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Intra-Industry: The Philippines in AFTA

by

Florian A. Alburo

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ABSTRACT

The early emphases of ASEAN economic cooperation on country specialization, upstream industries based on resource endowments, and industrial complementation were misplaced. Much of global trade expansion has been intra-industry trade fueled by multilateral trade liberalization and common market formation, as in Europe. The traditional doctrines of Heckscher-Ohilin-Samuelson had less to do with trade in industrial products. And since ASEAN economic cooperation, and now AFTA, has always concentrated on manufactures, including processed agriculture, then an intra-industry trade framework seems more suited to its analysis and understanding.

The paper shows substantial intra-industry trade of the Philippines with ASEAN among the 15 product groups identified for accelerated liberalization, even in 1991, two years before the start of AFTA. This augurs well for larger prospects.

The paper argues for specific ways and broad policy directions to capture more gains from AFTA.

Intra-Industry Trade: The Philippines in AFTA

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Introduction: Genesis of ASEAN Economic Cooperation

Since it began to include economics as integral to the overall ASEAN scenery, a major underlying framework for ASEAN economic cooperation is that the member countries would somehow find some specialization among traded goods from which gains accrue.

The decision on the allocation of upstream industrial projects according to the (original) five ASEAN states followed the notion of factor endowments and traditional comparative advantage. Each country had an ASEAN project -- e.g. rock salt-soda ash in Thailand, super phosphate in the Philippines, fertilizer in Indonesia, urea in Malaysia and hepa B-vaccine in Singapore. Called the ASEAN Industrial Project (AIP), these would "...utilize the available materials in the member states, contribute to the increase of food production, increase foreign exchange earnings or save foreign exchange ..." (Declaration of ASEAN Concord B (2)(ii)).

The "final" allocation was a quite different picture from that initially agreed upon. Problems of market size, profitability, equity ownership, and bureaucracy bogged down the concept of complementarity. For instance, the Philippines came up with a copper fabrication project later (after a pulp and paper project before). The availability of Japanese soft loans could not remove the bottlenecks the scheme created.

Undaunted by the difficulties involved in AIP, ASEAN went into an industrial complementation program which was principally a private sector affair. Under the scheme (AIC), member countries would be allocated complementary products in industrial sectors for production and supported by preferential trade (initially at 50 percent). There was an AIC for automotive products but did not really flourish for a variety of reasons similar to AIP. In fact the conflicts in framework and approach within ASEAN triggered the Singapore proposal of a five-minus-one principle that allowed it not to actually participate.

Along the same lines as AIP and AIC, the ASEAN Industrial Joint Venture (AIJV) was a concept of the private sector, more flexible than the other complementation schemes and undertaken by any two member states. But the concept remained the same i.e. countries specialize, this time dictated not by market forces but by the plans of business groups in the region. From the governments were asked tariff preferences among the participating countries. It was no surprise that the inititial AIJV were on automotive related products (Chng, 1985).

Even trade liberalization, exercised by ASEAN through the Preferential Trading Arrangements (PTA), implied a similar framework. The actual behavior of the ASEAN states in the PTA was not really to promote trade even if there were a lot of items under the PTA, or that the margins of preferences (MOP) were raised. Evaluations of the early PTA show that MOPs were given to products the ASEAN states did not trade (e.g. Tan, 1982). Put

which each one considered its comparative advantage and thus agreed to concessions for products of no consequence to its trade patterns. In fact, the PTA led to the emergence of extracts in the tariff codes of ASEAN to account for products neither traded nor produced in the region. The improvements in the PTA in the form of across-the-board concessions or the automaticity of MOPs were nullified by the exercise of an exclusion list for sensitive items. And since these individual exclusion lists were not harmonized, the scope for real intra-ASEAN trade was effectively narrowed down.

This implied concern for specialization, the existing protective structure of ASEAN economies, the traditional magnitude of non-ASEAN trade and the limited means for intra-ASEAN trade (that the ineffective liberalization did not push) provided little opportunities for interaction within ASEAN despite its growth exhuberance in the recent past (with the exception of the Philippines). Intra-ASEAN trade has not really exceeded 20 percent since schemes for economic cooperation were started. Deduct from this the magnitude of Singapore-Indonesia transit trade and the figure drops dramatically to less than 10 percent. And if we remove the weight of petroleum trade (in both exports and imports) intra-ASEAN trade would be even lower. One must recognize however that there has been an increase in intra-ASEAN trade despite the decline in Singapore-Indonesia trade in the recent past (Naya, 1987).

An emphasis on a traditional trade framework for ASEAN economic cooperation immediately limits ASEAN's potential. The Wansu Report, focusing on the need for regional projects according to resource conditions of the ASEAN members, did not help the narrowness of the framework either. Since the ASEAN members are similar in factor endowments, or level of development (with the exception of Singapore), or industrial structure or export and import products, the scope for trade among them becomes fairly limited. Note that the scope implied is really along the Ricardian, Heckscher-Ohlin-Samuelson type of gains from trade underneath comparative advantage and inter-industry trade.

It is perhaps fortunate that the various schemes described earlier did not materialize to a significant degree. One can just imagine the social costs involved in keeping large industrial projects according to a grand plan when market forces say otherwise. ASEAN states then may have had to constantly intervene in order to protect the specializations among members. It is also doubtful whether each member would have gained from force-allocation within ASEAN without huge trade diversion losses.

We are reminded of the famous assertion of Harry Johnson that Britain's joining the European Economic Community would only gain her about 1 percent of her GNP. This clearly ignored the additional gains from intra-industry trade that liberalization would stimulate - in turn arsing from economies of scale, intra-firm specialization, industry restructuring, technology transfers and adaptations, and other dynamic effects. It seems that more

intra-industry trade, and less inter-industry trade, has been the outcome of integration efforts among countries with similar resource endowments or levels of development, as in the case of Europe.

The recent operationalization of the ASEAN Free Trade Area (AFTA) as basis for deeper economic integration in ASEAN offers an interesting area for both re-examining the existing framework of its economic coperation and measuring its likely effects. This paper attempts to explore intra-industry trade as a departure point for the Philippines' participation in AFTA. It is too early for a rigorous examination of intera-industry trade between the Philippines and ASEAN in the context of AFTA. But there already is significant amount of such trade going on especially for some products identified for accelerated liberalization. We argue that this indicates a gain for the country.

Accordingly the next section briefly outlines some of the basic features of intra-industry trade as an integration framework for ASEAN. Section III looks at the Philippine participation in AFTA in terms of product coverage within the Common Effective Preferential Tariff (CEPT) program. In the fourth section, we look at the empirical evidence of intra-industry trade for the Philippines with ASEAN. Finally, we attempt to assess the prospects of the Philippines in AFTA and some of the adjustments essential to a fruitful participation.

II. Intra-Industry Trade: An Integration Framework

In this section, we briefly outline some salient results (rather than the rigorous processes) of the theoretical foundations of intra-industry trade (IIT) as they are relevant to subsequent discussions. For sure, its basic elements have been studied before though much of sharper theoretical as well as empirical focus is more recent (e.g. Linder, 1961).

Along classical and neoclassical traditional comparative advantage doctrine, trade was triggered by differences in factor endowments and technology. In the Ricardo and Hecksher-Ohlin-Samuelson sense, the more pronounced these differences (among countries), the larger the scope for trade. It is apparent that the gains from exchange and specialization would be equally larger. Trade in this setting is between products of different industries with different factor proportions i.e. inter-industry trade. Setting aside problems of distribution, the proposition that trade (free or restricted) is better than no trade immediately follows.

The neat results of the classical and neoclassical doctrines are of course a function of some stringent assumptions used including homogeneous products traded, perfect competition, constant returns to scale, etc. Notwithstanding these, they have been able to predict the patterns of trade among countries and the evolution of inter-industry trade. Indeed the dire consequences of this kind of trade patterns voiced by Prebisch testifies to its validity.

Yet the expansion of trade in at least the last decade has been fueled more by trade among developing countries than between them. Moreover, within these regions, exchange of products in the same industries has taken on significant importance. Clearly, these kinds of trade are between countries with similar factor endowments, a departure from the mold of traditional doctrines. In fact, trade and exchange of goods within regions has grown substantially in recent years, and where regional trade liberalization was taking place, as in the European Community, intra-regional and intra-industry trade were equally dominant.

What explains this phenomenon are two interrelated factors—
the existence of scale economies in industries especially
manufactures, and market structures that are monopolistically
competitive. The former asserts that even if two countries have
similar technologies in particular industries, costs are lower
where markets (i.e. output produced) are larger, other things being
equal. The latter implies that there exists consumer loyalties to
differentiated products such that there really is no homogeneity to
industry output and in a sense demand for any product is like a
monopoly demand. Entry of other firms (induced by monopoly
profits) producing similar products drives out excess profits.
Output expansion also lowers costs because of economies of scale.

What international trade does under these circumstances and factors is to enlarge markets and, in countries with similar industries, allow more product choices and varieties, both of which lead to lower costs (or higher productivities) and variety specialization. In trading countries with similar factor endowments there will both be inter-industry as well as intra-industry trade. Both will produce manufactures but for some industries both will be producing differentiated products.

In trade where IIT is dominant, there are several features worth pointing out. The trading countries generally have similarity of factor supplies, comparable levels of development, and manufacturing industries where economies of scale and product differentiation are important. Expansion of manufactures trade enlarges markets such that individual countries can reduce their number of products (achieving economies of scale) and increasing variety to customers. Which country will specialize in which products cannot really be determined a priori and would depend on initial conditions and adjustments.

The predominance of IIT raises two specific implications relevant to our standard explanation of international trade under the classical-neoclassical doctrine. The first is that the notion of gains and losses from international trade becomes less magnified, and is in fact fuzzy under conditions of intra-industry trade. No industries in one country are generally displaced by other industries. Similar industries exist between trading countries. This is unlike inter-industry trade where even strong specialization takes place.

The second, and related to the first point, is that adjustments take place more at the firm level than across all industries. There are really no dramatic resource movements from

one industry to another, no large adjustments by specific factors, no major capital retirements, and thus less structural unemployment. The reason is because firms produce differentiated products and trade induces them to reduce or narrow down product varieties to a limited number (but with larger scale) instead of ceasing production altogether. of course this does not mean that no firms actually lose out.

Thus, in addition to comparative advantage as triggering international trade, economies of scale and monopolistic competition likewise are independent sources of trade. What appears to be responsible for these to take place is not really a search for absolute cost competitiveness but progressive participation and liberalization in the exchange of goods, especially manufactures, between countries. The experience of the common market in Europe attests to the strength of IIT in inducing a rapid expansion of trade without causing large structural dislocations in the trading countries and an overall gain to all sectors (Krugman and Obstfeld, 1988).

III. The Philippines in AFTA

Since its establishment, ASEAN has always shied away from instituting itself as a free-trade-area (FTA) in the sense of what Europe followed. It was only in the 1992 Summit that an FTA was officially accepted as an objective of the grouping i.e. an ASEAN Free Trade Area (AFTA).

AFTA is centered around the Common Effective Preferential Tariff (CEPT), a rate applicable to goods exchanged among or originating from the ASEAN member states. It is a discriminatory tariff schedule applicable to the six ASEAN states. There is a specific rate at which ASEAN aims for, ranging from 0 to 5 percent. Thus if the CEPT rate is reached, ASEAN becomes a real free trade area.

The CEPT is to be implemented over a span of 15 years which at the end of the period tariff rates for ASEAN states for agreed products shall be 0-5 percent. The implementation shall be done in two stages. The first - for products whose tariff rates are above 20 percent - aims to bring the rates to 20 percent within 5-8 years with an encouraged formula of equal annual percentage reduction. Subsequently, the reduction from 20 percent to 0-5 percent shall be within 7 years and a minimum rate of reduction of 5 percent per reduction.

The second - for products whose tariff rates are 20 percent or below - aims to bring the rates to 0-5 percent. Here the agreement calls for unilateral decision by member states of an announced schedule for reduction without a minimum percentage cut nor time frame.

The coverage of CEPT includes all manufactured products, processed agricultural goods, and capital goods at the Harmonized System (HS) 6-digit level. Agricultural products are excluded from CEPT. Apart from the absolute exclusion of agricultural products, exclusions at the HS 8/9 digit level are allowed for those members

of ASEAN which define certain manufactured goods as sensitive. Unlike the enhanced PTA of the Third ASEAN Summit, the CEPT agreement does not specify a ceiling for the magnitude of the exclusion list. It does provide for a final exclusion list after 8 years.

There are other elements to the AFTA. There is the removal of quantitative restrictions which members commit to after inclusion of products into the CEPT. Moreover members are to eliminate non-tariff barriers within 5 years from the start of the CEPT concessions. Other steps include harmonization of standards, reciprocal recognition of tests, removal of barriers to foreign investments etc.

The CEPT as the core of a free trade area, is a vast improvement to the previous PTA. The latter becomes integral to the CEPT where the applicable tariff rate for consideration is net of the MOP. Not only is the theoretical notion of a free trade area satisfied in CEPT but the eventual processes for further cooperation. Indeed the tariff rate for trade among the ASEAN states would be similar for agreed products.

As if in anticipation of the protracted delay in deciding on common products for CEPT (experienced in the enhanced PTA processes), in drawing in private sector involvement and support, and in formalizing decisions, the Fourth ASEAN Summit went on to identify 15 product groups for accelerated tariff reduction.

There is no rationale given in the selection of the 15 product groups. After all, there is no clear official picture of the ASEAN

economic landscape in the long-run either. Indeed the product coverage does not seem to be consistent with the provisions of the Agreement on CEPT. For example, the 15 product groups cover whole Chapters of the HS code (2 digit) with only one (copper cathode) satisfying the provision for inclusion (Article 2(3)) as being at the HS 6-digit level - in this case HS 7403.11. Others are at 5-digit HS level (e.g. wooden/rattan furniture) or 4-digit . In other words, the 15 product groups for acceleration in CEPT are ad hoc.

Yet it is noteworthy that by the specification of 15 product groups for accelerated CEPT, a starting point had been spelled out, it circumscribed much of the country work along them, and it prevented a long gestation period of arriving at products for consideration in the CEPT.

The question seems to be whether the initial product coverage for CEPT forms a significant part of Philippine-ASEAN trade. This will then indicate the degree to which CEPT will enhance the integration scheme into AFTA.

Although the Philippines will be participating in AFTA beginning 1993, its operating tariff guidelines are actually those found in Executive Order No. (E.O.) 470 which ends in 1995. Beyond that the country draws up a tariff reduction program consistent with CEPT.

Table 1 shows the list of tariff lines the Philippines has included in the 15 product groups for accelerated tariff reduction under the agreement of the Fourth ASEAN Summit. It also shows the

relevant chapters in the HS code (column 1), description (column 2) and the range of existing tariff rates among those included in the program (columns 3 and 4). In the coverage, a large portion of these lines (83.8 percent) have rates below 20 percent.

How important are the 15 product groups to Philippine trade with the individual ASEAN member states is indicated in Table 3. The share of the 15 products in Philippine exports to and imports from each state in 1991 is reported in the Table. The share in exports ranges from 39.1 percent for Brunei to 79.3 percent for Malaysia. On imports, the share ranges from none from Brunei to 59.5 percent from Thailand. The average share is 69.4 percent in exports and 43.5 percent for imports.

The magnitude of Philippine trade with ASEAN remains small although rising over the years. In 1991 the share of ASEAN trade to overall trade stood at 24 percent (7 percent of total exports and 17 percent of total imports). This is slightly above the size of intra-ASEAN trade.

Assuming a full participation of the Philippines in the accelerated program of CEPT, the coverage will affect 50 percent of all its ASEAN trade. In addition the country's participation in regular tariff rate reductions over the lifespan of CEPT can raise the coverage beyond 50 percent in value to total ASEAN trade. This is definitely more significant than its participation in the enhanced PTA program of the Third ASEAN Summit.

When we now consider the list of Philippine products in the accelerated CEPT relative to the total number of lines implied in

the program, the significance of the coverage, whether in terms of just ASEAN trade or overall trade, diminishes rapidly. Table 3 presents the data showing a 45 percent coverage share for the country in the accelerated CEPT. This Philippine coverage hides a wide variation among the 15 product groups. There is a full participation in some (e.g. cement, pulp, and copper cathode, closely followed by fertilizers and rubber products) while in others the extent does not go beyond 20 percent (e.g. leather/leather products and textile/textile articles).

In the finalization of the country's list of products for inclusion in AFTA, the coverage can possibly increase further. The important meaning of product coverage for the country is two-fold. One is that to the extent that it is high (e.g. 100 percent as in cement, pulp, and copper cathode), then that is the extent to which our products also attain access to other ASEAN markets at CEPT rates. Conversely, the less coverage, the less the scope for reciprocal trade concessions. The other is that the degree to which we use product coverage as protective vehicle reflects an implied framework of specialization and comparative advantage.

IV. Intra-Industry Trade: Some Empirical Evidence

This section attempts to give orders of magnitude to IIT by focusing on the 15 product groups for accelerated tariff reduction. It is argued here that there already exists substantial IIT between the Philippines and ASEAN which constitutes a significant part of the current trade among the 15 product groups.

What we need is an index of IIT which shows the proportion of intra-industry trade to total trade for a specific industry. A general measure of this, the Grubel-Lloyd index, is defined as

$$R_{ij} = -\frac{|X_i - M_i|}{(X_i + M_i)}$$
 . 100

where R_{ij} is the IIT index for industry i in country j, $|X_{ij} - M_{ij}|$ is net exports or imports, respectively, in industry i, and $(X_{ij}$ + M_{ij}) is the value of total trade. R_{ij} 's value ranges between zero (when either X_{ij} or M_{ij} is zero so that there is no IIT in i) and 100 (when $X_{i,j} = M_{i,j}$) so that all trade in i is IIT. Where there is substantial amount of intra-industry trade we would see a country exporting and importing similar but not identical products within the same trade classification (e.g. beer exports and beer imports of different varieties). The absolute trade balance also measures inter-industry trade. In the pure trade doctrine, all trade is inter-industry trade so that in the aggregate trade balances but their components are of different industries. The actual measure of IIT may therefore be sensitive to the level of aggregation chosen. The IIT index can also be calculated bilaterally for trade between specific countries in specific industries.

Independent estimates of IIT for the Philippines show that there has been a substantial increase, with the world and with the ASEAN countries. Table 4 presents IIT indices between 1970 and 1990 for 3-digit SITC industries for all commodities as well as with 3-digit manufacturing industries (SITC 5-8). Notice the increasing magnitude of intra-industry trade from 0.07 in 1970 to 0.42 by 1990. At least between the two periods considered, the highest scale of intra-industry trade occurred between the Philippines and Singapore.

It was pointed out earlier that this kind of trade is triggered by the economies of scale and monopolistic competition (differentiated products) factors. Thus if we can classify various industries into some categories that narrow them down, the degree of IIT might have more meaning. A recent study classifies manufactures by factor use i.e. natural resource-intensive products (e.g. leather, wood, iron, copper, nickel etc. manufactures), unskilled labor intensive products (e.g. textile and fabrics, garments, furniture, footwear, toys etc), technology-intensive products (e.g. chemicals, medicinal and pharmaceutical, machinery, data processing machines, semi-conductors, scientific instruments, etc.), and human capital-intensive products (e.g. perfumery, soap, articles of paper, TV/radio receivers, motorcars, watches, musical instruments, etc). Table 5 reports the indices for Philippine IIT between the period of the late seventies and the late eighties.

Notice the dramatic increase in IIT for technology-intensive products in just a decade from 0.13 in 1979 to 0.40 in 1988, which is what is to be expected from the framework sketched out earlier. In terms of an aggregate IIT of the Philippines with ASEAN-3 (Indonesia, Malaysia, and Thailand), the index also rose from 0.09

to 0.23. There has also been an increasing IIT of the country with North America (from 0.05 to 0.29).

This evidence of increasing IIT is not only true of the Philippines but obviously of the other ASEAN states. But the usual reference point for the magnitude of IIT is really the scale in the U.S. and Western Europe where significant amounts of trade within themselves have taken place partly as a result of the general reduction of barriers to trade in manufactures. For instance, the U.S. IIT with Europe was 0.56 in 1988 compared with its IIT with Pacific Asia of 0.26.

On the 15 product groups for accelerated liberalization in AFTA, Table 6 gives the share of the top 4 exports and imports to the total exports to and imports from ASEAN. Notice that 3 out of the 4 top product groups are common to both exports and imports. While there appears to be more diversification of imports (in the sense that the top 4 constitutes 79.2 percent of imports from ASEAN) than exports (where the top 4 share 90.9 percent of exports to ASEAN), what is striking is the similarity of goods traded. In fact fertilizers come as the next important imports from ASEAN.

What Table 6 implies is that there is a large amount of exchange of goods between the Philippines and ASEAN that are similar or belonging to the same industry classification. This does not mean the goods are identical but may be complementary or integral to industrial processes that are becoming more interdependent and vertically integrated. On the other hand, where final products are involved, intra-industry trade merely reflects

wider consumer choices. Even at the 4-digit HS level (e.g. chemicals and electronics) the overlap seems apparent.

Table 7 gives intra-industry trade indices for the 15 products. They support the general notion of trade in similar products that Table 6 shows. There is a high intra-industry trade for example with Singapore in electronics, rubber products, and textiles. With Indonesia intra-industry trade dominates in chemicals; with Malaysia and Thailand, it is rubber and leather products, respectively.

A cursory look into the detailed trade flows would lend further support to the intra-industry nature of activities. textiles, a large amount of imports from Malaysia constitute intermediate goods like synthetic staple fibers, woven fabrics, other cotton fabrics, while exports to Malaysia contain mostly twine fibers, woven fabrics, and napkin liners. On the other hand for the same industry, exports to Singapore have been in finished products (e.g. dresses, shirts, babies garments) while imports from Singapore have been intermediate products like weave fabrics, denims, dyed woven fabrics and crocheted fabrics - all belonging to the same industry classification code. Although one can point out competitiveness among the 15 products for accelerated CEPT by using similar technical and manufacturing processes, to the extent that even multi-product firms can further specialize, the intra-industry trade translates as part of vertical integration and become complementary. Of course, the initial stages of tariff reduction

along specific HS lines lead to further product efficiencies which can then point to where advantages lie.

From Table 7 we can see that while the various factorintensity classifications are represented in the IIT indices, three
of them (chemicals, pharmaceuticals, electronics) are considered
technology-intensive industries/products. In fact, in one
estimate, the IIT indices for semi-conductor/integrated circuits
and other electronic equipment were as high as 0.55 and 0.93,
respectively, in 1985 (Yokota and Imaoka, 1993).

Scattered causal analysis of what explains IIT reveals that the factors argued to trigger it, noted in II above, explain in large part the emergence of intra-industry trade dominance in recent years (Drysdale and Garnaut, 1993; Fukasaku, 1993). In particular, participation in some form of regional trading arrangement has been a significant determinant of IIT. Wider disparities in levels of development (measured by differences in per capita income) lower the magnitude of IIT. Although there are yet no hard estimates of the importance of intra-firm transactions and the participation of multi-nationals, it is likely that these are important factors influencing IIT.

V. Prospects

In the evolution of AFTA, 15 product groups have been selected for accelerated tariff reduction as a first step towards an eventual 0-5 percent rates in manufactures for all of ASEAN. This paper has shown some evidence of substantial intra-industry trade of the Philippines with ASEAN among these 15 product groups. This existing type of trade, latent already with ASEAN, augurs well for larger prospects.

This is not unexpected. After all, since the focus of AFTA is on manufactures trade, industries here would usually be subject to economies of scale and product differentiation. These features follow the integration framework underlying intra-industry trade.

It turns out that the early emphases of ASEAN economic cooperation on country specialization, upstream industries based on resource endowments, and industrial complementation were misplaced. Much of global trade expansion has been intra-industry trade fueled by multilateral trade liberalization and common market formation, as in Europe. The traditional doctrines of Hecksher-Ohlin-Samuelson had less to do with trade in industrial products. And since ASEAN economic cooperation, and now AFTA, has always concentrated on manufactures, including processed agriculture, then an intra-industry trade framework seems more suited to its analysis and understanding.

The magnitude of intra-industry trade among the 15 product groups for accelerted CEPT is quite dramatic even in 1991, two years before the start of AFTA. The scales are particularly significant for trade with Indonesia, Malaysia, and Singapore. In Philippine exports to Indonesia in 1991, 77 percent are also our imports consisting of chemicals, vegetable oils, and electronics. In our exports to Malaysia, 88 percent are intra-industry transactions mostly in vegetable oils, pharmaceuticals, rubber

products and electronics. Almost 70 percent of Philippine exports to Singapore are likewise imports from that countryin the same industries i.e. rubber products, textiles, and electronics. Suprisingly, very little of our exports to Thailand are intraindustry related. Of the \$138.3 M exports in 1991, about \$120 M are inter-industry trade - fertilizer exports of \$33.3 M (and zero imports of fertilizer) and electronics exports of \$85.2 M (and \$6.7 M imports of same products).

There are several observations that we can make out of the results of this study. First, the exchange of goods between the Philippines and ASEAN that are similar or belonging to the same industries is real. The previous section noted several intermediate products that are traded in the same industries either driven by vertical integration or simply by varietal differences in product configuration. This kind of trade is only one among many other forms of intra-industry trade. At the consumer end, we have yet to see trade in the same things but different brands and varieties (exchanges of different beer brands, custom-built refrigirators, consumer electronics varieties, etc.). Indeed IIT now is not confined merely to exchanges among multinational corporations or "North-North" context but along a wider landscape. The increasing globalization of manufacturing activities involving different countries and contracting arrangements among all firm sizes (not necessarily multinational) all point to the strength of economies of scale and product differentiation as driving trade.

The Philippines has yet to be in the thick of the whole continuum of intra-industry trade.

Second, in the context of IIT between the Philippines and ASEAN, there are really no major losers. It is therefore erroneous to examine winners and losers in a freer ASEAN trade, and especially in the face of AFTA. Unlike the classical/neoclassical trade doctrines where resource tranfers and reallocations take place after trade, in IIT there are really no industry disclocations. Since adjustment costs are lower it can be argued that in such a trade everybody gains. More specifically, producers gain as a result of an enlarged market, economies of scale, and greater productivities. Consumers gain as a result of more product varieties to choose from and lower prices. From an oveall economy point of view, AFTA implies gains for the Philippines in terms of intra-industry trade.

This does not mean no individual (micro) firms will lose out or close shop especially those at the margin. What the IIT framework implies is that domestic firms adjust to a new setting within the same industry - more firms from other countries, more differentiated products, but also more economies of scale. The adjustment may take the form of concentrating on fewer products (or varieties) and other "niches"; but for some, actual withdrawal may be more viable, or a further domestic consolidation.

There is also another source of aggregate industry dislocation, apart from that induced by IIT. This would be the case where industrial structural incentives continue to be

distorted by trade policies. In the case of the Philippines, these distortions continue to be substantial. However, in the context of ASEAN trading schemes, what is clear is that with their limited liberalizing scope, IIT has been significant.

Instead of identifying winners and losers in AFTA, it would be more useful to look at the 15 product groups and see where our entrepreneurs can achieve economies of scale, improve productivities and capture enlarged markets. This may rquire narrowing product lines (fewer models or varieties), concentrating market bases in ASEAN (upscale or mass markets), and engaging in strategic alliances to supply intermediate products or be part of globalized manufacturing processes. Indeed a larger IIT is now termed "intra-industry, intra-firm, and inter-processed trade" (Fukasaku, 1993).

Finally, the Philippines, at this stage of its trade with ASEAN, is still at an early phase of achieving full potentials of intra-industry trade. This can be enhanced by abandoning two commonly-held and interrelated views. One is that the Philippines has to specialize in certain industries in which it is efficient across most product groups and thus achieve a trade surplus there. We must therefore identify what these are (the winners) and support them with the "right" interventions, including exclusion from the CEPT. Yet it was already pointed out that it is precisely the exchange of products within industries that stimulate where specializations take place and "niches" evolve through market

forces. What is more, the element of "winner" in ITT is quite unstable if not unpredictable.

The other is that the Philippines must achieve global, if not ASEAN, competitiveness i.e. be absolutely efficient if it is to gain from AFTA. Thus our industries clamor for a "level playing field" in terms of comparable energy costs, wage rates, interest rates, etc. throughout the cost spectrum. Yet we know that production input combinations differ across countries according to internal cost structures even if technology is similar. The point to make is that it is not really absolute advantages that matter as much as relative advantages which only emerge with participation in international trade and market forces, not exclusion from tariff reductions.

These observations on the intra-industry trade patterns between the Philippines and ASEAN suggest a number of policy insights. One is that the country should gear itself for AFTA with less exemptions from CEPT and more participation so that our latent "niches" will become apparent. Another is that export competitiveness should be focused less on operational problems and more on the trade environment. One often hears the argument that exchange depreciation will not affect competitiveness because it cuts across all industries uniformly. But this ignores wide variations in demand which will change responsiveness of export products. Macroeconomic policy stability needs to be pursued with vigor and continuity. Then greater, if not accelerated, trade liberalization in ASEAN can further stimulate intra-industry trade.

Finally, the country ought to pursue wider liberalization in tandem with ASEAN i.e. a multilateral framework consistent with the globalization of the country's manufactures.

University of the Philippines System School of Economics Library Dillinger, Quezon City

ENDNOTES

'The Kansu Report, an often-used source for defining mechanics of ASEAN cooperation, is a UN report of 1972, Report of the United Nations Team on Economic Co-operation.

For 1991, the share of intra-regional exports to total regional exports stood at 33 percent for North America, 16 percent for Latin America, 72.4 percent for Western Europe, 6.6 percent for Africa, 5.1 percent for the Middle East, and 46.7 percent for Asia. These shares, except for North America, have been increasing since 1986. Notice the wide margin between Europe and all other regions. See International Trade 91-92, p. 6.

3In more formal terms, Krugman (1981) shows that gains from intra-industry specialization outweigh distributional effects of interindustry trade and everybody gains from trade.

"It is interesting to note that the study by Naya (1987) which provided a background to the Third ASEAN Summit in 1987 specifically avoided the term "free" so that its recommendation was the creation of an ASEAN Trade Asia.

"In practice it is difficult to define what an "industry" is in the sense of industry classification. Most common measures use 3 or 4 digit classification. What is important however is to be able to discern similarity of products in the sense of comparable factor proportions used.

"The indices reported in the tables are in absolute values, not in percentages which the expression in the text defines. Multiplying the values by 100 converts them into percentages.

'In more elaborate empirical measures of IIT, it is possible to distinguish vertical and horizontal IIT.

*Comparability of cost structures would be difficult to come by or judged especially for similar products across countries. What would be more useful is to measure the degree of effective protection enjoyed by industries across trading partners, and work to even out the competitive field.

REFERENCES

- Alburo, Florian A. (1993). "A Study on the Implementation of Philipine Commitments to the Fourth ASEAN Summit (Pasig, Metro Manila: National Economic and Development Authority).
- Bergsten, C. Fred and Marcus Noland (editors)(1993). Pacific Dynamism and the International Economic System (Washington D.C.: Institute for International Economics).
- Chng Meng Kng (1985), "ASEAN Economic Co-operation: The Current Status" in Lim Joo-Jock (1985) pp. 31-53.
- Declaration of ASEAN Concord
- Drysdale, Peter and Ross Garnaut (1993). "The Pacific: An Application of General Theory of Economic Integration" in C. Fred Bergsten and Marcus Noland (1993), pp. 183-224.
- Foreign Trade Statistics of the Philippine 1991 (1992) (Manila: National Statistics Office).
- Fukasaku, Kiichiro (1992). "Economic Regionalization and Intra-Industry Trade: Pacific-Asian Perspectives" Technical Papers No. 53 (Paris: Organization for Economic Cooperation and Development).
- International Trade 91-92 Statistics (1993). (Geneva: GATT)
- Krugman, Paul and Maurice Obstfeld (1988). <u>International Economics: Theory and Policy</u> (Glenview, Illinois: Scott, Foresmen and Co.).
- (1981). "Intraindustry Specialization and the Gains From Trade," Journal of Political Economy, pp. 959-973.
- Lim Joo-Jock (editor)(1985). <u>Southeast Asian Affairs 1985</u> (Singapore: Institue of Southeast Asian Studies).
- Linder, Staffan B. (1961). An Essay on Trade and Transformation (New York: John Wiley).
- Naya, Seiji (1987). <u>Toward An ASEAN Trade Area</u> (Kuala Lumpur: Institute for Strategic and International Studies).
- Ohno, Koichi, (editor) 1993). Regional Integration and Its Impact on Developing Countries (Tokyo: Institute of Developing Economies).

- Tan, Gerald (1982). <u>Trade Liberalization in ASEAN</u> (Singapore: ISEAS AERU Research Notes and Discussion Paper No. 32).
- Yokota, Kazuhito and Hideki Imaoka (1993). "Structure of Trade Interdependence in Asia" in Koichi Ohno (1993), pp. 31-72.

Table 1 Summary of Philippine List of Products for Accelerated Tariff Reduction

Chapter (In HS) (1)	Description T	No. of Lines ariffs > 20% (3)	(B-Digits HS) Tariffs < 20% (4)	Total (5)
1507-1515 1516.20 1517-1519	Vegetable oils	6	4	10
2523	Cement	-	7	7
28, 2901- 2935, 3823	Chemicals	-	323	323
30	Pharmaceuticals	1	18	19
31	Fertilizers	_	25	25
39	Plastics	8	60	68
40	Rubber Products	16	60	76
41-42	Leather and Leather Products	-	12	12
47	Pulp	-	19	19
50-63	Textiles and Textiles Article	80 es	69	149
69-70	Ceramics and Glass Products	24	45	69
71	Gems and Jewelle	ery 1	38	39
7403.11 00	Copper Cathode	-	1	1
8470, 8471, 8473, 85	Electronics	2	87	89
9401 & 9403	Wooden and Rattan Furniture	10	-	10
N 2	TOTAL.	148	768	916
	% Share	16.16%	83.84%	100.00%

Table 2

Philippine Trade with ASEAN
15 Product Groups in Proposed CHP7
1991

`	Brunei	Indonesia	Malaysia	Singapore	Thailand	<u>Total</u>
Share of 15 Exports to Total Exports (%)	39.1	71.8	79.3	70.4	62.6	69.4
Total Exports (\$M) ¹	1.0	42.9	122.3	229.4	220.8	615.5
Share of 15 Imports to Total Imports (%)	0.0	46.0	34.1	52.6	59.5	43.5
Total Imports (\$M)2	98.3	177.9	226.9	475.4	100.4	1079.0

Source: Mational Statistics Office, Foreign Trade Statistics of the Philippines, 1991.

¹F.o.b. ²C.i.f.

Table 3
Philippine Product Coverage
in Accelerated CEP7

Description	Philippine Coverage	Total Lines	Share of Coverage (percent)
Vegetable Oils	19	44	22.7
Cement	7	7	100.0
Chemicals	323	474	68.1
Pharmaceuticals	19	31	61.3
Pertilizers	25	26	96.1
Plastics	68	143	27.5
Rubber Products	76	82	92.7
Leather/Leather Products	12	64	18.7
Pulp	19	19	100.0
Textile/Textile Articles	149	820	18.2
Ceramics/Glass Products	69	193	67.0
Coms/Jewellery	39	54	72.2
Copper Cathode	1	1	100.0
Electronics	89	143	62.2
Wooden/Rattan Furniture	10	_20_	50.0
Total	916	2031	45.1

Source: Derived from Table 1 and Philippine Council for ASEAN Cooperation (PCAC) sources.

Table 4
Intra-Industry Trade Indices
Philippines

		1970	1980	1990
All Commodities:	with world	0.08	0.30	0.39
Manufactures :	with world	0.07	_	0.42
	with Indone	sia 0.17	127	0.28
	with Malays	ia -	<u>-</u> 20	0.21
	with Singar	ore 0.15	7.0	0.39
	with Thaila	nd 0.17	70	0.22

Source of Basic Data: P. Drysdale and Garnaut, "The Pacific: An Application of General Theory of Economic Integration," in Bergsten, Fred and Marcus Noland, editors (1993).

Table 5

Intra-Industry Trade Indices by Factor Intensity
Philippines

		1979	1988
Natural	Resource-Intensive	0.09	0.14
Unskille	ed Labor-Intensive	0.22	0.18
Technolo	ogy-Intensive	0.13	0.40
Human Ca	pital-Intensive	0.15	0.13
Aggregat	:e	0.14	0.28
Memo:			
ASEAN-3	(Indonesia, Malaysia,	8	
	Thailand)	0.09	0.23
North Am	erica	0.05	0.29

Source of Basic Data: Fukasaku (1993).

Table 6

Top Four Philippine-ASEAN Exports and Imports in 15 Product Groups (in percent of total)

1991

Exports		Imports		
Electronics	70.3	Electronics	40.0	
Fertilizers	8.6	Chemicals	16.4	
Textiles	6.2	Plastics	13.0	
Chemicals	5.8	Textiles	9.8	

Source: Alburo (1993).

Table 7 Intra-Industry Trade 15 Products for Accelerated CEPT

Exports	ES Code	Brunei	Indonesia	Malaysia (excl. Sabah Sarawak)	Singapore	Thailand
vegetable oils cement chemicals pharmacouticals fertilizers plastics rubber products leather products pulp textiles ceramics & glass gems/jewelry copper cathodes electronics wooden/rattan furmiture	25 28 £ 29 30 31 39 40 41 42 64 47 50 - 63 69 £ 70 71 7403.11 85 9403.5 9403.5 9403.6 9403.8 9493.4	MA MA C.000 MA MA 0.000 MA 0.000 WA 0.000 NA 0.000 NA 0.000 NA 0.000 NA 0.000 NA 0.000 NA 0.000 NA 0.000	0.778 0.021 0.977 0.099 0.267 0.130 0.000 0.000 0.216 0.000 0.000 0.262 0.000 NA 0.705 NA NA 0.000 0.000 NA	0.350 0.193 NA 0.595 0.000 NA 0.000 0.000 0.000	0.240 0.124 0.000 0.645 0.753 0.073 0.000 0.934 (MA 1.046 0 0.020 0	0.253 0.002 0.210 0.557 0.000 0.117 0.051 0.928 0.560 0.472 0.000 0.328 0.328 0.328 0.319 WA 1.435 NA .000 .000 KA

Source: Alburo (1993)