

Centre for ASEAN Studies



ISSN-2031-065X

# ASEAN Economic Integration Compared: what do the numbers tell us?<sup>1</sup>

# L. CHEN<sup>2</sup> L. CUYVERS<sup>3</sup> Ph. DE LOMBAERDE<sup>4</sup>

## **CAS Discussion paper No 95**

December 2014

<sup>&</sup>lt;sup>1</sup>We gratefully acknowledge comments by Giovanni Capannelli, Masahiro Kawai, Srinivasa Madhur, Pradumna B. Rana and Suthad Setboonsarng at the RSIS-Economic Growth Centre Conference on ASEAN's Long-Term Economic Potential and Vision, Singapore, 20-21 November 2014. The authors want to thank Bonaventura Francesco Pacileo, Svea Freiberg, and Ashley Stead, all UNU-CRIS interns, for their excellent research assistance

<sup>&</sup>lt;sup>2</sup>Research Fellow, United Nations University Institute of Comparative Regional Integration Studies, Bruges (Belgium).

<sup>&</sup>lt;sup>3</sup>Emeritus Professor and Director of the Centre for ASEAN Studies, University of Antwerp; Associate Research Fellow, UNU-CRIS, Bruges (Belgium); and Extraordinary Professor, North-West University (South Africa).

<sup>&</sup>lt;sup>4</sup>Associate Director, UNU-CRIS, Bruges (Belgium).

### Abstract

In the comparative literature on regional (economic) integration processes, the ASEAN experience is often contrasted with the European (EU) integration process. More than any other integration process in the world, the ASEAN case is singled out as a counter-model for the EU. The ASEAN model is thereby associated with features such as: low levels of institutionalization, pragmatism, bottom-up or *de facto* regionalization, regional production platforms, and so on. The positive features of this 'model' are often emphasized; however, in recent years there have also been calls for deepening the institutionalization of ASEAN, including from the ADB.

The purpose of our paper is double: On the one hand, we present a long-term meta-analysis of available indicators in order to compare more accurately the ASEAN experience with other integration experiences worldwide, and complement (and test) the mostly qualitative approaches in the comparative literature. This should allow to better identify convergences and divergences between ASEAN and other integration processes. On the other hand, by comparing ASEAN with benchmark cases, we shed new light on the potential for further deepening the economic integration process in Southeast Asia. The latter comparison is complemented with gravity-type model estimations to assess the potential for further developing intra-ASEAN trade.

It is shown that ASEAN's export space is expanding faster than the world average and that there is still space for ASEAN countries to further develop the role of its intra-regional trade. ASEAN can further improve the region's competitiveness by reducing the non-tariff barriers and technical barriers, trade facilitation, strengthening regional value chains, facilitating factor mobility and enhancing regional cooperation.

#### 1. Introduction

When one looks back at the economic development in Southeast Asia over the last 50 years, and more specifically at the regional dynamics in the real economy and the determinants thereof, one tends to give more weight to the *de facto* regionalization process, historically centered around Japan, rather than to the *de jure* regional integration process in the context of the Association of Southeast Asian Nations (ASEAN). It is generally accepted that the former has dominated the latter. The former process has been described as a bottom-up process of gradual industrialization following a 'flying geese' pattern (Akamatsu 1962), supported by the development of a dense network of trade and investment linkages from the late 1950s to the mid-1980s, with a primary (Japan) and secondary hubs (South Korea, Hong-Kong, Taiwan, Singapore...). The process was an expression of the international fragmentation of the production of manufactures, and its organization in production sharing networks (Jones and Kierzkowski 1990, 2001; Feenstra 1998; Yi 1999; and Ng and Yeats 2001).

More recently, the emergence of PR China has modified the structure of the system but not necessarily its functional logic (Chen et al. 2011). This development goes back to the economic reforms (and open door policies) in China at the end of the 1970s but the Chinese take-off was particularly spectacular since the 1990s. The Chinese economy has attracted large quantities of FDI (Galbraith 2005) and has been connected to global and regional production networks (Ernst 2004; Steinfeld 2004; Yusuf et al. 2004).

Only after the Asian Financial Crisis of 1997-98, more regional policy coordination and cooperation in the areas of trade and finance took place in the wider region (Cuyvers et al. 2005). Regular meetings have been organized since then between ASEAN and Japan, China, and Korea. These meetings are held on a yearly basis with two parallel structures: ASEAN10+1 (ASEAN 10 + China or Japan) and ASEAN10+3 (APT<sup>5</sup>) including annual meetings of APT ministers of foreign affairs, trade, investment and finance.However, the institutionalization of the ASEAN+ process(es) remain shallow (Baldwin 2004, 2006).

In the comparative literature on regional (economic) integration processes, the ASEAN experience is often contrasted with the European integration process. They are considered as very divergent processes (Webber 2013: 96). More than any other integration process in the world, the ASEAN case is thereby singled out as a counter-model for the European Union (EU). The ASEAN model is associated with features such as: low levels of institutionalization, pragmatism, bottom-up or *de facto* regionalization, regional production platforms, and so on. The positive features of this 'model' are often emphasized; however, in recent years there have also been calls for deepening the institutionalization of ASEAN, including from the Asian Development Bank (ADB) (see e.g. ADBI 2012: 72-83).

It is indeed often heard that Asian regionalism is fundamentally different from European regionalism, even to the extent that doubts can be raised about the comparability of the integration experiences, as also suggested by the *new regionalism approach* (Söderbaum and Shaw 2003; Bøås, Marchand and Shaw 2005; Shaw, Grant and Cornelissen 2011). However, most analysts agree that there is still scope for a fruitfulcomparative research agenda on Asian and European regionalisms (Murray and Warleigh-Lack 2013), the more as "ASEAN [...] is perhaps the most enduring organization of its sort to have emerged from the 'developing world'" (Beeson 2008: 17).

The purpose of our paper is double: On the one hand, we will present a long-term meta-analysis of available indicators in order to compare more accurately the ASEAN experience with other integration experiences worldwide, and complement (and test) the mostly qualitative approaches in the comparative literature. This should allow to better identify convergences and divergences between ASEAN and other integration processes. On the other hand, by comparing ASEAN with benchmark cases, we will shed new light on the potential for further deepening the economic integration process in Southeast Asia. This comparison will be complemented with gravity-type model estimations to assess the potential for further developing intra-ASEAN trade.

In this paper, we adopt a pragmatic view on comparability in comparative regionalism studies, basically seeing comparability as a function of the research question(s) on the table.<sup>6</sup>The paper is organized as follows: In section two, the (mostly qualitative) literature will be reviewed, after which, in section three, a number of indicators will be presented for a selection of regional integration schemes, including ASEAN for the sake of comparability. In section four, we will further analyze the relative potential for intra-regional trade in ASEAN. Section five concludes

## 2. The Southeast Asian 'model' of regional integration

For one of the most prominent observers of Asian regionalism, Katzenstein, there is an "open form of Asian regionalism that is marked by multiple centers of influence" (Katzenstein 1996:2). He further contrasts de jure regional integration (as in Europe) with de facto regional integration (as in Asia) (Katzenstein 1996:3). Regional integration in Asia "occurs in markets that are changing rapidly under the confluence of globalization and growing links between national economies [...] [it] is unimpressive in the formal international institutions [...]" (Katzenstein 1996:12).

This pointsalready to a number of characteristics of Asian regionalism: First, de facto regionalization outweighs formal regionalism. The Asian way of regionalism (as in ASEAN) is constructed around partnerships between the private sector, playing a crucial role in the

<sup>&</sup>lt;sup>5</sup>APT refers to ASEAN10 + Japan, China, and Korea.

<sup>&</sup>lt;sup>6</sup>On the problem of comparability in comparative regionalism studies, see e.g. De Lombaerde et al. (2010).

process, and the state. It has been referred to as a form of 'trans-state development' (Parsonage 1997). The formal regional initiatives tend to be based more on intergovernmentalism and are in most cases less political than elsewhere (ILO 2008:30). Southeast Asian regionalism lacks both the broad scope and the depth of the European integration process (Webber 2013: 96-97) and is characterized by relatively weak institutions (Beeson 2008: 20-21).

Second, and somewhat uncritically, European and Asian regionalism are usually assimilated with 'closed' and 'open' regionalism, respectively (Söderbaum and Sbragia 2010: 569). Whereas, the European Union has (often unwarranted and unjustified) be associated with "Fortress Europe", Asian regionalism, in particular that of ASEAN, is much more attuned to the economic partner countries outside ASEAN with due regard to the ASEAN countries' relative dependence on the rest of the world for goods, services and investment.

Third, Asian regionalism is characterized by the absence of a unique centre of influence or a clear regional leader.Fawn (2009: 27) mentions East Asia as a 'unique' regional system, and focuses on the fact that it is composed of "several strong and distinctive national forms, and which prevents the ascendance of a single power". There is no consensus in the literature, however, on the direction of the relationship between regional leadership and the depth and speed of the regional integration process (Stakhovitz 1991; Laursen 2010; De Lombaerde 2014) but for Mattli (1999a,b). The combination with relatively limited potential market gains in Southeast Asiamakes that at least two factors play against (future) success of ASEAN.

It has further been observed that East Asia is a region which is to an important extent driven by sub-state and/or non-state actors (Pempel 2005; Katzenstein and Shiraishi 2006), and contrasts therefore not only with Europe but also with Latin America. In addition, it is emphasized that the Asian way also refers to dealing with differences and conflicts between (member) states through consultation, quiet diplomacy and non-confrontation (Goh 2003: 14; Beeson 2008: 21-22).

In order to characterize Asian regionalism, reference is often made to common cultural factors (Ogura 1993; Mahbubani 1995; Barrera 2001). There exist variations, however, with respect to the role of culture. For Poon (2009: 255), the 'Asian way', basically refers to the consensus culture as shared aspect of the (sub) national cultures in the region, while Shirer (2006: 329) points to the incompatibility of cultures in that region. Fawn (2009: 31) adds that "[t]he study of culture in regionalism, while necessary, is complicated by being both a major driving force and an obstacle to regionalism".

Asian regionalism scholars emphasize the 'Asian way', but refer practically always to the EU as a reference point. It is an open question if this problem of comparability also applies to other forms of regionalism/regionalization in Europe.

From the above, we can deduct that based on the (mostly qualitative) comparative regionalism literature, an image emerges of a Southeast Asian model of regionalism with –in the economic sphere- the following characteristics: a relatively high degree ofde facto integration, a relatively low degree ofde jure integration, relatively open towards third countries, the existence of relatively important regional value chains, the absence of a strong hub,... in combination with a factor of cultural homogeneity. In the following section, this image will be checked against numerical data.

## 3. Reviewing selected ASEAN indicator scores

De factointegration or regionalization can be measured by a set of indicators using intra-regional flow data of various sorts, the availability of data being the major constraint.

When looking at intra-regional trade shares over a long period of time (table 1), ASEAN seems to show overall average results. Historically, the ASEAN integration process took place under circumstances of limited intra-regional economic interdependence (Webber 2013: 98). Intra-regional trade shares are currently slightly above 25%. As observed before (Cuyvers and Dumont 2005; Chen et al. 2011), the development model in the region has been export-oriented; and countries have been competing for outsourced tasks from advanced economies.

The emergence of 'factory Asia' has therefore also been fostering competitive unilateral liberalization. As a result of these developments, intra-regional trade in (South-)East Asia in the post-war era has followed a U-shape time pattern (Agarwala et al. 1994: 22-23). Initially, trade with the US and Europe grew faster than intra-regional trade. However, from the 1980s onwards the importance of intra-regional trade has been on the rise (as measured by the intra-regional trade shares).

Cross-regional comparisons are complicated, however, by the fact that the scores depend upon the size of the region and the number of countries in the region. This has been well explained elsewhere (lapadre 2006; lapadre and Plummer 2011). When correcting the trade shares for the size of the regions, the ranking is completely different (table 2). The score for ASEAN is now relatively low and has been almost continuously decreasing since the 1970s. This means that the growth of intra-regional trade that has taken place during this period, has been overcompensated by the size effect.

	1970	1980	1990	2000	2010
ASEAN	18,4	16,0	17,1	22,6	26,1
CAIS	22,7	20,3	12,7	17,4	16,3
CAN	5,2	7,4	12,1	21,7	10,7
CIS	NA	NA	NA	26,6	16,6
ECOWAS	3,6	14,4	21,0	11,1	4,3
EU	55,4	54,4	63,2	63,2	60,8
Mercosur	9,9	10,0	11,3	20,8	11,8
NAFTA	40,2	33,7	37,5	46,4	40,0
SAARC	2,6	3,0	2,9	3,6	11,9
SADC	10,3	0,5	5,6	14,2	12,2

Table 1: Intra-regional trade shares, 1970-2010

Source: RIKS

	1970	1980	1990	2000	2010
ASEAN	7,3	4,1	3,6	3,7	3,4
CAIS	45,5	56,1	65,0	58,7	45,3
CAN	5,2	7,4	12,1	21,7	10,7
CIS	NA	NA	NA	16,3	4,6
EU	1,2	1,2	1,4	1,7	1,7
Mercosur	5,8	5,2	9,5	15,4	6,8
NAFTA	2,0	1,9	2,0	2,0	2,1
SAARC	2,2	3,0	2,9	3,6	31,6
SADC	15,4	0,4	41,2	23,8	13,5

Table 2: Intra-regional trade intensity indices, 1970-2010

Source: RIKS.

Rather than showing above-average levels of intra-regional trade interdependence, apparently it is the openness vis-à-vis the global markets which sets ASEAN apart from the other regions under consideration (table 3). Openness of the ASEAN region, as measured by the ratio of extra-regional trade on regional GDP, is clearly higher than the corresponding levels in other regions.

	1995	2000	2005	2010
ASEAN	76,6%	85,5%	89,6%	78,7%
EU	16,1%	20,0%	20,8%	24,4%
NAFTA	12,6%	13,2%	14,1%	15,7%
SAARC	20,5%	22,5%	29,0%	32,6%
MERCOSUR	13,2%	16,4%	24,2%	18,1%

Table 3: Openness of regional economies

Sources: Calculation based on data retrieved from UNCTAD Database.

Note: Openness of the regional economies is measured by the ratio between extra-regional trade (extraregional imports plus extra-regional exports) and regional GDP.

As evidence of intensive intra-regional production sharing, about one quarter of ASEAN's trade in parts and components occurred within the region. The figures lay in between the EU and MERCOSUR figures. But although the intra-regional share for ASEAN did not change significantly overtime, the overall size of ASEAN's trade in parts and components, both intraregionally and extra-regionally, did increase by over 160 percent during the period between 1995 and 2010.

	1995	2000	2005	2010
ASEAN	25.8%	24.5%	25.0%	24.2%
EU	27.1%	21.2%	40.2%	39.8%
MERCOSUR	11.0%	8.1%	9.6%	9.9%

Table 4: Intra-regional shares of trade in parts and components

Sources: calculation based on data retrieved from UN COMTRADE database.

Note: The definition of trade in parts and components is based on Ng and Yeats (2003).

Turning now to investment flows, the intra-regional share of total FDI inflows in ASEAN is comparable to the NAFTA levels, slightly higher than the MERCOSUR levels, but much below the EU levels (table 5). What is striking here is that the Asian financial crisis of the late 1990s seems to have had a great (negative) impact on intra-regional FDI flows.

From a comparison of ASEAN's intra-regional trade shares, its intra-regional trade intensity shares and its intra-regional FDI inflows, it appears that *de facto* regional integration in ASEAN has been largely driven by trade, much less by investment. Also looking at the intra-regional flows of parts and components as compared to the situation in the EU this is likely to be driven in ASEAN proportionately more by FDI from outside the region than by ASEAN FDI. No doubt, intra-regional trade has increased much by the reduction of the tariff duties since the completion of the ASEAN Free Trade Area.

Data on bilateral migration flows are even scarcer than data on bilateral FDI flows (Ceccoruli et al. 2011). However, World Bank data allow us to calculate intra-regional migration shares, be it that these are based on stock data. The results for 2005 asshown in table 6, shed again another light on intra-ASEAN interdependence. Broadly speaking, ASEAN shows results which are slightly above the world average.

	1990	1995	2000	2005	2010
ASEAN	15.7%	15.0%	5.8%	11.9%	N/A
MERCOSUR	8.3%	8.2%	6.6%	7.4%	7.2%
NAFTA	15.1%	11.6%	N/A	14.9%	7.4%
SAARC	0.2%	0.1%	0.2%	0.3%	N/A
EU	58.7%	52.5%	69.7%	53.2%	44.7%

Table 5: Intra-regional FDI inflows (as a share of total FDI)

Sources: ADB database for SAARC and ASEAN, OECD Statistics Library for NAFTA, EUROSTAT for EU28, elaboration from UNCTAD and OECD databases for MERCOSUR

	2005
CIS	85,5
CAIS	68,0
SAARC	67,8
ECOWAS	57,3
ASEAN	50,1
SADC	47,8
EAC	36,1
EU	32,0
MERCOSUR	30,3
NAFTA	27,0
CAN	22,9
CARICOM	19,6

#### Table 6: Intra-regional immigration shares (%)

Source: RIKS/World Bank data.

*De jure* regional integration is also difficult to quantify and compare across regions. With respect to negative integration (i.e. integration by reducing barriers), this is especially the case for non-tariff barriers, although it is there that the greatest gains of further reduction can be expected (Intal et al. 2014). As table 7 shows, average tariff levels in ASEAN have now also fallen below 1 percent. An additional reduction is possible, but with limited impact. The most can be expected from a reduction of non-tariff barriers, including technical barriers and barriers based on national legal requirements.

	1995	2000	2005	2010
ASEAN	3,6	3,0	1,7	0,8
EU(28)	0,0	0,0	0,0	0,0
NAFTA	1,8	0,4	0,2	0,1
SAARC	*15,9	14,2	9,5	7,1
MERCOSUR	1,1	1,1	0,1	0,0

#### Table 7: Intra-regional trade barriers (average AV duties)

Sources: WTO tariffs database.

Methodology: current membership.

**Computation**: figures disaggregated at a product level (HS07) have been aggregated by sector by country by year. Then the average by year by country has been taken. The final step was the simple average across member countries of the same RTA.

\*SAPTA entered into force on December 1995, so this figure is from 1996.

## 4. ASEAN's export potential

After reviewing ASEAN's market indicator scores, this section adopts a forward-looking position on ASEAN's export potential based on empirical data and simulates its evolution over time, on the basis of which we attempt to explore the possible correlation between deepening regional integration and the expansion of ASEAN's internal market.

#### 4.1 The model

We follow the earlier works by Redding and Venables (2004), Head and Mayer (2004), and Mayer (2009) to set up a theoretical framework of analysis.

Considering an exporting country *i* and an importing country *j*, the bilateral trade flow from *i* to *j*  $(X_{ij})$  can be expressed as a share  $(s_{ij})$  of j's total import  $M_{j}$ . That is

$$X_{ij} = s_{ij} \cdot M_j \tag{0.1}$$

Suppose the share  $s_{ij}$  can fundamentally be determined by *i*'s general export competitiveness  $(A_i)$ , market *j*'s overall market potential available for foreign producers  $(\Phi_j)$ , and the trade resistance between *i* and *j* ( $\delta_{ij}$ ). Each individual country's effective competitiveness in market *j* is therefore discounted by  $\delta_{ij}$ , and  $\Phi_j$  is essentially a set of market opportunities that it offers to all its trade partners. Defining *V* as a set of country j's trade partnersand  $h \in V$ , we have

$$\Phi_j = \sum_h A_h \cdot \delta_{hj} \tag{0.2}$$

Accordingly, country is share of is total imports is determined by the following equation:

$$s_{ij} = A_i \cdot \delta_{ij} \cdot \Phi_j^{-1} \tag{0.3}$$

Substituting equation (1.3) into (1.1) we have

$$X_{ij} = A_i \cdot \delta_{ij} \cdot M_j \cdot \Phi_j^{-1} \tag{0.4}$$

Country *i*'s total exports X<sub>i</sub>can thus be expressed as the sum of bilateral trade flows:

$$X_i = A_i \cdot \sum_h \delta_{ih} \cdot M_h \cdot \Phi_h^{-1}$$
 (0.5)

By defining  $s_{h,m}$  and  $s_{h,x}$  as country *h*'s share in the world total trade *T* respectively, we have the following equation for country *i*:

$$s_{i,x} = A_i \cdot \left( \sum_h \delta_{ih} \cdot s_{h,m} \cdot \Phi_h^{-1} \right)$$
(0.6)

where  $\boldsymbol{s}_{\boldsymbol{h},\boldsymbol{m}}=\boldsymbol{M}_{\boldsymbol{h}}\,/\,\boldsymbol{T}\,\text{and}\,\,\boldsymbol{s}_{\boldsymbol{h},\boldsymbol{x}}=\boldsymbol{X}_{\boldsymbol{h}}\,/\,\boldsymbol{T}$ 

The term between brackets is indeed a set of market opportunities that country *i*owns worldwide. To simplify, wedefine  $\Omega_i$  as *i*'s overall export space, where

$$\Omega_{i} = \sum_{h} \delta_{ih} \cdot s_{h,m} \cdot \Phi_{h}^{-1} = s_{i,x} / A_{i}$$
(0.7)  
$$\Phi_{i} = \sum_{h} \delta_{hi} \cdot s_{h,x} \cdot \Omega_{h}^{-1}$$
(0.8)

So far we obtain two indicators that are comparable to the ones presented by Redding and Venables (2004) – the supplier access indicator and the market access indicator:  $\Phi$  measures a country's overall import potential as a set of market spaces that it "offers" to foreign producers; while  $\Omega$  measures a country's overall export potential as a set of opportunities for its exports in other markets worldwide.<sup>7</sup>

When assessing exports, we follow Mayer (2009) and assume that all firms are symmetric (firms in the same country charge the same price) and the production structure is rigid in the short term (there are no changes in quantity or in product variety). Any changes in country *i*'s export competitiveness are solely reflected in the price.

$$A_i = N_i \cdot p_i^{1-\sigma} \tag{0.9}$$

From equation (1.7) we obtain

$$p_i = c \cdot \Omega_i^{\frac{1}{\sigma}} \tag{0.10}$$

where *c* is a constant and  $p_i$  is positively related to the country's overall export potential  $\Omega$ . On the otherhand, one can see that the set of alternatives to consumers in country j ( $\Phi_j$ ) is inversely related to the price index of imported products in the market ( $P_i$ ),

$$\Phi_j = P_j^{\sigma-1} \tag{0.11}$$

<sup>&</sup>lt;sup>7</sup>Mayer(2009) calls it an expenditure-weightedaverage of relative access.

Therefore, bilateral trade between country *i* and *j* can be expressed as

$$X_{ij} = A_i \cdot \delta_{ij} \cdot \left(M_j \cdot P_j^{1-\sigma}\right) \tag{0.12}$$

This structure can be incorporated well into a gravity equation where the countries' bilateral trade is determined by three groups of factors: factors related to the exporting country's capacity of exports  $f(\cdot) = A_i$ , factors related to the importer's characteristics of imports  $g(\cdot) = M_j \cdot P_j^{1-\sigma}$ , and the bilateral trade resistance $\delta_{ij}$ . The overall export space of country *i* can thus be estimated by:

$$\hat{\Omega}_i = \sum_h \hat{\delta}_{ih} \cdot \hat{g}_h , h \in V$$
(0.13)

#### 4.2 Variables and data

This study is novel as it aims to estimate market potential in a regional context and investigates its correlation with the process of regional integration. A technical challenge is to choose variables that can properly capture the characteristics of the three groups of factors mentioned above. Recent studies that use different augmented gravity models, such as Kimura and Lee (2006), Mayer (2009), Corcos et.al. (2012), and so on, have introduced and suggested some candidate variables/indices that can be employed in addition to the standard formula of the gravity equation.

#### a. Variables describing country characteristics

Gross Domestic Product (GDP): the sum of the gross value added of products and services produced within a country in a year. For an exporting country, this is an indicator of its total economic output, and therefore a mirror of its production capacity. For an importing country, this is a measure of its overall market capacity or consumption potential. On both sides, GDP is expected to be positively related to bilateral trade. The baseline GDP data is retrieved from the World Bank's latest online World Development Indicator (WDI) database.

Internet access and usage (INTER): the percentage of the total population accessing the Internet. Internet is an important channel for knowledge acquisition, communication and productivity improvement. The popularity of using Internet is an important measure of a country's advance in Information and Communication Technology (ICT); and the development of ICT will have a positive effect on a country's total productivity frontier (TPF). Thus we use it as an indicator to proxy a country's general productivity. The data is retrieved from the World Bank's latest online WDI (World Development Indicator) database.

Economic freedom (FREE): the openness of the economy. This is a proxy of a country's overall trade liberalization. Intuitively, countries with freer trade policies trade more whereas countries with more restrictive policies trade less. To analyze economic freedom, this paper uses the Index of Economic Freedom (IEF) taken from the Heritage Foundation.

WTO membership (WTO): a dummy variable, of which the value equals zero for years before the country's entry to WTO and equals one for years afterwards. WTO membership provides a stable institutional framework for trade relations. The date of countries' WTO accession is taken from the WTO website.

Paved road (PAVED): the total length of paved road is an indicator of the level of a country's physical infrastructure. A proper level of infrastructure can improve efficiency, save time, lower trade risks and therefore facilitate international trade. This is a multiple of the length of the country's total network of road and the share of paved roads. Both data were retrieved from the World Bank's latest online World Development Indicator (WDI) database.

Inward Foreign Direct Investments stock (FDI): the size of a country's FDI pool. The bilateral capital and trade flows are highly relevant. Inward FDI can be a proxy of a country's openness, market stability, technological progress, and economic perspective. The data is retrieved from the United Nations Conference on Trade and Development's (UNCTAD) online database of FDI.

#### b. Variables measuring the trade resistance

Distance (DIST): the geographic distance in kilometers between the countries' capitals. This is a proxy of transportation costs and related costs of international trade. As it is positively related withtrade costs, it has a negative impact on trade flows. The data is retrieved from the Centre d'études prospectives et d'informations internationales' (CEPII) database.

Simple average bilateral tariff level (TARIFF): the direct measure of the bilateral tariff rate can be a proxy of de facto policy friction of bilateral trade. However, its accuracy for our purpose may be affected by the existence of various non-tariff barriers. The data is calculated based on UNCTAD's TRAINS database of simple average effective tariff rates.

Common language (COMLNG) and contingent territory (CONTIG): these two dummy variables are complementary to the geographic and political friction that is measured by geographical distance and average tariff rate. Both of them are regarded as trade-inducing factors and expected to have positive signs. The data is taken from the CEPII database.

#### 4.3 Fixed effects versus random effects

Our study uses a panel dataset of global bilateral aggregate trade flows, covering the period 1990-2012. This allows us to take both the cross-sectional characteristics and time-variant changes into account. Observing the changes of dependent variables in these two dimensionsallows us to control for some omitted variables without the need of direct measurement of these factors.

The choice of different regression models thus depends on the assumption whether these omitted variables are constant overtime and/or whether they are cross-sectional. In principle,

the fixed effects model is applied to determine the existence of true differences among the estimated mean of section-specific errors; while the random effects model is used for the analysis on variant components since all effects are assumed to have a zero mean. The trade off between the two models is related to efficiency and consistency (Chen 2008).

Here, instead of imposing extra assumptions on the model, we conduct Hausman's test to assess the econometric justification of using random effect estimations. The results are presented in table 8.

	Fixed effect estimators	Random effect estimators	Hausman's comparison
	(1)	(2)	(3)=(1)-(2)
r_lgdp	0.801 <sup>***</sup>	0.778 <sup>***</sup>	0.023
	(0.016)	(0.013)	(0.011)
p_lgdp	0.365 <sup>***</sup>	0.657 <sup>***</sup>	-0.292
	(0.015)	(0.012)	(0.010)
r_internet	-0.005***	-0.009***	0.005
	(0.0003)	(0.0003)	(0.0001)
p_internet	0.005 <sup>***</sup>	-0.002***	0.003
	(0.0003)	(0.0003)	(0.0001)
r_free	0.005 <sup>***</sup>	0.015 <sup>***</sup>	-0.010
	(0.001)	(0.001)	(0.0004)
p_free	0.004***	0.011 <sup>***</sup>	-0.007
	(0.001)	(0.001)	(0.0004)
r_wto	0.296***	0.249 <sup>***</sup>	0.047
	(0.024)	(0.023)	(0.006)
p_wto	0.241 <sup>***</sup>	0.086 <sup>***</sup>	0.155
	(0.021)	(0.020)	(0.005)
r_lpaved	0.157 <sup>***</sup>	0.251 <sup>***</sup>	-0.093
	(0.018)	(0.011)	(0.014)
p_lpaved	0.151 <sup>***</sup>	0.440 <sup>***</sup>	-0.289
	(0.016)	(0.010)	(0.013)
r_linstock	0.027***	-0.018 <sup>**</sup>	0.044
	(0.009)	(0.008)	(0.004)
p_linstock	0.019 <sup>**</sup>	0.062 <sup>***</sup>	-0.044
	(0.008)	(0.008)	(0.003)
Tariff	-0.390***	-0.337***	-0.043
	(0.045)	(0.045)	(0.009)
Ldist	-1.142*** (0.009)	-1.289*** (0.022)	
Contig	1.228*** (0.046)	0.923 <sup>***</sup> (0.129)	
ComIng	0.729 <sup>***</sup> (0.022)	1.194*** (0.057)	

#### Table 8: Results of Hausman's tests

\*\*\*: statistically significant at 99%; \*\*: significant at 95%; \*: significant at 90%.

The results of the Hausman test<sup>8</sup> reject the null hypothesis of non-systematic difference between fixed effect estimators and random effect estimators. Due to the inconsistency of randomeffects estimators, we therefore will employ the fixed effects model for our analysis.

#### 4.4 Results

GDP has positive impacts on bilateral trade from both the supply and demand side but with different elasticities. Roughly speaking, a change of one percentage point in the importer's GDP will be equivalent to a change of three percentage points in the exporter's GDP regarding the direct impacts on bilateral trade. This is consistent with the knowledge that the world economy is dominated by the buyer's markets. Alarge market has a large consumption capacity and therefore a large (potential) demand.

Countries with more people accessing the internet tend to export more and import less. This demonstrates that the increased usage of Internet in a country can effectively increase the competitiveness of its products/services (for instance, accessing the Internet can improve workers' skills and knowledge and consequent their productivity). In addition, it also improves broader production lifecycle processes such as marketing, transportation, supply chain management and so on.

On the contrary, the coefficient of the Index of Economic Freedom is positive for importers but negative for exporters. It is intuitive to see imports grow as the market becomes open to foreign suppliers. Theoretically, the inflow of foreign competitors may crowd out some domestic producers from the industry and cause exports to contract in the short term. In the long run, the competition induced by economic openness will indeed make the domestic industry stronger and more competitive in the global market. If this is to be the case then the negative impact of economic freedom on exports is only temporary.

WTO membership does prove to be a strong factor of trade promotion on both imports and exports. Under the same condition, bilateral trade flows between two WTO member states are on average 70 percent larger than those between two non-WTO member countries. Under a multilateral framework of trade liberalization, countries open their domestic markets in exchange for better access to the global market.

<sup>&</sup>lt;sup>8</sup>Stata output of Hausman test:

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic chi2(13) = (b-B)'[(V\_b-V\_B)^(-1)](b-B)

The positive effects of infrastructure are also significant. For both importing and exporting countries, infrastructure building can facilitate logistics and transportation and therefore reduce trade costs. There is little difference between its impacts on exports and on imports. It is estimated that an increase of one percent in paved roads may cause countries' bilateral trade to increase by 0.1 to 0.2 percent.

The index of the FDI stock is imperfect in measuring international trade-related capital flows, however it does lead to certain insights on the relationship between the two. Our estimations show that the country's inward FDI stock and its trade (both imports and exports)<sup>9</sup> are positively correlated. As inward FDI is normally related to technology transfers and knowledge spillover, the host country becomes more competitive and thus exports more. Alternatively, inward FDI in labour-abundant countries is often related to export oriented manufacturing and assembly operations. On the other hand, the increasing FDI inflows can be interpreted as an indication of a country's positive economic outlook and expanding market potential, which will encourage more imports.

The estimated coefficients of three variables measuring trade resistance – the geographical distance, common language and contingent territory, arein line with theory. There is negative correlation between countries' geographical distance and the size of bilateral trade flows. It is also evident that common language and contingent territory are positive factors that stimulate bilateral trade.

Finally, the most revealing result is the impact of tariffs on bilateral trade which is negative and highly significant. The marginal effect of tariffs increases as the tariff rate approaches zero. On average, bilateral trade can increase by about 3 percent when the importer decreases its tariff rate by 10 percent beginning from 100 percent to 90 percent. In comparison, the removal of the last 10 percent tariff rate (to zero) will, in general, induce a 5 percent increase in bilateral trade.

<sup>&</sup>lt;sup>9</sup> However, the coefficient of the exporting country's FDI inflow stock presents the lowest degree of statistical significance in our fixed effect estimations of the basic model.

#### 4.5 Comparing the "regional fixed effect"

We now extend the basic model by adding regional dummy variables to capture the fixed effect that is common for countries in the same region*R* (referring to "regional fixed effect" in this context). We deconstruct the intra-regional trade bias into three subcategories and distinguish between them using three dummy variables. For each bilateral trade (import) flow M<sub>ij</sub>,

$$Import \ dummy = \begin{cases} 1, \text{ if } i \in \mathbb{R} \\ 0, \text{ otherwise} \end{cases}$$
$$Export \ dummy = \begin{cases} 1, \text{ if } j \in \mathbb{R} \\ 0, \text{ otherwise} \end{cases}$$
$$Intraregional \ Trade \ dummy = \begin{cases} 1, \text{ if } i \in \mathbb{R} \ \text{AND} \ j \in \mathbb{R} \\ 0, \text{ otherwise} \end{cases}$$

The coefficients of these dummy variables capture the effects that can be characterized as the "regional fixed effect", that is, the general characteristics that all countries in the region reveal respectively in imports, exports, and any additional preference to trade with partners from the same region (Table 9).

We do observe evidence on intra-regional trade bias for all three regions considered although these biases reveal different levels of statistical significance and could be a result of different driving forces. In general, ASEAN countries are more trade oriented: they trade (both imports and exports) much more than the world's average level. The preference for intra-regional trade is lacking when taking into account their pro-export and pro-import characteristics. Despite this, average trade between two ASEAN countries is double the level between countries otherwise under the same conditions.

The net intra-regional trade bias in the EU is the most modest among the three regions. Bilateral trade between EU member states is on average 10 percent higher than that which occurs between non-EU countries. When considering EU countries' general hesitation on imports (about 30 percent less compared to countries in the rest of world under similar economic conditions), EU member states do show a very strong preference to trade with their European partners (on average more than 40 percent higher).

The estimators related to MERCOSUR are a bit ambitious. Trade between MERCOSUR member states could be around 30 percent higher than that between countries outside the region. But the estimator is not highly significant and therefore needs further empirical support. In our study, it is not obvious to see MERCOSUR as a *de facto* trading bloc when compared to ASEAN and the EU.

Table 9: Model estimates

	Basic Model	ASEAN	EU	MERCOSUR
r_lgdp	0.801 <sup>***</sup>	0.801 <sup>***</sup>	0.822 <sup>***</sup>	0.802 <sup>***</sup>
	(0.017)	(0.017)	(0.017)	(0.017)
p_lgdp	0.365 <sup>***</sup>	0.364 <sup>***</sup>	0.354 <sup>***</sup>	0.377 <sup>***</sup>
	(0.015)	(0.015)	(0.015)	(0.015)
r_internet	-0.005***	-0.005 <sup>***</sup>	-0.004 <sup>***</sup>	-0.005***
	(0.0003)	(0.0003)	(0.0003)	(0.0003)
p_internet	0.005 <sup>***</sup>	0.005 <sup>***</sup>	0.004 <sup>***</sup>	0.005 <sup>***</sup>
	(0.0003)	(0.0003)	(0.0003)	(0.0003)
r_free	0.005 <sup>***</sup>	0.005 <sup>***</sup>	0.006 <sup>***</sup>	0.005 <sup>***</sup>
	(0.001)	(0.001)	(0.001)	(0.001)
p_free	0.004 <sup>***</sup>	0.004 <sup>***</sup>	0.003 <sup>***</sup>	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)
r_wto	0.296 <sup>***</sup>	0.296 <sup>***</sup>	0.294 <sup>***</sup>	0.295 <sup>***</sup>
	(0.024)	(0.025)	(0.024)	(0.025)
p_wto	0.241 <sup>***</sup>	0.233 <sup>***</sup>	0.247 <sup>***</sup>	0.239 <sup>***</sup>
	(0.021)	(0.021)	(0.021)	(0.021)
r_lpaved	0.157 <sup>***</sup>	0.157 <sup>***</sup>	0.144 <sup>***</sup>	0.156 <sup>***</sup>
	(0.018)	(0.018)	(0.018)	(0.018)
p_lpaved	0.151 <sup>***</sup>	0.153 <sup>***</sup>	0.160 <sup>***</sup>	0.146 <sup>***</sup>
	(0.016)	(0.016)	(0.016)	(0.017)
r_linstock	0.027 <sup>***</sup>	0.026 <sup>**</sup>	0.040 <sup>***</sup>	0.026 <sup>***</sup>
	(0.009)	(0.009)	(0.009)	(0.009)
p_linstock	0.019 <sup>**</sup>	0.019 <sup>**</sup>	0.011	0.014 <sup>**</sup>
	(0.008)	(0.008)	(0.008)	(0.008)
Tariff	-0.390***	-0.391 <sup>***</sup>	-0.441 <sup>***</sup>	-0.388***
	(0.045)	(0.045)	(0.045)	(0.045)
Ldist	-1.142 <sup>***</sup>	-1.219 <sup>***</sup>	-1.148 <sup>***</sup>	-1.124 <sup>***</sup>
	(0.009)	(0.009)	(0.009)	(0.009)
Contig	1.228 <sup>***</sup>	1.130 <sup>***</sup>	1.184 <sup>***</sup>	1.258 <sup>***</sup>
	(0.046)	(0.046)	(0.046)	(0.046)
ComIng	0.729 <sup>***</sup>	0.792 <sup>***</sup>	0.714 <sup>***</sup>	0.741 <sup>***</sup>
	(0.022)	(0.022)	(0.022)	(0.022)
Import dummy, (1)		0.937 <sup>***</sup> (0.027)	-0.315 <sup>***</sup> (0.024)	-0.136 (0.085)
Export dummy, (2)		0.819 <sup>***</sup> (0.145)	0.099 <sup>***</sup> (0.026)	-0.527*** (0.079)
Intraregional dummy, (3)		-0.781 (0.501)	0.250*** (0.040)	0.681 (0.278)

\*\*\*: statistically significant at 99%; \*\*: significantat 95%; \*: significant at 90%.

#### 4.6 Export potential

Based on the derivation in section 3.1, the value of region*R*'s export potential index is simply  $\Omega_R = \sum_{h \in R} \Omega_h$ . We include the EU and MERCOSUR in Figure 1 for the purpose of comparison. The figure presents the growth path of market potential in the three regions using 1996 as the baseline year.



Figure 1: Changes in market potential, 1996-2012

Overall, ASEAN's export space is expanding at a speed that is higher than the world's average rate of 6 per cent per year. Its export potential in 2012 is almost 5 times that of 1996 given the average growth rate of 10.3 per cent per year. Moreover, this growth seems continuous and smooth. The only year it shows negative growth is 1998 when most economies in the region experienced the Asian financial crisis. Even when the 2008-2009 global economic crises have contracted many other countries' export spaces (for instance, -8 percent in the EU and -5 percent in MERCOSUR), the ASEAN counties as a group still managed to expand their space by nearly 2.5 per cent.

The overall average growth rate of the EU's export potential (10.5 percent per year) was slightly higher during that period. This is however partially due to EU's enlargement in 2004. Between 2003 and 2004, the number of EU member states increased from 15 to 27 and its overall export potential increased by over 80 percent. Either before or after that period, ASEAN's average growth rate of export potential was much higher than that of the EU (8.3 percent versus 4.9 percent between 1996 and 2003; 12.3 percent versus 8.6 percent between 2004 and 2012). In 2012, ASEAN accounted for 5 percent of the world's total export space, while in 1996 this figure was only 2.6 percent.

This trend indicates the increasing demand for products made in ASEAN and reflects ASEAN's growing export capacity over time. The progress of regional integration among ASEAN member states could be a positive factor contributing to regional market capacity building. As shown in figure1, in the early 2000s when MERCOSUR encountered an internal crisis, the region's overall export space contracted significantly (by almost 40 percent). It took the region half a decade to recover from this loss. Accordingly, the region's share in the world's total export space dropped from 2.9 percent in 1996 to 1.6 percent in 2002 and then improved to 2.6 percent in 2012.

	Estima	Estimated export space			Actual exports		
	1996	2006	2012	1996	2006	2012	
ASEAN							
Intra-regional	31.4%	32%	34.1%	17.8%	18.6%	19.8%	
Extra-regional	68.4%	68%	65.9%	82.2%	81.4%	80.2%	
Within APT	62.2%	63.7%	72.2%	38.9%	41.5%	47.6%	
Outside APT	37.8%	36.3%	27.8%	61.1%	58.5%	52.4%	
EU							
Intra-regional	82.2%	82.2%	76.6%	55.1%	66.7%	62.2%	
Extra-regional	17.8%	17.8%	23.4%	44.9%	33.3%	37.8%	
MERCOSUR							
Intra-regional	70.1%	48.5%	55.2%	22.9%	9.7%	9.8%	
Extra-regional	29.9%	51.5%	54.8%	77.1%	90.3%	90.2%	

Table 10: Export potential vs. actual exports, 1996, 2006, 2012

Notes: We use the import data shown in the import country's balance sheet to measure the actual export flows instead of directly using the export data. For instance, we use country B's reported imports from country A to measure the actual export flow from A to B. This is because imports are normally calculated basedon the CIF (Cost, Insurance and Freight), which is indeed closer to the price faced by the domestic consumers or producers.

Table 10 presents the ratio of each region's intra-regional and extra-regional export space that has been determined by its export characteristics (the "ideal" ratio) and the ratio expressed in actual trade (the "actual" ratio). In the case of ASEAN, the estimated ideal ratio of intra- and extra-regional export was approximately 2:3 while the actual ratio remained at about 1:4. There is evidence of ASEAN's progress on integration and increasing export capacity: during the period between 1996 and 2012, the intra-regional export space within ASEAN expanded by about 180 percent, while the actual aggregated intra-regional export flows increased by over 300 percent. Moreover, the gap between the ideal and actual ratio hints that there is still a significant amount of space for ASEAN countries to further strengthen its intra-regional market.

From a broader regional viewpoint, however, we can see that the Southeast Asian countries have not only made progress with integration within the ASEAN but also in the context of APT. Relatively speaking, the estimated market space that APT could offer to ASEAN exports in 2012 (72.2%) was already quite close to the space that the integrated EU market could offer to its

member states (76.6%), and has shown a remarkable increase in the period 2006-2012. ASEAN's actual exports within and outside APT have been almost half-half.

#### 4.7 Scenario analysis

Our model demonstrates that an exporting country can expand its export space by either strengthening its export capacity or reducing trade resistance; while the improvement of a region's export potential could also be achieved by further facilitating intra-regional exchange of goods and services. We simulate the scenarios showing ASEAN's potential gains of extra export space via further trade liberalization and facilitation (Table 11). Here we consider four scenarios:

- Baseline: ASEAN countries keep their effective tariff rates of 2012 and other exportrelated characteristics (such as trade infrastructure and economic freedom) unchanged in the following years. Changes in export potential are solely due to the changes of GDP.
- Scenario 1: ASEAN fully removes tariffs on both intra-regional and extra-regional trade in the following years.
- Scenario 2: ASEAN fully liberalizes intra-regional trade; but keeps their tariffs on extraregional trade unchanged.
- Scenario 3: ASEAN fully liberalizes intra-regional trade; and meanwhile reduces tariff rates on extra-regional trade by 50 percent.
- Scenario 4: ASEAN cuts its tariffs by 50 percent.

	Changes in world's export space			ASEAN's share in world's total			
	compared to the baseline level				export space	ce	
	2013	2016	2019	2013	2016	2019	
Scenario1	2.15%	2.18%	2.22%	5.17%	5.29%	5.53%	
Scenario2	0.17%	0.17%	0.17%	5.27%	5.39%	5.64%	
Scenario3	1.15%	1.16%	1.19%	5.22%	5.34%	5.58%	
Scenario4	1.06%	1.07%	1.10%	5.14%	5.26%	5.50%	

Table 11: Impacts of trade liberalization on ASEAN's export potential

The result of Scenario 1 shows that if ASEAN countries fully abandon tariffs, this will drive the world's overall export space to expand by over 2 percent. The results suggest that full liberalization can actually aid the region in steadily increasing its share in the world market instead of posing a threat to competition in ASEAN's export sector.

Liberalizing intra-regional trade solely without removing barriers to extra-regional trade (Scenario 2) tends to increase ASEAN's share in the global market but its impact on the world's overall export space will be marginal. In comparison, the additional 50 percent cut of tariffs on extra-regional trade (Scenario 3) will have much more significant impacts on world trade without losing much relative market share.

Intermediate scenarios such as partial trade liberalization in Scenario 4 can also have general positive effects on exports, but may lead to poorer outcomes for the region.

### 5. Conclusions

In the qualitative literature on ASEAN, this regional arrangement is usually singled out as a counter-model to the EU, characterized by relatively high degrees of *de facto* integration in combination with relatively low degrees of *de jure* integration. When contrasting this image with a series of cross-regional indicators, it appears that it should probably be nuanced. The *de facto* relative importance of intra-regional trade, investment and/or migration flows are close to average at the global level. This would suggest, on the one hand, that regional economic integration in ASEAN is not necessarily more pronounced than in several other regions, as measured by these outcome indicators, but on the other hand also that further gains from deepened intra-regional interdependence can be expected. The relative openness of the ASEAN region was confirmed, however.

To complement the descriptive analysis, we further estimated ASEAN's export space using an augmented gravity model. Apart from the overall satisfactory fit of the model, a number of further conclusions can be extracted.

Intra-regional trade biases were observed for all regions, ASEAN thereby finding itself in an intermediate position. This has to do with the fact that ASEAN's intra-regional trade bias is somehow masked by its generally strong trade orientation. Its average intra-regional trade levels are approximately double as much as the corresponding levels among other countries under the same conditions.

It has further been observed that ASEAN's export space is expanding faster than the world average and the further progress of regional integration among ASEAN member states can be an additional positive factor contributing to its regional export capacity. Our estimation shows that there is still space for ASEAN countries to further develop the role of its intra-regional trade. Intra-regional trade also represents about one fourth of its total exports while the ideal share would be as much as 40 percent. In addition to tariff reduction, ASEAN can further improve the region's competitiveness by strengthening regional value chains, facilitating factor mobility and enhancing regional cooperation.

Further intra-regional trade liberalization will come mostly from reducing non-tariff barriers in the ASEAN countries, the harmonization of the many technical barriers, as well as from trade facilitation. Such trade liberalization has, however, to be supported, coordinated and monitored by some supra-national institutions at the regional level (see Yue, 2013, Sukma, 2014). This will also reduce the institutional stalemate ASEAN as a regional arrangement is facing, thus going beyond the present scorecard approach (Cuyvers, 2014).

In order to improve its export potential, ASEAN should liberalize trade not only intra-regionally but also globally. It is true that trade liberalization may require industries in developing countries to face competition from advanced economies, but it will at the same time push the countries to improve their export capacity and benefit from more business opportunities that will come along with expanding global export space. It could be in ASEAN's interests to accelerate the pace of regional integration under frameworks that involve the participation of non-ASEAN countries, such as an ASEAN Framework for Regional Comprehensive Economic Partnership (RCEP).

#### REFERENCES

- ADB (2008). Emerging Asian Regionalism. A Partnership for Shared Prosperity, Manila: Asian Development Bank.
- ADBI (2012). ASEAN 2030 Toward a Borderless Economic Community, Tokyo: Asian Development Bank Institute.
- Baldwin, R. (2004). The Spoke Trap: Hub and Spoke Bilateralism in East Asia, KIEP Discussion Paper, (04-02).
- Baldwin, R. (2006). Multilaterizing Regionalism: Spaghetti Bowls as Building Blocks on the Path to Global Free Trade, The World Economy, 29(11):1451-1518.
- Barrera, J. (2001). Integración y cultura en el Asia-Pacífico: algunas reflexiones, in: L.J. Garay, D. Ramírez Leyton and P. De Lombaerde (eds), El futuro de Colombia en la Cuenca del Pacífico, Bogotá: Universidad de Bogotá Jorge Tadeo Lozano, pp. 151-158.
- Beeson, M. (2008). Institutions of the Asia-Pacific. ASEAN, APEC and Beyond, Abingdon: Routledge.
- Chen, L. (2008). The Market Driven Trade Liberalization and East Asian Regional Integration, HEI Working Papers, (12/2008).
- Chen, L., P. De Lombaerde and N. Nair (2011). The Changing Roles of Japan and China Towards ASEAN's Economy. Beyond the Flying-geese Model?, Studia Diplomatica, LXIV(3):79–94.
- Corcos, G., D. Irac, G. Mion and T. Verdier (2012). The Determinants of Intrafirm Trade, CEP Discussion Paper, (1119).
- Cuyvers, L. (2014). Some tough facts about ASEAN's institutional stalemate, Europe's World, (27): 87-88.
- Cuyvers, L. and M. Dumont (2005). Tigers, Pussycats and Flying Geese: The Faunal Characteristics of Economic Growth in South-East Asia, L. Cuyvers and F. De Beule (eds.): Transnational Corporations and Economic Development: From Internationalisation to Globalisation, Basingstoke, Hampshire: Palgrave MacMillan, pp. 122-140
- Cuyvers, L., P. De Lombaerde, E. De Souza and D. Fielding (2005). Regional Monetary Cooperation and Integration, in: M. Farell, B. Hettne and L. Van Langenhove (eds.), Global Politics of Regionalism – Theory and Practice, London-Ann Arbor, MI: Pluto Press,pp. 120-136
- De Lombaerde, P. (2014). Measuring and Modeling Regional Power and Leadership, Journal of Policy Modeling, 36(S1): S1-S5.
- Fawn, R. (2009) 'Regions' and Their Study: Wherefrom, What For and Whereto? Review of International Studies, 35: 5-34.
- Goh, G. (2003) The 'Asian Way': Non-Intervention and ASEAN's Role in Conflict Management, Stanford Journal of East Asian Affairs, 3(1): 113-118.
- Head, K. and T. Mayer (2004) Market Potential and the Location of Japanese Investment in the European Union, Review of Economics and Statistics, 86(4): 959-972.
- Intal, Jr. P., Y. Fukunaga, F. Kimura, P. Han, P. Dee and D. Narjoko (2014). Moving ASEAN and AEC Forward Beyond 2015: Highlights, Conclusions and Key Recommendations for the Successor AEC Blueprint post 2015, in: ERIA, ASEAN Rising: ASEAN and AEC Beyond 2015, Jakarta: ERIA, pp. 347-390
- Katzenstein, P.J. (1996b). Regionalism in Comparative Perspective, Cooperation and Conflict, 31(2):123-159.
- Katzenstein, P.J. and T. Shiraishi (eds) (2006). Beyond Japan: The Dynamics of East Asian Regionalism, Ithaca: Cornell University Press.
- Kimura, F. and H. Lee (2006). The Gravity Equation in International Trade in Services, Review of World Economics, 142(1): 92-121.
- Kuroda, H. (2010). Foreword, in: ADB, Institutions for Asian Integration. Toward an Asian Economic Community. Synopsis, Manila: ADB, pp. iii-iv.

- Langhammer, R.J. (1995). Regional Integration in East Asia: From Market-driven Regionalisation to Institutionalised Regionalism?, Weltwirtschaftliches Archiv, 131(1): 167-201.
- Laursen, F. (2010). Comparative Regional Integration: Europe and Beyond, Aldershot: Ashgate.
- Li, F. and J. Deng (2014). Varieties of Regionalism: Comparison of Europe and Southeast Asia, Asian Social Science, 10(17): 71-80.
- Mahbubani, K. (1995). The Pacific Way, Foreign Affairs, 74(1): 100-111.
- Mattli, W. (1999a). The Logic of Regional Integration: Europe and Beyond, Cambridge: Cambridge University Press.
- Mattli, W. (1999b). Explaining Regional Integration Outcomes, Journal of European Public Policy, 6(1): 1-27.
- Mayer, T. (2009). Market Potential and Development, CEPII WP, (2009-24).
- Murray, P. (2010). Regionalism and Community. Australia's Options in the Asia-Pacific, Barton: Australian Strategic Policy Institute.
- Murray, P. and A. Warleigh-Lack (2013). Europe-Asia Studies: The Contribution of Comparative Regional Integration, T. Christiansen, E. Kirchner and P. Murray (eds.), The Palgrave Handbook of EU-Asia Relations, London: Palgrave Macmillan, pp. 108-123.
- Ng, F. and A. Yeats (2003). Major Trade Trends in Asia What Are Implications for Regional Cooperation and Growth World Bank Policy Research Working Paper, (3084).
- O'Grady, S. and H.W. Lane (1996). The Physic Distance Paradox, Journal of International Business Studies, 27(2): 309–334.
- Ogura, K. (1993). A Call for a New Concept of Asia, Japan Echo, 20(3): 37-44.
- Parsonage, J. (1997). Trans-state Developments in South-East Asia Subregional Growth Zones, in: G. Rodan, K. Hewison and R. Robison (eds), The Political Economy of South-East Asia An Introduction, Oxford: Oxford University Press.
- Pempel, T.J. (ed.) (2005). Remapping East Asia: The Construction of a Region, Ithaca: Cornell University Press.
- Poon, J.P.H. (2009). Regionalism in the Asia Pacific: Is Geography Destiny?, Area, 33(3): 252-260.
- Redding, S. and A. Venables (2004). Economic Geography and International Inequality, Journal of International Economics, 62(1): 53-82.
- Siow Yue, C. (2013). The ASEAN Economic Community: Progress, Challenges, and Prospects, ADBI Working Paper Series, (440).
- Söderbaum, F. and A. Sbragia (2010). EU Studies and the 'New Regionalism': What Can Be Gained from Dialogue?, Journal of European Integration, 32(6): 563-582.
- Stakhovitch, A. (1991). Unas y otrasintegraciones, in: V.L. Urquidi and G. Vega Canovas (eds), Unas y otrasintegraciones, México: Fondo de Cultura Económica, pp. 69-90.
- Sukma, R. (2014). ASEAN Beyond 2015: The Imperatives for Further Institutional Changes, ERIA Discussion Paper Series, (2014-01), Jakarta: Economic Research Institute for ASEAN and East Asia.
- Webber, D. (2013). Regionalism and EU-Asia Relations: Patterns, Trends and Determinants, in: T. Christiansen, E. Kirchner and P. Murray (eds), The Palgrave Handbook of EU-Asia Relations, London: Palgrave Macmillan, pp. 93-107.