015
2015-19	Nanda NURRIDZKI	Learning from the ASEAN + 1 Model and the ACIA	Mar 2015
2015-18	Patarapong INTARAKUMNERD and Pun-Arj CHAIRATANA and Preeda CHAYANAJIT	Global Production Networks and Host-Site Industrial Upgrading: The Case of the Semiconductor Industry in Thailand	Feb 2015
2015-17	Rajah RASIAH and Yap Xiao SHAN	Institutional Support, Regional Trade Linkages and Technological Capabilities in the Semiconductor Industry in Singapore	Feb 2015

<b>No.</b>	<b>Author(s)</b>	<b>Title</b>	<b>Year</b>
2015-16	Rajah RASIAH and Yap Xiao SHAN	Institutional Support, Regional Trade Linkages and Technological Capabilities in the Semiconductor Industry in Malaysia	Feb 2015
2015-15	Xin Xin KONG, Miao ZHANG and Santha Chenayah RAMU	China's Semiconductor Industry in Global Value Chains	Feb 2015
2015-14	Tin Htoo NAING and Yap Su FEI	Multinationals, Technology and Regional Linkages in Myanmar's Clothing Industry	Feb 2015
2015-13	Vanthana NOLINTHA and Idris JAJRI	The Garment Industry in Laos: Technological Capabilities, Global Production Chains and Competitiveness	Feb 2015
2015-12	Miao ZHANG, Xin Xin KONG, Santha Chenayah RAMU	The Transformation of the Clothing Industry in China	Feb 2015
2015-11	NGUYEN Dinh Chuc, NGUYEN Ngoc Anh, NGUYEN Ha Trang and NGUYEN Ngoc Minh	Host-site institutions, Regional Production Linkages and Technological Upgrading: A study of Automotive Firms in Vietnam	Feb 2015
2015-10	Pararapong INTERAKUMNERD and Kriengkrai TECHAKANONT	Intra-industry Trade, Product Fragmentation and Technological Capability Development in Thai Automotive Industry	Feb 2015
2015-09	Rene E. OFRENEO	Auto and Car Parts Production: Can the Philippines Catch Up with Asia	Feb 2015
2015-08	Rajah RASIAH, Rafat Beigpoor SHAHRIVAR, Abdusy Syakur AMIN	Host-site Support, Foreign Ownership, Regional Linkages and Technological Capabilities: Evidence from Automotive Firms in Indonesia	Feb 2015
2015-07	Yansheng LI, Xin Xin KONG, and Miao ZHANG	Industrial Upgrading in Global Production Networks: The Case of the Chinese Automotive Industry	Feb 2015
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,	Fiscal Policy and Equity in Advanced Economies: Lessons for Asia	Jan 2015

<b>No.</b>	<b>Author(s)</b>	<b>Title</b>	<b>Year</b>
	Motohiro SATO, and Karin SVANBORG- SJÖVALL		
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

[http://www.eria.org/publications/discussion\\_papers/FY2014/](http://www.eria.org/publications/discussion_papers/FY2014/)

[http://www.eria.org/publications/discussion\\_papers/FY2013/](http://www.eria.org/publications/discussion_papers/FY2013/)

[http://www.eria.org/publications/discussion\\_papers/FY2012/](http://www.eria.org/publications/discussion_papers/FY2012/)

[http://www.eria.org/publications/discussion\\_papers/FY2011/](http://www.eria.org/publications/discussion_papers/FY2011/)

[http://www.eria.org/publications/discussion\\_papers/FY2010/](http://www.eria.org/publications/discussion_papers/FY2010/)

[http://www.eria.org/publications/discussion\\_papers/FY2009/](http://www.eria.org/publications/discussion_papers/FY2009/)

[http://www.eria.org/publications/discussion\\_papers/FY2008/](http://www.eria.org/publications/discussion_papers/FY2008/)