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Abstract, *the main aim of this study is to comparatively investigate the impact of different level of economic integration on bilateral trade between the Eurozone and ASEAN. Applying augmented gravity equation, the results showed that deepening impact on bilateral trade was positive in all Eurozone members but insignificant for original member. In ASEAN, deepening impact which is creating AFTA generates positive result only between ASEAN-6, but not when CLMV joined the membership. The policy related with Maastricht criteria variables has small influence on reciprocal trade in both the Eurozone and ASEAN. Horizontal integration was improving in both the Eurozone and ASEAN for positive result of size and similarity coefficient. Intra-trade industry was a phenomenon in all Eurozone, but it was insignificant if only between original members in both the Eurozone and ASEAN due to relatively similar level of development in original members. For ASEAN, different factor endowment was determinant for higher bilateral trade when CLMV countries were included.*

Keywords: Regional Integration; International Trade; Hecksher-Ohlin; Maastricht Criteria; and Gravity Model.
(JEL F33, F36, O11, O57)

1. Introduction

Before crisis hitting the Eurozone in 2007-2009, creating a common currency was a good idea to exploit potential benefit from trade and European Monetary Union (EMU) looked as an ideal for up-coming ASEAN. The success of Euro's launch, it's evolution to be a strong currency, and price stability in the Eurozone, were the signs that monetary and fiscal stability provided by the Maastricht Criteria (MC) is surely in the right direction. According to Mutaqin and Ichihashi (2013) nevertheless many countries in the Eurozone currently now suffered from deep financial crisis, however it was exceptional phenomena since the most severe countries are mainly countries violating the role determined in both the Maastricht Treaty and Strong Growth Pact (SGP). Therefore, ASEAN may reflect European Union (EU) step in creating deeper regional economic integration.

The main aim of this paper is to comparatively investigate the impact of different level of economic integration on bilateral trade: the region having a common currency (the Eurozone) with the region struggling in free trade area (ASEAN). This paper centers on following research questions: Whether the different integration process has exerted a different impact on intra original and original-new bilateral trade relationship; whether membership enlargement impact was positive; whether convergence in variables associated with MC was matter; and whether new trade theory and H-O hypotheses were relevant. To answer those questions, we augment the gravity model by combining the micro approach with macro approach (MC variables).

Economic integration is often described by the Balassa model of five stages. Pelkmans (2001) divide the steps into following ways: (1) Free trade area (FTA), (2) Custom union (CU), (3) Common Market (CM), (4) Economic Union, and (5) Total Economic integration. Today, 17 of the 27 members of EU are forming the European Monetary Union (EMU) after has been initiated by 11 members in 1999, which according to Balassa model is somewhat more than step 4 but less than stage 5. ASEAN starting from 6 members, now having 10 members after allowing Cambodia, Laos,

Myanmar and Vietnam (CLMC) to be members, are in process of accomplishing ASEAN FTA and intend to achieve CM by preparing ASEAN Economic Community by 2015.

Countries joining a common currency weight the potential benefit of joining against the inevitable cost (Mico, Stein and Ordonez, 2003). The benefits such as a reduction in the transactions cost associated with trading goods and services between countries with different moneys. Countries close to international trade would potentially benefit greatly from joining. On the other hand, some costs maybe arise from foregoing the possibility of dampening business cycle fluctuation through independent counter cyclic monetary policy. European designed institution to assure economic convergence prior to introduction of the Euro. Maastricht Criteria (MC) following Maastricht Treaty (MT) in 1991 was strict guidelines for member states to follow with the ultimate goal of adopting a single currency. In order to maximize the benefit and minimize the cost MC enforce convergence in several factors which are: inflation rate, interest rate, and exchange rate as monetary criteria; deficit and debt to GDP ratio as fiscal criteria[1].

Although the Eurozone has worsening condition in term of growth of income and productivity, and has high level of unemployment, the significance of MC in determining real convergence, indicated the criteria sufficient enough to push countries for achieving convergence and stability as shown by Mutaqin and Ichihashi (2012). To achieve those goal as stressed by Marelli and Signorelli (2010) member countries in short-terms will suffer from slow growth resulted from delivering monetary policy to ECB and tightening fiscal policy, but in the long run countries will get the benefit from the advantage of macroeconomic stability such as price stability, fiscal discipline, removal exchange rate risks, reduction uncertainty of inflation and interest rate, and the spur of investment and international trade. The adoption of the common currency in 1999 followed by releasing euro coin concluded the European convergence process. In line with a common currency process, trade barriers between member states in the Eurozone were already removed during the 1990s. Sharing a common currency may further deepen real economic integration-directly through reduced trade costs and indirectly through intensified competition due to enhanced price transparency (Belke and Spies, 2008).

Despite some limitations, the fact showed that seventeen countries joined EMU and it continues expanding as more countries believe that the benefits outweigh the costs of membership (Darvas, 2010). At the European Council summit in Copenhagen (June 1993), the Union invited the Central and Eastern European countries (CEEC) to enter the EU with guarantying democracy, market economy, and fulfilling membership obligation as three accession criteria[2]. Following Copenhagen Treaty, 6 countries joining Euro membership are: Greece joined the group in 2001, followed by Slovenia in 2007, Malta and Cyprus in 2008, Slovakia in 2009, and finally Estonia in 2011.

ASEAN also extend the membership by preparing Indo-Chinese Countries to be members thorough Treaty of Amity and Cooperation in Southeast Asia in 1976. Although Vietnam, dominating others, refused the invitation, the resolution of Cambodia Crisis paved the way for reconciliation between ASEAN and Indo-Chinese countries. Finally, the Singapore declaration in 1992 allowed all Southeast Asian Countries to be members of ASEAN (Angresano, 2004). ASEAN free trade area (AFTA) in another side was established in 1992 and was one of the most important regional trade arrangements (RTA) in Asia aiming at eliminating tariff barriers among member countries through the agreement on the Common Effective Preferential Tariff (CEPT) scheme.

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[1] The criteria described in Afxentiou (2000) as the following:

- the country's inflation rate is not more than 1.5% higher than the average of the three lowest inflation rates in the European monetary system
- its long term interest rate is not more than 2% higher than the average experiential in the three low inflation countries
- it has not practiced devaluation during the two years preceding the entrance into the Union its government budget deficit is not higher than 3% of its Gross Domestic Product (if it is it should be declining continuously and substantially and come close to the 3% norm, or alternatively
- the deviation from the reference value (3%) should be exceptional and temporary and remain close to the reference value
- its government debt should not be exceed 60% of Gross Domestic Product (if it does, it should diminish sufficiently and approach the reference value (60%) at a satisfactory speed. Implementing the 5 criteria will ensure the sustainability of EU to absorb asymmetric shock).

[2] http://ec.europa.eu/enlargement/enlargement_process/accession_process/criteria/index_en.htm

Eliminating tariff should induce higher intra-regional trade of ASEAN members and AFTA was expected to become a full free trade area by the year 2008 (ASEAN Secretariat).

In mid-1997 the Asian financial crisis suddenly erupted. According to Hill and Menon (2010), it impacted seriously on ASEAN for a whole lost some of its commercial attractiveness and ASEAN was seen by many as an ineffective and feeble institution unable to respond decisively at a time of crisis. The crisis urged ASEAN to accelerate AFTA implementation at ASEAN summit at Hanoi in 1998. The story of crisis however repeated in the area of most developed countries situated or in the Eurozone. A decade after Euro, the crisis also has been erupting in the Eurozone suggesting that the benefit of common currency became less attractive especially for trade. In spite of the similar sounding, structural differences between the proposed AEC and the European Economic Community is that individual ASEAN countries are reluctant to give up national economic policies vis-à-vis non-members, the AEC set-up will not include a common external tariff. This should not be too surprising as there are huge discrepancies between the member states in average external tariff levels (Cuyvers, Lombaerde and Verherstraeten 2005). Thus, the lesson incurred by EMU will give insight suggestion for future development of ASEAN.

The rise in globalization fosters an increase number of studies related with the source of trade. In reality the main international trade pattern was multilateral; however the investigation would be complicated mainly for data limitation and method. Thus, gravity model as a bilateral trade model takes the momentum since it was done by many researchers, the approach was clearer, and it was convenience to explain trade pattern. According to Yamarik and Ghosh (2005), the gravity model has become extremely popular in empirical trade literature for: modern theories of trade based on differentiated products provide an improved theoretical foundation for the equation; it has proved quite successful in estimating bilateral flows; an increase interest in empirical testing of the trade effects on regional trading arrangement; and there has been a new interest among economists in the subject of geography and trade. Based upon Newton's law of gravitation, the model predict that the volume of trade between two countries should increase with the size and decrease with transaction cost (the proxy was distance). Helpman, E (1987) provides theoretical foundation to build the augmented model based on micro foundation approach covered new trade theory (size and similarity), and Heckscher-Ohlin theory (relative factor endowment). Egger and Pfaffermayr (2013) stick with Helpman's approach explain the pure effects of Europan Integration, and Warin, Wunnava and Janicki (2009) combine Helpman's model with convergence measure (MC) tries to explore bilateral FDI of EU countries.

This study differentiated with previous study in several aspects. First, this study provides better understanding on different impact of different stage of integration on trade. Second, this study was relevant to measure the effectiveness of regional economic integration especially in current global crisis condition related with trade. Third, the study combined micro approach (size, similarity, and endowment) variables with macro approach (variables associated with MC). Fourth, although there are number of studies on the effects of regional economic integration, little research has focused on comparing effects of Euro on Eurozone and AFTA in ASEAN. Therefore, it would be interesting to see how the Euro impacts on Eurozone where the developed countries situated and initially lower tariff level if not zero, and ASEAN, with initially has higher tariff levels.

2. Descriptive Figure

Figure 1 showed the average bilateral intra Eurozone and intra ASEAN trade. On average bilateral trade in Eurozone (43.72%) was almost double of it in ASEAN (24.20%). The highest degree of reciprocal in Eurozone was in 1992 (46.88%) and in ASEAN was in 2009 (26.32%). Overall, the bilateral trade in Eurozone showed declining trend and in ASEAN showed improving trend. The increasing trend in ASEAN implies that outward looking which traditionally became trade-mark of ASEAN induce high trade volume (Cuyvers, De Lobaerde and Verherstraeten 2005).

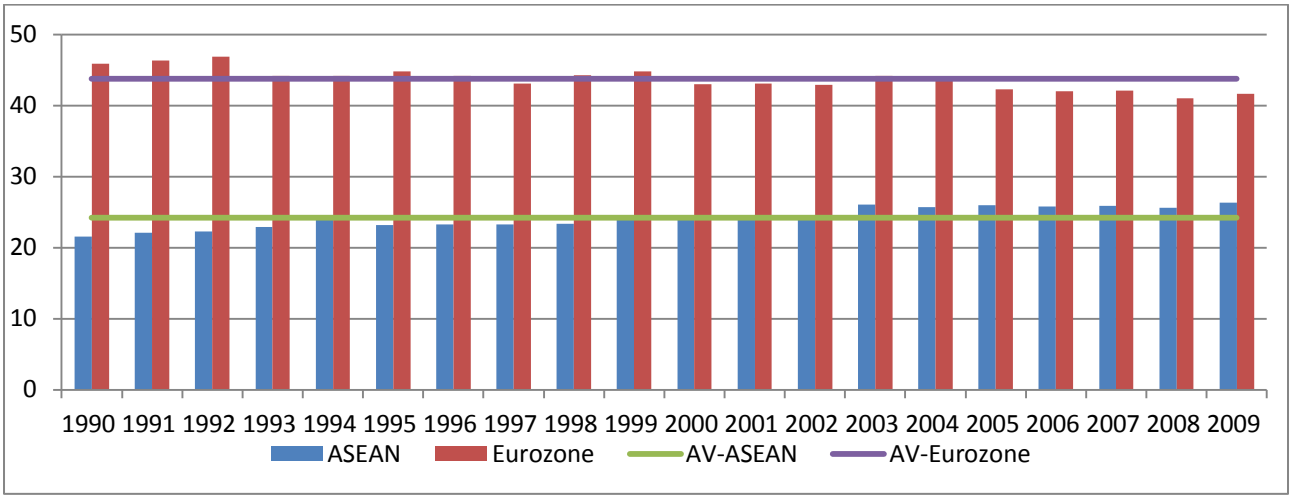

Figure 1 Bilateral Trade over Total Trade: ASEAN and Eurozone (1990-2009)

Own calculation by dividing bilateral trade over total trade in percentage.
Source: DOTS, IMF

Further detail for EU main trading partner was shown in figure 2. The figure showed that domestic destination (intra EU) take the highest portion by 18.9% unfortunately the trend was decreasing by -1.2% annually. USA became the second main important partner for EU by 16.98%; however the portion was also declining. China emerged to be the main important partner for its growing by 265% within 1993 to 2009. The emerge of China to be main player in international trade, due to high economic growth induced by rapid growth of investment resulted from open door policy. Having reputation as the highest populated area in the world, China also has reputation for its' trade dommodity competitiveness.

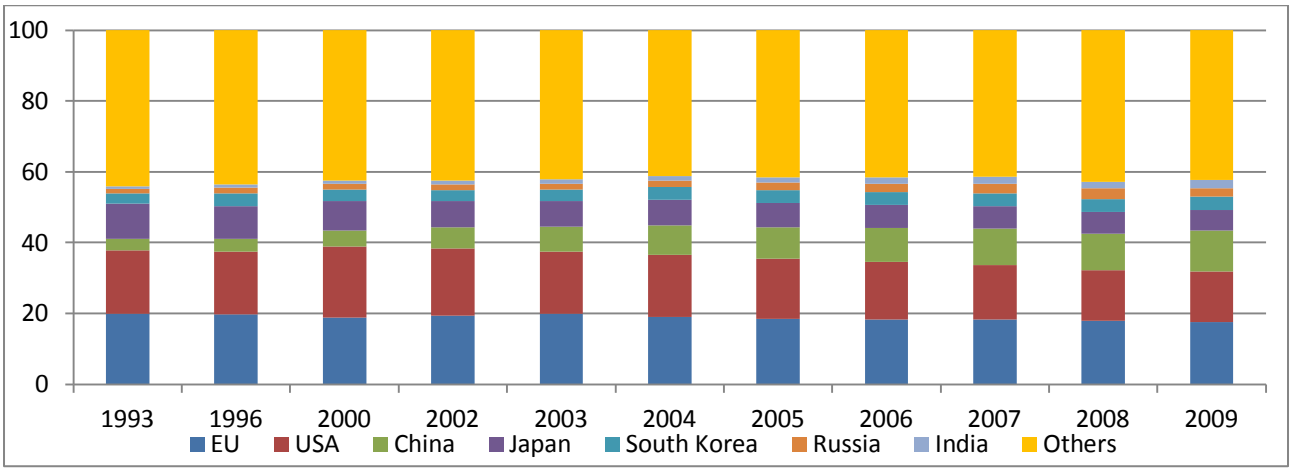

Figure 2 Percentage Share of EU Trade by Trading Partner (1993-2009)

Source: Eurostat

Japan was the main trading partner for ASEAN for its highest share in 1993-2009 by 13.4%; however in 2009 China and EU took over the position. China-ASEAN trade intensity was growing fast by 465%, starting from 2.1% in 1993 to 11.58% in 2009. The portion of USA-ASEAN trade was narrowing in period of analysis from 17.7% in 1993 to 9.76% in 2009. Figure 3 also showed that ASEAN intra-trade intensity took the highest portion by 22.8% with increasing trend. The declining influence of USA recently might be caused by recession suffered and the loss of competitiveness with the commodities traded by China.

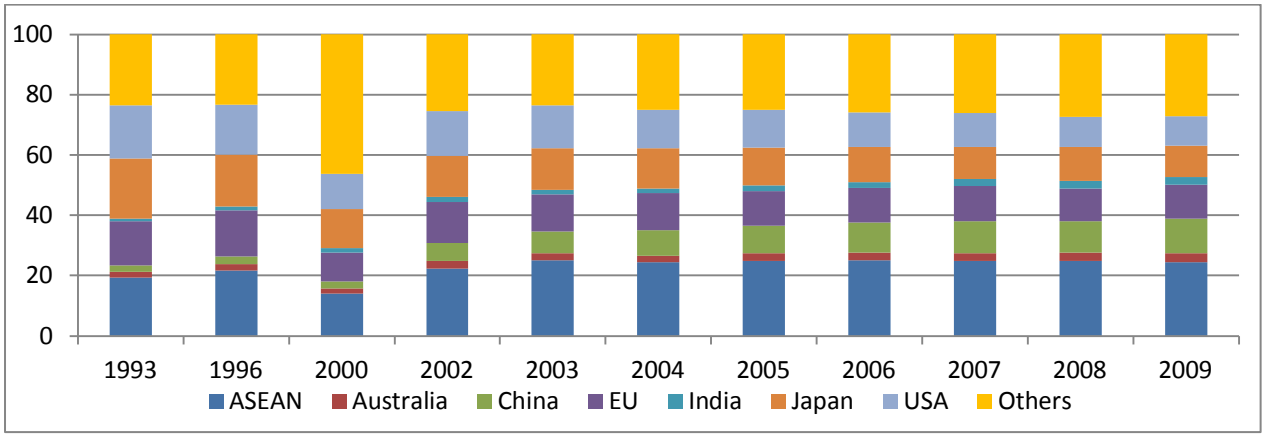

Figure 3 Percentage Share of ASEAN Trade by Trading Partner (1993-2009)

Note: Exclude Lao PDR prior to 2003; Vietnam Prior to 2004; and Cambodia and Myanmar prior to 2002.
Source: ASEAN Trade Statistics Database

The degree of bilateral trade intensity in country level within Eurozone countries was shown in figure 4. Portugal has the highest degree of dependency with other Eurozone members for the highest average degree of trade (62.4%) followed by Austria (61.2%). Ireland has the lowest trade intensity with other members which only 27.3%; the geographic position, close relation with the United Kingdom, and huge investment in high technology might be the answer for the lowest trade with other Eurozone members. Among new member states (NMS), Slovenia has the highest trade relation with other members by 59.8% and Cyprus was the lowest (40.9%). The interesting result was shown by France in which the degree of trade with other original member only account to 70% which largely different with other member states. Geographical position might be the dominant cause for different level of trade intensity with other member states. In the country level, Germany, as the biggest country in term of GDP, dominated bilateral trade with other members within the Eurozone (appendix 1) which above 10% portion with all members.

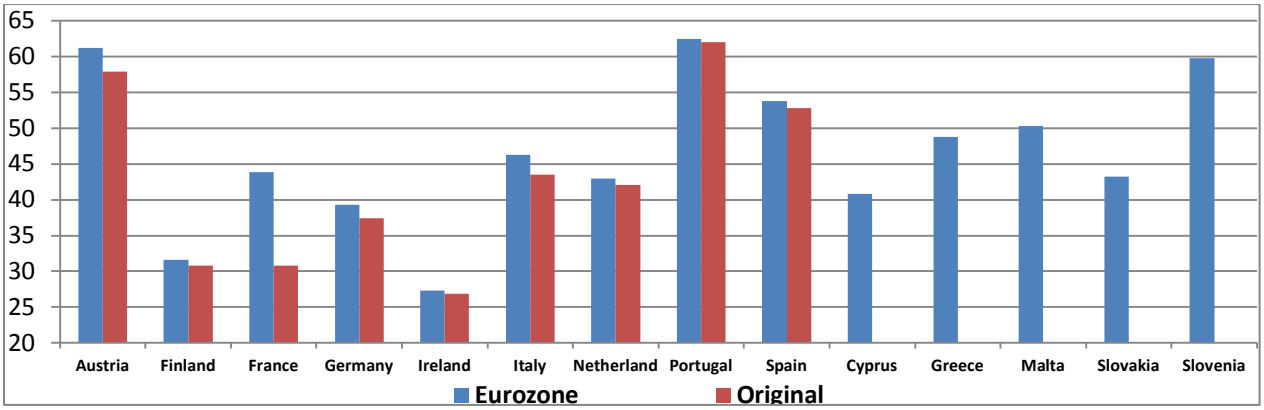

Fig. 4 Average Bilateral Trade intra Eurozone in percentage (1990-2009)

NMS was: Cyprus, Greece, Malta Slovakia and Slovenia, the ratio might be under value due to excluding Belgium and Luxembourg data.
Source: DOTS, IMF, Own calculation by dividing bilateral trade over total trade

For ASEAN, Laos was highly interrelated with other ASEAN members for its highest trade volume by 61.6% followed by Myanmar (39.9%) and Cambodia (39.6%). For ASEAN-6, Brunei did highest trading with other ASEAN members (30.7%) followed by Singapore (25.8%). Philippine was the country having the lowest relation with other ASEAN members (14.5%). Land locked country might be the answer why the degree of dependency with neighbor countries was very high in Laos. Thus geographical position plays important role for different degree of trade intensity with neighbor countries. In the country level, Singapore which implemented null tariff, was main trading partner for all ASEAN members except with Laos (for detailed please see at appendix 2).

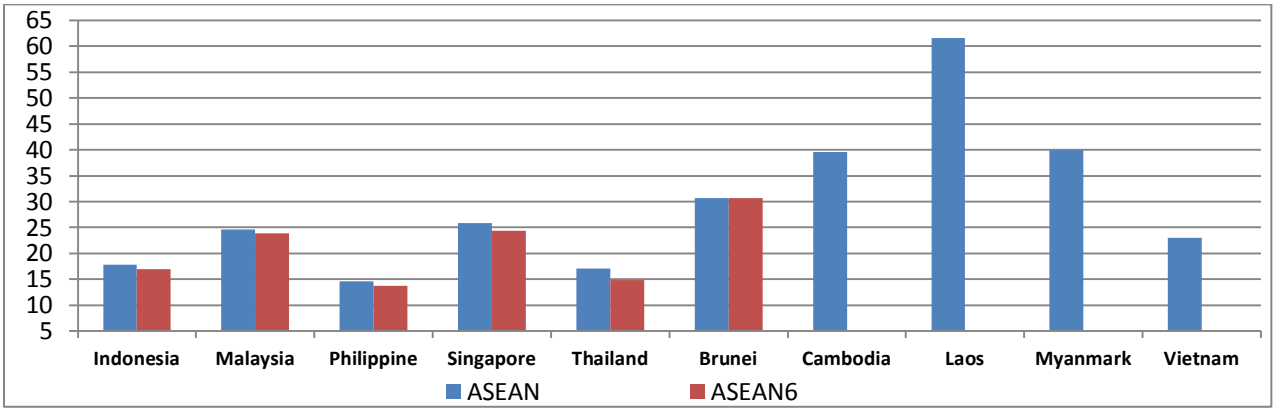

Fig. 5 Average Bilateral Trade intra ASEAN in percentage (1990-2009)

Source: DOTS, IMF

Own calculation by dividing bilateral trade over total trade

Generally, trading among neighboring countries played dominant contribution for total trade either in Eurozone or in ASEAN. Thus, creating regional economic integration might contribute to higher welfare through higher trade intensity. Despite a critique from Elliott and Ikemoto (2004) that apparent success with a robust economic performance from ASEAN countries mainly from extra-regional rather than intra-regional trade, removing trade barrier across border in ASEAN still play important role for huge market belonged to ASEAN (more than 500 million people).

To stimulate faster economic cooperation between member countries, ASEAN established AFTA in 1992 aiming at eliminating tariff barriers among members. The agreement on the Common Effective Preferential Tariff (CEPT) scheme required that tariff applied on a wide range of products traded within the region be reduced to no more than 5%. It applied to all products from ASEAN member countries defined as those that had at least 40% ASEAN content. ASEAN new members including Cambodia, Laos, Myanmar and Vietnam have also implemented their commitment on the CEPT scheme with 80% of their products having been moved into their CEPT inclusion list (ASEAN Secretariat).

Table 1 Average CEPT Rates, By Country, 1993-2003

Country	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
Indonesia	17.27	17.27	15.22	10.39	8.53	7.06	5.36	4.76	4.27	3.69	2.17
Malaysia	10.79	10	9.21	4.56	4.12	3.46	3.2	3.32	2.71	2.62	1.95
Philippine	12.45	11.37	10.45	9.55	9.22	7.22	7.34	5.18	4.48	4.13	3.82
Singapore	0	0	0	0	0	0	0	0	0	0	0
Thailand	19.85	19.84	18.16	14.21	12.91	10.24	9.58	6.12	5.67	4.97	4.63
Brunei	3.78	2.64	2.54	2.02	1.61	1.37	1.55	1.26	1.17	0.96	1.04
ASEAN6	**11.44**	**10.97**	**10**	**7.15**	**6.38**	**5.22**	**4.79**	**3.64**	**3.22**	**2.89**	**2.39**
Cambodia								10.39	10.39	8.89	7.94
Laos						5	7.54	7.07	7.08	6.72	5.86
Myanmar						2.39	4.45	4.43	4.57	4.72	4.61
Vietnam				0.92	4.59	3.95	7.11	7.25	6.75	6.92	6.43
ASEAN10				**7.03**	**6.32**	**4.91**	**5.01**	**4.43**	**4.11**	**3.84**	**3.33**

Source: ASEAN Secretariat

It was respected that ASEAN achievement was seen as an area where most countries have achieved rapid economic development for most of the past 25 year situated. AFTA has indirectly fostered on recognizing that most of the region's trade is extra-regional in order to minimize the potential costs of trade diversion of the original ASEAN members have been reducing their external tariffs in conjunction with declining barriers to intra-ASEAN trade. The schedule on preferential tariff reduction was ambitious and rapid, thus AFTA has to accelerate the pace of multilateral trade liberalization in ASEAN-6 countries.

3. The Significance of Bilateral Trade within Economic Integration

The main benefit of deepening economic integration and mainly having a common currency is reducing the transaction cost. Regardless of limitation, optimum currency area (OCA) theory was a guidance to weight the potential benefit of joining against the inevitable cost. Until recently two main hypotheses come into argument in the term of OCA endogeneity, the first one was proposed by Frankel and Rose (1996) then adopted by ECB that economic integration will affect the symmetry of output fluctuation by removal of trade barriers raising trade, allow demand shocks to more easily spread and lead to more correlated business cycles and so the policy shocks will become more correlated. The different argument came from Krugman (1981) that economic integration lead to more asymmetric macroeconomic fluctuation through better risk-sharing opportunities leading specialization in production more attractive and rendering macroeconomic fluctuation less symmetric. Based on the seminal paper of Frankel and Rose (1996), the endogeneity of OCA became focus for many economists with various method and object of study. Their study suggests that closer trade relations result in a convergence of business cycles. Furthermore, similar business cycles create good preconditions for policy integration and the creation of a currency area. Endogeneity of OCA according to Schiavo (2006) could be defined as a change, triggered by adoption of a single currency, in the nature of the shocks faced by member countries. Following OCA theory, EU sets-up MC as a policy guidance to avoid risks of asymmetric shock. Furthermore Warin et.al (2009) using MC as control variables suggested that economic convergence ensured by belonging to the common currency are helps double FDI flow.

Principally that a single medium of exchange rate should reduce transaction costs and thereby facilitate international trade (Mundel 1973). Having a common currency eliminates bilateral nominal exchange rate volatility and thus reduces the uncertainty and risk involved in trade transactions. While there are ways to hedge against this risk, doing so may be costly. Kenen (2003) point out that it is not always possible to fully hedge against large, long-lasting changes in exchange rates, since producers are uncertain not only about the price they will receive for their exports, but also about the demand for their products, thus the producer does not know how much foreign currency will be earned, and how much should be sold in the forward market.

Despite this argument's intuitive appeal, the evidence regarding the impact of exchange rate volatility on trade has not yielded conclusive result. There is some empirical evidence suggesting that exchange rate volatility has a negative effect, these effects are generally quite small, have decreased over time, and vary widely in significance depending on the study in question (Sousa, 2012). The effect of joining a currency union eliminates the transaction cost arising from the need to operate with multiple currencies when trading across countries with different monies. The costs are independent of the volatility channel.

Sharing a common currency has additional effect: it results in irrevocably fixed exchange rates, thus eliminating exchange rate volatility between the currency union partners for the foreseeable future. This may increase market transparency, and foster competition among firms in different countries. Finally in giving up their national monies and adopting a much more liquid currency, the monetary union may also provide its member countries with a vehicle to hedge exchange rate risk in their trade transactions with non-member countries. In this case the euro increase trade flows not only among euro members, but also with other trading partners as well.

Rose (2000) found that a common currency triggers bilateral trade. Glick and Rose (2001) using panel analysis found that adopting a common currency doubled trade. Klaasen (2004), and De Nardis and Vicarelly (2003) suggest that the Euro has positive impact on trade. They are several transmissions that can spur the effect of common currency on trade: The first, the efficiency gains included higher price transparency which stimulates competition and eventually leads to higher trade volume; EMU and its pro-competitive effects have served as a catalyst for structural reforms. The second, the cost saving related to monetary integration can be viewed like any other reduction of bilateral non-tariff trade barriers. The third, Change in intra-and extra-EMU trade should therefore be interpreted against the background of trade creation and trade diversion. However,

Sousa (2012) found that the effect of currency union on trade is decreasing over time. Trade creation implies that lower cost suppliers inside the currency union substitute higher cost domestic producers as a result of diminished trade costs. Trade diversion takes place when low cost suppliers outside the currency union are replaced by higher cost Euro Area Producer (Viner 1950). The rise of imports due to adoption of the Euro is expected to be higher for countries that have not yet exploited their full trade potential with the current EMU member states.

In ASEAN, AFTA established in 1992 was aimed at eliminating tariff barriers among member countries and creating regional market of 500 million people. The Agreement on the Common Effective Preferential Tariff (CEPT) scheme required that tariff levied on a wide range of products traded within the region be reduced to no more than 5%. It applied to all products from ASEAN member countries defined as those that had at least 40% ASEAN content. The study of Hapsari and Mangunsong (2006) suggested that AFTA might be causing some trade diversion and shifting trade from countries outside the bloc to possibly less efficient countries inside the bloc and the study of Elliott and Ikemoto (2004) found that trade flows were not significantly affected in the year immediately following the signing of the AFTA agreement; and the study of Bun, Klaasen and Tan (2009) showed the positive effect of AFTA on trade. Cuyvers, De Lombaerde, and Verherstraeten (2005), evaluating AFTA in ASEAN, criticize that several members are still very unresponsive when they have to lower tariff, local enterprises do not bother to go through all the necessary formalities, the authorities are still applying relatively high tariffs as they do not want to lose tariff revenues, non-tariff barriers remain a major obstacle in the process of arriving at a free flow of goods with region, lacking supranational institutional and structural mechanism, completely lacks of legal personality, and bilateral initiative by individual members are undermining the relevance of ASEAN.

4. Data and Empirical Methodology

To achieve our objective and answer our research questions we apply augmented gravity model. Tinbergen (1962) did first econometric studies of trade flows based on the gravity equation. In simplest formulation, the gravity model states that bilateral trade flows depend positively on the product of the GDPs of both economies and negatively on the distance between them, in analogy to Newton's gravitational attraction between two bodies. With imperfect substitutes, the number of varieties produced in each country increases with size and, as a result, the quantity of goods imported from each country is proportional to its GDP. Within this framework, trade barriers (such as transportation and other transaction costs) increase the relative price of imported good and therefore reduce trade. There are theoretical reasons to include additional variables.

The dependence of bilateral trade on the product of the GDP's was derived most naturally from models of trade with increasing returns to scale and product differentiation as has been explained in Helpman (1987) and Helpman and Krugman (1985) in The New Trade Theory. In regards of product differentiation, Johnson and Turner (2009) summary the role of intra-industry trade: intra-industry trade increases the variety of products the same industry which is beneficial to both producer and consumer, intra-industry trade gives opportunity for producer to benefit from the economies of scale, as well as use their comparative advantages; and intra-industry trade stimulates innovation in industry. Linder (1961) hypothesized that nations of similar development level will have similar preferences and thus will trade less with countries possessing different factor endowment.

Heckscher-Ohlin predict that countries with different factor endowments will trade more with others under assumption: there are two countries, two homogenous goods, and two homogenous factors of production assumed to be relatively different for each country; technology is identical; production is characterized by constant return to scale for both commodities; two commodities have different factor intensities; tastes and preferences are the same in both countries; perfect competition exists; factors are perfectly mobile within each country; there are no transportation costs; and there are no restricting policy for good mobility between countries. The assumptions lead to conclusion that with identical technology in both countries, constant return to scale, and a given

factor-intensity relationship between final products, the country with abundant capital will be able to produce relatively more of the capital-intensive good, while the country with abundant labor will be able to produce relatively more of the labor-intensive good. Rose (2000) and Frankel and Rose (2002) included exchange rate volatility in the form of currency unions along with thirty other potential independent variables.

Against this benchmark, we study the impact of Euro in Eurozone and AFTA in ASEAN by introducing dummy variable, which takes a value of one when two countries in the pair belong to Eurozone or AFTA. In terms of the covariates, we stick to Helpman's (1987) specification, Egger and Pfaffermayr (2013), and Warin, et al (2008). The general formula was as following:

$$(1) T = f(DI, DK, DifInf, DifInt, DifEr, DifDef, DifPd, G, S, R, D)$$

The dependent variable was T, denoting bilateral trade intensity. For independent we categorized into three groups. The first is dummy variable group, consisting of DI represented dummy integration in which Euro Dummy was dummy integration for the Eurozone countries and AFTA dummy was dummy integration for ASEAN countries; and DK was Crisis Dummy. The second group is consisting of the variables related with Maastricht Criteria which are: DifInf showed the difference in inflation rate between two countries in pair; DifIn was the difference in interest rate; DifEr denotes the difference in nominal exchange rate, DifDef was the difference in deficit to GDP ratio; DifPd was the difference in public debt to GDP ratio. The third group is accommodating the covariates derived by Helpman's specification representing New Trade Theory and H-O theory which are: G represents country size, S was proxy for country similarity; R denotes factor endowment, and D was distance a representative of transportation cost. Detail information for each variable will be explained further. The empirical regression we augmented additional variables which interact dummy integration with Helpman's variables which takes the following form:

$$(2) T_{ij,t} = \alpha_0 + \beta' \begin{pmatrix} DI_t \\ DK_t \\ DifInf_{ij,t} \\ DifInt_{ij,t} \\ DifEr_{ij,t} \\ DifDef_{ij,t} \\ DifPd_{ij,t} \\ G_{ij,t} \\ S_{ij,t} \\ R_{ij,t} \\ D_{ij} \end{pmatrix} + \delta' \begin{pmatrix} G_{ij,t} * DI_t \\ S_{ij,t} * DI_t \\ E_{ij,t} * DI_t \end{pmatrix} + \varepsilon_{ijt}$$

The usage of a gravity model is applied by aggregate annual bilateral flows of trade (total trade, export and import) among Eurozone members (All Eurozone countries except Belgium and Luxembourg, and original members), and among ASEAN members (All ASEAN members and ASEAN-6). T, the dependent variable, denotes the average bilateral intensity between country i and country j over time span using trade intensity concept (corresponding to: a. export weight (EX); b. import weight (IM) and total trade weights (TT). Trade data come from the IMF Direction of Trade Statistics covering 14 countries in the eurozone and 10 countries in ASEAN from 1990 through 2009 with measurements following Frankel and Rose (1996):

$$(3) TT_{ijt} = \frac{Ex_{ijt} + \mathrm{Im}_{ijt}}{(EX_{it} + EX_{jt} + IM_{it} + IM_{jt})}$$

$$(4) EX_{ijt} = \frac{Ex_{ijt}}{(EX_{it} + EX_{jt})}$$

$$(5) IM_{ijt} = \frac{\mathrm{Im}_{ijt}}{(IM_{it} + IM_{jt})}$$

Where Ex_{ijt} indicating total nominal exports from country i to country j during period t; EX_{it} denotes total global exports from country i; and Im denotes imports. The higher the value of eg TT_{ijt} was the higher the trade intensity between countries i and j would be. There are a variety of problem associated with bilateral trade data. Our data measure actual trade intensity which may understate the potential importance of trade. From a theoretical point of view it is unclear which set of weight is optimal some countries may have specialized exports or imports. Thus we conduct our tests with all three measures of trade intensity.

To capture the effect of deeper regional integration in the Eurozone, we augmented dummy integration in which 1 when a country in pair has Euro as a common currency and 0 otherwise. For ASEAN we augmented with dummy AFTA membership indicating 0 before joining and 1 afterward. To capture the impact of crisis experienced by ASEAN we included dummy variable which is 1 for 1998 and afterward; and for the Eurozone we include dummy variable for year 2009 since the global crisis incurred severely in that year.

A simple regression of bilateral trade intensity may be inappropriate. MC was a policy tool implemented to absorb asymmetric shock in the Eurozone and was the guide policy to ensure the effectiveness of the Euro; therefore we augmented policy variable represented by MC. Countries are likely deliberately to link their currencies to those of some of their most important trading partners, in order to capture gains associated with greater exchange rate stability. In doing so, they lose the ability to set monetary policy independently of those neighbors. Following Warin, et. al (2009) We employed variables associated with Maastricht Criteria convergence variables as control variables.

$$(6) DifInf_{ijt} = \left|\mathrm{inf}_{it} - \mathrm{inf}_{jt}\right|$$

$$(7) DifInt_{ijt} = \left|\mathrm{int}_{it} - \mathrm{int}_{jt}\right|$$

$$(8) DifEr_{ijt} = \left|ER_{it} - ER_{jt}\right|$$

$$(9) DifDef_{ijt} = \left|Def_{it} - Def_{jt}\right|$$

$$(10) DifPd_{ijt} = \left|Pd_{it} - Pd_{jt}\right|$$

These criteria account for every aspect necessary for monetary, fiscal, and structural stability. DifInf is the difference in inflation rate between country i and j; DifInt is the difference in interest rate; DifEr is the difference in exchange rate; DifDef is the difference in government deficit to GDP ratio and DifPd is the difference in 'debt to GDP ratio' between each country pair. These variables constructed in main variables to capture the policy variables insisting convergence in the area.

The model also was estimated using following gravity equation, in which following Eggar and Pfaffermayr (2013) and Warin, et. al (2009) we stick Helpman's (1987) specification to complete the model. The model controls for the endowment based New Trade Theory type influence (relative and absolute factor endowments) and for all time-invariant and common cycle specific effect. The variables' specifications are as detailed by Helpman (1987) as following:

$$(10) G_{ijt} = \ln(Y_{it} + Y_{jt})$$

G is the measure of "market size" or overall economic space. G was a proxy for trade that is motivated by market-expansion reasons (Helpman, 1987). Market size was the main variables in the

gravity model with positive value for trade flows as an indication of horizontal integration. Y is real gross domestic product (GDP).

$$(11) S_{ijt} = \ln\left(1 - \left(\frac{Y_{it}}{Y_{it} + Y_{jt}}\right)^2 - \left(\frac{Y_{jt}}{Y_{it} + Y_{jt}}\right)^2\right)$$

S is market similarity, the index that indicates the relative size of the two economies limited between absolute divergence in size and equality in country size. The expected sign is positive as the indication of horizontal integration and similarity in preference. According to the new trade theory, similarity in country size is one of the main determinants of multinational expansion to determine market.

$$(12) R_{ijt} = \left|\ln\left(\frac{gcf}{N_{it}}\right) - \ln\left(\frac{gcf_{jt}}{N_{jt}}\right)\right|$$

R measures the relative difference between the two countries in terms of relative "factor endowments. The formula shows the ratio of gross fixed capital formation and number of population in a country. The factor endowments variable takes a minimum value of 0, representing equality in relative factor endowments, and a maximum value that approaches 1, the largest possible difference in relative factor endowments. Factor endowment differentiates significantly depending on the trade theory hypothesis examined. Based on horizontal integration theory, factor endowment differences are irrelevant and should not be significant (or even exist) among developed countries. The Eurozone was representing a set of well-developed and relatively wealthy countries, movement toward equalization of relative factor endowments is expected to yield an increase in bilateral trade flows. gcf is real gross capital formation as a proxy of capital; and N is number of population.

D denotes the log of the "distance" between the economic centers of the two countries. It was a proxy for trade and transportation costs, which exerted a negative impact on trade flows. As in the gravity theory, farther distance between countries reduced the incentives for trade.

Table 2 Data and Sources

Name	Abbrev.	Definition	Source
Trade	T	total nominal exports and import between country i and country j	IMF Direction of Trade Statistics
Export	Ex	total nominal exports from country i to country j	IMF Direction of Trade Statistics
Import	Im	total nominal import of country i from country j	IMF Direction of Trade Statistics
Inflation	Inf	Percentage of changing CPI	World Bank, WDI
Interest rate	Int	Long term interest rate	World Bank, WDI for ASEAN and OECD stat for Eurozone
Exchange rate	ER	US$ over Local Currency	Unstat, National Accounts Main Aggregate Database
Public debt	Pd	Public debt ratio over GDP	WEO for ASEAN and OECD. Stat for eurozone
Size	Q	Market Size derived from GDP data	Unstat,
Similarity	S	Market Similarity derived from GDP data	Unstat,
Endowment	E	Endowment, gross capital formation over population	Unstat,
Distance	D	The distance between central economic activity between two countries	CEPII database
Dummy Integration	DI	1 when both countries in pair are members; and 0 otherwise	Own Calculation
Dummy Crisis	DK	1 when in times of crisis (1998 and afterward for ASEAN; and 2009 for the Eurozone)	Own Calculation

The empirical model as in Warin, Wunava, and Janicki (2009) was augmented with interaction term to test for a structural shift in the trade as result of deeper economic integration. A simple OLS estimate of our model would impose strict restrictions that might not be justifiable given the complicated nature of our dataset. Specifically, we expect both temporally-dependent interactions as well as interactions between country panels that contradict OLS assumptions. Following Warin et. al (2009) with the reason of concerning autocorrelation we apply a feasible generalized least squares procedure due to the model assuming an autoregressive error structure of the first-order AR (1), along with contemporaneous correlation among cross-sections. The estimated effect of growth is smaller, the standard error is also smaller, but it shrunk by less than the coefficient did. In the estimation we apply cross-section weights allowing different variances for each country. Table 2 showed the data and sources.

4. Empirical Result

This paper estimates the gravity model for Eurozone and ASEAN respectively over period of 20 years, from 1990 through 2009 with the following result.

a. Eurozone

Based on equation 1, table 3 reported the result of Panel estimation for the Eurozone. Looking at the result, we confirmed that having a common currency was significantly inducing higher bilateral trade between members when membership was expanded (0.0793) but for original members the result was insignificant. Having a common currency as a part of final phase of economic integration was beneficial for lowering transaction cost when the NMS included. Insignificant impact in original members might be due to implementation of European Single Market (EMS) in previous year which undermines the significant of the Euro beside their exchange rate was pegged. In somehow the result was also relevant with the finding of Sousa (2012) that the effect of a common currency on trade was declining over time. Although the impact was not as large as in previous study, the deepening impact was positive as in line with the finding of Berger and Nitsch (2008), Micco, Stein and Ordonez (2003) and Rose (2000). Widening impact was also positive shown by positive and significant coefficient for all members compared with only between origins. Thus inclusion NMS improve the benefit of Euro for trade. The impact of global financial crisis disincentives bilateral trade either only original member or by incorporating NMS.

Table 3. Panel Estimates for Eurozone, 1990-2009

	Trade		Export		Import	
Variable	**All**	**Original**	**All**	**Original**	**All**	**Original**
Constant	-1.1466*	-1.0677*	-1.2673*	-1.1317*	-1.0380*	-1.0826*
Euro Dummy	0.0793*	0.0056	0.0926***	-0.0223	0.1064*	0.0255
Crisis Dummy	-0.0044*	-0.0030*	-0.0056*	-0.0031*	-0.0027*	-0.0024**
DifInf	0.0003	0.0005	0.0002	0.0003	-0.0003	0.0005
Difint	0.0007*	0.0007**	0.0015*	0.0010*	0.0010*	0.0006**
Difer	-0.0090	0.0162***	-0.0243**	0.0224*	-0.0056	0.0218***
Difdef	0.0002	-0.0003	-0.0003	-0.0005**	0.0002	-0.0004***
Difdebt	-7.57E-05	-4.11E-05	-5.37E-05	-5.40E-05	-0.0001*	-2.02E-05
G (Market Size)	0.0639*	0.0579*	0.0669*	0.0594*	0.0611*	0.0576*
S (Market Similarity)	0.0286*	0.0271*	0.0248*	0.0225*	0.0257*	0.0204*
R (Endowment)	-0.0124*	0.0073	6.72E-05	0.0049	-0.0294*	0.0054
D (Distance)	-0.0369*	-0.0251*	-0.0324*	-0.0222*	-0.0407*	-0.0226*
G*Euro	-0.0033*	-0.0005	-0.0037**	0.0006	-0.0042*	-0.0011
S*Euro	-0.0039*	-0.0037*	-0.0005	0.0011	-0.0022	0.0001
R*Euro	0.0123*	-0.0057	0.0208*	0.0078	0.0190*	0.0045
Observation	2394	1440	2409	1440	2396	1440
R2	0.9605	0.9525	0.9256	0.9517	0.9485	0.9385

*Note: *,**, and *** denote 1%, 5%, and 10% level of significance respectively*

In regards with Maastricht policy variables, divergence in inflation rate has no trigger effect on higher bilateral trade intensity. Interest rate measures the long-term cost of borrowing; the divergence in interest rate was related with higher trade intensity either in all members or original members (0.0007). Convergence in nominal exchange rate strengthened higher trade intensity between all Eurozone members which is only in export weight (-0.0243); however divergence in exchange rate was more favorable for original members. The result implied that inclusion of new members triggers higher trade intensity due to lower transaction cost; unfortunately the reverse result happened for original members implying that inability to control monetary policy discourage competitiveness and motivation for trade. Convergence in deficit was assumed to be reassuring effect of fiscal policy mainly for original members in export weight (-0.0005) and import weight (-0.0004). The result showed that convergence in deficit to GDP ratio was significantly contributing to higher reciprocal trade intensity. The result also implies that convergence in debt to GDP ratio couldn't pursue reassuring effect of trade intensity either in all members or only between original members.

The total market size was positively significant on bilateral trade (0.0639). Higher coefficient for all members indicated that inclusion NMS into Eurozone induce larger market availability with same currency (lower transaction cost) compare if only between original members (0.0579). The result was in line with new trade theory, Helpman (1987) result and Gravity model hypothesis. Although in total still positive, market size (-0.0033) altered to be negative after Euro introduced. The result indicates that not only because of the birth of Euro as a strong currency attracting non-member countries to do trading with the Euro members and also unstoppable globalization phenomenon with the appearance of China as the new main international trade player as shown in figure 2. The coefficient of market similarity (0.0286) was also positive indicating that bilateral trade was mainly happen between countries having similar in size relative to the partner country. When interacted with Euro dummy, the coefficient of market similarity (-0.0039) became negative for total trade, but it was insignificant for both export and import weight. Overall impact was still positive, denoting that a common currency encourage the trade with trading partner not having similar size. Endowment coefficient (-0.0124) was negative denoting that convergence in factor endowments (capital and labor) lead to raise bilateral trade or bilateral trade was likely expanding across borders strictly on the premise of similar relative price in the partner country when NMS joining Eurozone. However the result for original members was insignificant as implied also in new trade theory when the level of development was similar, endowment factor was not important. Thus Linder's hypothesis might be there that no gains from specialization but from similarity in the structure of demand. When interacted with the Euro dummy, different factor endowment induces higher bilateral trade. Distance as proxy for transportation cost was related negatively on bilateral trade as hypothesized in gravity model. The coefficient was high when all members incorporated (-0.0372) compared with only between original members (-0.0231). It could be interpreted that NMS joining Euro was located in farther distance compared with original members with consequence of higher transportation cost.

b. ASEAN

Table 3 showed that in ASEAN-6 the impact of AFTA was positive (0.2853) but it was related negatively on bilateral trade in when all members incorporated (-0.8707). The result was relevant with the finding of Doanh and Heo (2009) denoting that AFTA related positively with higher trade intensity for Singapore (representative of ASEAN-6) and negatively for Vietnam (representative of CLMV). The result in somehow was in line with the finding of Bun, Klaassen, and Tan (2009) and Hapsari and Mangunsong (2006) with possible explanations were that AFTA might cause some trade diversion and the commodity traded in ASEAN was complementary.

Table 4. Panel Estimates for ASEAN, 1990-2009

	Trade		Export		Import	
Variable	**All**	**ASEAN-6**	**All**	**ASEAN-6**	**All**	**ASEAN-6**
Constant	-1.5118*	-0.9030**	-1.7087*	-1.6419*	-1.7523*	-0.5119
AFTA Dummy	-0.8707**	0.2853**	-0.7078**	0.2831**	-0.6385***	0.0831
Crisis Dummy	-0.0162**	-0.0008	-0.0224*	-0.0009	-0.0132**	0.0036***
DifInf	-3.94E-05	-6.06E-05	-0.0002	-3.86E-05	-4.50E-05	-0.0002
Difint	-0.000691	2.46E-05	-0.0004	5.42E-05	-6.62E-08	0.0004
Difer	-4.23E-07	-4.55E-07	3.19E-07	-1.60E-07	-2.30E-07	-7.84E-07
Difdef	0.0018*	-1.50E-05	0.0017*	3.46E-05	0.0014**	7.17E-07
Difdebt	-0.0001	-8.43E-05**	-0.0002**	1.06E-05	-0.0002***	-9.86E-05*
G (Market Size)	0.1011*	0.0593*	0.1070*	0.0825*	0.1094*	0.0436*
S (Market Similarity)	0.0766*	0.0542*	0.0728*	0.0504*	0.0732*	0.0605*
R (Endowment)	0.0159*	-0.0047	0.0152*	-0.0057	0.0124**	-0.0037
D (Distance)	-0.1023*	-0.0333*	-0.0961*	-0.0194**	-0.0983*	-0.0307*
G*AFTA	0.0328**	-0.0113*	0.0267**	-0.0111**	0.0237***	-0.0036
S*AFTA	-0.0136***	-0.0072***	-0.0144***	-0.0029	-0.0134	-0.0142
R*AFTA	-0.0006	-0.0005	-0.0022	0.0021	-0.0002	0.0002
Observation	1509	582	1549	583	1545	583
R2	0.7769	0.9678	0.7184	0.9766	0.7299	0.9705

*Note: *,**, and *** denote 1%, 5%, and 10% level of significance respectively*

The potential positive impact of AFTA aimed at eliminating tariff barriers among member countries might be cancelled out as criticized by Cuyvers, De Lombaerde, and Verherstraeten (2005) that the commitment of participating country on CEPT was relatively low which might be undermine the relevance of AFTA. Widening impact of AFTA membership was reducing incentive of bilateral trade since the main purpose of AFTA was mainly for multilateral trade. Moreover, the emergence of China as giant rival for market share as also shown in figure 3 reduce the important of AFTA; not to mention the arrival of the new industrial and exporting powers of South American and Easter Europe beside the appearance of other regional trade agreements such as the EU and NAFTA and associated agreements between these groupings which may have exhibited their own trade diversion effects as indicated by Elliot and Ikemoto (2004). Other possible causes might be coming from outward looking oriented inheritance in individual ASEAN country which causes higher improvement of extra-regional trade than intra-regional trade. Despite some limitation, AFTA could be the best hedge again other regional initiative although might be not the best regional initiative.

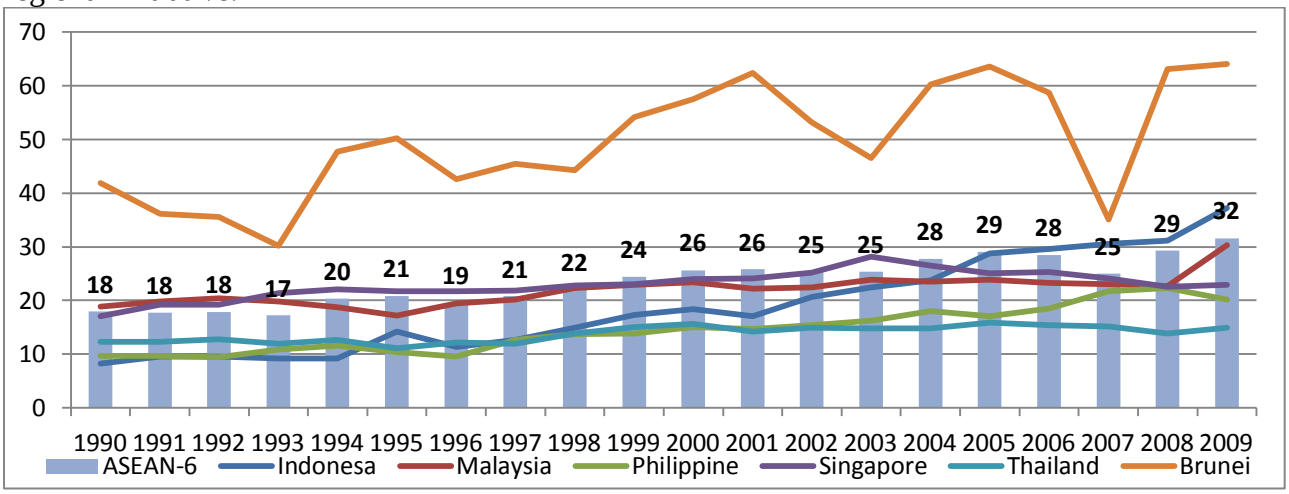

Figure 6 Bilateral Import over Total Import: ASEAN-6 Countries (1990-2009)

Own calculation by dividing bilateral import over total trade, in percentage.
Source: DOTS, IMF

The impact of Asian crisis in 1998 was related negatively on bilateral trade mainly when CLMV was incorporated into equation. The result could be relevant since the crisis will be incurred on structural and financial difficulty with large currency depreciation. Financial crisis suffered by some countries in ASEAN impacted on crisis of credibility and confidence in the region by the

developed world. In line with the finding of Elliott and Ikemoto (2004) the impact of crisis on import weight in for ASEAN-6 was positive. The positive influence on import shows the desire to replace the imported good from outside region by the product produced by member country. Despite of ASEAN's previous amazing success in trade which based on export oriented strategy, Asian crisis could be a moment for ASEAN countries to forcefully turn inwards and focus on their region markets as also figure 6 showed the increasing trend of bilateral import after the crisis.

In regards with variables associated with MC, convergence in inflation, interest, and exchange rate have no impact on bilateral trade intensity. Divergence in deficit (0.0018) induces higher trade in ASEAN. Convergence in public debt was fostering higher bilateral trade intensity; it means that traders indeed seem to be reassured by the homogeneity of debt either only between original or between all members.

Market size was important for bilateral trade of all ASEAN members (0.1011) and ASEAN-6 (0.0593) since traders need larger market to sell or buy good and ASEAN membership enlargement has positive size impact. After joining AFTA market size (0.0328) continue contributing positively for all ASEAN members, but continue decreasing for ASEAN-6. The result implies that more open policy in CLMV have already given positive impact on higher bilateral trade. The coefficient of market similarity was positive either in ASEAN (0.0766) or ASEAN-6 (0.0542) indicating bilateral trade was plausible between countries having relative similar size as in study of Helpman (1987) and also and indicator of horizontal integration improvement. After being AFTA members the coefficient (-0.0136 in ASEAN and -0.0072) became negative indicated the similarity of market became less important, although overall impact was still positive. Factor endowment was positive when CLMV incorporated into equation (0.159); the result implied that different factor endowment was important for higher bilateral trade for the existence of development gap mainly between ASEAN-6 members with CLMV. Since the development stage relatively similar (the exception only for Singapore and Brunei), the endowment impact was insignificant in ASEAN-6. When interacted with AFTA dummy, the endowment impact was insignificant suggesting no significant change of endowment importance in both ASEAN and ASEAN-6. In line with gravity hypothesis, the impact of distance was negative in both ASEAN-6 (-0.0333) and even higher for all ASEAN (-0.1023).

c. Comparative Result

Based on the results on table 3 and 4 we try to make some comparisons with the following result:

Between the Eurozone and ASEAN

Total Trade Weight

In comparison with total trade weight, we try to measure the impact of independent variables on bilateral trade. We conclude that market size was positively significant in both areas with higher influence was in ASEAN (0.1011 and 0.0639). The similar result was also shown in the impact of market similarity (0.0766 and 0.0286) however the pattern was reverse after deeper integration (-0.0136 and -0.0039). The distance has negative impact in both regions with negative influence was higher in ASEAN (-0.1023 and -0.0369) as also the impact of crisis (-0.0162 and -0.0044). In regards with other independent variables, the difference in inflation, exchange rate and debt are insignificant in both regions.

The impact of Euro is positively significant in the Eurozone by 0.0793, but the impact of AFTA was in reverse (-0.8707). Divergence in interest rate influences positively in the Eurozone (0.0007); while divergence of deficit was only significant in ASEAN by 0.0018. Difference in factor endowment was positive in ASEAN by 0.0159 but negative impact was in the Eurozone by -0.0124. Market size was continuing positively significant in ASEAN after AFTA (0.0328) but in the Eurozone after having the Euro the result was negative by -0.0033. Furthermore, factor endowment after deepening regional integration only has impact in the Eurozone by 0.0123.

Export Weight

Not much different with total trade weight, based on export weight, the impact of market size (0.1070 and 0.0669) and market similarity (0.0728 and 0.0248) were positive and significant in both regions with higher impact was in ASEAN; however after deepening integration process the impact of market similarity was negative in the Eurozone by -0.0039 and in ASEAN by -0.0136. In line with total trade weight the distance (-0.0961 and -0.0324) impact was also negative and higher in ASEAN as also crisis impact (-0.0224 and -0.0056). The difference in inflation was insignificant in both regions.

The impact of Euro is positive by 0.0926 for reciprocal export in the Eurozone and the influence of AFTA was negative by -0.7078 in ASEAN. The divergence in interest rate was positively inducing higher bilateral trade by 0.0015 in the Eurozone; and convergence in exchange rate has positive influence by -0.0243 only in the Eurozone. The divergence in deficit (0.0017) and convergence in public debt (-0.0002) are responsible on higher bilateral trade only between ASEAN members. Factor endowment plays important role on higher bilateral trade in ASEAN by 0.0152, but it was insignificant in the Eurozone. Market size was inducing higher bilateral trade by 0.0267 after AFTA in ASEAN, but it disincentives reciprocal trade by -0.0037 in the Eurozone after the Euro. The impact of factor endowment after the Euro was positive by 0.0208, but factor endowment was insignificant in ASEAN after AFTA.

Import Weight

In line with total trade and export weight, the impacts of market size (0.1094 and 0.0611) and market similarity (0.0732 and 0.0257) are positive and significant; in which ASEAN has higher impact. The impact of market similarity became insignificant in both regions after deepening regional economic integration. The impact of distance as has been predicted in gravity theory was negative and significant by -0.0983 in ASEAN and by -0.0407 in the Eurozone. Convergence in inflation and exchange rate were insignificant in both regions, but convergence in debt has power to improve bilateral trade by -0.0002 in ASEAN and by -0.0001 in the Eurozone.

The impact of Euro is positive (0.1064), but the impact AFTA is negative for ASEAN (-0.7078), and the crisis disincentive bilateral import by -0.0224 in ASEAN and by -0.0056 in the Eurozone. The divergence in interest rate influence on higher bilateral import in the Eurozone by 0.0010, but it was insignificant in ASEAN, but divergence in deficit induces higher bilateral trade in ASEAN by 0.0014. Factor endowment play important role in ASEAN by 0.0124 but reverse result for the Eurozone by -0.0294 however it change to be positive after Euro launch by 0.0190. The reverse result also was shown in the size impact of ASEAN after AFTA by 0.0237 and by -0.0042 in the Eurozone after having Euro.

Between the Eurozone and Original members

Total Trade

Based on the result in table 3, we try to compare between all members of the Eurozone and between only original members. The result confirmed that both market size (0.0639 and 0.0579) and market similarity (0.0286 and 0.0271) were positively significant in both equations where the impact was higher when NMS was incorporated; however after Euro introduced the impact altered to be negative (-0.0039 and -0.0037). The influence of transportation cost with distance as a proxy related negatively which is -0.0369 between all the Eurozone members and -0.0251 between only original members. The impact of crisis was more painful when NMS was incorporated (-0.0044 and -0.0030). In regards with variables associated with MC, the difference in inflation, deficit, and debt are insignificant in both equation. The difference in interest rate has positive impact on higher bilateral trade either between all members or only between original members.

Overall the impact of Euro is positive by 0.0793, but it was insignificant if only between original members. The divergence in exchange rate was influential between original members by 0.0162. Different factor endowment contributes negatively on bilateral trade in all the Eurozone but it was insignificant if only between original members. After the Euro introduced, size and similarity

impact were influential when NMS incorporated (-0.0033 and 0.0123) but it was insignificant if only between original members.

Bilateral Export

Weighting with export measure, market size impact was positive by 0.0669 for all the Eurozone and by 0.0594 for only original members. Market similarity also influences positively by 0.0248 for all members and by 0.0225 for only original members, but the impact of similarity after Euro launched was insignificant in both estimates. Endowment was insignificant in both equations. The distance impact was negative in both equations with the higher impact was when NMS was incorporated by -0.0324 and by -0.0222 if only between original members. The crisis was painful in either NMS incorporated or not which the impact was higher when those countries were incorporated (-0.0056 and -0.0031). Variables related inflation and debt to GDP ratio are insignificant in both estimates. The divergence in interest rate was inducing higher bilateral trade by 0.0015 in the Eurozone and by 0.0010 for only between original members.

The Euro impact related with export weight is different in both estimations; it was positive (0.0926) if NMS was incorporated and insignificant otherwise. Convergence in exchange rate will raise bilateral export when NMS incorporated by -0.0243, but divergence in nominal exchange rate was preferred if bilateral trade was between original member by 0.0224. The difference in deficit was insignificant when all members incorporated but convergence in deficit induce higher bilateral trade if only between original members by -0.0005. After the Euro launched, market size disincentive bilateral trade when NMS incorporated by -0.0037, but it was insignificant if it was only between original members. Endowment impact after Euro was related positively when NMS augmented by (0.0208) and it was insignificant if only between original members.

Bilateral Import

In regards with import weight, market size and market similarity were related positively in both estimates in which the impact was higher when NMS was incorporated (0.0611 and 0.0576 for market size) and (0.0257 and 0.0204 for market similarity); however the impact of market similarity became insignificant after the Euro introduced. The distance as hypothesized was related negatively with higher impact when NMS was augmented (-0.0407 and -0.0226). Reciprocal trade in time of crisis was deteriorating, but the impact was higher in all Eurozone by -0.0027 compare with -0.0024 if only between original members. The difference in inflation was insignificant in both estimates, but divergence in interest rate was foster higher bilateral trade in both estimates with the impact is higher when NMS was included (0.0010 and 0.0006).

The impact of Euro was positive by 0.1064 when all members are incorporated, but it was insignificant if only between original members. The difference in exchange rate was insignificant when NMS is incorporated but the divergence in exchange has impact on increasing bilateral trade by 0.0218. Deficit to GDP ratio was insignificant when membership was extended, but convergence in this variable related with high reciprocal import or by -0.0004. The convergence in debt to GP ratio induces higher bilateral import when NMS was included by -0.0001, but it was insignificant if only between original members. Different factor endowment was related negatively by -0.0294 when all members incorporated, however endowment impact was reversing after the Euro was introduced. After the Euro launched, market size became negative when NMS incorporated by -0.0042 but insignificant for only between original members.

Between all ASEAN and ASEAN-6

Total Trade

In regards with total trade weight, market size and market similarity have positive and significant impact on reciprocal bilateral trade either CLMV incorporated into equation or not; however the impact when CLMV countries were incorporated was higher (0.1011 and 0.0593 for market size) and (0.0766 and 0.0542 for market similarity), the After AFTA was introduced the impact of market similarity became negative by -0.0136 in all ASEAN and -0.0072 in only ASEAN-6. Distance was related negatively by -0.1023 in between all ASEAN and by -0.0333 in

between ASEAN-6. Macroeconomic variables related with MC such as inflation, interest rate, and exchange rate are insignificant whether CLMV countries were incorporated or not.

The impact of AFTA was negative for bilateral trade when CLMV countries were included by 0.8707; however it was inducing higher bilateral trade if only between ASEAN-6 by 0.2853. ASEAN economic crisis was painful by when CLMV was incorporated by -0.0162. The divergence in deficit to GDP ratio was fostering higher bilateral trade when CLMV incorporated by 0.0018, but convergence in debt to GDP ratio was significant only between original members by -8.43E-05. Factor endow was important only by incorporating CLMV for higher bilateral trade intensity by 0.0159. The size impact after launching AFTA was positive for all ASEAN members by 0.0328, but negative when only between original members by -0.0113.

Export Weight

Based on export weight market size and market similarity impact was positive and significant in which the impact was higher when CLMV incorporated into equation (0.1070 and 0.0825 for market size) and (0.0728 and 0.0504 for market similarity). The impact of distance was higher between all ASEAN members by -0.0961 than only between ASEAN-6 by -0.0194. Diminishing difference in variables related with inflation, interest rate, and exchange rate are insignificant in both ASEAN and ASEAN-6. Factor endowment after AFTA was insignificant in both estimations.

The impact of AFTA was negative by -0.7078 when CLMV was incorporated into equation and it was positive by 0.2831 if only between ASEAN-6. The impact of crisis only painful if bilateral export was between all ASEAN members by -0.0224. Wider difference in deficit was significant in inducing higher bilateral trade between all ASEAN members by 0.0017 and convergence in debt was fostering higher bilateral export in all members by -0.0002. Different factor endowment induces higher reciprocal trade when CLMV incorporated into estimation. The size impact after AFTA was positive in between all ASEAN members by 0.0267 and was negative by -0.0111 in ASEAN-6. After AFTA, the impact of market similarity was negative in all ASEAN by -0.0144.

Import Weight

Concerning with import weight, the impact of market size was positive and significant in which higher in between all ASEAN members by 0.1094 and between ASEAN-6 by 0.0436. The similar result was also for market similarity impact in which 0.0732 for all ASEAN and 0.0605 between ASEAN-6. The distance impact was negative in which -0.0983 for between all ASEAN members and -0.0307 for only between ASEAN-6. The difference in inflation, interest and exchange rate had no significant impact either only between ASEAN-6 or between when the membership is extended. Convergence in debt impacted on higher reciprocal trade by -0.0002 between all ASEAN and -9.86E-05 between ASEAN-6. After the launch of AFTA, market similarity and factor endowment are insignificant either between ASEAN-6 or between all ASEAN members.

The impact of AFTA is negative when CMLV was incorporated by -0.6385; while the impact of crisis was negative when the trade was between all ASEAN members by -0.0132, but it was positive when only between ASEAN-6 by 0.0036. The divergence in deficit was fostering higher bilateral import between all ASEAN members by 0.0014. Factor endowment raises bilateral import by 0.0124 when CLMV included into equation. After AFTA, country size impact was positive by 0.0237 when CLMV incorporated into estimation.

5. Conclusion and Policy Implication

Using augmented gravity equation the paper tries to comparatively analyze the impact of different level of economic integration on bilateral trade: the region having a common currency (the Eurozone) with the region struggling in free trade area (ASEAN). The results show that deepening impact on bilateral trade was positive in all Eurozone members but insignificant for original member. Thus widening membership was positive to induce higher reciprocal trade. In ASEAN,

deepening impact which is creating AFTA generates positive result only between ASEAN-6 not when CLMV joined the membership. Thus the widening impact was negative. The impact of financial crisis reduces the incentive to trade bilaterally in both the Eurozone (in 2009) and ASEAN (1998).

For the Eurozone in regards with MC variables, the divergence in interest rate has incentive for higher bilateral trade; the similar impact was caused by the divergence nominal exchange rate in original members; and reassuring effect was shown by deficit to GDP ratio for original members in export and import weight. Thus in somehow forcing convergence in variables associated with Maastricht criteria might be not so influential on higher bilateral trade. For ASEAN, among variables associated with MC, divergence in deficit induces higher bilateral trade and convergence in debt implying the appearance of reassuring effect.

Related with H-O variables, the impact of market size, income similarity, and distance were as expected. Market size and income similarity was important factor for higher flow of bilateral trade which was indicator of horizontal linkage creation based predominantly on market access and consumer income. We got various results for factor endowment impact. Intra-trade industry was a phenomenon in all Eurozone shown by the negative impact of factor endowment on bilateral trade, but it was insignificant if only between original members due to similar level of development in original members. For ASEAN, different factor endowment was determinant for higher bilateral trade when CLMV countries were included as shown by positive result of factor endowment; however if only between original members the impact was insignificant.

The lessons learned from the result that the impact of Euro became lesser in comparing with Rose (2000) finding but in line with the finding of Sousa (2012). Thus it was necessary to do greater economic integration and decreasing the trade disputes and frictions in the area especially regarding with intra imbalance trade issue. For ASEAN, the result as in line with the problems denoted by Cuyvers, De Lombaerde, and Verherstraeten (2005) that ASEAN needs to realize their commitment to lower the tariff based on CEPT scheme in order to accelerate the realization of ASEAN economic community by 2015.

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Appendix 1. Bilateral Trade Intensity between the Eurozone Countries

Bilateral Trade Intensity Index, Austria as Reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Finland	0.74	0.65	0.65	0.59	0.61	0.67	0.64	0.60	0.78	0.78	0.76	0.71	0.67	0.70	0.58	0.56	0.57	0.51	0.48	0.44	0.63
France	4.43	4.36	4.41	4.48	4.64	4.70	4.56	4.42	4.63	4.61	4.10	4.36	4.17	4.25	4.05	3.95	3.46	3.36	3.39	3.54	4.19
Germany	40.98	41.24	41.52	40.83	39.15	41.16	40.35	38.25	39.48	40.47	38.73	38.03	37.01	37.50	39.19	38.51	37.77	37.64	37.04	38.16	39.15
Ireland	0.27	0.31	0.35	0.37	0.37	0.40	0.39	0.34	0.47	0.44	0.45	0.42	0.40	0.38	0.69	0.35	0.41	0.35	0.36	0.40	0.40
Italy	9.34	9.09	8.70	8.65	8.51	8.81	8.59	8.29	8.50	7.88	7.81	7.68	7.97	8.19	7.84	7.64	7.99	7.97	7.81	7.40	8.23
Netherland	2.85	2.82	2.80	2.96	3.00	3.16	2.92	3.00	2.99	3.55	3.38	3.53	3.45	3.27	2.91	2.78	2.95	3.06	2.96	2.92	3.06
Portugal	0.52	0.53	0.56	0.54	0.54	0.49	0.54	0.51	0.49	0.34	0.35	0.37	0.36	0.37	0.31	0.27	0.29	0.29	0.26	0.29	0.41
Spain	1.50	1.61	1.76	1.71	1.70	1.68	1.81	1.84	2.09	1.98	1.86	1.81	2.28	1.94	1.81	1.91	1.95	1.96	1.70	1.53	1.82
Cyprus	0.04	0.04	0.05	0.03	0.02	0.03	0.02	0.02	0.03	0.02	0.03	0.03	0.07	0.03	0.04	0.04	0.06	0.06	0.05	0.06	0.04
Greece	0.49	0.49	0.51	0.45	0.40	0.43	0.36	0.32	0.33	0.31	0.30	0.33	0.35	0.40	0.34	0.29	0.33	0.38	0.37	0.36	0.38
Malta	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.10	0.02	0.02	0.02	0.02
Slovakia	-	-	-	0.71	0.76	0.88	1.08	1.18	1.17	1.16	1.23	1.31	1.71	1.82	1.69	1.60	1.66	1.98	2.10	2.17	1.42
Slovenia	-	-	-	1.00	1.06	1.21	1.19	1.31	1.29	1.43	1.48	1.51	1.56	1.69	1.82	1.38	1.50	1.64	1.66	1.69	1.44
Eurozone	61.17	61.15	61.31	62.33	60.77	63.63	62.46	60.11	62.27	63.00	60.49	60.10	60.00	60.56	61.27	59.31	59.03	59.22	58.21	58.97	60.77

Bilateral Trade Intensity Index, Finland as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	1.23	1.26	1.26	1.10	1.08	1.11	0.97	1.00	1.25	1.21	1.15	1.09	1.10	1.15	0.98	0.85	0.82	0.79	0.76	0.81	1.05
France	5.21	5.07	5.76	5.00	4.62	4.36	4.33	4.47	5.04	4.70	4.49	4.55	4.42	4.02	3.87	3.56	3.31	3.51	3.35	3.93	4.38
Germany	15.21	16.11	16.36	14.52	14.01	14.16	13.36	12.52	13.19	14.28	13.59	13.21	12.96	13.76	13.17	13.35	13.34	13.21	12.77	13.03	13.81
Ireland	0.54	0.63	0.67	0.58	0.58	0.64	0.68	0.80	0.74	0.75	0.69	0.91	0.87	0.66	0.59	0.69	0.67	0.60	0.56	0.60	0.67
Italy	3.90	3.86	3.84	3.47	3.38	3.37	3.19	3.44	3.95	3.58	3.74	3.57	3.45	3.74	3.30	3.16	3.13	2.97	3.00	2.76	3.44
Netherland	3.73	4.21	4.52	4.46	4.45	4.17	3.76	4.05	4.40	5.25	4.94	3.78	4.20	5.48	5.69	5.47	5.77	6.13	5.72	6.43	4.83
Portugal	0.99	1.07	0.99	0.83	0.69	0.64	0.60	0.63	0.62	0.60	0.55	0.52	0.54	0.49	0.48	0.48	0.40	0.35	0.45	0.53	0.62
Spain	1.65	1.96	1.99	1.91	1.87	2.08	1.86	1.85	2.20	2.07	2.01	2.20	2.08	2.14	2.04	1.93	1.91	2.11	2.00	1.70	1.98
Cyprus	0.05	0.04	0.03	0.14	0.03	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.07	0.14	0.05	0.03	0.15	0.23	0.06
Greece	0.47	0.46	0.53	0.43	0.44	0.43	0.41	0.45	0.66	0.55	0.59	0.52	0.56	0.58	0.45	0.37	0.39	0.45	0.38	0.37	0.47
Malta	0.04	0.06	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.03	0.03	0.08	0.02	0.02	0.01	0.06	0.06	0.03	0.05	0.03
Slovakia	-	-	-	0.12	0.14	0.14	0.15	0.14	0.16	0.16	0.14	0.16	0.17	0.17	0.17	0.17	0.22	0.23	0.36	0.22	0.18
Slovenia	-	-	-	0.08	0.10	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.09	0.07	0.09	0.10	0.15	0.14	0.15	0.14	0.10
Eurozone	33.02	34.73	35.99	32.66	31.40	31.23	29.44	29.46	32.32	33.28	32.03	30.64	30.54	32.28	30.92	30.28	30.22	30.58	29.68	30.79	31.57

Bilateral Trade Intensity Index, France as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	0.86	0.86	0.88	0.93	0.97	0.97	0.94	0.90	0.96	0.93	0.84	0.98	1.05	0.99	0.98	0.92	0.90	0.90	0.89	0.89	0.93
Finland	0.64	0.53	0.57	0.47	0.52	0.56	0.56	0.58	0.63	0.56	0.60	0.57	0.55	0.56	0.52	0.48	0.49	0.51	0.47	0.45	0.54
Germany	17.91	18.00	17.83	17.13	16.96	17.73	16.93	15.69	16.36	17.32	15.32	16.82	17.18	17.48	17.17	16.91	17.30	17.41	17.55	17.78	17.14
Ireland	0.64	0.66	0.77	0.81	0.88	0.87	0.92	1.04	1.22	1.14	1.32	1.18	1.15	1.08	1.07	1.13	1.03	1.02	0.92	1.03	0.99
Italy	11.25	10.84	10.59	9.46	9.46	9.63	9.36	9.23	9.39	9.24	8.83	8.55	8.90	9.19	8.89	8.49	8.61	8.65	8.34	8.06	9.25
Netherland	5.23	5.01	4.90	4.88	4.68	4.86	4.76	4.69	4.76	5.74	5.90	5.51	5.43	5.40	5.31	5.28	5.46	5.62	5.48	5.68	5.23
Portugal	1.27	1.28	1.37	1.30	1.28	1.24	1.22	1.24	1.28	1.33	1.49	1.87	1.51	1.67	1.60	1.08	1.07	1.06	1.02	1.06	1.31
Spain	5.42	5.92	6.20	5.95	6.45	6.81	7.25	7.13	7.82	7.73	7.98	7.62	7.87	8.47	8.40	8.26	8.24	8.12	7.42	7.20	7.31
Cyprus	0.04	0.03	0.06	0.05	0.04	0.04	0.04	0.03	0.03	0.09	0.13	0.12	0.09	0.08	0.05	0.04	0.06	0.05	0.04	0.04	0.06
Greece	0.54	0.51	0.53	0.51	0.46	0.49	0.50	0.51	0.49	0.52	0.54	0.47	0.48	0.57	0.55	0.47	0.49	0.51	0.48	0.48	0.51
Malta	0.05	0.05	0.07	0.07	0.07	0.07	0.11	0.11	0.11	0.11	0.13	0.10	0.11	0.12	0.13	0.10	0.11	0.11	0.10	0.08	0.10
Slovakia	-	-	-	0.04	0.05	0.08	0.10	0.11	0.14	0.11	0.10	0.12	0.15	0.16	0.16	0.19	0.25	0.41	0.45	0.55	0.19
Slovenia	-	-	-	0.24	0.27	0.27	0.30	0.27	0.35	0.24	0.24	0.24	0.28	0.32	0.31	0.31	0.28	0.27	0.27	0.30	0.28
Eurozone	43.86	43.69	43.78	41.85	42.08	43.62	42.99	41.53	43.56	45.04	43.42	44.15	44.76	46.09	45.13	43.64	44.30	44.65	43.42	43.59	43.76

Bilateral Trade Intensity Index, Germany as Reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	5.03	5.06	5.26	5.77	5.39	4.58	4.76	4.48	4.66	4.75	4.61	4.50	4.66	4.71	4.86	4.80	5.00	4.99	5.01	5.30	4.91
Finland	1.06	0.95	0.94	0.90	0.97	0.97	0.94	0.93	1.01	1.11	1.09	1.10	1.04	1.01	1.03	1.11	1.04	1.06	0.95	0.82	1.00
France	12.29	12.68	12.62	11.48	11.51	11.18	10.76	10.58	11.10	11.04	10.55	10.30	10.15	9.95	9.72	9.54	9.13	9.00	8.86	9.29	10.59
Ireland	0.61	0.63	0.70	0.70	0.74	0.79	0.75	0.76	0.80	1.18	1.28	1.73	1.46	1.47	1.48	1.44	0.88	0.86	0.74	0.69	0.98
Italy	9.20	9.24	9.34	7.67	7.88	7.88	7.80	7.57	7.58	7.45	7.16	7.01	6.93	6.91	6.67	6.38	6.22	6.29	6.10	6.11	7.37
Netherland	9.11	9.05	9.03	7.84	7.69	7.86	7.97	7.68	7.40	7.26	7.59	7.21	7.05	7.16	7.13	7.17	8.84	8.92	9.25	9.40	8.03
Portugal	0.88	1.00	1.01	0.93	0.87	0.96	1.10	1.11	1.13	1.12	1.07	1.00	1.02	0.96	0.87	0.81	0.70	0.71	0.68	0.66	0.93
Spain	3.00	3.42	3.48	2.92	2.99	3.28	3.46	3.57	3.78	3.88	3.65	3.71	3.88	4.10	4.13	4.14	3.78	3.91	3.54	3.40	3.60
Cyprus	0.05	0.06	0.08	0.09	0.09	0.06	0.05	0.04	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.05	0.07	0.09	0.06	0.06	0.06
Greece	0.81	0.78	0.87	0.78	0.67	0.60	0.58	0.56	0.57	0.59	0.55	0.57	0.56	0.60	0.59	0.58	0.54	0.55	0.55	0.57	0.62
Malta	0.06	0.06	0.06	0.07	0.07	0.06	0.05	0.05	0.05	0.05	0.05	0.06	0.04	0.05	0.05	0.04	0.04	0.04	0.05	0.04	0.05
Slovakia	-	-	-	0.25	0.33	0.46	0.49	0.53	0.69	0.64	0.59	0.68	0.78	1.05	1.01	0.92	0.93	1.00	0.97	0.97	0.72
Slovenia	-	-	-	0.48	0.48	0.50	0.47	0.47	0.47	0.48	0.43	0.42	0.42	0.41	0.38	0.39	0.40	0.44	0.45	0.42	0.44
Eurozone	42.10	42.94	43.39	39.86	39.68	39.18	39.17	38.33	39.28	39.61	38.66	38.34	38.04	38.44	37.97	37.37	37.58	37.87	37.20	37.70	**39.14**

Bilateral Trade Intensity Index, Ireland as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	0.51	0.52	0.48	0.50	0.59	0.44	0.39	0.31	0.41	0.46	0.43	0.37	0.37	0.40	0.38	0.42	0.40	0.46	0.41	0.40	0.43
Finland	0.67	0.71	0.61	0.51	0.64	0.64	0.60	0.61	0.60	0.69	0.52	0.46	0.46	0.41	0.38	0.43	0.50	0.42	0.46	0.39	0.54
France	7.73	7.12	7.38	7.03	6.83	7.02	6.46	6.46	6.50	6.61	6.40	5.57	4.58	5.23	5.36	5.38	4.95	5.15	5.08	5.29	6.11
Germany	10.13	10.63	10.86	10.78	11.08	11.28	10.59	9.60	11.81	9.61	9.17	10.29	7.10	8.24	8.18	8.05	8.50	8.32	7.62	6.08	9.40
Italy	3.53	3.47	3.34	2.96	3.17	2.98	2.99	2.65	2.71	2.98	3.26	2.94	3.04	3.62	3.60	3.34	3.45	3.00	2.98	2.82	3.14
Netherland	5.00	5.62	5.86	4.71	4.36	5.17	5.16	5.33	4.53	5.04	4.77	4.30	3.69	4.73	4.49	4.60	4.19	4.39	4.38	4.31	4.73
Portugal	0.50	0.50	0.46	0.38	0.40	0.34	0.39	0.36	0.35	0.30	0.26	0.28	0.34	0.33	0.35	0.36	0.39	0.36	0.38	0.38	0.37
Spain	1.76	1.84	1.80	1.65	1.82	1.82	1.88	1.90	2.00	2.09	2.05	1.95	1.94	2.28	2.28	2.61	2.85	2.80	3.12	3.12	2.18
Cyprus	0.07	0.08	0.07	0.07	0.06	0.05	0.04	0.05	0.03	0.02	0.03	0.02	0.03	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.04
Greece	0.32	0.36	0.33	0.35	0.33	0.38	0.36	0.21	0.18	0.23	0.23	0.24	0.25	0.27	0.27	0.26	0.28	0.31	0.28	0.30	0.29
Malta	0.03	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03
Slovakia	-	-	-	0.01	0.03	0.05	0.03	0.03	0.04	0.04	0.03	0.04	0.04	0.04	0.03	0.04	0.07	0.07	0.07	0.97	0.10
Slovenia	-	-	-	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.03
Eurozone	30.24	30.90	31.24	29.05	29.36	30.24	28.96	27.58	29.21	28.14	27.22	26.52	21.89	25.62	25.40	25.55	25.65	25.36	24.86	24.16	27.36

Bilateral Trade Intensity Index, Italy as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	2.35	2.34	2.34	2.37	2.36	2.39	2.33	2.28	2.34	2.42	2.26	2.28	2.45	2.61	2.59	2.49	2.55	2.47	2.30	2.34	2.39
Finland	0.58	0.53	0.54	0.46	0.48	0.52	0.50	0.55	0.62	0.63	0.65	0.56	0.58	0.59	0.53	0.55	0.56	0.54	0.54	0.45	0.55
France	15.24	14.67	14.62	13.36	13.30	13.50	12.96	12.65	12.95	13.01	11.99	11.71	11.73	11.95	11.67	11.13	10.49	10.29	9.87	10.22	12.37
Germany	20.25	20.94	21.12	19.40	19.11	19.09	17.88	17.11	17.60	17.92	16.29	16.13	15.69	16.08	15.80	15.29	15.05	15.03	14.40	14.68	17.24
Ireland	0.48	0.50	0.52	0.53	0.62	0.65	0.67	0.66	0.74	0.94	1.04	0.96	0.95	1.04	0.98	0.91	0.80	0.71	0.60	0.70	0.75
Netherland	4.46	4.50	4.59	4.16	4.20	4.19	4.31	4.39	4.43	4.54	4.30	4.38	4.18	4.13	4.14	4.06	4.05	3.96	3.86	4.05	4.24
Portugal	0.88	0.93	0.99	0.86	0.88	0.93	0.95	0.92	0.96	1.01	0.89	0.91	0.88	0.88	0.83	0.77	0.78	0.69	0.66	0.85	0.87
Spain	4.12	4.36	4.30	3.90	4.31	4.49	4.60	4.97	5.21	5.45	5.20	5.21	5.48	6.01	5.97	5.86	5.77	5.90	5.23	5.01	5.07
Cyprus	0.10	0.10	0.13	0.10	0.09	0.09	0.08	0.08	0.08	0.08	0.09	0.08	0.08	0.09	0.12	0.13	0.13	0.12	0.16	0.13	0.10
Greece	1.34	1.31	1.33	1.30	1.32	1.36	1.36	1.34	1.32	1.42	1.28	1.24	1.29	1.39	1.40	1.25	1.29	1.33	1.26	1.27	1.32
Malta	0.31	0.36	0.44	0.44	0.47	0.41	0.24	0.19	0.18	0.17	0.18	0.18	0.20	0.17	0.15	0.15	0.16	0.14	0.19	0.21	0.25
Slovakia	-	-	-	0.15	0.21	0.24	0.28	0.28	0.33	0.36	0.37	0.40	0.42	0.40	0.43	0.48	0.55	0.61	0.60	0.65	0.40
Slovenia	-	-	-	0.58	0.65	0.70	0.66	0.71	0.68	0.65	0.68	0.69	0.70	0.75	0.72	0.73	0.75	0.83	0.81	0.76	0.71
Eurozone	50.12	50.55	50.94	47.60	48.00	48.58	46.82	46.12	47.43	48.60	45.21	44.74	44.64	46.08	45.32	43.80	42.92	42.62	40.47	41.33	46.09

Bilateral Trade Intensity Index, Netherland as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	1.05	1.03	1.08	1.11	1.07	1.16	1.17	1.12	1.27	1.07	1.05	1.16	1.07	1.12	1.08	0.99	0.99	1.01	0.97	0.95	1.08
Finland	0.91	0.79	0.75	0.79	0.88	0.90	0.84	0.89	0.93	0.92	0.96	0.95	0.97	0.98	1.04	1.02	1.03	1.01	0.91	0.86	0.92
France	9.52	9.18	9.32	8.80	9.01	9.03	8.94	8.77	8.82	8.45	8.09	8.18	7.99	7.79	7.56	7.16	6.66	6.53	6.76	6.97	8.18
Germany	26.20	27.62	27.50	25.51	25.53	25.12	24.57	22.88	21.84	22.35	21.63	22.23	21.69	21.84	21.72	20.99	21.49	21.25	21.24	21.59	23.24
Ireland	0.73	0.69	0.85	0.90	0.88	0.96	0.85	1.04	1.08	1.25	1.18	1.30	1.24	1.43	1.21	1.12	1.01	1.01	0.89	0.90	1.03
Italy	5.19	5.10	5.07	4.52	4.55	4.47	4.60	4.49	4.36	4.39	4.32	4.53	4.49	4.42	4.32	4.09	3.75	3.69	3.68	3.64	4.38
Portugal	0.69	0.69	0.71	0.73	0.65	0.66	0.66	0.66	0.70	0.70	0.67	0.70	0.69	0.71	0.66	0.66	0.57	0.54	0.53	0.57	0.66
Spain	2.10	2.10	2.21	2.24	2.27	2.48	2.52	2.69	2.84	2.74	2.71	2.84	2.84	3.00	3.07	3.00	2.73	2.75	2.56	2.60	2.61
Cyprus	0.04	0.04	0.04	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.06	0.06	0.05	0.06	0.07	0.04
Greece	0.59	0.60	0.64	0.61	0.61	0.56	0.50	0.46	0.47	0.47	0.50	0.50	0.53	0.52	0.50	0.47	0.43	0.44	0.44	0.46	0.51
Malta	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.05	0.03
Slovakia	-	-	-	0.07	0.08	0.09	0.10	0.12	0.14	0.11	0.10	0.12	0.14	0.14	0.19	0.21	0.24	0.35	0.34	0.36	0.17
Slovenia	-	-	-	0.11	0.10	0.10	0.09	0.10	0.12	0.09	0.10	0.10	0.11	0.11	0.10	0.10	0.12	0.12	0.12	0.12	0.11
Eurozone	47.05	47.87	48.19	45.48	45.72	45.60	44.91	43.27	42.62	42.60	41.36	42.66	41.80	42.13	41.52	39.89	39.10	38.78	38.52	39.16	42.91

Bilateral Trade Intensity Index, Netherland as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	1.05	1.03	1.08	1.11	1.07	1.16	1.17	1.12	1.27	1.07	1.05	1.16	1.07	1.12	1.08	0.99	0.99	1.01	0.97	0.95	1.08
Finland	0.91	0.79	0.75	0.79	0.88	0.90	0.84	0.89	0.93	0.92	0.96	0.95	0.97	0.98	1.04	1.02	1.03	1.01	0.91	0.86	0.92
France	9.52	9.18	9.32	8.80	9.01	9.03	8.94	8.77	8.82	8.45	8.09	8.18	7.99	7.79	7.56	7.16	6.66	6.53	6.76	6.97	8.18
Germany	26.20	27.62	27.50	25.51	25.53	25.12	24.57	22.88	21.84	22.35	21.63	22.23	21.69	21.84	21.72	20.99	21.49	21.25	21.24	21.59	23.24
Ireland	0.73	0.69	0.85	0.90	0.88	0.96	0.85	1.04	1.08	1.25	1.18	1.30	1.24	1.43	1.21	1.12	1.01	1.01	0.89	0.90	1.03
Italy	5.19	5.10	5.07	4.52	4.55	4.47	4.60	4.49	4.36	4.39	4.32	4.53	4.49	4.42	4.32	4.09	3.75	3.69	3.68	3.64	4.38
Portugal	0.69	0.69	0.71	0.73	0.65	0.66	0.66	0.66	0.70	0.70	0.67	0.70	0.69	0.71	0.66	0.66	0.57	0.54	0.53	0.57	0.66
Spain	2.10	2.10	2.21	2.24	2.27	2.48	2.52	2.69	2.84	2.74	2.71	2.84	2.84	3.00	3.07	3.00	2.73	2.75	2.56	2.60	2.61
Cyprus	0.04	0.04	0.04	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.06	0.06	0.05	0.06	0.07	0.04
Greece	0.59	0.60	0.64	0.61	0.61	0.56	0.50	0.46	0.47	0.47	0.50	0.50	0.53	0.52	0.50	0.47	0.43	0.44	0.44	0.46	0.51
Malta	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.05	0.03
Slovakia	-	-	-	0.07	0.08	0.09	0.10	0.12	0.14	0.11	0.10	0.12	0.14	0.14	0.19	0.21	0.24	0.35	0.34	0.36	0.17
Slovenia	-	-	-	0.11	0.10	0.10	0.09	0.10	0.12	0.09	0.10	0.10	0.11	0.11	0.10	0.10	0.12	0.12	0.12	0.12	0.11
Eurozone	47.05	47.87	48.19	45.48	45.72	45.60	44.91	43.27	42.62	42.60	41.36	42.66	41.80	42.13	41.52	39.89	39.10	38.78	38.52	39.16	42.91

Bilateral Trade Intensity Index, Portugal as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	0.90	0.95	0.82	0.96	0.90	0.77	0.86	0.81	0.74	0.76	0.69	0.67	0.73	0.72	0.67	0.61	0.58	0.73	0.54	0.70	0.76
Finland	1.03	1.02	0.87	0.78	0.70	0.71	0.64	0.68	0.70	0.67	0.50	0.47	0.49	0.54	0.58	0.64	0.50	0.49	0.58	0.62	0.66
France	12.95	12.48	13.11	13.60	13.52	12.74	12.33	11.96	12.43	12.38	11.37	11.19	11.17	11.15	11.15	10.28	9.64	9.92	9.21	9.90	11.62
Germany	15.30	16.20	16.34	16.71	15.84	17.53	17.85	16.84	16.82	16.65	15.19	15.97	16.35	14.69	13.95	12.87	13.04	12.87	12.00	12.63	15.28
Ireland	0.45	0.42	0.40	0.50	0.60	0.50	0.51	0.56	0.60	0.64	0.55	0.58	0.63	0.66	0.71	0.78	0.74	0.67	0.81	0.73	0.60
Italy	7.58	7.58	7.69	6.44	6.46	6.33	6.40	6.26	6.40	6.39	5.85	5.90	5.86	5.76	5.38	4.85	4.93	4.76	4.45	4.86	6.01
Netherland	5.70	5.78	6.23	5.01	4.78	4.88	4.62	4.55	4.86	4.64	4.44	4.59	4.23	4.32	4.36	4.14	4.11	4.06	3.91	4.65	4.69
Spain	14.20	15.08	15.70	16.52	17.75	18.74	19.14	19.06	20.67	22.51	23.03	23.44	24.97	27.58	27.55	27.80	27.99	28.54	27.67	29.54	22.37
Cyprus	0.05	0.04	0.05	0.05	0.04	0.03	0.03	0.00	0.03	0.02	0.03	0.03	0.02	0.03	0.02	0.02	0.03	0.03	0.04	0.03	0.03
Greece	0.27	0.21	0.24	0.27	0.25	0.26	0.30	0.23	0.24	0.28	0.27	0.28	0.28	0.29	0.26	0.27	0.24	0.25	0.25	0.25	0.26
Malta	0.02	0.02	0.03	0.02	0.03	0.12	0.02	0.02	0.02	0.01	0.03	0.04	0.02	0.03	0.02	0.03	0.02	0.02	0.03	0.03	0.03
Slovakia	-	-	-	0.02	0.02	0.03	0.05	0.04	0.03	0.02	0.04	0.08	0.08	0.08	0.08	0.08	0.10	0.16	0.14	0.19	0.07
Slovenia	-	-	-	0.04	0.03	0.03	0.04	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.04
Eurozone	58.47	59.78	61.47	60.92	60.92	62.67	62.79	61.04	63.56	65.01	62.03	63.26	64.88	65.89	64.79	62.44	61.96	62.58	59.69	64.19	62.42

Trade Intensity Index, Spain as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	0.78	0.73	0.81	0.95	0.96	0.85	0.93	0.95	0.97	1.06	0.97	1.02	1.07	1.04	0.97	0.84	0.83	0.90	0.84	0.84	0.91
Finland	0.62	0.57	0.57	0.60	0.64	0.66	0.57	0.58	0.61	0.63	0.65	0.57	0.55	0.59	0.54	0.50	0.54	0.58	0.54	0.41	0.58
France	17.01	16.65	17.60	17.90	18.64	18.59	18.88	17.88	18.88	18.87	18.36	17.91	17.83	17.87	17.39	16.55	15.50	15.22	14.56	15.60	17.38
Germany	15.33	15.76	16.14	15.41	14.42	15.29	14.68	14.18	14.68	14.87	13.87	14.12	14.30	14.72	14.65	13.72	13.28	14.01	13.04	13.33	14.49
Ireland	0.55	0.59	0.65	0.67	0.71	0.75	0.69	0.84	0.97	1.04	1.11	1.04	1.09	1.03	1.00	1.10	1.13	1.05	1.04	1.13	0.91
Italy	10.69	10.21	10.26	9.17	9.06	9.12	9.18	9.59	9.36	8.88	8.59	8.57	8.89	9.40	9.12	8.49	8.39	8.81	8.04	7.63	9.07
Netherland	4.09	3.74	3.80	3.73	3.99	4.03	3.70	3.81	4.07	4.38	4.21	4.14	4.09	4.29	4.31	4.23	4.28	4.21	4.05	4.27	4.07
Portugal	3.87	4.14	4.60	4.84	5.00	5.31	5.52	5.61	5.74	5.68	5.29	5.66	5.82	6.01	6.00	5.81	5.53	5.44	5.69	6.02	5.38
Cyprus	0.03	0.06	0.06	0.04	0.03	0.05	0.05	0.08	0.08	0.05	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.08	0.06	0.06
Greece	0.44	0.44	0.42	0.50	0.55	0.63	0.64	0.56	0.51	0.55	0.56	0.59	0.63	0.69	0.63	0.58	0.60	0.63	0.64	0.58	0.57
Malta	0.02	0.03	0.03	0.06	0.03	0.06	0.07	0.05	0.06	0.04	0.07	0.04	0.08	0.05	0.04	0.03	0.03	0.04	0.04	0.06	0.05
Slovakia	-	-	-	0.03	0.05	0.06	0.08	0.08	0.09	0.10	0.14	0.17	0.24	0.23	0.16	0.20	0.27	0.27	0.27	0.32	0.16
Slovenia	-	-	-	0.06	0.06	0.12	0.10	0.11	0.13	0.14	0.13	0.15	0.16	0.14	0.13	0.16	0.16	0.19	0.16	0.15	0.13
Eurozone	53.43	52.92	54.95	53.97	54.13	55.54	55.09	54.30	56.15	56.29	54.01	54.05	54.82	56.12	54.98	52.25	50.59	51.37	48.99	50.41	53.72

Bilateral Trade Intensity Index, Cyprus as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	0.93	1.11	1.25	0.80	0.54	0.68	0.52	0.49	0.79	0.70	0.67	0.57	0.62	0.62	0.68	0.53	0.60	0.60	0.55	0.61	0.69
Finland	0.34	0.54	0.35	0.36	0.49	0.35	0.42	0.46	0.43	0.61	0.45	0.59	0.65	0.62	1.25	2.69	0.82	0.35	0.29	0.36	0.62
France	5.21	3.18	6.30	4.73	3.60	3.44	3.25	3.41	4.14	4.40	3.90	5.41	4.47	4.41	5.61	6.35	4.83	4.78	3.64	3.59	4.43
Germany	7.79	7.92	7.74	7.30	7.37	7.10	6.34	5.27	7.36	6.14	6.42	5.73	7.72	6.72	8.27	7.88	8.32	8.98	7.97	8.84	7.36
Ireland	0.70	0.81	0.67	0.78	0.74	0.71	0.58	0.62	0.76	0.79	0.84	0.67	0.70	0.69	0.58	0.56	0.58	0.54	0.42	0.45	0.66
Italy	7.69	7.92	7.56	8.05	7.75	7.69	7.16	6.48	7.46	7.40	7.58	6.97	8.07	8.39	9.02	8.55	10.15	9.21	9.69	9.48	8.11
Netherland	2.33	1.93	2.15	2.26	2.60	1.89	1.60	1.62	2.00	2.18	2.12	1.92	2.20	2.45	3.17	3.62	3.84	3.73	3.72	4.38	2.59
Portugal	0.30	0.39	0.36	0.35	0.34	0.32	0.31	0.30	0.39	0.34	0.39	0.29	0.35	0.47	0.42	0.33	0.40	0.40	0.44	0.36	0.36
Spain	1.86	1.41	1.68	1.96	2.05	1.85	1.88	2.07	2.96	2.54	3.21	3.28	3.16	3.49	3.16	2.77	2.53	3.15	3.42	3.19	2.58
Greece	7.76	7.27	6.96	8.14	7.07	6.90	6.82	7.16	8.55	8.45	8.83	8.53	9.33	11.49	14.63	16.33	17.01	18.13	17.42	20.69	10.87
Malta	1.84	1.62	1.80	1.92	2.36	1.56	1.28	1.37	1.63	1.74	1.79	1.66	1.82	2.07	2.85	3.27	3.65	3.56	3.57	4.24	2.28
Slovakia	-	-	-	-	0.11	0.18	0.12	0.11	0.11	0.12	0.15	0.19	0.13	0.20	0.18	0.14	0.19	0.21	0.13	0.09	0.15
Slovenia	-	-	-	0.08	0.09	0.09	0.20	0.08	0.27	0.41	0.00	0.13	0.13	0.09	0.22	0.41	0.06	0.09	0.09	0.07	0.15
Eurozone	36.74	34.10	36.82	36.73	35.11	32.77	30.48	29.45	36.85	35.83	36.34	35.94	39.35	41.70	50.04	53.43	52.98	53.72	51.37	56.34	40.80

Bilateral Trade Intensity Index, Greece as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	1.39	1.35	1.49	1.21	1.22	1.07	1.18	1.05	1.07	1.01	0.84	0.76	0.76	0.96	1.05	1.01	1.06	1.18	1.17	1.27	1.11
Finland	0.77	0.73	0.61	0.62	0.81	0.74	0.72	0.78	0.94	1.13	1.48	0.87	0.79	1.07	0.95	0.83	0.98	0.85	0.89	0.80	0.87
France	8.53	7.70	7.76	6.70	7.10	7.41	7.03	7.55	7.58	7.79	5.95	5.68	5.14	6.15	5.88	5.34	5.56	5.23	4.85	5.50	6.52
Germany	21.20	20.70	21.33	18.65	17.64	18.30	15.48	15.41	16.15	15.26	13.21	13.10	11.69	12.73	13.25	12.70	12.24	12.53	11.61	13.06	15.31
Ireland	0.48	0.45	0.51	0.56	0.60	0.82	0.70	0.61	0.61	0.68	0.86	0.75	0.55	0.73	0.74	0.75	0.75	0.80	0.75	0.91	0.68
Italy	15.91	14.94	15.53	13.47	15.04	17.47	15.74	15.65	15.08	15.03	12.04	11.14	10.74	12.15	12.22	11.89	11.43	11.47	11.49	12.28	13.54
Netherland	5.79	5.25	5.74	5.41	5.77	5.71	5.20	5.12	5.42	5.47	5.17	4.80	4.79	4.69	4.88	4.74	4.41	4.29	4.25	5.15	5.10
Portugal	0.37	0.31	0.36	0.31	0.34	0.39	0.49	0.38	0.37	0.38	0.39	0.39	0.34	0.35	0.37	0.34	0.31	0.32	0.34	0.36	0.36
Spain	1.86	2.04	2.28	2.33	2.71	3.43	3.34	3.08	3.39	3.36	3.39	3.32	3.52	3.66	3.69	3.85	3.67	3.56	3.39	3.68	3.18
Cyprus	0.93	0.98	1.14	1.49	1.22	1.10	1.18	1.11	1.15	1.21	1.53	1.44	1.36	1.30	1.41	1.75	1.95	2.39	2.26	2.91	1.49
Malta	0.16	0.19	0.19	0.67	0.46	0.27	0.28	0.32	0.27	0.31	0.35	0.42	0.32	0.12	0.08	0.04	0.04	0.05	0.08	0.09	0.24
Slovakia	-	-	-	0.14	0.10	0.11	0.13	0.13	0.12	0.10	0.11	0.20	0.17	0.17	0.18	0.15	0.24	0.30	0.19	0.26	0.16
Slovenia	-	-	-	0.08	0.09	0.19	0.10	0.11	0.11	0.11	0.11	0.15	0.13	0.14	0.17	0.15	0.42	0.41	0.44	0.32	0.19
Eurozone	57.37	54.64	56.94	51.64	53.10	57.01	51.57	51.29	52.25	51.83	45.45	43.01	40.30	44.23	44.88	43.54	43.04	43.38	41.70	46.58	48.69

Trade Intensity Index,Malta as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	0.87	0.43	0.35	0.33	0.34	0.35	0.35	0.40	0.42	0.36	0.39	0.42	0.44	0.48	0.43	0.51	0.56	0.62	0.82	0.44	0.47
Finland	0.16	0.09	0.19	0.08	0.09	0.07	0.12	0.11	0.07	0.18	0.40	0.35	0.26	0.26	0.27	0.16	1.01	0.90	0.55	0.70	0.30
France	7.18	7.36	7.40	9.14	8.94	9.87	15.47	17.57	12.68	17.52	14.33	9.64	14.87	15.35	14.08	11.70	12.93	12.02	9.69	9.50	11.86
Germany	15.03	13.54	12.12	14.81	16.26	13.28	11.32	11.32	8.92	11.05	8.80	8.75	8.78	8.88	9.65	10.52	9.64	10.41	10.07	10.32	11.17
Ireland	0.49	0.66	0.66	0.68	0.51	0.55	0.64	0.72	0.57	0.55	0.62	0.26	0.55	0.47	0.48	0.46	0.33	0.53	0.53	0.66	0.55
Italy	33.35	36.47	38.94	29.11	30.73	28.59	16.77	14.52	15.99	11.87	11.17	13.35	13.94	14.79	16.28	21.41	18.51	16.87	19.26	16.74	20.93
Netherland	2.41	2.50	2.65	2.59	2.18	2.00	2.33	2.48	1.71	2.04	1.62	1.82	1.78	1.65	2.41	2.44	2.47	2.11	2.87	2.83	2.24
Portugal	0.24	0.20	0.34	0.20	0.24	0.30	0.21	0.25	0.22	0.18	0.20	0.34	0.30	0.34	0.32	0.29	0.98	0.28	0.25	0.26	0.30
Spain	1.12	1.07	1.14	1.02	1.23	1.35	1.21	1.46	2.73	1.35	1.22	1.58	1.77	1.91	2.16	2.33	2.19	1.96	2.23	2.64	1.68
Cyprus	0.06	0.08	0.07	0.06	0.09	0.04	0.06	0.05	0.04	0.04	0.06	0.26	0.05	0.06	0.08	0.12	0.14	0.14	0.24	0.18	0.10
Greece	0.64	0.57	0.47	0.52	0.56	0.50	0.48	0.47	0.41	0.35	0.28	2.51	0.39	0.31	0.43	0.42	0.44	0.54	0.62	0.77	0.58
Slovakia	-	-	-	0.08	0.03	0.03	0.04	0.06	0.04	0.02	0.02	0.12	0.05	0.04	0.04	0.03	0.03	0.06	0.03	0.07	0.05
Slovenia	-	-	-	0.08	0.06	0.06	0.13	0.04	0.03	0.04	0.03	0.09	0.05	0.05	0.07	0.05	0.06	0.40	0.06	0.12	0.08
Eurozone	61.53	62.97	64.35	58.69	61.26	57.00	49.14	49.44	43.83	45.55	39.14	39.49	43.22	44.59	46.71	50.44	49.28	46.83	47.22	45.24	50.30

Bilateral Trade Intensity Index, Slovakia as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	-	-	-	5.67	5.52	5.04	5.25	5.92	5.86	6.27	5.97	5.88	5.74	8.03	7.35	6.67	5.78	5.56	5.43	5.47	5.97
Finland	-	-	-	0.10	0.17	0.23	0.18	0.17	0.17	0.20	0.20	0.18	0.23	0.13	0.18	0.36	0.52	0.38	0.69	0.18	0.25
France	-	-	-	1.55	1.97	2.24	2.73	3.09	3.67	4.27	3.94	3.90	4.31	3.00	2.69	3.50	3.74	5.27	5.16	6.24	3.60
Germany	-	-	-	13.08	15.19	16.40	17.36	21.40	27.01	26.81	25.84	25.71	24.11	31.76	29.93	24.98	22.78	21.14	19.66	18.91	22.48
Ireland	-	-	-	0.10	0.15	0.14	0.18	0.22	0.23	0.24	0.21	0.25	0.25	0.15	0.13	0.20	0.24	0.22	0.18	0.15	0.19
Italy	-	-	-	2.88	4.35	4.72	5.50	5.90	6.78	7.89	7.57	7.48	8.61	5.49	5.55	5.53	5.36	5.07	4.77	5.18	5.80
Netherland	-	-	-	1.43	1.72	1.74	1.85	2.03	2.16	2.34	2.05	2.06	2.32	1.85	2.32	2.89	3.20	2.86	2.71	2.82	2.26
Portugal	-	-	-	0.03	0.07	0.08	0.06	0.10	0.11	0.10	0.12	0.21	0.26	0.14	0.13	0.15	0.16	0.24	0.23	0.25	0.14
Spain	-	-	-	0.38	0.60	0.71	0.76	0.88	1.02	1.18	1.63	1.89	2.47	1.99	1.34	1.69	1.98	2.14	1.69	1.73	1.42
Cyprus	-	-	-	0.04	0.06	0.07	0.05	0.04	0.03	0.03	0.03	0.05	0.03	0.02	0.02	0.11	0.07	0.13	0.07	0.08	0.05
Greece	-	-	-	0.29	0.22	0.21	0.21	0.22	0.19	0.21	0.19	0.37	0.24	0.22	0.21	0.24	0.35	0.39	0.34	0.44	0.27
Malta	-	-	-	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Slovenia	-	-	-	0.54	0.56	0.82	0.72	0.71	0.69	0.73	0.79	0.77	0.92	0.84	0.74	0.80	0.69	0.70	0.89	0.78	0.75
Eurozone	-	-	-	26.13	30.59	32.39	34.87	40.70	47.93	50.29	48.54	48.78	49.48	53.63	50.61	47.13	44.88	44.11	41.84	42.24	43.18

Bilateral Trade Intensity Index,Slovenia as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Austria	-	-	-	6.53	7.40	8.06	7.81	7.64	7.41	7.72	7.90	7.95	7.67	8.01	13.44	9.96	10.08	9.60	9.43	9.55	8.60
Finland	-	-	-	0.27	0.38	0.32	0.33	0.33	0.32	0.38	0.43	0.43	0.44	0.43	0.30	0.27	0.33	0.32	0.33	0.30	0.35
France	-	-	-	8.01	7.86	8.20	8.58	8.14	10.48	8.56	8.82	8.83	8.49	7.94	9.01	7.49	6.04	5.44	5.16	6.17	7.84
Germany	-	-	-	26.12	24.92	26.14	25.87	24.81	24.31	25.10	22.78	22.65	21.86	21.14	19.23	19.35	19.31	18.38	17.89	17.95	22.22
Ireland	-	-	-	0.30	0.16	0.20	0.19	0.18	0.21	0.26	0.27	0.26	0.23	0.28	0.15	0.18	0.17	0.16	0.14	0.22	0.21
Italy	-	-	-	13.79	14.30	15.65	15.20	15.81	15.41	15.43	15.66	15.23	15.07	15.83	15.96	15.50	15.17	14.82	14.25	13.67	15.10
Netherland	-	-	-	1.62	1.75	1.80	1.80	1.82	1.92	1.91	1.92	1.82	1.87	1.93	2.18	2.46	2.47	2.44	2.30	2.27	2.02
Portugal	-	-	-	0.14	0.07	0.08	0.10	0.13	0.14	0.12	0.15	0.15	0.18	0.18	0.13	0.29	0.26	0.22	0.19	0.19	0.16
Spain	-	-	-	0.91	0.99	1.48	1.21	1.42	1.58	1.58	1.85	1.83	2.09	1.76	1.86	2.38	2.19	2.00	1.84	1.78	1.69
Cyprus	-	-	-	0.20	0.08	0.03	0.04	0.02	0.02	0.03	0.03	0.02	0.02	0.01	0.04	0.04	0.02	0.03	0.03	0.04	0.04
Greece	-	-	-	0.18	0.15	0.24	0.20	0.22	0.22	0.26	0.24	0.32	0.39	0.33	0.36	0.32	0.72	0.54	0.72	0.57	0.35
Malta	-	-	-	0.02	0.09	0.08	0.09	0.01	0.01	0.01	0.01	0.04	0.02	0.01	0.01	0.00	0.01	0.01	0.04	0.01	0.03
Slovakia	-	-	-	0.41	0.58	0.74	0.84	0.90	0.85	0.77	1.07	1.17	1.31	1.39	1.22	1.40	1.50	1.66	1.80	2.04	1.16
Eurozone	-	-	-	58.48	58.73	63.03	62.26	61.44	62.89	62.13	61.12	60.69	59.65	59.25	63.90	59.64	58.27	55.64	54.12	54.75	59.76

Appendix 2. Bilateral Trade Intensity between ASEAN Countries

Bilateral Trade Intensity Index, Indonesia as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Malaysia	0.01	1.36	1.65	1.69	1.83	4.16	2.08	2.33	2.60	2.67	3.24	3.19	3.47	3.74	3.98	3.89	4.51	6.10	5.77	5.82	3.21
Philippine	0.45	0.45	0.38	0.52	0.60	0.78	0.84	0.97	1.01	1.03	0.98	1.04	1.01	1.20	1.24	1.21	1.04	1.17	1.05	1.29	0.91
Singapore	6.68	7.45	8.13	7.92	8.36	7.12	8.02	9.33	10.84	10.26	10.82	9.75	10.68	10.20	10.23	12.07	11.71	10.79	13.01	16.71	10.00
Thailand	0.78	0.99	1.14	1.08	1.12	1.67	2.07	1.80	2.34	2.40	2.23	2.35	2.73	3.30	4.02	3.97	3.51	3.89	3.75	3.58	2.44
Brunei	0.02	0.02	0.04	0.07	0.00	0.00	0.03	0.05	0.05	0.09	0.04	0.07	0.08	0.16	0.28	0.86	1.02	1.01	0.93	1.00	0.29
Cambodia	0.02	0.01	0.04	0.06	0.06	0.10	0.07	0.07	0.08	0.10	0.05	0.08	0.08	0.09	0.06	0.07	0.06	0.07	0.07	0.09	0.07
Laos	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Myanmar	0.01	0.02	0.04	0.08	0.10	0.19	0.12	0.18	0.23	0.13	0.09	0.10	0.10	0.06	0.07	0.06	0.10	0.16	0.11	0.09	0.10
Vietnam	0.15	0.41	0.32	0.32	0.45	0.52	0.58	0.53	1.01	1.29	0.69	0.57	0.74	0.94	0.86	0.78	1.17	1.25	0.90	0.91	0.72
ASEAN	8.13	10.71	11.75	11.76	12.51	14.54	13.80	15.27	18.17	17.97	18.16	17.15	18.88	19.71	20.74	22.92	23.13	24.44	25.59	29.50	17.74

Bilateral Trade Intensity Index, Malaysia as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Indonesia	1.12	1.42	1.42	1.36	1.40	1.44	1.69	1.70	1.89	1.99	2.20	2.35	2.52	2.70	3.15	3.02	3.10	3.53	3.79	3.44	2.26
Philippine	0.94	0.65	0.89	0.75	0.79	0.73	1.11	1.30	1.93	1.95	2.06	1.94	2.27	2.42	2.06	2.04	1.74	1.67	1.41	1.06	1.49
Singapore	18.88	19.28	19.42	18.52	17.37	16.23	16.91	16.65	15.43	15.42	16.53	14.98	14.75	14.03	13.30	13.92	13.76	13.19	13.10	16.60	15.91
Thailand	2.96	2.79	3.08	3.05	3.12	3.24	3.70	3.77	3.47	3.48	3.73	3.89	4.12	4.50	5.12	5.35	5.38	5.13	5.15	5.67	4.04
Brunei	0.15	0.17	0.19	0.21	0.25	0.19	0.21	0.19	0.18	0.15	0.14	0.17	0.15	0.19	0.14	0.14	0.14	0.15	0.15	0.17	0.17
Cambodia	0.03	0.02	0.03	0.03	0.06	0.06	0.04	0.07	0.04	0.03	0.05	0.05	0.04	0.04	0.04	0.05	0.04	0.05	0.05	0.06	0.04
Laos	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.00	0.00
Myanmar	0.12	0.12	0.13	0.17	0.21	0.18	0.17	0.27	0.27	0.19	0.17	0.17	0.18	0.12	0.11	0.15	0.10	0.11	0.14	0.12	0.16
Vietnam	0.09	0.12	0.22	0.25	0.23	0.26	0.30	0.31	0.39	0.42	0.52	0.49	0.57	0.64	0.75	0.86	1.09	1.29	1.34	1.45	0.58
ASEAN	24.28	24.57	25.37	24.34	23.43	22.34	24.13	24.27	23.59	23.65	25.40	24.05	24.61	24.63	24.67	25.54	25.39	25.14	25.15	28.57	24.66

Bilateral Trade Intensity Index, Philippines as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Indonesia	1.23	1.01	0.91	1.35	1.31	1.63	0.00	1.53	1.19	1.25	1.21	1.37	1.37	1.52	1.57	1.67	1.37	1.67	2.01	1.75	1.35
Malaysia	1.96	2.42	2.21	1.79	1.96	2.05	2.81	2.57	3.50	3.71	3.69	3.36	4.17	5.18	4.84	4.78	4.79	4.52	4.14	3.44	3.39
Singapore	3.53	3.23	3.29	4.69	6.10	4.97	5.54	6.07	6.05	6.35	7.49	6.72	6.77	6.74	7.23	7.26	7.92	8.83	8.05	8.04	6.24
Thailand	1.45	1.47	0.97	1.20	0.59	2.67	2.58	2.67	2.42	2.51	2.87	3.50	3.02	3.52	3.15	3.10	3.46	3.47	4.11	4.54	2.66
Brunei	0.54	0.46	0.39	0.18	0.11	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.00	0.01	0.01	0.01	0.01	0.08	0.08	0.10
Cambodia	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01
Laos	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Myanmar	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Vietnam	0.58	0.31	0.17	0.17	1.23	0.36	0.00	0.59	0.80	0.41	0.32	0.53	0.54	0.61	1.34	1.23	1.04	1.21	1.99	2.11	0.78
ASEAN	9.29	8.90	7.95	9.38	11.30	11.72	10.94	13.52	13.97	14.26	15.60	15.50	15.94	17.60	18.15	18.07	18.61	19.72	20.42	19.99	14.54

Bilateral Trade Intensity Index, Singapore as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Indonesia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.13	7.74	7.57	7.76	7.83	8.09	7.81	2.75
Malaysia	13.29	15.07	13.66	15.38	17.92	17.27	16.46	16.21	15.32	16.07	17.56	17.32	17.79	14.95	14.06	13.43	13.04	12.97	11.99	11.51	15.06
Philippines	0.86	0.76	0.83	1.18	1.18	1.25	1.44	1.91	2.30	2.55	2.47	2.37	2.29	2.04	2.19	2.06	2.10	2.12	1.85	1.97	1.79
Thailand	4.53	4.63	4.89	4.85	5.13	5.46	5.56	4.88	4.28	4.55	4.28	4.40	4.60	3.94	3.89	3.94	3.92	3.71	3.71	3.54	4.43
Brunei	0.59	0.59	0.68	0.53	0.51	0.70	0.75	0.62	0.37	0.28	0.28	0.25	0.28	0.21	0.17	0.15	0.16	0.15	0.16	0.18	0.38
Cambodia	0.00	0.00	0.19	0.24	0.21	0.22	0.22	0.19	0.17	0.20	0.18	0.18	0.18	0.13	0.11	0.09	0.11	0.09	0.10	0.22	0.15
Laos	0.00	0.00	0.00	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
Myanmar	0.25	0.29	0.27	0.28	0.27	0.35	0.36	0.34	0.27	0.23	0.20	0.23	0.26	0.25	0.19	0.16	0.12	0.15	0.21	0.19	0.24
Vietnam	0.00	0.00	0.38	0.84	0.89	0.92	0.84	0.86	0.92	0.89	1.07	1.24	1.25	1.16	1.22	1.45	1.39	1.54	1.69	1.79	1.02
ASEAN	19.53	21.33	20.91	23.30	26.12	26.19	25.65	25.02	23.64	24.80	26.04	25.99	26.66	30.82	29.58	28.87	28.61	28.57	27.81	27.24	25.83

Bilateral Trade Intensity Index, Thailand as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Indonesia	0.62	0.65	0.78	0.85	0.87	1.05	1.33	1.83	1.87	1.91	2.02	2.15	2.42	2.59	2.90	3.10	2.61	2.99	3.28	2.96	1.94
Malaysia	3.01	2.80	3.33	3.24	4.20	3.40	4.20	4.46	3.95	4.26	4.70	4.56	4.85	5.40	5.69	6.08	5.84	5.61	5.57	5.68	4.54
Philippine	0.49	0.30	0.38	0.45	0.56	0.71	0.90	1.01	1.38	1.60	1.67	1.80	1.76	1.90	1.77	1.72	1.81	1.72	1.57	1.68	1.26
Singapore	7.39	7.96	7.92	8.86	9.37	8.59	8.04	7.74	7.04	7.40	7.19	6.40	6.33	5.86	5.86	5.70	5.43	5.40	4.84	4.64	6.90
Brunei	0.37	0.32	0.33	0.26	0.22	0.25	0.22	0.13	0.07	0.18	0.40	0.33	0.37	0.23	0.23	0.12	0.08	0.07	0.06	0.08	0.22
Cambodia	0.02	0.02	0.22	0.32	0.38	0.35	0.31	0.32	0.32	0.34	0.27	0.38	0.39	0.45	0.39	0.41	0.49	0.48	0.60	0.58	0.35
Laos	0.19	0.18	0.22	0.28	0.35	0.30	0.32	0.36	0.40	0.43	0.35	0.39	0.37	0.36	0.37	0.44	0.59	0.61	0.68	0.73	0.40
Myanmar	0.31	0.01	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.47	0.58	0.92	0.93	0.86	1.03	1.09	1.19	1.11	1.45	1.51	0.58
Vietnam	0.20	0.21	0.21	0.24	0.29	0.36	0.41	0.58	0.82	0.74	0.89	0.88	0.89	1.03	1.21	1.42	1.53	1.68	1.80	2.11	0.88
ASEAN	12.60	12.45	13.40	14.51	16.28	15.05	15.73	16.42	15.87	17.32	18.08	17.81	18.32	18.68	19.45	20.08	19.58	19.68	19.84	19.97	17.06

Trade Intensity Index, Brunei as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Indonesia	0.59	0.52	0.66	1.38	1.65	1.16	0.80	0.91	0.91	3.27	1.12	1.24	1.32	2.57	4.93	15.50	16.58	15.78	17.62	7.01	4.78
Malaysia	4.05	3.69	4.34	4.65	7.46	6.92	6.47	7.56	6.01	9.26	6.03	6.55	5.64	7.43	5.87	5.48	4.95	4.80	4.57	5.87	5.88
Philippine	3.42	2.71	2.36	1.28	1.04	0.45	0.23	0.22	0.10	0.19	0.09	0.10	0.49	0.07	0.08	0.15	0.08	0.06	0.67	0.34	0.71
Singapore	12.93	11.47	15.95	12.76	18.45	19.69	16.95	15.03	19.39	13.53	15.54	13.25	13.72	8.06	11.02	9.32	9.18	8.09	8.75	11.56	13.23
Thailand	6.47	6.50	6.28	6.12	7.40	7.07	7.31	8.00	1.79	8.79	11.04	8.46	9.02	8.17	6.78	3.55	2.30	1.83	1.65	2.56	6.05
Cambodia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00
Laos	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Myanmar	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.05	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Vietnam	12.45	5.72	2.86	3.58	3.53	4.76	3.58	0.89	1.39	2.26	2.75	0.38	2.48	2.39	1.88	1.51	1.33	1.28	1.06	1.69	2.89
ASEAN	39.90	30.61	32.45	29.76	39.53	40.06	35.35	32.64	29.64	37.31	36.59	29.98	32.67	28.70	30.56	35.52	34.42	31.84	34.32	29.04	33.54

Bilateral Trade Intensity Index, Cambodia as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Indonesia	12.45	5.72	2.86	3.58	3.53	4.76	3.58	0.89	1.39	2.26	2.75	0.38	2.48	2.39	1.88	1.51	1.33	1.28	1.06	1.69	2.89
Malaysia	15.33	9.52	2.46	2.06	5.42	5.10	3.39	0.66	0.36	2.47	2.90	1.07	2.57	2.69	2.03	1.82	1.48	1.58	1.38	1.64	3.30
Philippine	1.76	0.00	0.07	0.00	0.02	0.02	0.15	0.02	0.19	0.15	0.14	0.24	0.00	0.00	0.15	0.14	0.14	0.09	0.07	0.16	0.18
Singapore	0.00	0.00	30.94	34.01	32.31	30.49	31.71	4.60	6.61	12.29	4.87	15.54	4.71	4.25	3.64	3.70	4.52	5.28	4.37	7.78	12.08
Thailand	9.69	13.04	17.14	23.40	28.76	26.60	22.98	18.92	11.90	9.36	9.60	18.59	7.79	6.50	5.83	5.50	6.57	14.51	7.44	5.48	13.48
Brunei	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00
Laos	0.00	0.00	0.00	0.22	0.17	0.13	0.14	0.00	0.00	0.01	0.12	0.03	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.01	0.04
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00
Vietnam	17.40	9.77	1.43	9.03	7.25	6.50	6.50	15.19	12.92	8.43	4.36	4.87	4.14	4.52	4.95	4.09	5.27	12.58	6.71	6.86	7.64
ASEAN	56.63	38.05	54.90	72.30	77.47	73.59	68.45	40.31	33.37	34.99	24.75	40.74	21.69	20.35	18.49	16.78	19.32	35.33	21.04	23.63	39.61

Bilateral Trade Intensity Index, Laos as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Indonesia	0.04	0.04	0.07	0.00	0.00	0.00	0.00	0.02	0.20	0.15	0.19	0.16	0.08	0.28	0.11	0.10	0.17	0.20	0.10	0.08	0.10
Malaysia	0.30	0.07	0.05	0.00	0.00	0.00	0.00	0.11	0.17	0.12	0.19	0.20	0.32	0.28	0.18	0.95	1.80	1.24	0.27	0.22	0.32
Philippine	0.01	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.02	0.02	0.04	0.02	0.01	0.02	0.01	0.01
Singapore	0.00	0.00	1.41	2.89	1.71	1.76	1.75	0.14	2.24	3.51	3.12	2.67	2.67	1.82	2.70	2.31	1.61	1.29	0.65	0.93	1.76
Thailand	52.89	53.74	47.11	35.63	40.20	41.23	40.26	61.77	43.35	39.61	45.13	48.64	47.74	47.81	46.75	53.42	56.56	54.62	56.42	51.21	48.20
Brunei	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cambodia	0.00	0.00	0.00	0.45	0.30	0.31	0.30	0.00	0.00	0.02	0.32	0.08	0.00	0.00	0.00	0.02	0.04	0.04	0.02	0.02	0.10
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vietnam	9.93	2.94	6.80	6.37	12.00	12.40	18.15	4.20	19.72	28.41	16.08	12.11	11.55	9.00	8.98	8.38	9.04	9.11	9.32	8.52	11.15
ASEAN	63.17	56.83	55.45	45.33	54.20	55.70	60.46	66.24	65.68	71.84	65.04	63.87	62.37	59.20	58.73	65.22	69.25	66.52	66.80	61.00	61.65

Trade Intensity Index, Myanmar as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Indonesia	1.23	0.62	1.48	2.68	2.93	4.57	2.99	4.56	5.50	2.53	1.82	1.79	1.54	1.06	1.24	1.36	2.01	3.03	2.23	1.76	2.35
Malaysia	3.74	5.60	6.69	7.77	10.83	8.19	7.23	11.48	10.71	7.90	6.32	5.44	5.81	3.78	3.95	5.38	3.50	3.43	3.74	2.94	6.22
Philippine	0.08	0.05	0.04	0.02	0.06	0.06	1.13	0.26	0.20	0.27	0.26	0.18	0.10	0.11	0.16	0.15	0.12	0.11	0.11	0.11	0.18
Singapore	15.37	23.63	22.38	21.89	22.51	25.24	25.51	23.40	17.45	14.04	11.54	10.73	11.77	13.21	11.82	10.37	8.10	8.73	11.00	8.77	15.87
Thailand	6.38	0.26	0.00	0.00	1.16	1.03	0.00	0.00	0.00	13.72	15.69	21.29	20.73	21.85	28.66	32.97	35.26	30.27	36.00	34.27	14.98
Brunei	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.06	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Cambodia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00
Laos	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vietnam	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.09	0.07	0.19	0.18	0.23	0.51	0.50	0.75	0.91	0.89	0.77	0.74	0.30
ASEAN	26.86	30.17	30.58	32.36	37.49	39.11	36.90	39.83	34.01	38.55	35.84	39.63	40.19	40.53	46.33	50.99	49.89	46.46	53.87	48.59	39.91

Trade Intensity Index, Vietnam as reporter

Partner	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Indonesia	0.45	1.41	0.85	1.55	1.53	1.74	1.04	1.16	2.78	3.04	1.97	1.78	1.91	2.24	1.91	1.69	2.33	2.25	1.76	1.37	1.74
Malaysia	0.11	0.44	1.76	1.17	1.32	2.15	1.48	1.72	1.77	2.41	2.67	2.57	2.83	3.04	3.15	3.30	3.23	3.45	3.17	2.70	2.22
Philippine	1.13	0.24	0.03	0.05	0.19	0.47	0.86	1.30	2.27	1.89	1.80	1.35	1.14	1.06	1.18	1.50	1.33	1.24	1.54	1.23	1.09
Singapore	12.88	24.56	20.58	20.82	17.60	15.13	17.72	15.66	13.12	11.83	11.89	11.27	9.59	8.59	8.73	9.25	9.54	8.85	8.40	6.88	13.14
Thailand	1.29	1.54	1.90	2.48	3.27	3.87	3.21	3.79	4.70	3.76	3.93	3.57	3.24	3.56	4.06	4.68	4.68	4.29	4.36	4.51	3.53
Brunei	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Cambodia	0.31	0.25	0.22	1.50	0.96	0.85	0.62	0.63	0.57	0.44	0.59	0.54	0.67	0.80	0.88	1.03	1.12	1.12	1.14	0.90	0.76
Laos	0.37	0.15	0.40	0.81	1.25	0.75	0.50	0.39	0.99	1.56	0.59	0.42	0.35	0.25	0.24	0.24	0.31	0.29	0.29	0.29	0.52
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.03	0.03	0.04	0.07	0.06	0.08	0.10	0.09	0.08	0.07	0.03
ASEAN	16.55	28.59	25.73	28.39	26.14	24.96	25.44	24.66	26.22	24.94	23.47	21.53	19.77	19.61	20.21	21.77	22.63	21.57	20.76	17.95	23.04