Foreign direct investment and pollution transfers in transition economies in Southeast Asia

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Introduction

All production leads to some degree of pollution. Imports cause pollution in the exporting country as a result of production. The importer gets the benefits of consumption and the producing country has to deal with the negative external effects in terms of environmental damage. In a world where ever increasing amounts of trade are a reality, it is likely that many of the products we consume are not produced in our own country, but are produced abroad. As we consume many products from abroad, the pollution associated with the production of these products is inflicted on the country of origin. This is the essence of the issue at hand. In consuming foreign products, pollution is effectively transferred to that foreign country. However, transfers of pollution are not only directly caused by international trade, but are under the influence of international capital flows as well. A main implication of foreign investments in a host economy, is that it stimulates and expands production. As production demands energy and various resources in order to realize a final product, it seems fair to assume that international investments are partly responsible for transfers of pollution. For instance, if a factory moves from one country to another, so does its demand for energy and its pressure on the environment in terms of pollution.

This paper tries to link these pollution transfers to foreign direct investments. In doing so, we consider stocks of foreign direct investment and perform an import-export analysis of five transition economies in East and Southeast Asia. Considering the economic state they are in, many Southeast Asian economies depend on exports for income. Not nearly all produced goods are consumed domestically; a substantial amount is traded with other nations.
The paper focuses on trade in physical products, assuming they generally cause more strain on the environment than the service sector, for example through direct air and land pollution and indirectly through a more energy intensive production. However, there isn't a compensation for this embodied pollution, although one could argue that the reward consists of economic growth.
The analysis on trade has revealed the degree of competitiveness in different sectors of production for each of the countries. The most important sectors in this paper include chemicals, petroleum, textile and food. The degree of competitiveness, measured by the ratio of imports to exports, tells something about the importance of the Asian developing nations to the outside world and vice versa.
In order to approach the coherence of investments and exports embodying pollution, we make use of data on total foreign direct investment stocks and trade data on various relevant industries, and try to connect the two. Although by analysing total investment stocks rather than those in individual sectors and from different countries origin we cannot in detail approach the issue, but we can present a general image of possible pollution transfers while controlling the degree of complexity.

Ultimately, we aim to present an answer to the following question: What are the effects of foreign direct investment on pollution transfers through trade in Southeast Asian transition economies?
The outline of this paper is as follows. In the first chapter, we explain some of the theories and concepts relevant to this writing. Also, a general description of the role of institutions is included. This is important because of the leading role in directing the economy using policy that can alter investment, consumption, production and coherent pollution. In the second chapter, we will analyse the theory of the environmental Kuznets curve, describing an initial increase of pollution with increasing wealth before decreasing. We apply the theory to developing Asian nations and include comments and implications. The third chapter deals with the creation of national income in the primary, secondary and tertiary sector, the foreign investment stock and their influence on the state of the environment. In particular, we look at foreign investment stocks in relation to four strong subsectors of national industry; chemicals, petroleum, textile and food. The fourth chapter

is meant to describe the direction of trade of these four industrial sectors. Identifying dominant trading partners and environmental implications are part of the analysis. We finish with a conclusion.

1. Sketching the issue

What are theories that can help to describe the issue of pollution transfers? In the following chapter, the main features of a number of theories and concepts relevant to this paper will be discussed. Using these theories and concepts, a notion of the problem at hand can be illustrated, as well as to provide some general suggestions concerning the issue.

1.1 Pollution haven hypothesis

As local consumption is realized in the absence of local production, production has to originate elsewhere. When produced goods are subsequently traded, the resulting trade flows incorporate pollution. Natural resources and energy are utilized locally to provide for consumption abroad. The use of these resources and combining them into final products lead to local pollution for which generally no compensation is received. It is public perception that in developing nations, environmental regulation is of a lower level than in fully developed economies. As firms from developed economies are often taxed for their negative influence on the environment, they supposedly seek opportunities to avoid such burden.

The pollution haven hypothesis can be linked to the concept of pollution transfers. It is based on the properties of polluting industries concerning their effect on the environment. It also relies heavily on the presence or absence of environmental regulations. The theory states that by the lack of environmental policy and monitoring of pollution in developing countries, partly due to weak institutions, so-called dirty industries, those with heavily polluting reputations, are attracted. For this relocation to be a viable option, the cost of relocating should of course be lower than the cost of having to comply with environmental standards in the home country. Although it seems to be an intuitively plausible hypothesis, research hasn't resulted in unambiguous outcomes. For example, Spatareanu (2007) finds that firms from countries with stringent environmental policy are more likely to invest elsewhere. A similar finding includes that firms with high abatement costs are more likely to invest abroad. Conversely, she finds that countries with well defined property rights, including those concerning the environment, attract more foreign investment. Brunnermeier and Levinson (2004) indicate that early research on the issue based on a cross-sectional analysis regularly found environmental policy to have no significant effect on firm location considerations. Smarzynska and Wei (2001) find some evidence supporting the theory in case environmental protection is measured in environmental treaties participation. In case of low participation, the share of foreign investment from environment-intensive companies is relatively high, and vice versa. However, accepting the theory implies that no polluting industry would remain in a developed economy with stringent environmental policy. As for example the chemicals industry and pharmaceutical companies still hold a solid position in a number of European countries and the US, the theory is unlikely to be entirely true.

The lack of environmental policy supposedly originates from different priorities compared to developed economies. In developing countries this priority is income. As income increases, so does the demand for a clean environment. This is illustrated by the Environmental Kuznets curve, elaborated in chapter 2. It implies that as an economy's output increases, so does the overall degree of pollution. When income as a result of this output growth is sufficiently high and people can afford luxury goods, such as a clean environment, the degree of pollution decreases.

Additionally, advanced economies have generally substituted their industrial sector by a service sector, the latter being generally far less energy intense, and thus less pollution intensive. Hence, it may at least partially cause the decrease in pollution predicted by the Kuznets curve. The domestic shift away from the secondary sector doesn't mean a decreasing demand for industrial

commodities. Low and medium tech industrial production may shift increasingly to developing countries. They in turn can realize economic growth, partly as a result of a vast labour force. Here, wages are relatively low compared to advanced economies and manual industrial production often requires little education. Theoretically, these arguments make developing economies a perfect candidate for relocating industry.

Closely related to this are the differences in environmental costs between richer and poorer countries. According to Muradian et al (2001), there are three factors that determine the amount of costs associated with pollution and environmental degradation. Firstly, major producers and consumers are often able to offload or ignore environmental damages due to weaker institutions and their lack of (compliance with) environmental regulations. This may be based for example on producer market power, or the absence of proper monitoring of polluting economic activities. Secondly, health threatening pollution in poorer countries has relatively fewer consequences for the performance of economic agents in monetary terms. Basically, because of lower levels of education and coherent income in developing economies, total life income is not affected as much in absolute terms compared to workers in developed economies in case of life-threatening pollution. Basically, because nominal life income is lower in developing economies, life threatening pollution lowers life income in developing economies to an even lower level. However, it has relatively fewer consequences than in developed countries, where the same conditions would lead to a larger decrease in life income in absolute terms, because income is higher there. In any case, Beghin et al (1999) argue that in environmental protection pays for itself through a reduction in health care costs.
Thirdly, environmental externalities expressed in terms of willingness to pay tend to have a lower value in less developed economies. Suppose low income households are faced with a choice between food and clean air, neither of which are free of charge. Rather than enjoying a clean environment, they will want to provide in basic needs, such as food, clothing and shelter. Moreover, they may be willing to sacrifice the environment in order to provide in their basic needs.

1.2 Polluter pays principle

The principle of the polluter pays, a dominant concept in environmental law since the 1970's, states that the party responsible for producing pollution should be the one to bear the costs associated with this pollution, thus should pay for its disposal.

As the amount of pollution greatly depends on the level and composition of consumption, consumers play a significant role in the level of pollution, largely through their leading role in determining production. If there is no demand for a certain good or service, production would be ceased because no profits can be made. Following this reasoning, all production results from consumer demand. This implies that all pollution associated with production is indirectly caused by consumers. They are environmentally liable, justifying application of the polluter pays principle (Muradian et al (2001)). In this sense, negative environmental externalities should be incorporated in prices, diverting associated costs to the consumer. As a result, prices of polluting goods will rise and demand will fall. Goods that are produced in an environmental friendly way become relatively cheaper which increases demand for those goods. On the other hand, Say's law states that supply creates its own demand. Applying the principle, producers are the cause of pollution. In reality, both consumers and producers have a significant influence on a country's production, thus should share the costs of pollution.
Note that in monetary terms, environmentally friendly production often requires substantial expenses and investments. Examples include costs for proper waste disposal, investments to realize a more efficient production method to comply with emissions standards or mandatory usage of certified inputs.

In the absence of environmental regulations and expressed strictly in terms of a firm's monetary expenditures, polluting production is generally cheaper than environmentally friendly production. But as income rises, so does demand for the luxury good of a clean environment. This demand may shift consumer preferences towards cleaner consumption. As polluting firms are then at risk of losing environmentally friendly customers, they seek cleaner methods of production. A broadening of the market of environmentally friendly consumption may very well follow, leading to increasing market entrance as existing firms are unable to cope with the increase in demand. The result is more competition. In theory, more competition ultimately leads to lower prices and higher product quality, in terms of durability and user friendliness, but in terms of less embodied pollution as well.

1.3 The role of institutions

Institutions play an important role in directing investments, production and consumption, which all influence the environment, through for example taxes and subsidies. Every domestic government utilizes a certain policy concerning economic growth and the conservation of the environment. Various policy components can have a positive or negative impact on economic growth or the environment. To a certain degree there is a trade-off between the level of economic growth and preservation of the environment. Theoretically, no attention whatsoever for environmental policy enables the economy to freely expand. On the other hand, when all means are directed at conserving the environment, the economy is confined to very slim margins of growth.

Many developed economies apply an elaborate framework for emission rights for polluting enterprises and effluent charge systems (Greenspan Bell and Russell, 2002). These emission rights are basically tradable permits to a certain quantity of pollution. If a company produces more pollution than it has a right to, punishments, mainly in the form of fines, are the consequence. The fact that these permits are tradable and the operation is market based, is quite an interesting feature with multiple effects. Firstly, companies polluting more than they are permitted to, may start to utilize inputs responsible for emissions more efficiently. By polluting less through efficiency gains, a firm level reduced degree of environmental degradation can be attained with the same amount of output. Secondly, firms that do not pollute as much as their permits allow, can sell the remaining share of emission rights to those surpassing their allowed emissions, thus generating economic revenue. Although this course of action ultimately does not necessarily reduce total emissions, at least it allows for greater output at constant amounts of emissions.

Although for developed economies it is relatively easy to implement the use of market based instruments such as emission rights, developing economies often still lack the institutional capabilities and means to effectively implement such policy. A number of prerequisites include accountability, auditing of real emissions, understanding of market forces and trade distortions and the absence of corruption for controlling institutions. For these complex market based environmental policies to work outside their current context of developed economies, it is imperative that these conditions are met.
Suppose accountability is absent, then it would be impossible to hold anyone responsible. If real emissions aren't properly audited, it will be very difficult to determine standards and polluting firms may try to manipulate their own reports if it is in their economic interest. With respect to market forces, a fair price needs to be established for tradable permits in order to allow firms to keep producing within the environmental regulations. If the price would be too low, the environment would probably not benefit. If the price would be too high, many firms may shut down which may result in unemployment and a halt to economic growth. Related to this is the notion of trade distortions. It needs to be realized that taxes effectively increase the price of a product. When national firms that operate on the world market are faced with costly taxes, they may lose their ability to compete with other firms, resulting in reduced sales which may ultimately translate to foregone economic growth greater than a country would initially give up to preserve the environment.

Obviously, taxes on emissions and inputs, import tariffs and the like generate a certain degree of economic distortion. The same goes for subsidies on for example energy, which is mainly perceived in energy intensive economies. These measures have an influence on prices.
In the case of subsidies, it lowers prices, which can have a number of effects. It may raise demand, because the good has become cheaper. It may also affect the degree of efficiency in the

use of inputs. Because the government pays for part of the costs of energy in this case, there is little incentive to economize on the amount of input, for a part of the expenses are covered. Although energy subsidies may very well trigger faster economic growth, especially in heavily industrialized economies, market forces are partly overridden, diminishing its power to bring about economic efficiency. Also, increased energy consumption induces increasing pollution.

From a consumption-centred environmental policy perspective, consumers can be stimulated to consciously choose for environmentally cleaner consumption. This can be done by informing consumers of alternative production chains for the same product that cause less environmental strain or by subsidizing clean consumption. Assisting in the implementation of institutional regulation concerning compensating foreign producers for the effects of pollution caused by local consumption through tax schemes can also add to consumer comprehension of the effects of consumption on the environment.

The effects of environmental policy in terms of taxes and duties is broadly twofold. Firstly, the tax can be used to elevate prices substantially, thereby discouraging usage of a certain polluting good. Secondly, the taxes can be utilized to generate a fairly stable cash flow for the government. These funds could be utilized to reduce degradation of the environment or to finance environmental institutions. The latter may be the case if the tax itself isn't substantial enough to significantly influence consumption of the good.

Many Asian countries engage in national or regional environmental programs in an effort to tackle environmental problems such as air and water pollution and the rate of deforestation. China for example has been abating polluting emissions though levies, at which firms quickly respond (Wang and Wheeler, 2000). However, as mentioned before, many of these countries lack the institutional capabilities to effectively tackle such issues. International institutions capable of making a contribution in the field of environmental issues may present some relief. The International Monetary Fund, the World Bank, the United Nations and its Environmental Programme, international environmental summits and the like may be of assistance in providing specific knowledge or funding to implement efficient policy. For example, the collaboration between the US Environmental Protection Agency and the Indonesian government has led to the creation and implementation of the Indonesian Program for Pollution Control Evaluation and Rating (PROPER). This programme is based on public disclosure of figures on water pollution of a number of firms. Using panel data techniques with plant level data on a treatment group and a control group, García López, Sterner and Afsah (2004) conclude that the amount of COD[1] and BOD[2] has indeed been reduced as a result of the programme. They find that among firms that were not compliant with environmental load standards the reduction in emissions was particularly profound en rapid; here, they found a reduction of 32% in COD and BOD emissions loads. This reduction makes sense, as firms do not wish to be associated with polluting activities for it may affect their sales.

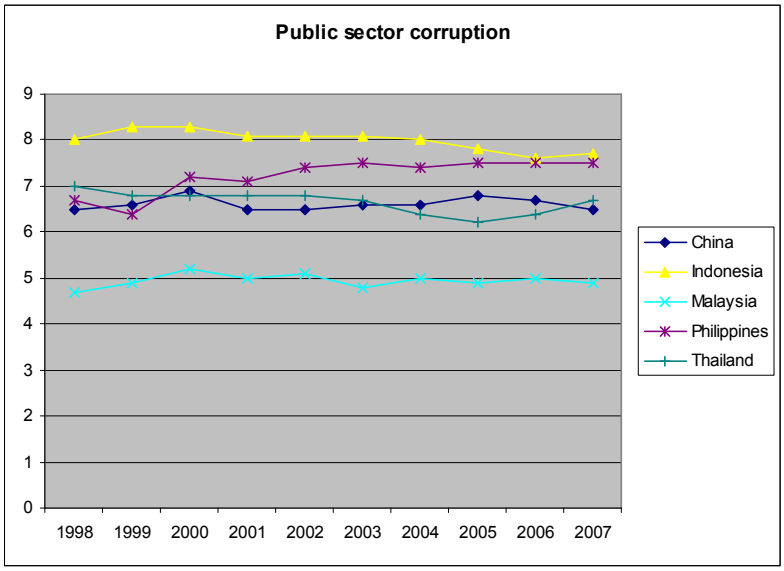
[1] Chemical oxygen demand (COD) indicates the mass of oxygen consumed per litre of solution, determining the amount of organic pollutants in surface water

[2] Biochemical oxygen demand (BOD) refers to the amount of oxygen that bacteria in water will consume in breaking down waste water

1.4 Corruption and environmental regulations

Related to relatively weak institutions is the presence of government corruption. This in turn may be associated with the lack of existence or enforcement of environmental regulations. What is the role of corruption in pollution and how does it relate to foreign direct investment?
Cole et al (2006) have done research on this issue. They employ the lead content per gallon of gasoline describing environmental regulations, while incorporating a measure of corruptibility ("government honesty") provided by the International Country Risk Guide. Foreign investment is used as an explanatory variable. These variables lead to the creation of a model consistent with empirical evidence that found that if FDI and corruption are sufficiently high, the level of environmental regulation is suboptimal.

In many developing countries corruption is a serious issue, and the perception is that the selected Asian nations are no exception. Graph 0, displayed below, shows perceived corruption in the public sector of the five Asian nation, based on expert assessments and opinion surveys collected by Transparency International, an international organisation with the mission "to create change towards a world free of corruption".



Graph 0. Perceived public sector corruption on a scale from one to ten
(Source: Transparency International Corruption Perceptions Index 1998-2007 (adapted))

According to the model of Cole at all, high levels of corruption correlate with high levels of investment in polluting activities. Applying the essence of the model, one is drawn to the conclusion that a more than proportionate amount of pollution occurs in these countries as a result of investments in environmentally intensive production enabled by high levels of corruption. This may imply confirming the pollution haven hypothesis. That is, as long as the total policy contribution outweighs the combined costs of complying with environmental regulation in the home country and other costs involved in moving the firm abroad. Also, the firm has to recognise that as the corrupted country in question develops over time, environmental regulation may very well be enforced in the future, or the incumbents accepting the contributions from foreign firms may leave office, leaving the firms at the mercy of the next incumbents.

2. Environmental Kuznets Curve

The Environmental Kuznets Curve (Grossman and Krueger, 1993) hypothesizes that as income per capita increases, so does pollution in a country. This supposedly occurs until a certain degree of income, which is assumed to be between $5000 and $8000. When this level of income has been acquired, the steepness referring to the increase in pollution should flatten out, and gradually shifts to a decline in total pollution. This supposed inverted U-shape describing the relation between pollution and income is similar to the pattern of income distribution as presented by Kuznets (1955), hence the name Environmental Kuznets Curve.

The steep increase in pollution at low levels of income corresponds to preferences of a country's inhabitants; Beghin (2000) states that poverty contributes to pollution in this stage. When facing a choice between income and environment, the priority lies with income. People are mainly interested in jobs and means of acquiring consumption needs, which in many developing countries may be as basic as having food on a plate. Clean water and air are in this sense categorized as luxury goods, which are simply not affordable at low income levels. Local governments share these same preferences. To remain in favour with the population, available means are directed towards creating wealth, and environmental policy and regulations are in this stage of little or no importance. As income increases, the a shift occurs. People increasingly value a clean environment and as providing for basic needs is no longer an issue, higher levels of income enable a portion of income to be directed towards decreasing or at least diminishing pollution. This may correspond with the rise of environmental institutions and basic regulations concerning standards of cleanness of air, water and soil. As income keeps rising, so does demand for a cleaner environment, as luxury goods, in this case a clean environment, become affordable. To provide for that demand, the effectiveness of environmental regulations and institutions increase as government funding is expanded. Supposing constant output levels, an environmental framework in which industry has to realize output leads to diminishing pollution. Some of the most polluting industries may shrink in size or continue production in countries where wealth is still sufficiently low that income generation has absolute priority. Other industry may be forced to produce output utilizing more efficient production processes through better knowledge and technology, further diminishing or decreasing pollution.

Moreover, economic structure matters. There is correlation between a country's income levels and distribution of income between the sectors of agriculture, industry and services. This relates to a high proportion of the population employed in the agricultural sector in the least developed countries. As income and education ameliorate in comparison to the previous situation, in terms of employment the secondary sector becomes increasingly dominant. Over time, increasing productivity in industry subsequently frees up labour from this sector, and together with a rise in demand for services, partly due to higher standards of living, this provides the circumstances for a larger proportion of the economically active population to be employed in the service sector. The service sector being the least pollution intensive of the three, this may provide an even further amelioration in pollution. However, as countries around the world reside in various economic states, it may be argued that although pollution decreases in some parts of the world, pollution increases in other parts of the world, which may be a combined result of economic development and relocating of polluting production towards developing nations. This is in line with what is stated by the pollution haven theory, but can of course also be driven by certain cost advantages, such as low wages or closeness to natural resources.

The Environmental Kuznets Curve may even be interpreted as an instrument on which to base environmental policy. It may be viewed as a justified disinterest for environmental standards and regulations until a certain level of income has been attained. In other words, before even

considering environmental protection, the wealth must be sufficiently high; gain income to tackle environmental degradation. This may hold especially for transitional economies experiencing high growth rates. The rationale behind this is that measures of environmental protection, such as high emission taxes and output caps, constrain the economy and cause serious foregone growth in monetary terms.

2.1 Affirmative research and criticisms

The literature on the Environmental Kuznets Curve is far from in agreement. A number of writings confirm the existence of the curve, but eventually those seem to be underrepresented. An example of affirmative outcomes on the existence of the inverted U-shaped curve includes Selden and Song (1994). They use a cross-national panel of data on emissions of four important air pollutants, namely suspended particulate matter, sulfur dioxide, oxides of nitrogen and carbon monoxide. Their analysis shows that emissions per capita exhibit the proposed inverted U-shape as income levels rise.

Grossman and Krueger (1995) have presented perhaps the best known research in the field of the Environmental Kuznets Curve. They use data from the Global Environmental Monitoring System (GEMS) on concentrations of urban air pollution, measures of the state of the oxygen regime in river basins and concentrations of fecal contaminants and heavy metals in river basins. The conclusion to their writing is that for most indicators there is a phase of environmental degradation with income growth, followed by a phase of amelioration.
There is however quite some criticisms on the validity of the Environmental Kuznets Curve, for example by Herbaugh, Levinson and Wilson (2001). They have done follow-up research on the research by Grossman and Krueger (1995), with an updated and revised data set on air pollution in cities worldwide. They find that the income levels indicating turning points for amounts of pollution and their existence as such are sensitive to slight changes in the used dataset as well as changes in the parameters of the econometric model used to derive the inverted U-shape. Examples of these variations include adding observations and control variables to the dataset and adding other countries, leading to very different curve shapes. With respect to data availability, they argue there is still very little known on actual emissions on a larger scale. The actual data generally comes from a limited number of monitoring stations from a small number of cities. This appears to be not nearly representative on a larger scale as local observations are mostly the result of local economic activity. Considering this, the data would not be suitable to draw conclusions on a national level. To increase the quantity and quality of environmental data, international institutions such as the World Bank and the United Nations finance a number of projects, for example the Global Environmental Monitoring System (GEMS), in both developed and developing countries. Also, a number of countries, although predominantly developed ones, have introduced mandatory reports on emissions by industrial plants.

Wheeler et al (2002) summarize two more points of criticism. One is that some critics state globalization and the growing volume of trade it incorporates may lead to a so called race to the bottom, implying that global levels of pollution will continue to rise as levels of production and subsequent consumption will continue to rise. This would mean pollution attains local maximum levels for each country, given the environmental regulations. Advocates of this criticism point out that restrictions in international trade and investment play an important role in high levels of pollution in developing countries. Foreign investment, it is argued, induces the creation of pollution havens in developing countries. On the other hand, foreign investment can greatly facilitate the transfer and implementation of technology, which may dampen the increase of pollution, although it doesn't provide in sufficient environmental protection. Wheeler and Martin (1992) provide evidence of this happening in the paper and pulp industry, while Reppelin-Hill (1999) observed it in the steel industry. Technology plays a crucial role because it can change the relation between consumption and pollution, for instance by increasingly cleaner and more efficient production, recycling and by enabling the use of sustainable energy. In this respect, foreign direct investments may act as a means to facilitate the transfer of relevant technology. Also, trade and investment have the potential to accelerate economic development. The increased wealth in turn induces governments to generate sound environmental policy, as the population

demands a higher standard of living, in this case through a cleaner environment. An alternative would be to reduce to autarky or force developing countries to apply export tariffs on polluting goods in order to mitigate the positive effects for large polluters. Subramanian (1992) concurs with the use of tariffs if pollution is induced by trade.
However, this doesn't seem desirable, because of negative effects in terms of foregone economic growth in both developed and developing nations. For the latter it seems particularly unfair, as the nation is being punished for the fact that it may have an advantage as some kind of pollution haven. Imposing such restrictions may very well negatively affect income and jobs for poor populations in the world.
Closely related to this is the concept of the targeting principle introduced by Bhagwati and Srinivasan (1997), which can be applied to address the subject of taxation for pollution caused by production. It implies that environmental policy is best carried out when duties and taxes are closest to the source of pollution to minimize distortions elsewhere in the economy. In practice this translates to taxing emissions in order to reduce pollution. If for some reason, for instance because of technical limitations, measurement of real emissions is impossible, taxes on inputs are the next best thing. Might the amount of inputs not be verified, the suggested subject of taxes should be the production output. Finally, if all other subjects cannot be taxed, an import or export tariff could be applied. However, it is clear that taxation in that way to control the amount of pollution is far from desirable, because the subject of taxation is very far from the actual source of pollution. This principle actually offers a just way to act with regard to reducing pollution by targeting the source. As technology advances and means of monitoring improve, emissions will be more and more directly taxed, in stead of taxing the final product and its embedded emissions. How does this relate to the EKC? Taxation may reduce polluting output, but also affects income. Considering this, it may be possible that nothing changes at the supposed turning point if both are influenced at the same relative rate.
Another argument challenging the existence of the original curve concerns the invention of new chemicals and compounds, containing toxics yet to be classified. The current maximum amount of pollution permitted in economies with extensive environmental regulatory schemes is based on information on known forms of pollution. As new substances make their entry in production processes, the total amount of pollution may yet increase, despite the decrease in pollution from other sources. The described increase may very well be sustained until regulations have caught up. In practice, many potentially harmful substances are still untested and unregulated. Thoroughly researching and documenting impacts of new chemicals may however take years, in which pollution may reach new heights. This situation may be avoided if institutions strictly regulate the use of inputs in production processes. effectively forbidding the implementation of chemicals of which the general environmental or human health implications are still unknown. However, it is feasible that the use of these new chemicals may be a significant improvement, in terms of environmental impact and productivity, compared to those previously used in the production process. Positive effects may be foregone by postponing implementation in this case.

A final argument against the existence of the curve is that all one actually has to do to find an inverted U-shape, is to find a pollutant which is declining in amount over time, while income per capita increases. This in itself may lead to biased research if the goal is to support the theory. Examples may include the abolition of leaded gasoline and the use of CSC's in refrigerators and spray cans. As income increases over time, a researcher is lead to conclude that the inverted U-shape does exist. However, for many other pollutants, this relation still fails to show.

2.2 Empirical observations

Do empirical observations from developing Asia match the theory of the environmental Kuznets curve? If we assume the curve does exist and the environment starts to improve at the corresponding levels of income, we can say something about environmental awareness and basic protection in a number of Asian countries. When in 1972 the US Clean Water Act was written, per capita GDP (PPP, international dollar) was $5838 (source: World Development Indicators), which falls perfectly in the range of $5000 and $8000. Malaysia passed the $5000 limit as early as 1991, and Thailand did in 2000. China, Indonesia and the Philippines have yet to reach this limit. How does this compare to the implementation of basic environmental policy in these five countries? Malaysia and Thailand had already written a National Environmental Quality Act by 1974 and 1975 respectively. By the 1980's regulations and standards on clean air and industrial effluent were in place in these countries. Although less formal, the Philippines had stated an environmental policy by 1977 through Presidential Decree 1151. By 1980, when a number of environmental laws had been formalized, per capita income in purchasing power parity was still only $1254. Although the environment enjoyed virtually no attention under president Soeharto's authoritarian rule, Indonesia's Environmental Management Act saw the light of day in 1982, when income levels per capita had nearly reached $800. China appears to be a latecomer in the field of environmental laws with its Law of Prevention and Control of Water Pollution in 1984. Strikingly, income in international dollars in terms of purchasing parity was a mere $437 per capita at the time. When environmental laws in the selected developing countries was roughly at the level of the US Clean Water Act of 1972, purchasing power income was not nearly as high as in the United States at the time. This implies that the curve in comparison to that which may exist for the US lies further to the left; awareness of the environment has been reached at lower levels of income. This may be explained by a number of factors. Lessons learned from developed economies, collaboration with international institutions, education and global attention all play an important role.

When analyzing statistics on organic water pollutants in terms of biochemical oxygen demand (BOD), we see that in China the amount has started to decline sharply since 1998, when purchasing power parity income was $1994. The data suggest that for this indicator, China is already on the right hand side of the supposed curve, improving water quality at a relatively low income level. In Indonesia, BOD values have been relatively constant since 1998, translating to the leveling out period, when income per capita was $2264. Malaysia's BOD can still go either way, as no visible trend was established by 2003, the last year for which data was available. Further lack of data availability denies us to say anything about organic water pollutants in the Philippines or Thailand.

Judging by data from the World Bank's World Development Indicators for NO emissions, reported in kilotons of CO2 equivalent, China's emission level in 2005 is practically the same as in 2000, somewhat ahead of schedule, as in the same period income had risen from $2371 to $4081, well before the supposed $5000-$8000 range. Indonesia has had a small increase in emissions in the same period, but a significantly smaller increase than between 1990 and 2000. Although in Malaysia in 2000 a decrease of almost 25% compared to 1995 was achieved, an increase of 6% was reported five years later. In the Philippines a similar trend was observed. However, the decrease of the year 2000 compared to 1995 was nearly 9%, while the subsequent increase over the following five years was over 12%. Based on these figures, we cannot firmly state the period of leveling out has begun yet, although it might have been expected for Malaysia, as income per capita was $11680 in 2005. In that year, incomes in Indonesia and the Philippines were only $3209 and $2956, respectively. Observations in Thailand show the least promising results, with values increasing ever more since 1990, without sign of slowing down. In 2005,

income already exceeded $7000, thus not confirming the original position of the curve for this indicator.

Another pollution indicator is provided by the Emission Database for Global Atmospheric Research (EDGAR)[3]. It combines actual data with a complex model to estimate national sulphur dioxide emissions for 1990, 1995 and 2000. According to this data, the bulk of SO_2 emissions is generated by five components; power generation, the industrial sector, other transformation sector (refineries, gas works, etc), road transportation, and residential, commercial and other sectors. SO_2 emissions in China and Malaysia in 2000 are practically the same as in 1995. There has however been a 30% decline in SO_2 emissions in the industrial sector in China, but there has been a substantial increase in emissions from power generation, where Malaysia reduces the latter to half. The Philippines manages to reduce the amount of SO_2 caused by the industrial sector in 2000 by 23% compared to 1995, but nevertheless has an overall increase of 8% in the same period. This is mainly because of increases of emissions in road transportation and the residential, commercial and other sector. In Thailand, power generation emissions in 2000 are almost double that of 1990, but 19% less than in 1995. Further reduction was realized in the industrial sector, where emissions decreased by 11% compared to 1995. However, in the sector of other transformation emissions increased by 50%, but still holds a share of only 7% in total emissions, which increased 6%. Values for Indonesia indicate very poor performance. Comparing the year 2000 to 1995, emissions from all of the five components has risen sharply, increasing estimated total SO_2 emissions by almost 70%. This may be the combined result of rapid economic expansion, both in general and in relatively dirty sectors, and failure to properly execute environmental policy. This leads us to conclude that for Indonesia economic expansion results in more pollution than can be offset by cleaner technology and environmental regulations concerning sulphur dioxide emissions.

[3] Appendix table 13

2.3 Concluding remarks

In conclusion we can say that the data on various pollution indicators and many publications imply that there is no simple, uniform way to apply the original environmental Kuznets curve theory. Although its existence may be analytically proven in specific circumstances and regions for selected indicators, the debate goes on. As different forms of pollution and their impacts are a complex issue, partial research only appears to be part of a giant puzzle. While some forms of pollution may be observed to decrease as income rises, others may very well keep increasing. Also, there doesn't seem to be a specific range of income where environmental policy is actually enacted and implemented. There is a significant difference in income per capita between countries implementing basic environmental policy. Moreover, the instruments of environmental policy and the target of amelioration varies a great deal around the world, depending for example on a country's economic structure and which (local) environmental issue craves the most attention. Governments may also fear the enforcement of environmental regulation, as it may slow down economic growth. All these factors make for uncertain outcomes in the long run. What does seem relatively certain is that environmental awareness will keep increasing with education, media attention and international cooperation. But perhaps most important is the essence of the environmental Kuznets curve. Income will continue to rise over time, and with wealth comes an increasing demand for a clean environment. Foreign direct investment may contribute significantly to creating wealth in the host economy for example by providing employment and trade opportunities. Equally important may be its potential to transfer clean technology and more efficient production processes, further enabling amelioration of environmental conditions. However, there may also be a downside to foreign investment. As foreign influence in developing countries increases and the economy expands with the help of investments from abroad, these investments may be defined as part of causing, not solving, environmental issues.

3. Foreign direct investment, value added and trade

Foreign direct investment has been accumulating in the Asian nations in the last decades. Besides an absolute accumulation, we also observe an increasing investment stock compared to GDP, suggesting an increase in the influence of foreign firms in the local economy. Indeed, investment stocks in the region grow faster than GDP in most countries (table 1).

Inward FDI stock as % of GDP, 1980-2006

	China	Indonesia	Malaysia	Philippines	Thailand
1980	0,35	5,88	21,11	3,95	3,03
1985	2,02	6,11	23,68	8,46	5,14
1990	5,40	7,04	23,44	7,37	9,66
1995	14,43	9,26	32,34	8,21	10,53
2000	17,92	15,02	58,40	17,07	24,38
2005	13,73	4,80	36,33	15,13	33,02

Table 1. Inward FDI stock as % of GDP, 1980-2006

In this section we look at look at the total stock of foreign direct investment compared to trade in the main sectors of agriculture, industry and services. In most sectors we notice an increase of the ratio of FDI to both exports and imports for most countries, meaning investment stocks increase at a higher rate than exports and imports do. We also look at changes in energy intensity of production over time and link it to investments.

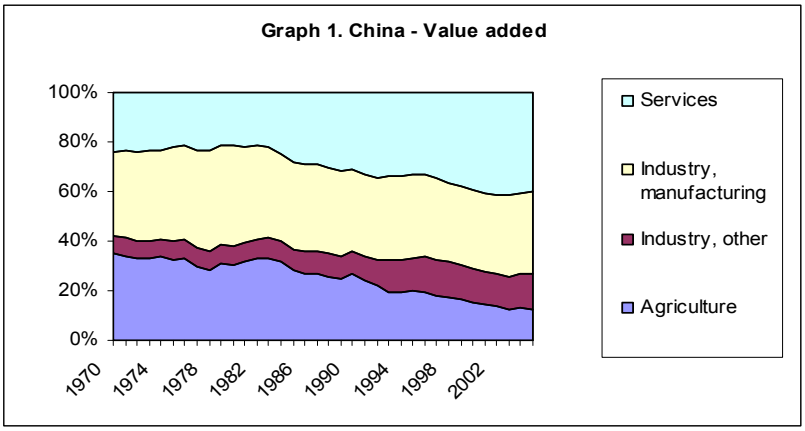
We focus in particular on four strong subsectors of national industry that are important for creating wealth, both in terms of value added as in their relevance to trade relations, and their possible impact on the environment, using a number of environmental indicators. These branches of industry, as will be demonstrated later on, consist of the chemical industry, the petroleum industry, the textile industry and the food industry. But before we analyze those industrial sectors in more detail, we take a look at the primary and tertiary sector an their contribution to national income and trade over time.

It needs to be noted however, that in observing the data, some care has to be taken in interpreting the data for the 1997 and the following years, when the Asian financial crisis caused major depreciation of local currency and stagnation or even contraction of the economies under analysis, as well as depleting FDI stocks. The depreciation led to a lower exchange rate for local currencies from the Asian point of view. Since all calculations concerning trade, investment and national income are based on US$, this may lead to some deviations in absolute, but not in relative terms.

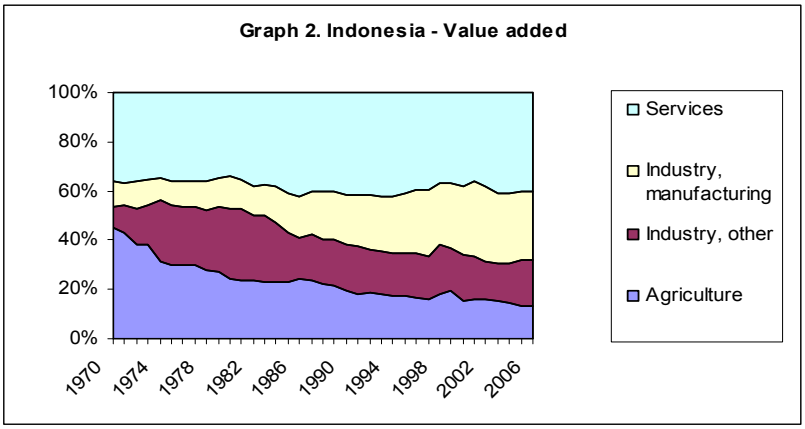
3.1 Agriculture - Value added, investment and trade

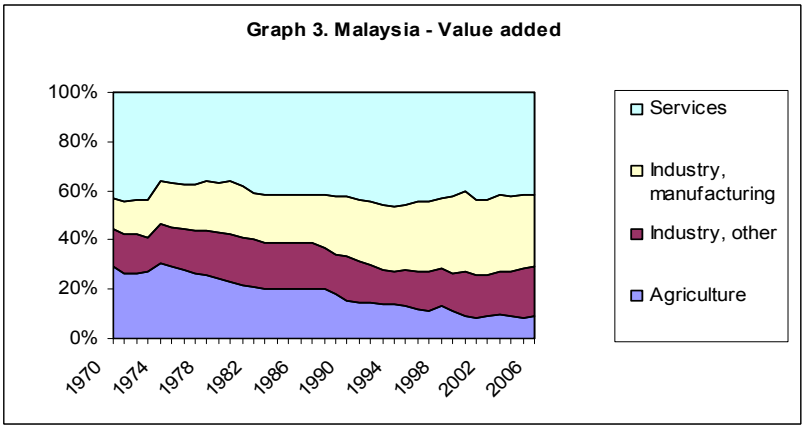
We look at trade induced by agricultural activity in this section in two parts. One part of trade in agricultural goods consists of agricultural raw materials, such as cotton and tobacco. The other part consists of trade in food. Although trade in food includes both manufactured and unmanufactured foods, for the sake of simplicity we assume food exports and imports to relate solely to the agricultural sector, and not to industry. As at least the base materials are generated by the agricultural sector, this seems a fair statement.
Apart from the Indonesian exports in food, inward FDI stock as a ratio to both imports and exports in food is a multiple of that of the value of trade. For imports in food this multiple ranges from over two for Indonesia to thirteen for China in 2005. In the exports of food, we observe less divergence between the amount of trade and capital accumulation. In Indonesia, as mentioned before, food exports had in 2005 a value of more than twice the value of inward investment stock. For the other countries the magnitude of FDI varies between more than twice and more than five for the same year; Exports in food grow at a faster pace than imports do[4].

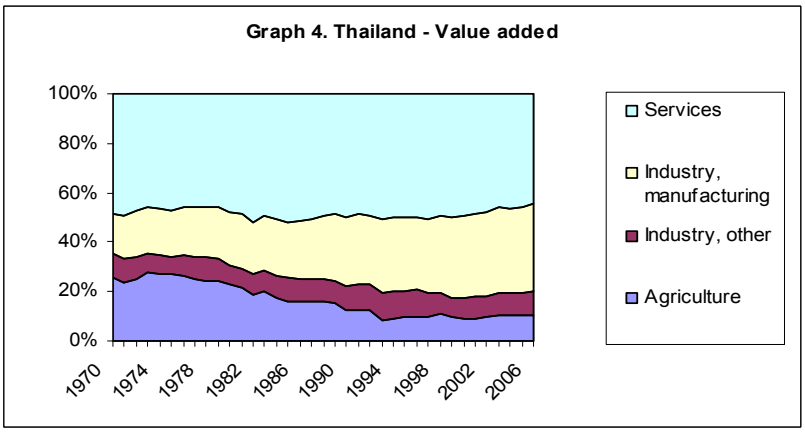
When we look at trade in agricultural raw materials, we see that China traditionally had a positive trade balance in raw materials trade, but since 2002 imports exceeded exports in trade value. This suggests that even though China has an abundance in raw materials, it nevertheless is dependent on imports in this sector, relating to a consumption effect. Besides rising consumption as a result of higher income, it may refer to the type of consumption; as raw materials are often used as input for final products, it signifies China's overall production expansion, both for internal and external consumption. The other countries also see the ratio of exports to imports drop, but retain overall surpluses; ratios with values ranging between two and five are commonly observed since the mid 1990's[5].
To put these number into perspective, we need to consider the contribution of the agricultural sector to national income. A graphical interpretation of value added in different economic sectors is presented in graphs 1 through 5 below and on the next page. Halfway the 1970's still some 30% of total value added came from agricultural activities. In 1995 it still contributed around 20% in China and the Philippines, while Indonesia, Malaysia and Thailand were already below that; Thailand was even below the 10% mark. By 2005, agriculture had lost most of its earlier significance as it was responsible for only 8-14% of national income for the Asian countries.

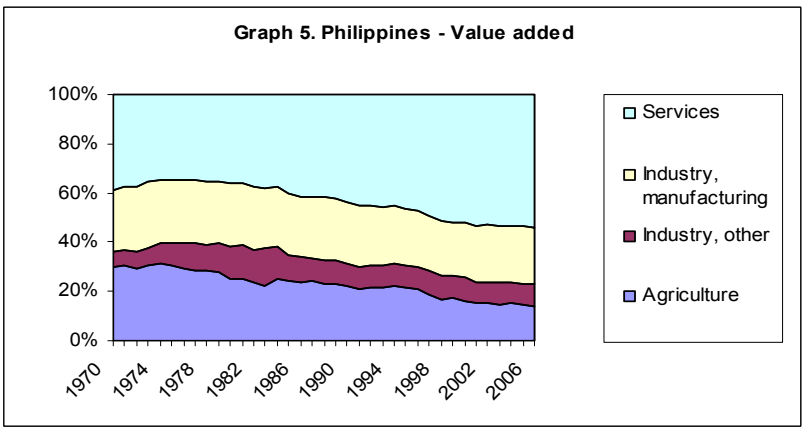


[4] Appendix tables 2 and 3
[5] Appendix table 4


Graph 2. Indonesia - Value added
100%
80%
60%
40%
20%
0%
1970
1974
1978
1982
1986
1990
1994
1998
2002
2006
Services
Industry, manufacturing
Industry, other
Agriculture


Graph 3. Malaysia - Value added
100%
80%
60%
40%
20%
0%
1970
1974
1978
1982
1986
1990
1994
1998
2002
2006
Services
Industry, manufacturing
Industry, other
Agriculture


Graph 4. Thailand - Value added
100%
80%
60%
40%
20%
0%
1970
1974
1978
1982
1986
1990
1994
1998
2002
2006
Services
Industry, manufacturing
Industry, other
Agriculture


Graph 5. Philippines - Value added
100%
80%
60%
40%
20%
0%
1970
1974
1978
1982
1986
1990
1994
1998
2002
2006
Services
Industry, manufacturing
Industry, other
Agriculture

Combining this with the observation of relatively little trade, suggests that the agricultural sector is far from of a dominant economic contributor nowadays. Also, the figures indicate that there is more and more convergence in trade in agricultural goods; large net exporters of agricultural raw materials see their surpluses turn into trade balance, so import and export values move closer together. This may relate to increasing demand for materials unavailable internally. Although the food industry has lost much of its significance over time, it is however responsible for a considerable amount of water pollution, in terms of biochemical oxygen demand (BOD) emissions (as can be seen in graphs 14-16 in chapter 3.5.4). This refers to the amount of oxygen that bacteria in water will consume in breaking down waste water (UNEP GEO data portal). Although the data is incomplete, total BOD pollutants have been declining in China and stabilizing in Indonesia since 1997. When assuming equal technology in all countries involved in trade and equal pollution intensity of traded goods, as well as considering the relatively low energy intensity in agriculture, we are lead to the conclusion that trade in agricultural goods has a modest impact on trade induced pollution transfers. We will get back to this later on. Also, global trends in foreign direct investments suggest that agriculture is a less popular sector than industry or services, making pollution transfers as influenced by investments in this sector even smaller.

3.2 Services - Value added, investment and trade

When we look at the effect of the service sector on national income in the five analyzed Asian nations, we see that, apart from in China, it has been a dominant contributor during our entire time frame. In 1970 the share of value added in services range from 36% in Indonesia to 48% in Thailand. In the same year services in China only had a share of 24%. In 2005 the values range from around 40% in China to 54% in the Philippines, indicating their constant importance at country level.

Relating FDI stock to trade in services, we observe roughly three different groups. Overall, the rate of capital accumulation exceeds that of the growth rate of imports and exports between 1980 and 2005 for the Philippines and Thailand. Indonesia and China show an increase in stock compared to imports until well into the 1990's, but then exhibit a decrease, suggesting a sudden surge in imports. Relating FDI to exports, Indonesia has a dropping trend over time as the ratio of exports to imports improves in favour of Indonesia. China's ratio has been dropping only since the late 1990's as a result of steep growth in services exports. This may partly imply a sudden payoff of foreign investments in services, but it may as well indicate China's own external focus in services.

In Malaysia the ratio of FDI stock to imports and exports seems fairly constant since the mid 1980's. Simultaneously, an convergence towards balance in the ratio of exports to imports is observed, implying the buildup of a stable position in the service sector which seems to be related to foreign capital stock[6].

However, we see that overall, services have a relatively small share in total trade compared to physical goods[7]. Between 1980 and 2005 services were responsible for generally between 9% and 14% of exports, with the exception of the Philippines and Thailand. In the Philippines the contribution lies between one fifth and one third until the late 1990's; it then drops to around 10%, implying rapid growth in trade of physical goods. Services in Thailand have always had a larger influence, ranging between 20 and 23%, although we see the percentage dropping to around 16% by the turn of the century, signifying the relative growth of physical exports. In service imports in the period 1980-2005 we see in general some higher shares in total imports, with expenditures around 16-23% of total imports. By 2005 this had dropped to around 11% for China and the Philippines. Although there have been some periods in which the developing nations exported a greater value of services than they imported in China, the Philippines and Thailand, in general they import a larger value.

We can apply some of the reasoning as used in analyzing investments and trade in the agricultural sector. The service sector especially has a low energy intensity compared to industry. It doesn't make use of heavy machinery in order to realize production, besides for example in the construction sector. As generally no physical production is the result of service activity, we can also assume that pollution embodied in service trade is minimal. When incorporating foreign direct investments, it is observed that nowadays a generous portion of investments end up in the service sector. Considering this, FDI may have a diminishing effect on the amount of pollution transfers realized by foreign investments, to the extent that FDI presence induces services production and exports.

[6] Appendix tables 5, 6 and 7
[7] Appendix tables 8 and 9

3.3 Industry – Value added, investment and trade

As relative shares in GDP for agriculture have been subsiding and shares in services have been fairly stable in most countries, the implication is that industry as a whole has had a growing part in value added. In order to find a relationship between FDI stocks and exports for industry, we look at the ratio of FDI stocks to exports. Within industry we have made a division into manufacturing and other industry. The fact that many Asian nations specialize in some form of manufacturing can be seen in the magnitude of the manufacturing sector, both as a share in GDP and in total exports. In China and the Philippines its contribution is relatively stable at respectively 1/3 and 1/4 of total value added. In the other three countries, its share has grown significantly from 10-15% to 28-35% in total value added (see graphs 1-5 in section 3.1). With respect to other industrial activities there has been much more modest growth. In Thailand the level of value added in 2005 is even the same as in 1970, just under 10%, with minor deviations in between. This implies that the manufacturing sector is of greater importance that other industry.

When we look at the ratio of exports and imports in manufacturing for the period of 1980-2005, we see that for Indonesia the ratio has been increasing over time, while the ratio has been rather stable for Thailand, Malaysia and the Philippines and even dropping for China. Malaysia manages to be quite in balance in trade in manufactures, while the other countries exhibit ratios between 1,6 for Thailand to 4,3 for China in 2005 (table 10).

Manufactures exports \ imports ratio

	China	Indonesia	Malaysia	Philippines	Thailand
1980		0,25	0,65	1,74	1,74
1985	3,65	1,54	0,98	4,07	2,67
1990	5,96	2,42	0,98	2,42	2,18
1995	5,87	3,45	1,00	1,88	2,15
2000	6,25	3,54	1,04	2,41	1,95
2005	4,28	3,28	1,11	2,43	1,64

Table 10. Manufactures export \ import ratio

When we relate inward FDI stock to the magnitude of trade in manufactures, we see mixed results[8]. In Malaysia exports in manufactures grow faster than FDI stock accumulates until the end of the 1980's, from then on the growth ratios are quite similar, when investment stocks are about half of the value of exports. This may imply that as FDI increases, so do exports in the manufacturing sector and at the same rate. Although it is not clear whether exports follow the trend of FDI or the other way around, we can say that there seems to be a stable relationship between the two; the export value of manufactures is roughly twice that of the investment stock. The same reasoning goes for manufactures imports.
A similar situation appears to present itself in the Philippines, where FDI stocks are generally 16-20% of the value of exports and around 40% of imports in manufacturing.
In Indonesia we observe an overall dropping ratio; manufactures exports and imports grow faster than FDI stocks. This could mean relatively small investments lead to large increases in trade volumes. In Thailand quite the opposite is happening as FDI accumulates faster than exports and imports grow. This may relate to a buildup of foreign investments in other sectors than manufacturing.

[8] Appendix tables 11 and 12

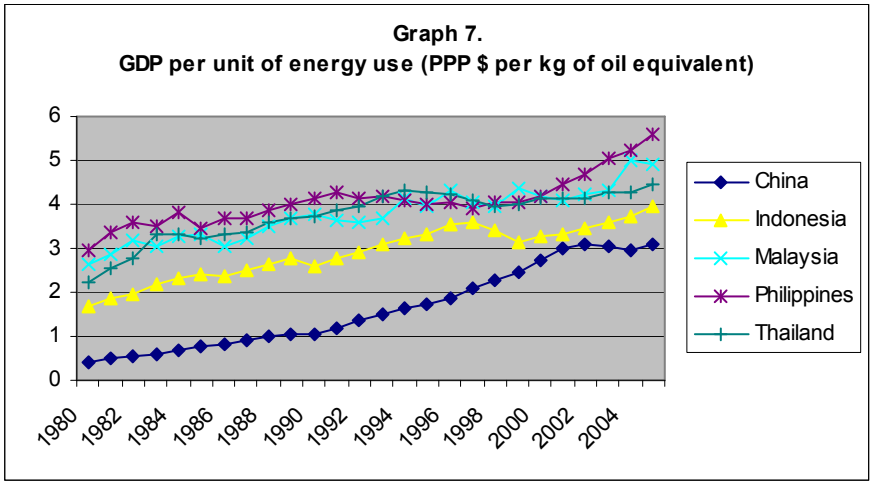
For China the stocks were at first increasing compared to trade volumes, but have been dropping in the last few years as a result of a sudden increase in both imports and exports of manufacturing. As investment stocks were already extensive before this sudden increase, it seems unlikely that foreign direct investment is directly responsible. Thus we are lead to conclude that the sudden increase in trade volume of manufactures in China occurred rather independent of foreign investments.

3.4 Energy intensity and pollution of economic activity

In the light of considerable growth in the manufacturing sector in most countries and the advantage in manufactures in trade these countries exhibit, it is likely that a significant part of polluting emissions and environmental degradation in general is the result of activity in this sector.

The Emission Database for Global Atmospheric Research (EDGAR) model estimations on SO_2 suggests that industrial fossil fuel production and use (excluding power generation), is responsible for around a quarter of total SO_2 emissions in 2000 in all countries except the Philippines. Here the percentage is just under ten. However, production of non-ferrous metals contribute more than 40% in the Philippines, and 12% in China. SO_2 emissions from industrial fossil fuel production and use (excluding power generation) do not exhibit an overall trend in the period 1990-2000. While in China its contribution to SO_2 emissions is dropping, it is rather stable in Thailand and the Philippines and rising significantly in Indonesia and Malaysia[9]. The situation in Malaysia corresponds to the relatively large share of "other industry"; value added in that subsector of industry amounts to 18% in 2000.

Considering that the energy intensity in the industrial sector is higher than in the other two, because of extensive usage of heavy machinery and mass production, supports the notion that industry exhibits the highest pollution intensity of the three main sectors. We do however see a significant amelioration in terms of the energy intensity of per unit of GDP for all five countries, as shown in graph 7. This can be explained by a number of factors, including the influence of foreign direct investment.



First, higher value added plays a role. In services, for example, the incorporation of specific knowledge in subsectors like banking and finance justifies a greater difference between input and output value. Higher tier manufacturing goods, such as high-tech electrical appliances, may indicate the same. FDI is at least partially responsible for enabling higher tier goods production by providing necessary technology, as foreign firms recognized possibilities in production, both for a growing local market and because of perceived cost advantages. When foreign firms settle in a host economy, they bring their knowledge and technology with them.

Second, in manufacturing and other industry, application of technology enables more complex goods to be produced. Technology may also act as an energy saver. Better production processes generally lead to more efficient production, thus lowering the amount of input, both in terms of

[9] Appendix table 13

energy and materials. Here, foreign direct investment may play a role in transferring technology. Spillovers may lead to widespread application of foreign technology outside foreign firms.
Third, trade liberalization and decreases in energy subsidies force firms to economize on inputs to remain competitive, effectively reducing production costs and relative energy intensity.
These arguments, combined with the emergence of environmental regulation, at first in developed economies, but since the late 1970s in Asian transition economies as well, may translate to a relative decrease in polluting emissions and subsequent embodied pollution of goods.

3.5 Subsectors of national industry

In the next section we will look at strong subsectors of national industry, and relate them to their relative importance in trade with other countries and their contribution to pollution. To identify those subsectors, we make use of data by the United Nations Industrial Development Organization (UNIDO), which reports relative shares of various industries in value added in the International Standard International Classification (ISIC) of all economic activity. The indentified industries, as mentioned before, include that of chemicals, petroleum, textiles and food. In recent years, their individual contribution to national value added generally range from seven to fourteen percent in most countries, adding up to a significant share in national income, relating to their importance.

We will then for most industries consider trade in corresponding Standard International Trade Classification (SITC) and relate the amount of trade to some specific pollution indicators. Note that dropping relative shares in value added generally do not indicate lower absolute values as total manufacturing value added has increased considerably over the years.

3.5.1 Subsectors of national industry - Chemical industry

The UNIDO data indicate that four of the five countries under observation have a strong position in the chemical industry, contributing between 9% and 12% of total value added in the manufacturing industry between 2003 and 2005. Although the chemical industry in Thailand is less concentrated than in the other countries in terms of value added, we will include Thailand for the sake of completeness. As the chemical industry is of great national importance on the national level and, as will be demonstrate in chapter four, on the international level in trade, it seems logical that international investments also find their way in the national chemical industries.

Trade induced by production in the chemical industry comes from COMTRADE data on SITC revision 2 group 5, "chemicals and related products"[10].

We first notice that both chemicals imports and exports in terms of monetary value have increased significantly over the last two decades. Between 1985 and 2005, the value of chemical imports increases 36 times for China, while the other countries experience a more modest increase of four to nine times. In exports, we see an overall explosion of growth. For the same period, the value increases by 250% for the Philippines, but the other countries exhibit far greater expansions; Indonesia manages an export value in 2005 of 20 times that of 1985, China 41 times, Malaysia 45 times and Thailand even 93 times.

Related to inward FDI stocks[11], we see a dropping ratio for Indonesia, Malaysia and Thailand. Exports seem to have boomed at least partially under the influence of foreign presence. China shows mixed results and buildup of FDI in the Philippines seems to outpace export growth, suggesting investors rather choose a different sector. FDI stock as a ratio to chemicals imports constantly rises for Thailand, but for the other countries it falls around the turn of the century. This may be perceived as chemical products needed for domestic production of both local and foreign firms.

Outward FDI stocks compared to exports[12] does not show an obvious visible trend, while for imports there is a general rising trend; outward stocks accumulate faster than imports grow, which mainly implies that the countries invest outside their home economy at a higher rate than imports increase.

[10] Appendix tables 14.1 and 14.2
[11] Appendix table 14.4
[12] Appendix table 14.6

Relating chemicals exports to total merchandise exports, we see an overall steep increase in the importance of chemicals in trade between 1980 and 2005. For Malaysia and Thailand the contribution in merchandise exports has exceeded 5%. This implies that production of chemical products is rather outward focused, thus signifying the importance of chemicals exports as means to create trade revenue. In China and Indonesia the share was around 1,5%, while for the Philippines only 0,5% (table 14.9). This suggests that relating to income from exports, these countries rely more heavily on exports from other sectors.

Chemicals exports as % of merchandise exports

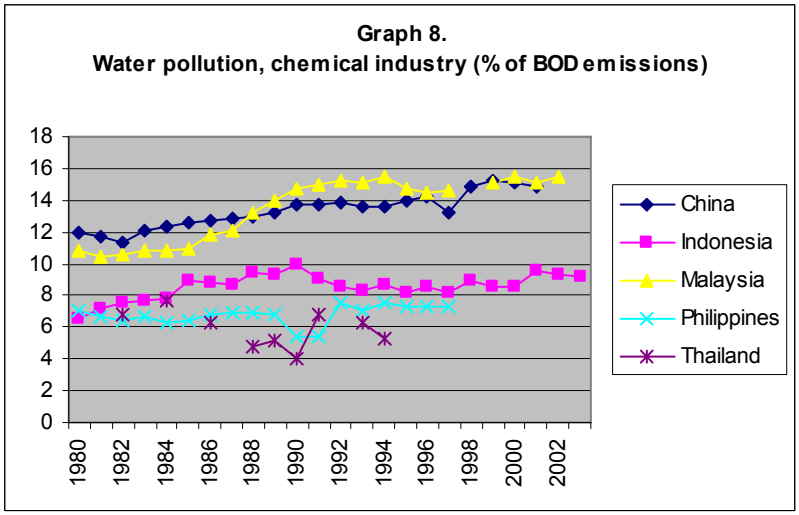
	China	Indonesia	Malaysia	Philippines	Thailand
1980		0,11	0,32	0,27	0,15
1985	0,27	0,24	0,56	0,49	0,24
1990	1,06	0,54	1,09	0,59	0,55
1995	1,24	0,75	2,51	0,44	1,28
2000	1,00	1,89	4,13	0,44	3,31
2005	1,57	1,55	5,95	0,53	5,03

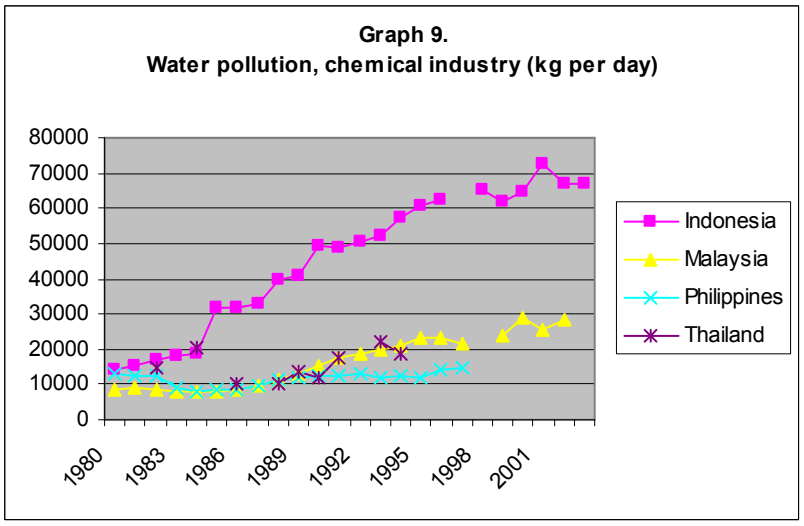
Table 14.9. Chemicals exports as % of merchandise exports

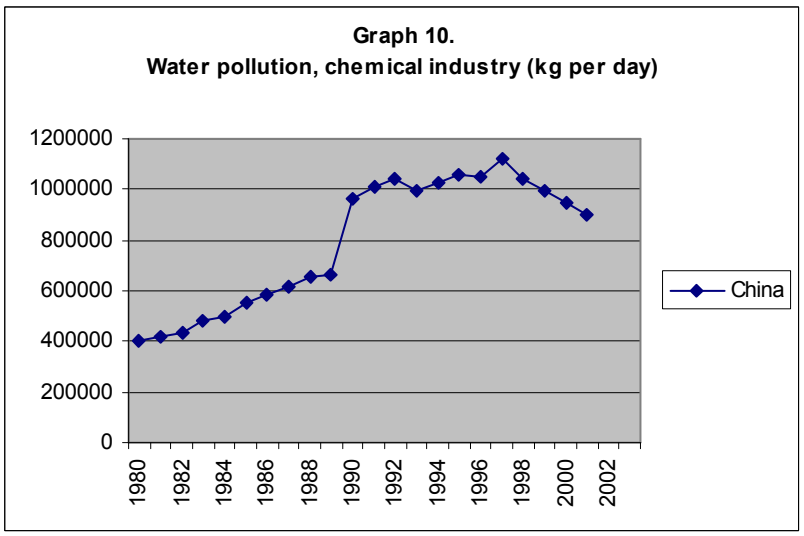
In chemicals imports as a percentage of total merchandise imports, we see less rigorous developments. Malaysia and Thailand keep a fairly constant share since the 1980's, with shares ranging between 7-9% and 10-12% respectively. Although shares are similar, in the other countries we notice a general decreasing share, signifying the rise in importance of other sectors in imports[13].

Although all countries have managed to expand their chemical industry to a respectable size, they still all have a trade deficit in chemical products with the world. Assuming equal technology and pollution intensity of traded goods, this relates to a pollution transfer away from the Asian nations, at least in this sector.
In domestic pollution, EDGAR data on SO_2 emissions[14] suggests that the chemical industry processes (excluding fossil fuel use) in Indonesia and China are responsible for more than 2,4% of total SO_2 emissions in 2000, which is a significant increase compared to earlier years. Although the other countries have also experienced rapid growth in the industry, its impact seems insignificant there.

[13] Appendix table 14.8
[14] Appendix table 13







When we take a look at graphs 8-10, we see that the contribution of the chemical industry in total BOD emissions has been rather stable since the 1990's for most countries, although the absolute amount still seems to be rising in Malaysia and Indonesia while it has been falling in China since 1997. Considering however the rapid expansion of the sector, both in exports and in value added,

all countries except Indonesia seem to have the pollution intensity of chemical industry in terms of BOD emissions rather under control. This is plausibly the result of implementation and execution of targeted environmental policy, as well as the incorporation of cleaner technology, which may be at least partly transferred by foreign investment. We can only assume that concerning SO_2 emissions, the environmental policy and technology element have been unable to offset the effects of the expanding industry and that specific improvements are not generally applicable.

3.5.2 Subsectors of national industry – Petroleum industry

The petroleum industry, in terms of total value added in industry, is specifically important to Malaysia (8,9% in 2000, 11,7% in 2003) and the Philippines (13,9% in 1996, 14,8% in 2003). Trade resulting from this economic activity can be best described by the product group "petroleum, petroleum products and related materials"[15].

As we analyze the contribution of exports from this sector, it appears that the petroleum industry in the Philippines is mainly directed towards domestic use. Although it is responsible for a large contribution to GDP, petroleum exports as a percentage of merchandise exports stays well under 1% (table 15.9).

Petroleum exports as % of merchandise exports

	Malaysia	Philippines
1980	12,79	0,15
1985	12,80	0,09
1990	9,96	0,30
1995	4,13	0,21
2000	6,46	0,58
2005	8,92	0,75

Table 15.9. Petroleum exports as % of merchandise exports

Imports however, make up a significant amount of total merchandise imports, ranging from 8% to 14% between 1990 and 2005 while more than 25% in 1980 and 1985 (appendix table 15.8). Needless to say, the Philippines exhibit a sizeable deficit in trade in petroleum products. Malaysia presents an entirely different case. Petroleum exports as a percentage of total merchandise exports range between 10% and 13% in 1980-1990 (table 15.9). Although in 1995 the export value plummets, in 2000 and 2005 its contribution returns to a highly respectable 6,5% and 8,9% respectively.
In imports, mixed results are observed. In 1980 (14,9% of merchandise imports) and 1985 (12,1% of merchandise imports) higher absolute import values are observed than in 1995 (2%). After that, petroleum imports regain a more prominent position in total merchandise imports[16]. Comparing export value to import value reveals quite an advantage for the Malaysian petroleum industry: in 2005 exports exceed imports by 45%, although in 1990 this was as high as 223%[17].

Foreign direct investment stock has been very large in relative terms in the last decades (table 1). In 1980 it already was more than 21% of GDP, by 1995 it had risen to 32,2% and in 2003 the 40% marker was almost reached. Combining these figures with the notion of a strong petroleum industry suggests extensive foreign presence in the sector. This implies that foreign firms utilize local resources and thus pollute locally.

EDGAR data on SO_2 emissions[18] attribute a significant share of emissions to the "other transformation sector", which includes for example refineries, coke ovens and gas works. In 1990 the share was nearly 7%, but has grown to over 14% in 2000, which can be related to the rapid expansion of the petroleum industry in Malaysia. Although we don't have data on actual production or domestic consumption, considering the large export contribution in total exports, it

[15] Appendix table 15.1 and 15.2
[16] Appendix table 15.8
[17] Appendix table 15.7
[18] Appendix table 13

suggests a significant amount of pollution may be embedded in those exports. Moreover, whether it is to satisfy internal or external needs may be rendered irrelevant, as a strong foreign presence implies pollution induced through production in the host economy either way.

3.5.3 Subsectors of national industry – Textiles

In three of the five countries, according to UNIDO data on value added, the textile sector is of considerable size. For China, the textiles and footwear sector is of major importance, contributing 9% of value added in industry in 1995 and 8% in 2005. In Indonesia textiles and footwear combined show even higher values; over 17% in 1998 and over 13% in 2003. The sector induces 7,9% value added in manufacturing in 1996 and 12% in 2000 for Thailand.
Using data from the World Development Indicators (WDI) on trade in textile (table 16.9), we see that in 2000 exports in textiles in the at least three of the Asian transition economies have grown to contribute between 5,2% and 6,1% in total merchandise exports for China, Indonesia and Thailand. While in China and Thailand the contribution to trade has been fairly stable since the 1990's, in Indonesia its importance in exports somewhat faded by 2005 (3,5% at the practically the same export value as five years earlier), implying increasing importance of other sectors. Although the textile contribution is significant, comparing it to value added within the economy, it suggests that much of production is purposed for domestic use.

Textile exports as % of merchandise exports

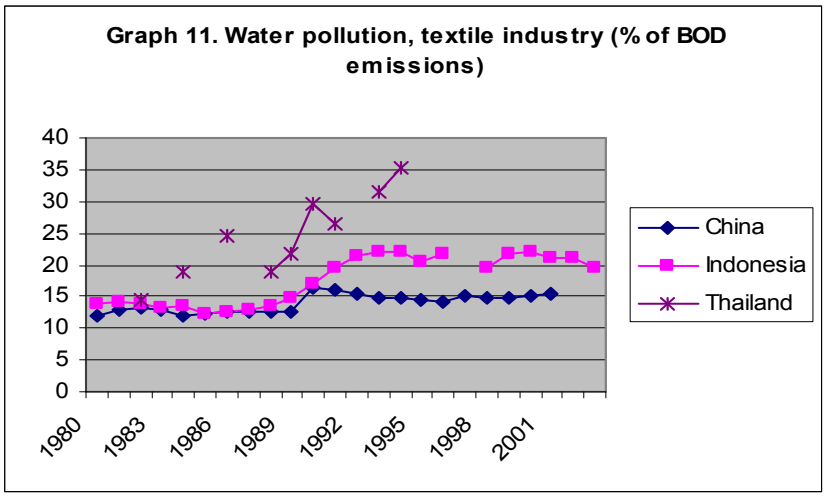
	China	Indonesia	Thailand
1980		0,19	2,03
1985	1,75	0,67	2,81
1990	5,62	3,07	5,38
1995	6,22	4,11	5,56
2000	5,26	6,10	5,54
2005	6,03	3,56	5,80

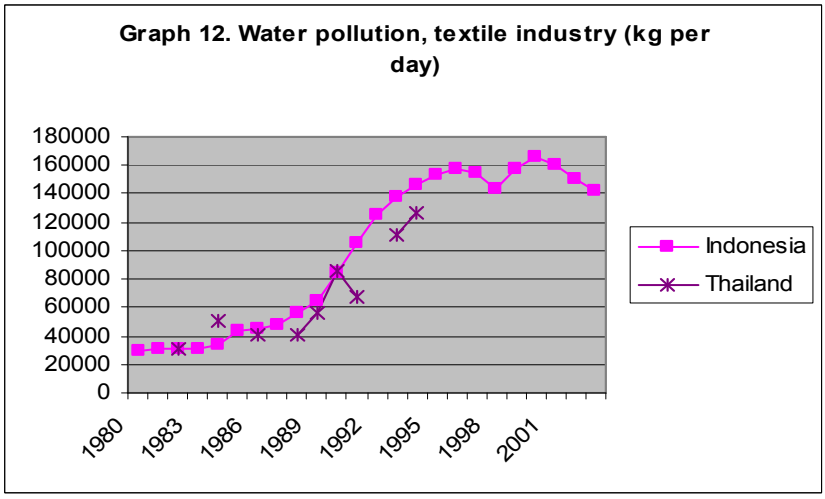
Table 16.9. Textile exports as % of merchandise exports

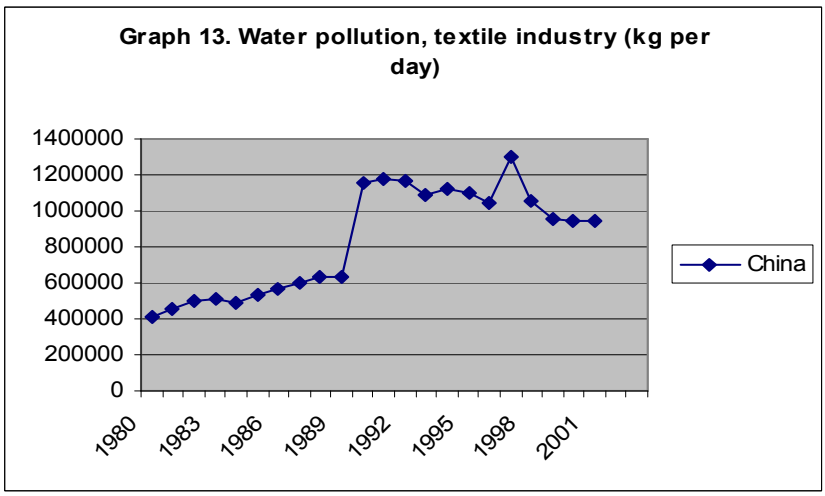
In imports, the share in total merchandise imports seems to be subsiding (appendix table 16.8). In all three countries, the import value of 2000 was roughly the same as in 1995. By 2005, imports in Indonesia have decreased considerably compared to 2000 (-28%), while growth was observed in China (+43%) and Thailand (+27%).
When comparing inward FDI stock to exports (appendix table 16.4), we see stability in Thailand (1985-1995) and Indonesia (1990-2000) of around 2%, suggesting a strong correlation between investments and exports for that period. This phenomenon doesn't occur in China. Inward FDI compared to imports shows no trend in Indonesia, while in China and Thailand FDI stocks increase more than imports do from the 1980's on[19]. Outward FDI stocks compared to imports and exports show similar results, implying increasing investments in other sector than the textiles industry[20].
Nonetheless, a comparative advantage in textiles is obvious[21]. In 1985 export values exceed import values by 43% in Indonesia, 109% in China, and 140% in Thailand. Twenty years later these percentages have increased significantly to respectively 515%, 459% and 232%. This perceived advantage implies the likelihood of foreign presence in the sector, both as a cause and consequence.
Under the assumption of equal production processes and their coherent pollution intensities between the countries that export textile and their trading partners, this strong position in textiles translates to a significant pollution transfer at the expense of the Asian nations.

[19] Appendix table 16.3
[20] Appendix table 16.5 and 16.6
[21] Appendix table 16.7

When we look at graphs 11-13 below, we see that the textile industry has had a fairly stable share in total BOD emissions in Indonesia and China throughout the 1980's and then rise to the level of the 1990's.







In China, BOD emissions by the textile industry increase significantly in the early 1990's as the industry expands, but declines again almost immediately, despite the continued growth. This

implies significant reduced product pollution intensity. Supposing correlation between national production of textile products and textile exports, we can state that in Indonesia the leveling out of BOD emissions seems to be caused mainly by a rather sudden halt in expansion of the industry, which can be indirectly derived from export figures[22]. Moreover, the Indonesian economy, as others, contracted by the Asian financial crisis and it suffered tremendous FDI stock depletion in the following years, partly influenced by civil unrest.

[22] Appendix table 16.2

3.5.4 Subsectors of national industry – Food industry

Another important domestic industry is that of food. In 2003 it contributed more than 10% of value added in manufacturing in Indonesia and the Philippines. In 1996 it was responsible for 11,4% in Thailand, while in 2005 the percentage was around seven for China and Malaysia. Measured as a percentage of total merchandise exports, food exports seem to lose significance over the years, with Indonesia as the exception (table 17.9).

Food exports as % merchandise exports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		7,65	15,05	35,86	47,02
1985	12,57	9,96	17,45	26,90	46,16
1990	12,65	11,16	11,66	18,92	28,73
1995	8,25	11,39	9,50	13,17	19,30
2000	5,44	8,95	5,54	4,78	14,39
2005	3,23	11,66	6,97	6,07	11,64

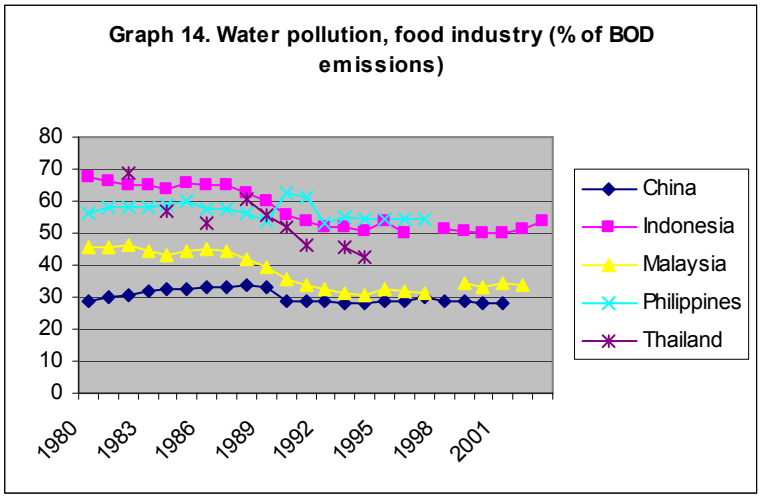
Table 17.9. Food exports as % merchandise exports

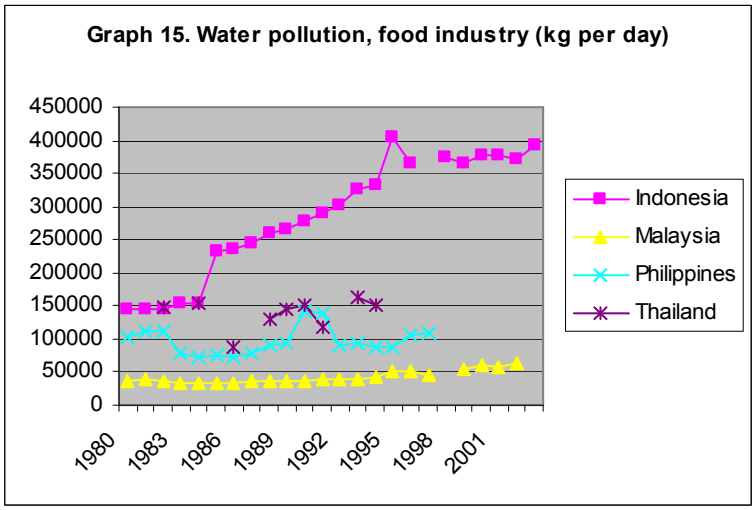
There it has a rather stable influence on export revenue with overall shares between 9% and 11%. While its contribution in merchandise exports has been as high as 35% and 47% in the Philippines and Thailand, by 2005 it had decreased to 6% and 11% respectively. Still, this is a respectable amount considering the volume of exports. In China and Malaysia it shrunk from around 12% in 1990 to 5,5% in 2000. So we clearly observe a subsiding importance of food products in total exports, implying increasing differentiation in supplying export products, which may improve terms of trade for the Asian transition economies.
In imports we see relatively stable shares from 1995 on for Indonesia (8-10%), the Philippines (7-8%) and Malaysia (4-5%). Thailand shows the most constant figures; 3,8-5,2% for 1980-2005[23]. In China the share still appears to be dropping as imports of other products overshadow those in food. Food imports seem to have suffered little under the financial crisis, as only Malaysia reports a minor decrease of imports in 2000 compared to 1995[24].
Overall, the developing countries have a generous advantage in trade in food. Although the advantage has been waning over the years, the value of food exports in 2005 still exceed the import value, at rates varying from 59% in Malaysia to 448% in Indonesia[25].

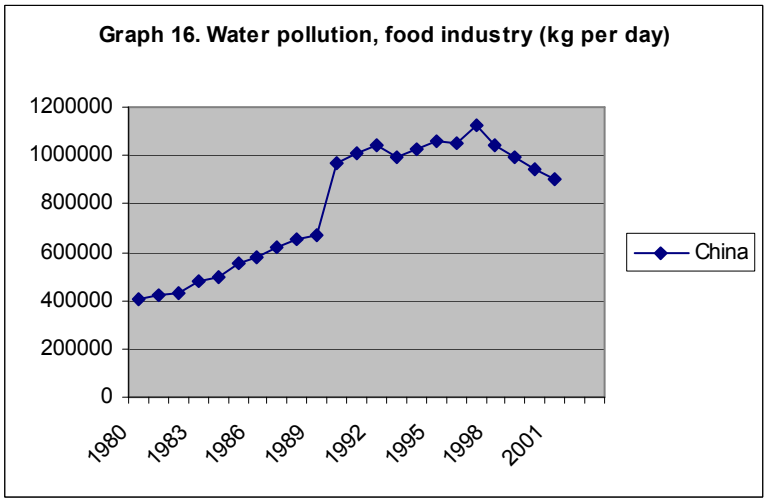
When we look at inward FDI stocks compared to food exports, we see a general increase until 2000 for most countries[26]. The trend continues for China and Thailand, but turns for the other nations as FDI accumulation falls short. All countries except China export significantly less food in terms of value in 2000 than five years earlier[27]. In 2005, when the effects of the Asian financial crisis have waned, exports from Indonesia and Malaysia have recovered, but those of the Philippines and Thailand still fall short. This suggests that the latter two have specialized more in exports from other sectors, despite of the perpetuating advantage; an advantage that most likely hasn't been overlooked by foreign investors. This suggests that the advantage in food products draws foreign investment towards the region, leading to local food production by foreign firms.

[23] Appendix table 17.8
[24] Appendix table 17.1
[25] Appendix table 17.7
[26] Appendix table 17.4
[27] Appendix table 17.2

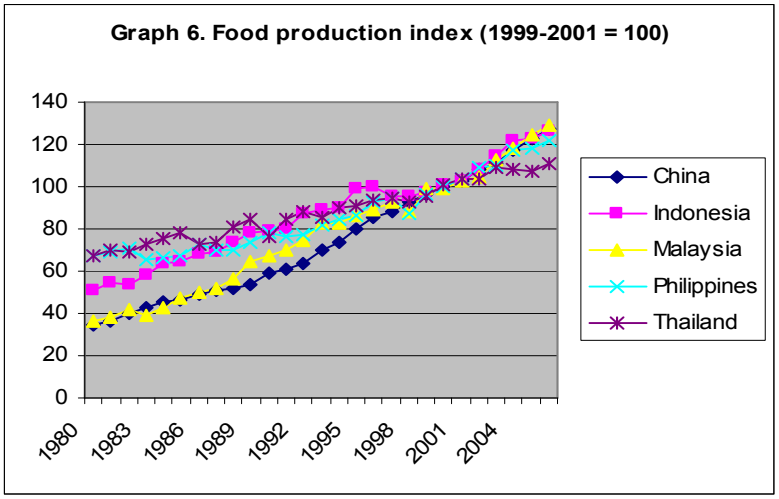
When related to water pollution, the food industry appears to have the most profound impact by far (**graphs** 14-16).







The following examples indicate conditions in the three largest exporters of food. China again seems to make good progress in terms of reducing pollution intensity, as total BOD emissions decrease after 1997, despite a continuously growing output (graphs 6 and 16).



Indonesian food production increased 28% in 1993-2003, while BOD emissions caused by the food industry increased only by 20,5% in the same period, suggesting a decrease in the pollution intensity of food production. In Malaysia food production increased by 21,5% in 1995-2002 and BOD emissions by 21,2%; a slight improvement in pollution intensity.
However, it should be kept in mind that not all food is processed, and of course a large share of production in the food industry is meant for local consumption. Nevertheless, the trade balance tips in favour of the Asian countries. Again, assuming equal technology and pollution intensity between individual countries and their trading partner, these results imply a pollution transfer to all five countries under analysis.

3.6 Concluding remarks

There seems to be a trend of increased foreign direct investment, in monetary terms, but in many cases compared to GDP as well. Foreign firms are in any case gaining an influential position. The FDI presence indicates local production, and therefore locally induced pollution, which can in fact be considered a pollution transfer.

For specific branches of industry, there appears to be a significant advantage in production and trade in the Asian nations compared to their trading partners, which will be elaborated in the next chapter. Besides having an important position within the domestic economy, for most of these sectors trade has a significant part in obtaining revenue by exporting the products of those industries. This relative advantage will not have gone unnoticed by foreign investors. Matching a strong foreign presence in the region to competing industries implies foreign activity within those industries, translating to local pollution caused by foreign firms.

Especially in trade of textile and food products, many of the analyzed countries have quite a dominant position. Apart from whether these sizeable trade surpluses are (partly) the result of foreign direct investment activity, when assuming equal technology and pollution intensities in both internal and external production, they imply a significant pollution transfer within these industries to the Asian nations. This can be deducted from their relative contribution to local water pollution, for example.

Of course a large share of local production is dedicated to satisfying the needs of the domestic population. However, a strong foreign presence may also imply foreign firms serving domestic markets. In this case, FDI stocks do not necessarily have significant influences on various trade flows.

Although pollution has increased in a number of cases, there seems to be a decrease in the pollution intensity of production. This may be the combined result of applied environmental policy, sometimes in cooperation with the international community, more efficient technology, and a shift to higher tier value added production. Foreign direct investment may play a role in facilitating the transfers of new technologies, and foreign firms usually apply the strict environmental standards from their often highly developed home economy in the foreign economy.

On the whole pollution intensities seem to decrease (graph 7), but often doesn't keep up with growth in production, leading to an absolute increase in pollution, as can be derived from graphs 9, 10, 12, 13, 15 and 16. Moreover, at least part of domestic production and trade flows are induced by foreign investment. The export flows induced by FDI constitute an embodied pollution at the expense of the Asian countries, while FDI induced imports imply pollution transfers in favour of these countries. In the case of a foreign firm serving mainly a domestic market, the results aren't implied by trade, but we can assume that production abroad in any case burdens the host economy in terms of induced pollution; whether this is in terms of direct polluting emissions or indirectly, in terms of energy consumption.

4. Trade in subsectors of national industry

Now that we have identified four major industries, in this chapter we will take a closer look at import and export flows in the four major subsectors of national industry discussed in the previous chapter: The chemical, petroleum, textiles and food industry. What are the features of trade within these industries? What countries are considered to be major trading partners and conversely dominant investors? How does FDI relate to trade originating from these sectors? The goal is to gain an understanding in not only the role of individual countries, but more importantly specific groups of countries in trade, investment and coherent pollution transfers over time with respect to China, Indonesia, Malaysia, the Philippines and Thailand. In order to do so, the time frame spans the period 1980-2005 with steps of five years. We will also try to connect it with possible pollution transfers. Within this time frame and between countries, we consider technology and pollution intensity of traded goods to be equal. Therefore, an export surplus relates to a pollution transfer to the developing Asian nations, while an import surplus relates to a pollution transfers away from these countries.
In order to capture the largest part of trade originating from and destined for the Asian transition economies, we have selected four important trading blocks. These include a regional developing block, a regional developed block, a North American block and a European block. These groups will be elaborated next.

We are interested in the trade and pollution transfers concerning the five selected countries. Considering strong economic ties in the region, it seems fit to include the other four developing countries when analyzing an individual country's trade flows. For example, when analyzing trade flows to and from China, we consider Indonesia, Malaysia, the Philippines and Thailand as both individual and group trading partner. This way, pollution embedded in trade flows to one another will be noticed not leaving the cluster of these developing economies.

A second group is also situated in the region, with the difference that these countries reside in far more advanced economic states. The group includes the (former) newly industrialized countries Hong-Kong, Singapore, South Korea and the developed economies of Japan and Australia. Of the latter two, especially Japan holds a prominent position, both in investments and in trade in the region. The former three have themselves experienced rapid economic expansion in the last decades, and their outward oriented structure and openness to investment and trade has in turn given them the opportunity to play a leading economic role within the region. It is however important to realize that Hong Kong and Singapore may act as a transit port rather than a large-scale producer of physical goods. This implies that large amounts of imports from the two city states doesn't relate to pollution over there because the actual production is likely to take place elsewhere. It does however imply pollution transfers away from the Asian transition economies under analysis.

The third group comprises of five of the leading countries in the European Union. It includes Germany, France, the United Kingdom, Italy and the Netherlands. According to the World Bank, in 2007 the first four were all in the top ten of richest countries in terms of GDP, both nominal and purchasing power parity. Although the Netherlands is considerably smaller in terms of domestic product, it is considered to be a major gateway to the European mainland, thus justifying its inclusion in the trade analysis. It should be noted that Germany's trade statistics as such have only come into being after reuniting East and West Germany. Therefore it will in most cases appear from 1990 on.

The fourth and final group consists of the North American countries of Canada and the United States. Needless to say, the United States alone has an enormous influence on the global

economy; it is the largest economy in the world and the American dollar is the most internationally accepted currency in the world. Although Canada may be less prominent on the global stage than its neighbour, it still is easily one of the larger world economies.

Besides the five original Asian countries, these 12 countries together account for a large part of the trade flows as well as investment flows, without making matters unnecessarily complex. For the sake of completeness total world trade volumes and trade with the rest of the world have been added, as to sketch the relative importance of these 12 selected economies.

4.1 Direction of trade in chemicals and related products

In this section we will try to identify major trading partners to the Asian nations in trade that originates from the chemical industry. It is an important national sector, in creating trade revenue as well as providing value added. With the exception of the Philippines, all countries have over time created a chemical industry of respectable size. Nevertheless, as reported in the previous chapter, all of the countries have had a trade deficit in chemical products in the period 1980-2005.

In analyzing the direction of trade for chemicals and related products, what immediately stands out is the significance of countries in the region. The combined export shares of groups one and two are in many cases well over 50% of total chemicals exports[28].

When we isolate the first group in exports, China poses an exception; in the last decade, the group contribution stays around the 7% mark. However, Indonesia gets around a constant 20% of its chemicals exports revenues from this group between 1990 and 2005; in Malaysia the value ranges from 14 to 20 percent. The Philippines (17-45%) and Thailand (13-35%) experience even larger group shares at certain points in time.

An explanation for China's low values in exports to the first group is that China itself is by far the largest importer and exporter of chemicals compared to the other four nations. Considering this, it is China that contributes a large part in the regional exports of the other four, especially since the year 2000. As implied before, the Philippines has by far the smallest market for chemicals trade, and therefore generally contributes the least.

With respect to the group of developed nations in the region, Japan is perceived to be the most important and constant factor in exports; it shows up as a significant contributor to all the countries. In most cases its share revolves between ten and twelve percent, but peaks of 20% (Indonesia, 1990), 23% (Thailand, 1980), 43% (Malaysia, 1980) and even 61% (Philippines, 1980) are also observed, predominantly in the earlier years of the analysis.

Another large regional contributor is found in Hong Kong, with periodical shares of between 8 percent and 28 percent in most countries until 2000. By 2005 however, the importance of Hong Kong has decreased in Indonesia (2,3%), Malaysia (7%) and the Philippines (6,3%), while Japan's share stays leveled. Only from China and Thailand its share in chemicals exports remains above the 10% limit in the same year.

The third regional exports destination is that of Singapore. Interestingly, its influence in export revenues from chemicals seems to be lasting only for Malaysia, but is subsiding over time nonetheless (43% in 1980, 10% in 2005). In Indonesia it has a temporary position between 1990 and 2000, while in Thailand the peak occurs in 1995 at 18,7% before dropping to 3,5% five years after.

As a final regional partner, South Korea is of some importance to China (around 7%) and the Philippines (over 5%), but only from respectively 1995 and 2000 on. Although a country's relative significance is of importance, it should again be noted that the Philippine chemicals export sector isn't one of great magnitude; the Chinese chemicals exports to South Korea in 2005 alone is over four times as large as the *total* value of chemicals exports from the Philippines in 2005.

The third group, that of European economies, seems to be only of relevance to China; between 1990 and 2005, the group share ranges from 10,6 to 18,2 percent; Germany and the Netherlands together lead the group in shares.

The United States seems to be of less importance to chemicals exports than might have been expected. China and the Philippines should however be content with US shares of respectively 8-14% (1990-2005) and 7-11% (1980-2005). If we apply the theory of the pollution haven to these

[28] Appendix tables 18.1.1-18.5.1

data, we should find that highly polluting industries, such as the chemicals industry, move to less developed countries. Strikingly, we observe that over the entire time frame and for all five developing countries, chemicals imports from the US generously surpass exports to the US[29]. Although in most cases the relative gap between export and import values becomes smaller, as import shares constantly drop for all countries concerned, there still is a significant difference between them. This suggests that, under our assumption of equal pollution intensity of production, a sizeable amount of pollution is transferred from the developing Asian countries to the United States.

With respect to the third group, we notice its contribution to imports typically vary between 10 and 16 percent over the entire time frame for all countries except China. Here, the group share lies between 7 and 9 percent. Although shares are not exceptionally high, we do see that they are rather constant. Individually the United Kingdom appears to be the dominant European contributor, but only until halfway the nineteen nineties. From then on, Germany takes that role.

The regional economies however are responsible for most of chemical imports, combined providing over 40% in most cases. Of the developed economies, Japan has the biggest part overall, as it provides significant amounts of chemical imports in each of the developing nations. Thailand especially is dependent on Japanese imports; shares never drop below 20%. However, China (12-18%), Indonesia (9-29%), Malaysia (14-20%) and the Philippines (10-23%) also rely heavily on Japan.
Singapore is another robust regional partner for Indonesia, Malaysia, the Philippines and Thailand and it is becomes more important as time progresses, especially in Indonesia and Malaysia. There, by 2005 it has taken the role of dominant chemicals import supplier, at the expense of Japan, with shares of 14,4% and 15,8% respectively.
China on the other hand prefers South Korea as an import relation over Singapore. Here, between 1990 and 2005, its share has grown from less than two percent to 17%, partly relieving China of its dependence on the United States. The other four countries have had fair ties with South Korea, but its significance was short lived; the height had been reached in the years 1995 and 2000, and it never gained the importance that it has in the case of China. Only in the Philippines and Malaysia shares have reached the ten percent mark in those years, while in Indonesia and Thailand the seven percent mark was never attained. In 2005, its share has subsided, varying from 4,8% in Thailand to 6,7% in the Philippines.
The developing nations among themselves have been increasingly stepping up since the end of the century in particular. By 2000, the group contribution ranges from nearly ten percent in Malaysia to over 18 percent in the Philippines. This excludes China, as it provides rapidly increasing shares of chemicals imports to the other countries, but not relying on the developing region for imports itself, although its group share more than tripled to over six percent between 1990 and 2005.

As mentioned before, all countries have had a significant deficit in chemicals trade over time. This becomes clear by looking at the export to import ratio of chemicals trade[30]. In the case of Indonesia, Malaysia and Thailand, we do see however a rapid amelioration of the trade balance beginning in the nineteen nineties. For those countries the ratio in 1990 varies from 0,14 to 0,23 in total trade with the selected economies. This implies the value of chemical imports were four to seven times the value of exports. World trade shows no major deviations. By 2005, the ratio in trade with the selected economies has risen to 0,47 in Indonesia, 0,80 in Malaysia and 0,69 in

[29] Appendix tables 18.1.1 through 18.5.1 and 18.1.2 through 18.5.2
[30] Appendix tables 18.1.3-18.5.3

Thailand. Relating to world trade, these figures are even slightly higher, signifying the rapid growth in chemicals exports from these three countries. Although they seem to be on their way to trade balance, it still indicates reliance on foreign economies for chemicals imports, and in that sense contribute to pollution elsewhere. As The Philippines has the smallest chemicals sector of the five countries, it naturally employs relatively most of foreign resources. This is illustrated by the constantly enormous deficit, as the ratio never rises above 0,30 in trade with both the selected economies and world trade. Values of around 0,10 have been much more common since 1995. China exhibits a worsening of the export to import ratio between 1990 and 2000, but manages to improve somewhat five years later. Still, in total chemicals trade, the import value is still double that of exports.

When we look only at the second group, we notice a vast improvement for Indonesia, Malaysia and Thailand. The exports to the developed economies in the region show growth rates surpassing the growth rates of imports, thus resulting in the observed overall amelioration of the ratio. If this trend continues and national chemical industries keep expanding, they may enable self reliance at first, and, in a later stage, enable producing increasingly for the outside world. Until then, these countries, as do China and the Philippines, continue to be dependent on trade to satisfy demand. Until then, they will transfer the pollution associated with the production of chemicals abroad, albeit for a large part within the region, especially to Singapore and Japan, but increasingly among themselves.

4.2 Direction of trade in petroleum products

In this section we determine major trading partners in petroleum products (SITC rev. 2 group 33) of the five Asian developing nations, as well as their trade ratios and the trade balance.

Although the developing regional countries initially play a modest role in exports, by 2005 that group is responsible for almost a fifth of China's total petroleum export revenues. This is mainly because of a steep increase in exports to Indonesia, which singlehandedly contributes more than fifteen percent in that year. Comparing this to imports from the same group, we see that it is of much less importance; again, only Indonesia is considered to be a major trading partner. It contributes 16-17% in 1990 and 1995, but after that, China relies more on petroleum imports from outside the selected countries, as petroleum imports surge in order to fuel its booming economy.
When relating the imports to exports from the group of developing Asian nations, it becomes clear that China suffers a relatively modest deficit which is growing over time, although the trade balance with Indonesia is close to zero[31]. This implies China imports more than it exports to this group, suggesting a pollution transfer away from China.

In analyzing trade data from the second group, regionalism becomes more obvious. Major export destinations from the overall dominant second group include Japan and Singapore from 1990 on, while data indicate that South Korea becomes important from 1995 on[32].
In imports, Hong Kong initially has a great deal of influence, providing over 20% of China's total petroleum imports in 1985. As Hong Kong itself isn't rich of petroleum, this probably refers to products it imported in turn from elsewhere. Considering also that China's total petroleum imports in 1985 comprised a mere 46 million US dollars compared to the 60 billion dollar import value in 2005, puts things into perspective.
In 1990, China exhibits a generous surplus in petroleum trade with Japan when exports exceed imports by a factor 40[33]. Until 2000 Japan is by far China's dominant export destination, but its importance has been decreasing ever since 1990, both in relative and absolute terms. By 2005 the value of imports from Japan have surpassed the value of exports to Japan, implying Japan has found other sources of petroleum products.
Singapore has been a steady partner in export revenues, while it has played a less significant role in imports since 1990. In that year, China's exports to Singapore were almost twice the value of imports from Singapore. In the following years however, a trade deficit occurred, effectively transferring the pollution of petroleum production to China.
As mentioned, South Korea appeared on stage by 1995, not only in exports, but in imports as well. Since then, it contributed 9-13% in export revenue, while providing 6-10% of petroleum imports. This signifies the rapid economic change South Korea experienced, as its demand for and supply of petroleum products became apparent. In 1995, China's exports to South Korea were still 13% more than its imports from Korea, in later years a significant trade deficit developed for China.
As the economy of Japan in particular, but that of South Korea and Singapore as well, resides in an advanced state and given the observed regionalism, it seems fair to assume that a large part of the international investments coming from these countries are invested regionally. With relatively polluting activities in the petroleum sector, and the pollution haven theory in mind, one would expect China not to have a trade deficit in petroleum products, but rather a generous surplus. This supposedly occurs because developing economies theoretically tend to value economic expansion over preserving the environment, which would lead to attracting dirty industries. This implies

[31] Appendix tables 19.1.3 and 19.2.3
[32] Appendix table 19.1.1
[33] Appendix table 19.1.3

increasing pollution transfers towards China. However, clearly the opposite of what the theory states is happening as imports exceed exports; under the assumption of equal pollution intensity of products, China transfers pollution away to advanced economies in the region. This suggests rejecting the pollution haven hypothesis in this case.

The advanced European economies have practically no part in imports and exports of petroleum products from China. The United States however does have a part, and mainly in exports. Between 1990 and 2005 it contributes between 8% and 15% of China's petroleum exports revenues. It is the China's only important trading partner with which it has a surplus in trade for this product group. The export value is still 2,3 times that of the import value from the US, implying a pollution transfer from the US to China. However, in monetary terms, it doesn't compare to China's regional petroleum trade deficits[34].

Indonesia exhibits similar relations with the developed western economies of groups 3 and 4. European economies are insignificant, while the US is of importance for export revenue, albeit mostly in the earlier years of our time frame. While in 1980 it contributed a quarter to exports, its share decreased in both relative and absolute terms. Nonetheless, Indonesia still exports twice it imports from the US in 2005.
In regional imports, Indonesia traditionally relies heavily on Singapore (23-40% in 1980-2005) and in recent years somewhat on South Korea. With the latter it still holds a trade surplus in petroleum in 2005 of 85% of trade value, while with Singapore a trade deficit occurs since 1990. By 2005, imports from Singapore exceeded exports almost seven times[35]. This implies a gigantic pollution transfer away from Indonesia, with a value of almost six billion US dollar.
Although Japan supplies nearly no petroleum imports to Indonesia, it does make for an excellent trading partner, with export revenue shares of 33-64% between 1980 and 2005. Needless to say, within this product group, Japan grossly burdens Indonesia with the negative externalities of petroleum production. Opposite to the case with China, the pollution haven theory does seem to apply here. In order to satisfy its petroleum needs, Japan appears to induce pollution in Indonesia in this sector.

With respect to Indonesian petroleum trade with the developing economies of the first group, Malaysia has been rather important in imports since the 1990's, while having little meaning in terms of exports. China became an interesting export destination in the 1990's, while gaining a place in imports from 2000 on. On the whole, Indonesia has a relatively marginal trade deficit with the first group in 2005. Before that, terms of trade were in favour of Indonesia[36]. However, since involved pollution transfers don't leave the five developing Asian nations this way, it is of less importance compared to transfers outside the cluster of Asian transition economies. Moreover, considering investments from those countries are minimal compared to much more developed economies such as the US and Japan, trade induced by investments are assumed be minimal as well.
However, for Indonesia the trade ratio for the combined four groups has been dropping ever since 1980, from over 15 to 0,92 in 2005, meaning imports are overshadowing exports. Compared to the rest of the world, the foresight looks even grimmer in monetary terms, as import value is almost 20 times the export value in 2005[37]. On the other hand, it implies more polluting activity for Malaysia relating to petroleum products takes place outside than inside the country.

[34] Appendix table 19.1.4
[35] Appendix table 19.2.3
[36] Appendix table 19.2.3
[37] Appendix table 19.2.3

Of the selected trade partners in imports, Malaysia relies practically solely on Singapore, which is providing 42-80% of all petroleum imports between 1980 and 2005[38]. In exports, Malaysia issues more diversification, but nonetheless acts almost exclusively regionally; the combined export revenues from group 1 and 2 range between 71% and 94% in the selected period[39]. Major players include Thailand, Singapore, South Korea and Japan.
With respect to Singapore, as is the case with China and Indonesia, Malaysia holds a deficit from 1995 on. In earlier years trade between the two was rather balanced. Contrary to trade with Singapore, the trade balance with Thailand, South Korea and Japan is generously in favour of Malaysia[40]. In monetary terms, that is. Such surpluses again imply pollution transfers to Malaysia, as it holds an obvious advantage in the production of petroleum products.

Thailand shows similarities with the other countries, as regionally, Singapore is a dominant trading partner. However, in imports this dominance manifests itself until 1995, with shares ranging from 17% in 1980 to 38% in 1990[41]. Interestingly, from 1995 on, Singapore becomes the dominant export destination, contributing as much as 38,8% in 2000[42], signifying a shift in pollution transfers between the two[43]. Japan and South Korea are less prominent, but nonetheless show steadily increasing export shares since 1995. Within the entire second group, Thailand suffers an enormous trade deficit in petroleum products until 1995, implying large pollution transfers away from it. However, by 2000, this changes, as exports expand enormously compared to imports from the second group[43].
Within the group of developing Asian nations, Malaysia plays a large part in imports since halfway the nineteen eighties. Together with Singapore, it holds a relatively large share in imports over the entire time frame. Besides obtaining petroleum imports from these two countries, Thailand satisfies its petroleum needs outside the selected economies.
With respect to exports, the first group remains rather insignificant to Thailand until 2000; then, China and Indonesia present themselves as worthy export destinations, with combined shares in total petroleum export revenues of 18% and 27% in 2000 and 2005 respectively.

The Philippines do not have a strong exporting position in petroleum. In 2005, total export value did not even total one billion dollar[44], which pales in comparison to the other four nations. In imports, it seems mostly dependent on countries outside our analysis. However, we can say that because of imports dominate exports, there should be no fear for the Philippines that pollution of petroleum related production is transferred their way.

Finally, we take a look at the export to import ratios in petroleum trade[45]. In trade within the regional developed countries, we see China's and Indonesia's ratio of petroleum exports to imports constantly falling from a sizeable surplus to a deficit, relating to foreign pollution to realize local consumption. Conversely, Malaysia and Thailand have a surplus in 2000 and 2005. With respect to the major individual trading partners of the second group (Singapore, South Korea and Japan), ratios in China have all dropped from large surpluses in 1990 to large deficits in 2005, relating to pollution transfers towards those trading partners. Malaysia upholds surpluses with South Korea and Japan, while the ratio of Singapore has dropped, as is the case for China.

[38] Appendix table 19.3.2
[39] Appendix table 19.3.1
[40] Appendix table 19.3.3
[41] Appendix table 19.5.2
[42] Appendix table 19.5.1
[43] Appendix table 19.5.3
[44] Appendix table 19.4.1
[45] Appendix tables 19.1.3 through 19.5.3

The trade ratios of Thailand seem to be improving, but mainly because of increasing exports to regional developed nations, while imports are kept low. Nonetheless, this may be interpreted environmental strain exerted on Thailand on behalf of Singapore, South Korea and Japan. More importantly however, certainly in more recent years, for four of the five countries petroleum imports come increasingly from countries outside our trade analysis. Indonesia is the exception; it imports from the rest of the world in have dropped to nearly 40%, while Malaysian imports from the rest of the world have risen to 46%. In China, the Philippines and Thailand, shares of over 70% from the rest of the world are quite common. With this in mind, it appears to be the case that the developing nations employ vast amounts of resources outside their own economy. As the extraction of petroleum and refining processes are commonly environmentally intensive, this implies significant environmental pressure as a result of petroleum demand in the developing Asian nations.

4.3 Direction of trade in textile products

In this section we will take a closer look at trade in textile products which we have defined as the sum of SITC groups 26 (textile fibres (not wool tops) and their wastes (not in yarn)), 65 (textile yarn, fabrics, made-up articles, nes, and related products), 84 (articles of apparel and clothing accessories) and 85 (footwear).

In imports, regional ties are clearly visible. Over the entire timeframe and concerning all the Asian developing nations, typically half of all textile imports come from groups 1 and 2[46]. In many cases, the share of these groups combined is even greater, augmenting to over 60%. The largest part of the remaining textile imports, generally around 30%, comes from economies outside our analysis, signifying the marginal role of European and North American economies. China has a huge part in textile imports throughout the entire period, especially for Indonesia, Malaysia and Thailand. Shares in these countries range from 6-16% for Indonesia (with the exception of 1995), 7-27% for Malaysia and 7-24% for Thailand. In the Philippines, China becomes a more important import supplier halfway the 1990's; by 2005, its share increased from close to 4% to 18%. Although China is the dominant supplier of textile products within the first group, it is not the only one. With respect to the Philippines and Malaysia, Thailand and Indonesia are gaining importance departing from 1995. By 2005, the share of the first group, excluding China, has reached 9% in textile imports in the Philippines and 16% in Malaysia.

Within the second group, that of regional advanced economies, we see a number of similarities between the developing countries.
Hong Kong has a significant influence on regional imports for China, Malaysia, the Philippines and Malaysia. In the Philippines the share is rather constant between 1980 and 2005, supplying between 17% and 22% of all Philippine textile imports. In the same period Thailand relies on Hong Kong for 4-7% of textile imports, China for 8-13% with a 52% peak in 1990. Malaysia imports 8-14% from Hong Kong between 1980 and 2000, while the share drops to 5,3% in 2005; the slack appears to be picked up by China.

Japan also provides a large share of textile imports to our developing economies, with no exception. In Indonesia, Malaysia, the Philippines and Thailand its relevance predominantly shows in the first two points in time, 1980 and 1985. For those four countries, its share in imports is around one fifth. Afterwards, its share drops to around one tenth in Thailand, and in case of the other three countries it diminishes even further to 6-7%. In the case of China, Japans relevance is clear in 1985 and 1990 (around ten percent), but in 1995 (19,2%) and 2000 (20,8%) it becomes even more comprehensive. However, as textile imports have risen over 40% to 24 billion dollar in the following five years, Japan's contribution drops a few percent. Nonetheless, it remains China's dominant individual supplier.

South Korea is of particular relevance to the imports of the Philippines, where relative shares constantly increase over time from 2,8% to 16,3%. This is an exceptional observation, as for most other countries, the South Korean share subsides after the 1990's. In the case of China, it reaches a peak of 18,6% in 2000 before decreasing.
Another exceptional observation is the inclusion of Australia in trade, as in the other product groups, its contribution remains marginal, both in terms of imports and exports. However, Indonesia and Thailand experience peaks in Australian textile imports in 2000, of 13,6% and 7,8%, respectively. Data on China indicate that the importance of Australia is still periodically increasing, albeit gradually.

[46] Appendix tables 21.1.2 through 21.5.2

With respect to the western developed economies, Europe's role is rather marginally, while the US does appear of importance in textile imports, at least for some countries. In Indonesia, the Philippines and Thailand, it even manages to provide around 30% of imports in 1980. Ten years later the US share has dropped to 10% in the Philippines and Thailand. Indonesia still upholds a 19% share in the same year. Moreover, although it dropped to 10% in 2000 in Indonesia, five years after, it had yet again risen to 17%. In 2000, the US share in Chinese textiles imports was a low as 2%, for 1990, 1995 and 2005, it maintains a respectable range of 8,6% to 9,4%.

Contrary to observations in import data, participating countries in exports are much more divers[47]. Although there are dominant players, overall there are many countries with small shares. Also, European countries combined generally have a greater part in textile exports than in the other product groups, with Germany and even more so, the United Kingdom as largest contributors.

Europe's contribution (third group) to export income from textile trade in China keeps growing from the 1980's on to over 11% in 2005. Even though Europe in this sense is a force to be reckoned with, it has an even greater value to the remaining four countries. It pinnacle is reached in 1995 for Indonesia (26,6%), the Philippines (17,3%) and Malaysia (19,7%). Overall, percentages range from 10 to over 20 percent over the entire time frame[48].

The first group appears to be rather unimportant to regional textile exports in the 1990's, although a rise in their shares is perceived over time. Malaysian and Thai exports to the combined countries of the first group are relatively high (7,3% and 8,3%) in 2005 compared to those from China, Indonesia and the Philippines.

With respect to the second group, the only stable trade relation leads to Japan. Although its share in exports stays between 4 and 8 percent for all countries except China, it does remain a rather constant contributor. Japan is of more interest for China, as shares between 12 and 23 percent are common between 1990 and 2005.
Hong Kong appears to be China's gateway to the world with respect to exports in 1990, when almost half of the total export value originated from it. Although its share rapidly dropped to just under 12 percent in 2005, it still remains at a steady second place in the region, behind Japan. Of the other countries, only Malaysia shows relative peaks in exports to Hong Kong in 1995 (9,1%) and 2000 (7.7%).
Besides Japan and, temporarily, Hong Kong, Singapore is of relative importance to Malaysia, especially in 1990 (10,5%) and 1995 (8,55%). However, it was of more significance to Indonesia, but only until 1990. After that, its share dropped from 12% to around 3%.

This leaves us with the group of North America. As in the other product groups, Canada, almost traditionally, has only a marginal part in trade, but the US is observed to be the overall dominant destination for textile exports from the developing Asian countries. The Philippines has again by far the smallest export volume, as is the case in the other product groups, and is in 2000 and 2005 almost solely dependent on exports to the US, as it provides more than 70% of textile export income for the Philippines. The other countries also maintain strong export ties with America in textiles, China being the least dependent with shares between 10 and 19 percent in 1985-2005.

[47] Appendix tables 21.1.1 through 20.5.1
[48] Appendix tables 21.2.1 through 20.2.5

Over the same period, Indonesia (26-41%), Malaysia (31-42%) and Thailand (20-40%) generously surpass China's figures, but don't come close to those of the Philippines.

Relating exports to imports using the ratio between them gives an idea of the relative position of the Asian nations in textile trade[49].
As exports to the selected European economies vastly outpace imports from Europe, all countries exhibit very large ratios. This implies their comparative advantage and generates revenue. On the other hand, it implies a vast amount of pollution transfer towards the developing Asian countries, especially from the United Kingdom and Germany. With respect to trade with the United States, we can draw the same conclusion, with the difference that the amount of perceived pollution transfer is even far greater.
In trade with developed regional economies, the Philippines is the only party to suffer a deficit in textile trade over the entire period, and doesn't show sign of improvement. This is likely to be related to a relatively small export market for textile in the Philippines. Indonesia starts out with a deficit in 1980 and 1985, but turns it into a surplus which seems to increase over time; By 2005, the export value is more than triple that of imports from the second group. A similar situation presents itself in Malaysia. Only after the deficit until 1990, the ratio of exports to imports appears to stabilize around 1,5. Thailand has a peak ratio of 2,45 in 1995 and a low of 0,92 in 1985, but otherwise experience a modest surplus of 12% to 25%. China shows itself as the country with the largest advantage and coherent surplus in trade with the second group. Starting practically in balance in 1985, it manages to constantly increase its advantage in textile trade to a ratio of exports to imports of 4,37 in 2005. Especially Hong Kong and Japan gratefully employ China's textile exports.
All in all, the developing nations together have an obvious advantage in textile trade with developed nations. It creates large revenues, but implies vast production for the outside world. Although textile manufacturing is generally labour intensive and therefore relatively energy efficient, for example the process of dying clothes with harmful chemicals and the cultivation of cotton are considered to be a significant strain on the environment. Considering this, a considerable amount of pollution may very well be effectively transferred to the developing Asian nations.

[49] Appendix tables 20.3.1 through 20.3.5

4.4 Direction of trade in food products

This section deals with trade relating to food, based on UNCTAD data on SITC group 0, which is defined as food and animals chiefly for food.

An overall constant 70% to 80% of all exports originating from the developing Asian nations is directed towards the selected economies in our analysis.
When we take a look at the significance of economies of the second group, Japan is, as in earlier product groups, an overall major export destination for all countries involved[50]. It is in relative terms of the least importance for Malaysia, where it contributes between 5,4% and 8,5% in the period 1985-2005. In the other countries it exhibits shares of up to 40% in the same period, signifying its great importance for food exports.
Singapore is relevant in food exports to Indonesia but especially to Malaysia, where a share of 22% in 2005 is the lowest. Between 1980 and 2005, its share is commonly between 30 and 40%. Clearly, what Japan means to the other four countries, is what Singapore means to Malaysia. Hong Kong, another developed economy in the region, plays a more modest role as both a Malaysian and Philippine export partner and mostly in the years 1995 (8,6% and 5,7%) and 2000 (6,4% and 7,6%). For China on the other hand, it has a rather large part to play, as it contributes between 8 and 26 percent in 1990-2005. There is however a dropping trend as South Korea presents itself as an alternative to Chinese food exports, which can be seen from data from 2000 (11.3%) and 2005 (11.2%). The Philippines also accept South Korea to be included as an export partner from 1995 on, although less prominent.

With respect to exports the within the developing economies, we see an overall growing contribution of the group as a whole, with China, Indonesia and Malaysia as driving forces. In Thai export figures, the group share exceeds 14% in 1980, 1985, 1995, 2000 and 2005. For the other countries, its share generally grows from a few percent to more than ten.

The group of developed European countries are a constant source of income in food exports for Thailand, Indonesia and Malaysia. There, its share never drops below 10%, and seems to stabilize between 10 and 14 percent from 1990 on. Within the group, the Netherlands play a dominant role for both Indonesia and Malaysia.

We then turn to the fourth group. The US is an overall dominant trading partner for the developing nations in most product groups discussed here, but we see mixed results. For example, Malaysian export data show ups and downs (with 11% in 2005 as the peak), whereas its share in Chinese export products only increases (to 11% in 2005). For the other three countries, we see a significant share in all years, practically never dropping below one tenth, and in many cases even above twenty percent. The Philippines, as in textile exports, rely most on the US; There, its share ranges between 21 and 37 percent throughout the entire time frame.

In imports, the rest of the world becomes increasingly influential, as shares of 40% are not uncommon for many countries as time passes. However, we are able to identify a number of dominant individual and group trading partners[51].
We see very similar results in import data for each of the individual countries.

In the first group, China and Thailand together lead the contribution of the developing Asian nations. To a lesser extent, Indonesia has influence in Malaysian and Thai food imports. Because

[50] Appendix tables 21.1.1 through 21.5.1
[51] Appendix tables 21.1.2 through 21.5.2

of the presence of Chinese, Indonesian and Thai food imports in Malaysia, Malaysian ties with the developing region are strongest of the five countries; data show that imports coming from the entire first group never drop below one quarter of total Malaysian food imports.

For once, Japan is not observed to be the dominant trading partner. In food imports, Australia has filled that position. Indonesia and Malaysia rely on Australia for more than a fifth of food imports for a number of years. In China its relevance grows again after 1995 to 7,5% in 2005, while Philippine imports reached 17,9% in 1995 and Thai food imports from Australia seem to gain importance since 1980, rising to almost 8% in 2005. Although this last figure may not seem of great value, Australia still is the overall dominant supplier of food in the developed region.

With respect to imports from the North American group, we observe that Canada plays a significant role in especially China (6,7-22,1% between 1990 and 2005), and to a lesser extent in Indonesia (4,6%-11,2% between 1985 and 2005). However, for Malaysia, the Philippines and Thailand, its relevance is again marginalized. The United States have solid import relations in China (12-29%), Indonesia (8-20%), and Thailand (11-20%). The Philippines (22-46%) exhibit the strongest dependence on the United States, as in food exports.

Related to a country's individual world trade in food, Malaysia and the Philippines are net importers. In order of magnitude of trade surpluses in food in 2005, Thailand has the largest, followed by China and Indonesia. In that order, it constitutes the magnitude of pollution transfers induced by foreign demand[52].
Compared to trade with economies outside the analysis, Indonesia (again) suffers a deficit from 1995 on, the Philippines from 1990 on, relating to exerting environmental pressures outside their economy to provide for their internal needs. Malaysia however, presents the relatively largest burden on the rest of the world, with export to import ratios around 0,40 throughout the entire time frame. China seems to be rather in balance from 1995 on, in monetary terms and conversely in perceived pollution transfers.
In food products trade with North America, Thailand has a traditionally high export to import ratio, while Malaysia and China manage to improve their trade balance, at the expense of employing local resources for foreign consumption. The opposite is true in the case of the Philippines.
With respect to trade to developed countries in the region, all five countries do exhibit considerable trade surpluses over time, with the exception of Malaysia in 1980. For all countries except for the Philippines this holds for trade with the selected European nations, with the exception of the Chinese balance of 1990, where the ratio of exports to imports has a value of 0,67. Comparing values from 1985 to those in 2005 in the same group, the balance of trade improves only for China (from 2,38 to 2,91). The ratio for Indonesia, Malaysia and Thailand deteriorates, nevertheless stays well in their favour in monetary terms. This relates to a relative reduction in pollution transfers towards Asia, but not necessarily in absolute terms as trade volumes drastically increased in the last two decades. However, as technology advances over time, the pollution intensity of food products probably decreases over time as well, further reducing perceived pollution transfers to the transitional nations.

[52] Appendix tables 21.1.3 through 21.5.3

4.5 Concluding remarks

With respect to trade relations of the transition economies of Asia in our analysis, we observe that there is a strong reliance on the region. Especially the economy of Japan plays a dominant role, but the previous newly industrialized countries of South Korea, Singapore and Hong Kong also have an enormous role to play, sometimes individually, but practically without exception as a group. This signifies that developing regional nations have the strongest relations within the region; this is likely to be true in terms of investment flows as well. However, an important notion is that imports originating from Singapore and Hong Kong are largely re-exports of imported goods. Since both are city states, they are unable produce the observed amounts of goods themselves, concluding they function as transit port rather than producer. In this case, imports from these two countries do not imply direct pollution transfers to the two, as actual production originates elsewhere in many cases.

Besides the impact that the more developed regions have in the economic development of China, Indonesia, Malaysia, the Philippines and Thailand, there appears to be an increasingly strong economic relation between the transition economies themselves.

Concerning trade in textile products, we see that most economies exhibit rather a large advantage, as the export value is generally much larger than the value of imports, although there are large deviations between the countries. In trade with developed economies within the region, only the Philippines is unable to end on top in textile trade. The other four do. With respect to textile trade with the European and North American economies as groups and as individual countries, all five countries exhibit massive trade surpluses. This implies enormous amounts of textile goods produced for the outside world, relating to a pollution transfer to the Asian transition economies.

In food products, the advantage is still obviously there with respect to groups two, three and four for China, Indonesia and Thailand, but less sizeable than in textiles.

In the other two branches of industry, that of chemicals and petroleum, we see entirely different results. In the petroleum sector, only Thailand and Malaysia still appear capable to maintain a trade surplus with the group of developed nations in the region. In petroleum trade with the United States it is China, Indonesia and Malaysia that remain on top, even though the ratio of imports to exports have been rapidly dropping since the start of our time frame.

In chemicals especially, there is still a lot of room for national development. With no exception, all countries seem to be very dependent on the outside world for chemicals imports. While their export amount is rapidly expanding, the amount of imports still generously surpasses it, with huge trade deficits within the sector as a result. Although it is not to be expected that all five countries will be self sufficient in the near future, we do see some amelioration in the terms of trade. However, in this branch particularly, under the assumption of equal technology and pollution embedded in traded products, it is the Asian transition economies that are perceived to transfer pollution towards the members of developed regional economies, European economies and North American economies.

5. Conclusion

In the foregoing chapters we have tried to sketch the issue of pollution transfers and its influence on the environment. Investments and trade have played an exceptional role. Investments can have both positive and negative consequences for the amount of production, consumption and the coherent economic development and perceived pollution. A main positive feature of foreign direct investment is that it facilitates the transfer of technology, which in turn can lead to more efficient and cleaner production. On the other hand, as illustrated by the pollution haven hypothesis, investments may sometimes be perceived to lead to environmental degradation, as mechanisms and instruments to tackle environmental issues in transition economies are less advanced than in fully developed economies. This phenomenon may be caused largely by a relative absence of institutions, as governments and their substructures are in developing nations are perceived to be less capable, which may be the result of limitations in funding, education, qualified personnel and technology.

In this sense, the environmental Kuznets curve can be interpreted by some as to prioritize economic growth before inducing environmental protection. The logic behind this is that new found wealth can be utilized to create strong general public institutions and specialist environmental institutions to map and tackle environmental issues. Besides national environmental programs which are increasingly set up and improved, regional and extensive international cooperation may lead to further improvement, as developing countries may learn from the experience of more developed nations that have already dealt with previous stages of environmental protection. This seems to apply, as we observe that the selected economies have all imposed (basic) environmental regulation well before the level of income at which for example the United States had. This however doesn't mean that pollution from then on starts to decrease; environmental protection has certainly been deemed necessary and is still in a developing stage.

With respect to data on foreign direct investment stocks in transitional economies indicate that foreign presence and influence is strongly increasing over time. This indicates that production partly shifts towards the developing nations. The effects may be considered broadly twofold. First, as foreign firms observe opportunities abroad, they may act to provide in consumption and production needs, which increases wealth, both internally and externally. Also, foreign firms generally incorporate their production processes and technology in the host economy, leading to more efficient production and transfers of relevant technologies to the host economy, which in turn can utilize these technologies more widespread. Second, these investments imply increasing production in the host economy, which in turn leads to more resource usage and coherent pollution, while effectively sparing the environment in the investing country. It is however unclear whether one of these two effects is dominant.

In analyzing trade flows inherent to strong national subsectors of industry, we observe that the Asian transition economies have a clear advantage in textiles and food. This is illustrated by the ratio of exports to imports. Under the assumption of equal technology and pollution intensity of traded goods, a positive trade balance in a certain sector may be interpreted as a pollution transfer towards these countries. In the branches of petroleum and chemicals, we see quite the opposite. Here, the developing nations appear to be largely dependent on the outside world, although much of the trade occurs within the region. Vast deficits in this case relate to the transfer of pollution away from the Asian transition economies.

We have assumed that there is equal technology and pollution intensity of production of all countries involved. Under this assumption, it is possible to roughly estimate the amount of

pollution transfers in monetary terms. The assumption reduces complexity, but is far from reality as actual levels of technology and pollution intensity of production may differ greatly between countries. However, data limitations concerning actual emissions and pollution intensity of manufactures traded goods deny us to conclude anything concrete on actual pollution transfers. Also, sector level data on investment stocks and flows per country of origin and destination are still rather scarce. But as time progresses, such data becomes increasingly available, which may lead to future research further enhancing our understanding and create solutions to the issue of pollution and pollution transfers.

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APPENDIX

Outward FDI stock as % of food exports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		0,10	8,12	1,47	0,08
1985	2,34	0,63	7,44	2,07	0,08
1990	9,92	0,67	14,68	1,85	1,70
1995	29,59	25,60	60,69	12,49	7,02
2000	42,61	47,01	317,29	44,01	12,47
2005	78,95	41,66	228,62	33,38	23,49

Table 2. Outward FDI stock as % of food exports

Outward FDI stock as % of food imports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		0,44	23,72	26,41	2,68
1985	51,97	7,76	28,51	29,32	2,98
1990	96,49	7,80	35,49	11,50	25,05
1995	192,75	164,23	135,14	51,57	85,06
2000	298,86	159,95	441,91	61,38	80,81
2005	243,65	228,30	363,74	60,73	101,61

Table 3. Outward FDI stock as % of food imports

Food exports \ imports ratio

	China	Indonesia	Malaysia	Philippines	Thailand
1980		4,34	2,92	17,95	31,56
1985	22,13	12,27	3,83	14,14	37,55
1990	9,72	11,58	2,42	6,22	14,71
1995	6,51	6,41	2,23	4,13	12,11
2000	7,01	3,40	1,39	1,39	6,48
2005	3,09	5,48	1,59	1,82	4,32

Table 4. Food export \ import ratio

Outward FDI stock as % of services imports

	China	Indonesia	Malaysia	Philippines	Thailand
1980			10,30	11,90	0,78
1985	35,63	1,07	10,51	19,77	0,78
1990	102,37	1,42	13,73	8,80	6,62
1995	70,44	43,55	34,20	17,61	12,09
2000	77,07	44,38	94,81	30,44	14,25
2005	68,27	63,19	99,24	34,12	17,77

Table 5. Outward FDI stock as % of service imports

Outward FDI stock as % of services exports

	China	Indonesia	Malaysia	Philippines	Thailand
1980			26,84	11,83	0,87
1985	29,46	6,52	21,33	7,67	0,70
1990	76,09	3,46	19,52	4,78	6,51
1995	92,88	107,81	44,16	13,05	15,33
2000	91,25	133,10	113,90	47,29	15,89
2005	76,89	107,78	111,31	44,22	23,90

Table 6. Outward FDI stock as % of service exports

Services exports \ imports ratio

	China	Indonesia	Malaysia	Philippines	Thailand
1980			0,38	1,01	0,91
1985	1,21	0,16	0,49	2,58	1,12
1990	1,35	0,41	0,70	1,84	1,02
1995	0,76	0,40	0,77	1,35	0,79
2000	0,84	0,33	0,83	0,64	0,90
2005	0,89	0,59	0,89	0,77	0,74

Table 7. Services export \ import ratio

Exports of goods as % of total exports

	China	Indonesia	Malaysia	Philippines	Thailand
1980			91,95	80,00	81,24
1985	89,15	95,64	88,74	67,44	77,57
1990	89,80	91,51	88,19	71,62	78,04
1995	87,01	89,67	86,08	65,11	78,88
2000	89,11	92,62	87,59	91,71	83,04
2005	91,11	87,06	87,87	89,90	84,41

Table 8. Exports of goods as % of total exports

Imports of goods as % of total imports

	China	Indonesia	Malaysia	Philippines	Thailand
1980			78,14	84,30	83,55
1985	93,81	71,22	74,84	85,50	82,22
1990	90,68	77,99	82,73	87,39	82,41
1995	81,36	75,14	82,75	79,21	77,10
2000	85,63	72,08	82,25	89,20	78,42
2005	88,23	75,91	83,19	89,12	79,63

Table 9. Imports of goods as % of total imports

Inward FDI stock as % of manufactures imports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		65,18	73,10	32,49	20,94
1985	27,96	72,09	85,42	128,51	36,00
1990	45,01	48,02	42,92	47,14	33,26
1995	100,67	63,18	43,17	37,12	30,94
2000	126,99	92,95	75,87	44,87	63,01
2005	63,89	33,43	54,23	41,14	70,63

Table 11. Inward FDI stock as % of manufactures imports

Inward FDI stock as % of manufactures exports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		257,14	112,56	18,71	12,03
1985	7,66	46,84	87,15	31,60	13,49
1990	7,55	19,87	43,58	19,48	15,29
1995	17,15	18,29	43,29	19,76	14,40
2000	20,31	26,29	72,61	18,62	32,34
2005	14,94	10,20	48,69	16,96	42,99

Table 12. Inward FDI stock as % of manufactures exports

EDGAR SO_2 emissions estimation (kt)	China			Indonesia		
	1990	1995	2000	1990	1995	2000
Industrial sector FFPU	10027,8	12505,1	8421,4	104,9	166,9	317,4
Power generation FFPU	6458,3	10443,3	13329,3	209,9	174,9	325,6
Other transformation sector FFPU	483,7	1714,1	2055,7	94,3	101,2	125,8
Residential, commercial and other FFPU	4667,7	4291,7	2888,8	25,8	31,3	102,5
Road transportation FFPU	74,7	118,3	188,4	37,6	55,6	73,7
Chemicals IP	408,2	617,6	827,6	1,4	1,2	33,5
Other	3255,3	4669,5	6493,4	237,9	266,4	368,9
Grand total	25375,6	34359,5	34204,7	711,8	797,4	1347,4

	Malaysia			Philippines		
	1990	1995	2000	1990	1995	2000
Industrial sector FFPU	71,4	111,7	124,9	69,0	87,1	66,6
Power generation FFPU	170,2	133,9	64,0	139,1	153,0	150,6
Other transformation sector FFPU	25,7	45,1	59,0	44,6	50,0	48,2
Residential, commercial and other FFPU	2,5	5,5	18,3	15,1	18,5	26,5
Road transportation FFPU	16,8	22,1	36,2	13,0	19,3	24,3
Chemicals IP	0,0	0,0	0,0	1,2	1,2	1,2
Other	83,0	111,7	116,0	337,0	304,5	370,7
Grand total	369,6	429,9	418,4	619,0	633,5	688,1

	Thailand		
	1990	1995	2000
Industrial sector FFPU	195,6	403,8	357,8
Power generation FFPU	349,8	542,2	438,8
Other transformation sector FFPU	31,3	62,9	92,2
Residential, commercial and other FFPU	11,3	16,8	24,0
Road transportation FFPU	40,0	70,2	65,1
Chemicals IP	2,5	2,9	2,9
Other	130,4	134,4	324,7
Grand total	760,9	1233,4	1305,5

*FFPU = Fossil fuel production and use
*IP = Industrial processes

Table 13. EDGAR SO_2 emissions estimation (kt)

Chemicals imports (mln US$)

	China	Indonesia	Malaysia	Philippines	Thailand
1980		1262,41	929,61	810,90	1073,59
1985	2035,78	1802,25	1092,08	641,24	1248,11
1990	6669,88	3359,91	2459,35	1478,98	3419,71
1995	17170,68	6147,93	5385,41	2566,31	7229,22
2000	29876,09	5769,22	5734,98	2917,41	6589,14
2005	76412,16	7863,81	8802,09	3509,51	11706,06

Table 14.1. Chemicals imports (mln US$)

Chemicals exports (mln US$)

	China	Indonesia	Malaysia	Philippines	Thailand
1980		82,13	78,78	88,85	48,04
1985	829,68	209,97	177,30	150,78	94,16
1990	3750,24	619,51	478,55	261,23	465,42
1995	9055,54	1516,47	2229,66	329,59	2143,30
2000	12004,66	3126,49	3726,53	330,43	4060,70
2005	35196,96	4454,44	8137,16	524,51	8858,00

Table 14.2. Chemicals exports (mln US$)

Inward FDI stock as % of chemicals imports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		3,63	5,66	1,58	0,91
1985	3,03	2,96	6,89	4,06	1,60
1990	2,87	2,40	4,19	2,21	2,41
1995	6,12	3,04	5,33	2,37	2,44
2000	7,19	4,30	9,20	4,44	4,54
2005	4,03	1,75	5,64	4,26	4,97

Table 14.3. Inward FDI stock as % of chemicals imports

Inward FDI stock as % of chemicals exports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		55,82	66,82	14,42	20,41
1985	7,44	25,41	42,43	17,25	21,24
1990	5,11	13,01	21,56	12,51	17,71
1995	11,60	12,34	12,89	18,47	8,25
2000	17,89	7,93	14,15	39,22	7,37
2005	8,75	3,09	6,10	28,47	6,57

Table 14.4. Inward FDI stock as % of chemicals exports

Outward FDI stock as % of chemicals imports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		0,00	0,33	0,21	0,01
1985	0,44	0,03	0,38	0,27	0,01
1990	0,67	0,03	0,31	0,10	0,12
1995	1,03	0,96	0,95	0,48	0,31
2000	0,93	1,20	2,77	0,55	0,33
2005	0,75	1,77	2,48	0,57	0,41

Table 14.5. Outward FDI stock as % of chemicals imports

Outward FDI stock as % of chemicals exports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		0,07	3,87	1,93	0,27
1985	1,08	0,26	2,33	1,14	0,15
1990	1,19	0,14	1,57	0,59	0,90
1995	1,96	3,89	2,30	3,70	1,06
2000	2,31	2,22	4,26	4,83	0,54
2005	1,63	3,13	2,68	3,81	0,54

Table 14.6. Outward FDI stock as % of chemicals exports

Chemicals exports / imports ratio

	China	Indonesia	Malaysia	Philippines	Thailand
1980		0,07	0,08	0,11	0,04
1985	0,41	0,12	0,16	0,24	0,08
1990	0,56	0,18	0,19	0,18	0,14
1995	0,53	0,25	0,41	0,13	0,3
2000	0,4	0,54	0,65	0,11	0,62
2005	0,46	0,57	0,92	0,15	0,76

Table 14.7. Chemicals exports / imports ratio

Chemicals imports as % of merchandise imports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		11,65	8,59	9,78	11,65
1985	4,82	17,56	8,88	11,74	13,5
1990	12,5	15,39	8,41	11,34	10,35
1995	13	15,13	6,93	9,06	10,21
2000	13,27	13,23	7	7,88	10,64
2005	11,58	10,41	7,68	7,4	9,91

Table 14.8. Chemicals imports as % of merchandise imports

Petroleum imports (mln US$)

	Malaysia	Philippines
1980	1610,21	2310,02
1985	1491,00	1435,19
1990	1355,27	1830,34
1995	1570,33	2324,86
2000	3731,79	3683,74
2005	8418,88	5979,73

Table 15.1. Petroleum imports (mln US$)

Petroleum exports (mln US$)

	Malaysia	Philippines
1980	3189,68	48,45
1985	4066,27	27,26
1990	4386,74	131,33
1995	3669,81	154,82
2000	5834,14	438,14
2005	12199,13	743,37

Table 15.2. Petroleum exports (mln US$)

Inward FDI stock as % of petroleum imports

	Malaysia	Philippines
1980	3,27	0,55
1985	5,05	1,81
1990	7,61	1,79
1995	18,30	2,62
2000	14,13	3,52
2005	5,90	2,50

Table 15.3. Inward FDI stock as % of petroleum imports

Inward FDI stock as % of petroleum exports

	Malaysia	Philippines
1980	1,65	26,44
1985	1,85	95,38
1990	2,35	24,88
1995	7,83	39,31
2000	9,04	29,58
2005	4,07	20,09

Table 15.4. Inward FDI stock as % of petroleum exports

Outward FDI stock as % of petroleum imports

	Malaysia	Philippines
1980	0,19	0,07
1985	0,28	0,12
1990	0,56	0,08
1995	3,26	0,52
2000	4,25	0,43
2005	2,59	0,33

Table 15.5. Outward FDI stock as % of petroleum imports

Outward FDI stock as % of petroleum exports

	Malaysia	Philippines
1980	0,10	3,53
1985	0,10	6,29
1990	0,17	1,18
1995	1,40	7,88
2000	2,72	3,64
2005	1,79	2,69

Table 15.6. Outward FDI stock as % of petroleum exports

Petroleum exports / imports ratio

	Malaysia	Philippines
1980	1,98	0,02
1985	2,73	0,02
1990	3,24	0,07
1995	2,34	0,07
2000	1,56	0,12
2005	1,45	0,12

Table 15.7. Petroleum exports / imports ratio

Petroleum imports as % of merchandise imports

	Malaysia	Philippines
1980	14,88	27,85
1985	12,12	26,29
1990	4,63	14,03
1995	2,02	8,20
2000	4,55	9,95
2005	7,34	12,61

Table 15.8. Petroleum imports as % of merchandise imports

Textile imports (mln US$)

	China	Indonesia	Thailand
1980		515,57	341,50
1985	2546,36	411,17	454,55
1990	7323,63	1423,93	1574,19
1995	16019,28	2603,66	2505,24
2000	16895,86	2307,72	2417,63
2005	24182,09	1660,80	3073,31

Table 16.1. Textile imports (mln US$)

Textile exports (mln US$)

	China	Indonesia	Thailand
1980		145,70	657,24
1985	5328,62	588,24	1093,81
1990	19940,85	3510,57	4589,46
1995	45274,29	8298,70	9340,30
2000	63011,07	10066,54	6802,01
2005	135267,50	10224,02	10224,02

Table 16.2. Textile exports (mln US$)

Inward FDI stock as % of textile imports

	China	Indonesia	Thailand
1980		8,89	2,87
1985	2,42	12,98	4,40
1990	2,62	5,66	5,23
1995	6,56	7,19	7,05
2000	12,71	10,74	12,37
2005	12,74	8,29	18,93

Table 16.3. Inward FDI stock as % of textile imports

Inward FDI stock as % of textile exports

	China	Indonesia	Thailand
1980		31,46	1,49
1985	1,16	9,07	1,83
1990	0,96	2,30	1,80
1995	2,32	2,26	1,89
2000	3,41	2,46	4,40
2005	2,28	1,35	5,69

Table 16.4. Inward FDI stock as % of textile exports

Outward FDI stock as % of textile imports

	China	Indonesia	Thailand
1980		0,01	0,04
1985	0,35	0,13	0,03
1990	0,61	0,06	0,27
1995	1,11	2,26	0,91
2000	1,64	3,01	0,91
2005	2,37	8,39	1,57

Table 16.5. Outward FDI stock as % of textile imports

Outward FDI stock as % of textile exports

	China	Indonesia	Thailand
1980		0,04	0,02
1985	0,17	0,09	0,01
1990	0,22	0,02	0,09
1995	0,39	0,71	0,24
2000	0,44	0,69	0,32
2005	0,42	1,36	0,47

Table 16.6. Outward FDI stock as % of textile exports

Textile exports / imports ratio

	China	Indonesia	Thailand
1980		0,28	1,92
1985	2,09	1,43	2,41
1990	2,72	2,47	2,92
1995	2,83	3,19	3,73
2000	3,73	4,36	2,81
2005	5,59	6,16	3,33

Table 16.7. Textile exports / imports ratio

Textile imports as % of merchandise imports

	China	Indonesia	Thailand
1980		4,76	3,71
1985	6,03	4,01	4,92
1990	13,73	6,52	4,76
1995	12,13	6,41	3,54
2000	7,51	5,29	3,90
2005	3,66	2,20	2,60

Table 16.8. Textile imports as % of merchandise imports

Food imports (mln US$)

	China	Indonesia	Malaysia	Philippines	Thailand
1980		1373,53	1284,13	648,16	481,99
1985	1731,61	709,01	1447,10	584,77	478,26
1990	4617,17	1103,01	2122,78	1348,30	1667,12
1995	9218,27	3590,07	3790,93	2365,59	2676,14
2000	9291,43	4338,84	3592,93	2601,96	2726,20
2005	23478,49	6102,58	5990,42	3294,65	4741,80

Table 17.1. Food imports (mln US$)

Food exports (mln US$)

	China	Indonesia	Malaysia	Philippines	Thailand
1980		5966,68	3752,15	11636,39	15212,98
1985	38315,79	8702,36	5544,13	8267,30	17956,84
1990	44874,21	12767,37	5131,94	8383,40	24515,44
1995	60033,95	23028,09	8441,48	9764,85	32409,77
2000	65157,78	14762,57	5004,07	3628,47	17663,48
2005	72454,00	33446,52	9530,83	5994,69	20506,57

Table 17.2. Food exports (mln US$)

Inward FDI stock as % of food imports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		3,34	4,10	1,98	2,03
1985	3,56	7,52	5,20	4,45	4,18
1990	4,15	7,31	4,86	2,42	4,94
1995	11,40	5,21	7,58	2,57	6,60
2000	23,11	5,71	14,68	4,98	10,97
2005	13,12	2,26	8,29	4,53	12,27

Table 17.3. Inward FDI stock as % of food imports

Inward FDI stock as % of food exports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		0,77	1,40	0,11	0,06
1985	0,16	0,61	1,36	0,31	0,11
1990	0,43	0,63	2,01	0,39	0,34
1995	1,75	0,81	3,40	0,62	0,55
2000	3,30	1,68	10,54	3,57	1,69
2005	4,25	0,41	5,21	2,49	2,84

Table 17.4. Inward FDI stock as % of food exports

Outward FDI stock as % of food imports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		0,00	0,24	0,26	0,03
1985	0,52	0,08	0,29	0,29	0,03
1990	0,96	0,08	0,35	0,11	0,25
1995	1,93	1,64	1,35	0,52	0,85
2000	2,99	1,60	4,42	0,61	0,81
2005	2,44	2,28	3,64	0,61	1,02

Table 17.5. Outward FDI stock as % of food imports

Outward FDI stock as % of food exports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		0,00	0,08	0,01	0,00
1985	0,02	0,01	0,07	0,02	0,00
1990	0,10	0,01	0,15	0,02	0,02
1995	0,30	0,26	0,61	0,12	0,07
2000	0,43	0,47	3,17	0,44	0,12
2005	0,79	0,42	2,29	0,33	0,23

Table 17.6. Outward FDI stock as % of food exports

Food exports / imports ratio

	China	Indonesia	Malaysia	Philippines	Thailand
1980		4,34	2,92	17,95	31,56
1985	22,13	12,27	3,83	14,14	37,55
1990	9,72	11,58	2,42	6,22	14,71
1995	6,51	6,41	2,23	4,13	12,11
2000	7,01	3,40	1,39	1,39	6,48
2005	3,09	5,48	1,59	1,82	4,32

Table 17.7. Food exports / imports ratio

Food imports as % of merchandise imports

	China	Indonesia	Malaysia	Philippines	Thailand
1980		12,68	11,87	7,81	5,23
1985	4,10	6,91	11,76	10,71	5,17
1990	8,66	5,05	7,26	10,34	5,05
1995	6,98	8,84	4,88	8,35	3,78
2000	4,13	9,95	4,38	7,03	4,40
2005	3,56	8,08	5,23	6,95	4,01

Table 17.8. Food imports as % of merchandise imports

China - Chemicals exports (SITC 5) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH												
	IN			3,56	*0,43%*	38,04	*1,01%*	205,85	*2,27%*	317,04	*2,64%*	835,30	*2,37%*
	MA			2,79	*0,34%*	44,99	*1,20%*	136,51	*1,51%*	179,01	*1,49%*	499,04	*1,42%*
	PH			1,27	*0,15%*	10,36	*0,28%*	88,67	*0,98%*	110,51	*0,92%*	370,57	*1,05%*
	TH			4,40	*0,53%*	77,55	*2,07%*	235,69	*2,60%*	268,17	*2,23%*	801,74	*2,28%*
	total			12,02	*1,45%*	170,95	*4,56%*	666,72	*7,36%*	874,73	*7,29%*	2506,65	*7,12%*
Group 2	HK			55,54	*6,69%*	1059,68	*28,26%*	1596,47	*17,63%*	1388,51	*11,57%*	3589,62	*10,20%*
	SI			3,18	*0,38%*	95,43	*2,54%*	158,53	*1,75%*	174,77	*1,46%*	492,19	*1,40%*
	SK			0,00	*0,00%*	148,33	*3,96%*	629,31	*6,95%*	769,40	*6,41%*	2254,89	*6,41%*
	JP			82,99	*10,00%*	476,21	*12,70%*	1178,65	*13,02%*	1485,52	*12,37%*	3799,51	*10,79%*
	AU			5,40	*0,65%*	29,29	*0,78%*	100,95	*1,11%*	192,22	*1,60%*	602,93	*1,71%*
	total			147,10	*17,73%*	1808,95	*48,24%*	3663,91	*40,46%*	4010,42	*33,41%*	10739,15	*30,51%*
Goup 3	GE					0,00	*0,00%*	575,80	*6,36%*	644,13	*5,37%*	1321,59	*3,75%*
	FR			1,60	*0,19%*	101,63	*2,71%*	124,05	*1,37%*	160,76	*1,34%*	420,80	*1,20%*
	UK			5,61	*0,68%*	84,43	*2,25%*	237,91	*2,63%*	266,33	*2,22%*	626,44	*1,78%*
	IT			0,16	*0,02%*	36,45	*0,97%*	217,39	*2,40%*	259,18	*2,16%*	794,09	*2,26%*
	NL			19,26	*2,32%*	175,93	*4,69%*	489,84	*5,41%*	493,40	*4,11%*	1174,26	*3,34%*
	total			26,63	*3,21%*	398,44	*10,62%*	1644,99	*18,17%*	1823,81	*15,19%*	4337,18	*12,32%*
Group 4	US			32,60	*3,93%*	308,85	*8,24%*	871,20	*9,62%*	1652,48	*13,77%*	4794,69	*13,62%*
	CA			1,76	*0,21%*	17,57	*0,47%*	80,70	*0,89%*	113,16	*0,94%*	305,25	*0,87%*
	total			34,36	*4,14%*	326,42	*8,70%*	951,91	*10,51%*	1765,64	*14,71%*	5099,95	*14,49%*
Grand total				220,11	*26,53%*	2704,76	*72,12%*	6927,53	*76,50%*	8474,60	*70,59%*	22682,92	*64,45%*
Rest of world				609,57	*73,47%*	1045,48	*27,88%*	2128,01	*23,50%*	3530,06	*29,41%*	12514,04	*35,55%*
World total				829,68	*100,00%*	3750,24	*100,00%*	9055,54	*100,00%*	12004,66	*100,00%*	35196,96	*100,00%*

Table 18.1.1. Chinese chemicals exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Indonesia - Chemicals exports (SITC 5) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	0,00	*0,00%*	15,65	*7,45%*	58,51	*9,44%*	101,75	*6,71%*	342,03	*10,94%*	765,95	*17,20%*
	IN												
	MA	1,81	*2,21%*	24,53	*11,68%*	42,94	*6,93%*	93,52	*6,17%*	224,33	*7,18%*	376,86	*8,46%*
	PH	8,15	*9,92%*	28,35	*13,50%*	56,98	*9,20%*	90,51	*5,97%*	122,18	*3,91%*	155,13	*3,48%*
	TH	1,03	*1,26%*	9,47	*4,51%*	24,93	*4,02%*	118,44	*7,81%*	238,52	*7,63%*	283,93	*6,37%*
	total	11,00	*13,39%*	78,00	*37,15%*	124,84	*20,15%*	302,46	*19,95%*	585,03	*18,71%*	815,92	*18,32%*
Group 2	HK	2,80	*3,41%*	4,76	*2,27%*	38,46	*6,21%*	162,10	*10,69%*	190,87	*6,10%*	100,40	*2,25%*
	SI	3,73	*4,54%*	30,62	*14,58%*	128,63	*20,76%*	70,69	*4,66%*	196,74	*6,29%*	258,21	*5,80%*
	SK	0,01	*0,01%*	8,28	*3,95%*	15,60	*2,52%*	43,11	*2,84%*	103,47	*3,31%*	168,34	*3,78%*
	JP	7,39	*8,99%*	8,26	*3,93%*	41,64	*6,72%*	135,42	*8,93%*	275,82	*8,82%*	492,42	*11,05%*
	AU	0,89	*1,09%*	2,28	*1,08%*	11,93	*1,93%*	19,85	*1,31%*	97,56	*3,12%*	132,16	*2,97%*
	total	14,82	*18,05%*	54,20	*25,81%*	236,26	*38,14%*	431,16	*28,43%*	864,46	*27,65%*	1151,54	*25,85%*
Goup 3	GE					0,00	*0,00%*	13,35	*0,88%*	43,56	*1,39%*	44,38	*1,00%*
	FR	2,62	*3,19%*	3,46	*1,65%*	7,20	*1,16%*	8,14	*0,54%*	23,62	*0,76%*	14,97	*0,34%*
	UK	1,84	*2,25%*	6,79	*3,24%*	4,87	*0,79%*	11,08	*0,73%*	16,83	*0,54%*	32,00	*0,72%*
	IT	0,08	*0,09%*	0,06	*0,03%*	2,91	*0,47%*	21,84	*1,44%*	16,68	*0,53%*	13,24	*0,30%*
	NL	5,70	*6,93%*	4,88	*2,32%*	8,70	*1,41%*	36,35	*2,40%*	92,98	*2,97%*	68,01	*1,53%*
	total	10,23	*12,46%*	15,19	*7,23%*	23,69	*3,82%*	90,77	*5,99%*	193,66	*6,19%*	172,59	*3,87%*
Group 4	US	12,19	*14,85%*	11,26	*5,36%*	17,30	*2,79%*	50,78	*3,35%*	194,63	*6,23%*	295,43	*6,63%*
	CA	0,03	*0,04%*	0,34	*0,16%*	0,53	*0,09%*	1,77	*0,12%*	8,77	*0,28%*	20,56	*0,46%*
	total	12,22	*14,88%*	11,60	*5,53%*	17,83	*2,88%*	52,55	*3,47%*	203,40	*6,51%*	315,99	*7,09%*
Grand total		48,28	*58,78%*	158,99	*75,72%*	402,61	*64,99%*	876,94	*57,83%*	1846,54	*59,06%*	2456,04	*55,14%*
Rest of world		33,85	*41,22%*	50,98	*24,28%*	216,90	*35,01%*	639,53	*42,17%*	1279,94	*40,94%*	1998,40	*44,86%*
World total		82,13	*100,00%*	209,97	*100,00%*	619,51	*100,00%*	1516,47	*100,00%*	3126,49	*100,00%*	4454,44	*100,00%*

Table 18.2.1. Indonesian chemicals exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Malaysia - Chemicals exports (SITC 5) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	0,28	*0,36%*	0,86	*0,48%*	13,25	*2,77%*	63,39	*2,84%*	276,51	*7,42%*	1125,65	*13,83%*
	IN	5,12	*6,50%*	7,56	*4,27%*	23,77	*4,97%*	99,47	*4,46%*	302,10	*8,11%*	644,20	*7,92%*
	MA												
	PH	4,54	*5,76%*	3,09	*1,74%*	13,54	*2,83%*	59,53	*2,67%*	117,96	*3,17%*	213,50	*2,62%*
	TH	3,52	*4,47%*	3,01	*1,70%*	48,07	*10,04%*	152,45	*6,84%*	253,80	*6,81%*	734,58	*9,03%*
	total	13,46	*17,08%*	14,51	*8,19%*	85,38	*17,84%*	311,44	*13,97%*	673,86	*18,08%*	1592,28	*19,57%*
Group 2	HK	5,45	*6,91%*	8,03	*4,53%*	38,10	*7,96%*	248,28	*11,14%*	356,12	*9,56%*	568,36	*6,98%*
	SI	33,93	*43,07%*	43,90	*24,76%*	126,47	*26,43%*	326,67	*14,65%*	488,38	*13,11%*	811,87	*9,98%*
	SK	0,30	*0,39%*	0,67	*0,38%*	10,68	*2,23%*	196,16	*8,80%*	123,26	*3,31%*	385,41	*4,74%*
	JP	5,16	*6,54%*	21,71	*12,24%*	78,40	*16,38%*	241,14	*10,82%*	414,11	*11,11%*	819,05	*10,07%*
	AU	1,74	*2,21%*	4,47	*2,52%*	18,08	*3,78%*	73,65	*3,30%*	99,62	*2,67%*	249,25	*3,06%*
	total	46,58	*59,13%*	78,78	*44,43%*	271,74	*56,78%*	1085,90	*48,70%*	1481,48	*39,76%*	2833,95	*34,83%*
Goup 3	GE					0,00	*0,00%*	38,72	*1,74%*	91,48	*2,45%*	119,28	*1,47%*
	FR	0,01	*0,01%*	0,13	*0,07%*	6,49	*1,36%*	15,24	*0,68%*	10,48	*0,28%*	18,54	*0,23%*
	UK	0,93	*1,19%*	2,42	*1,37%*	5,52	*1,15%*	63,21	*2,84%*	40,35	*1,08%*	31,19	*0,38%*
	IT	0,02	*0,03%*	0,30	*0,17%*	1,10	*0,23%*	12,91	*0,58%*	30,37	*0,82%*	18,07	*0,22%*
	NL	0,01	*0,02%*	15,13	*8,53%*	5,41	*1,13%*	89,15	*4,00%*	112,96	*3,03%*	212,16	*2,61%*
	total	0,98	*1,24%*	17,98	*10,14%*	18,52	*3,87%*	219,23	*9,83%*	285,65	*7,67%*	399,24	*4,91%*
Group 4	US	8,54	*10,85%*	36,14	*20,38%*	21,76	*4,55%*	208,42	*9,35%*	374,00	*10,04%*	339,99	*4,18%*
	CA	0,06	*0,08%*	0,08	*0,05%*	0,70	*0,15%*	0,84	*0,04%*	3,70	*0,10%*	13,10	*0,16%*
	total	8,61	*10,93%*	36,23	*20,43%*	22,46	*4,69%*	209,25	*9,38%*	377,69	*10,14%*	353,09	*4,34%*
Grand total		69,62	*88,38%*	147,50	*83,19%*	398,10	*83,19%*	1825,83	*81,89%*	2818,69	*75,64%*	5178,56	*63,64%*
Rest of world		9,16	*11,62%*	29,80	*16,81%*	80,44	*16,81%*	403,83	*18,11%*	907,85	*24,36%*	2958,60	*36,36%*
World total		78,78	*100,00%*	177,30	*100,00%*	478,55	*100,00%*	2229,66	*100,00%*	3726,53	*100,00%*	8137,16	*100,00%*

Table 18.3.1. Malaysian chemicals exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Philippines - Chemicals exports (SITC 5) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	0,36	*0,40%*	10,31	*6,84%*	23,27	*8,91%*	6,72	*2,04%*	20,60	*6,23%*	29,04	*5,54%*
	IN	1,66	*1,87%*	13,45	*8,92%*	46,99	*17,99%*	12,39	*3,76%*	18,30	*5,54%*	28,86	*5,50%*
	MA	2,05	*2,31%*	4,23	*2,80%*	4,98	*1,91%*	8,88	*2,70%*	12,24	*3,70%*	35,84	*6,83%*
	PH												
	TH	3,20	*3,60%*	12,08	*8,01%*	41,79	*16,00%*	28,55	*8,66%*	21,14	*6,40%*	30,52	*5,82%*
	total	7,27	*8,18%*	40,07	*26,58%*	117,04	*44,80%*	56,54	*17,15%*	72,28	*21,87%*	124,26	*23,69%*
Group 2	HK	7,24	*8,15%*	17,21	*11,42%*	28,64	*10,97%*	39,02	*11,84%*	32,24	*9,76%*	33,22	*6,33%*
	SI	2,66	*2,99%*	1,91	*1,27%*	7,68	*2,94%*	9,71	*2,95%*	13,05	*3,95%*	15,19	*2,90%*
	SK	0,43	*0,49%*	1,84	*1,22%*	4,84	*1,85%*	8,71	*2,64%*	17,61	*5,33%*	30,42	*5,80%*
	JP	54,36	*61,18%*	48,56	*32,20%*	29,77	*11,39%*	34,53	*10,48%*	36,40	*11,02%*	66,56	*12,69%*
	AU	2,01	*2,26%*	7,94	*5,27%*	7,94	*3,04%*	10,93	*3,31%*	10,02	*3,03%*	20,09	*3,83%*
	total	66,70	*75,08%*	77,46	*51,37%*	78,87	*30,19%*	102,89	*31,22%*	109,32	*33,09%*	165,47	*31,55%*
Goup 3	GE					0,00	*0,00%*	0,85	*0,26%*	1,69	*0,51%*	3,91	*0,75%*
	FR	0,09	*0,11%*	1,65	*1,09%*	0,21	*0,08%*	1,76	*0,53%*	3,81	*1,15%*	6,25	*1,19%*
	UK	0,33	*0,37%*	0,39	*0,26%*	1,41	*0,54%*	7,90	*2,40%*	3,99	*1,21%*	2,54	*0,49%*
	IT	1,48	*1,67%*	0,33	*0,22%*	1,33	*0,51%*	0,30	*0,09%*	0,28	*0,08%*	0,91	*0,17%*
	NL	0,21	*0,23%*	4,22	*2,80%*	11,57	*4,43%*	7,46	*2,26%*	1,91	*0,58%*	5,34	*1,02%*
	total	2,11	*2,37%*	6,59	*4,37%*	14,51	*5,56%*	18,26	*5,54%*	11,68	*3,53%*	18,95	*3,61%*
Group 4	US	6,22	*7,00%*	12,48	*8,27%*	24,49	*9,37%*	26,74	*8,11%*	28,74	*8,70%*	56,27	*10,73%*
	CA	0,39	*0,44%*	0,70	*0,46%*	0,64	*0,24%*	0,70	*0,21%*	1,32	*0,40%*	1,93	*0,37%*
	total	6,61	*7,44%*	13,18	*8,74%*	25,12	*9,62%*	27,43	*8,32%*	30,05	*9,10%*	58,20	*11,10%*
Grand total		82,69	*93,07%*	137,30	*91,06%*	235,54	*90,17%*	205,13	*62,24%*	223,34	*67,59%*	366,88	*69,95%*
Rest of world		6,16	*6,93%*	13,48	*8,94%*	25,68	*9,83%*	124,46	*37,76%*	107,09	*32,41%*	157,63	*30,05%*
World total		88,85	*100,00%*	150,78	*100,00%*	261,23	*100,00%*	329,59	*100,00%*	330,43	*100,00%*	524,51	*100,00%*

Table 18.4.1. Philippine chemicals exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Thailand - Chemicals exports (SITC 5) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	0,00	*0,00%*	6,10	*6,48%*	11,63	*2,50%*	121,76	*5,68%*	333,43	*8,21%*	1395,76	*15,76%*
	IN	3,68	*7,67%*	4,63	*4,92%*	13,04	*2,80%*	136,47	*6,37%*	357,49	*8,80%*	755,62	*8,53%*
	MA	2,28	*4,75%*	7,87	*8,36%*	29,30	*6,30%*	122,20	*5,70%*	291,14	*7,17%*	655,12	*7,40%*
	PH	0,12	*0,25%*	0,67	*0,71%*	8,64	*1,86%*	45,18	*2,11%*	162,98	*4,01%*	246,04	*2,78%*
	TH												
	total	6,09	*12,67%*	19,27	*20,47%*	62,61	*13,45%*	425,60	*19,86%*	1145,04	*28,20%*	3052,54	*34,46%*
Group 2	HK	8,66	*18,03%*	17,85	*18,96%*	98,57	*21,18%*	315,77	*14,73%*	686,72	*16,91%*	1012,85	*11,43%*
	SI	4,76	*9,92%*	8,12	*8,63%*	33,18	*7,13%*	400,32	*18,68%*	144,61	*3,56%*	384,22	*4,34%*
	SK	0,07	*0,14%*	1,26	*1,33%*	8,42	*1,81%*	20,40	*0,95%*	78,24	*1,93%*	190,73	*2,15%*
	JP	11,03	*22,97%*	10,28	*10,91%*	86,62	*18,61%*	220,46	*10,29%*	421,68	*10,38%*	722,41	*8,16%*
	AU	0,11	*0,22%*	3,21	*3,41%*	14,23	*3,06%*	31,32	*1,46%*	78,21	*1,93%*	153,92	*1,74%*
	total	24,63	*51,27%*	40,72	*43,25%*	241,03	*51,79%*	988,27	*46,11%*	1409,47	*34,71%*	2464,14	*27,82%*
Goup 3	GE					0,00	*0,00%*	17,57	*0,82%*	27,44	*0,68%*	31,80	*0,36%*
	FR	0,47	*0,99%*	0,22	*0,24%*	1,19	*0,26%*	3,32	*0,15%*	8,05	*0,20%*	13,14	*0,15%*
	UK	0,07	*0,14%*	1,40	*1,49%*	3,49	*0,75%*	15,54	*0,72%*	15,77	*0,39%*	50,14	*0,57%*
	IT	1,11	*2,31%*	0,07	*0,08%*	1,09	*0,23%*	8,69	*0,41%*	16,52	*0,41%*	42,04	*0,47%*
	NL	1,41	*2,93%*	0,67	*0,71%*	9,52	*2,05%*	16,91	*0,79%*	52,74	*1,30%*	76,29	*0,86%*
	total	3,06	*6,36%*	2,36	*2,51%*	15,29	*3,28%*	62,02	*2,89%*	120,52	*2,97%*	213,41	*2,41%*
Group 4	US	1,04	*2,17%*	2,11	*2,24%*	13,37	*2,87%*	59,08	*2,76%*	139,48	*3,43%*	440,68	*4,97%*
	CA	0,01	*0,01%*	0,30	*0,32%*	0,68	*0,15%*	6,87	*0,32%*	19,47	*0,48%*	36,04	*0,41%*
	total	1,05	*2,18%*	2,41	*2,56%*	14,06	*3,02%*	65,95	*3,08%*	158,95	*3,91%*	476,72	*5,38%*
Grand total		34,82	*72,49%*	64,76	*68,78%*	332,98	*71,55%*	1541,84	*71,94%*	2833,99	*69,79%*	6206,81	*70,07%*
Rest of world		13,22	*27,51%*	29,39	*31,22%*	132,43	*28,45%*	601,46	*28,06%*	1226,71	*30,21%*	2651,19	*29,93%*
World total		48,04	*100,00%*	94,16	*100,00%*	465,42	*100,00%*	2143,30	*100,00%*	4060,70	*100,00%*	8858,00	*100,00%*

Table 18.5.1. Thai chemicals exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

China - Chemicals imports (SITC 5) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH												
	IN			0,12	*0,01%*	62,13	*0,93%*	178,97	*1,04%*	506,71	*1,70%*	1031,95	*1,35%*
	MA			0,40	*0,02%*	20,42	*0,31%*	125,66	*0,73%*	524,59	*1,76%*	1599,28	*2,09%*
	PH			0,03	*0,00%*	25,65	*0,38%*	9,10	*0,05%*	38,52	*0,13%*	72,00	*0,09%*
	TH			0,03	*0,00%*	14,71	*0,22%*	179,47	*1,05%*	794,54	*2,66%*	2051,97	*2,69%*
	total			0,57	*0,03%*	122,91	*1,84%*	493,21	*2,87%*	1864,36	*6,24%*	4755,20	*6,22%*
Group 2	HK			6,66	*0,33%*	584,16	*8,76%*	688,90	*4,01%*	909,72	*3,04%*	1600,77	*2,09%*
	SI			0,09	*0,00%*	119,20	*1,79%*	362,89	*2,11%*	858,65	*2,87%*	3103,25	*4,06%*
	SK			0,00	*0,00%*	89,85	*1,35%*	2357,46	*13,73%*	5101,53	*17,08%*	12973,48	*16,98%*
	JP			3,92	*0,19%*	852,99	*12,79%*	2827,25	*16,47%*	5217,67	*17,46%*	12493,21	*16,35%*
	AU			0,02	*0,00%*	17,39	*0,26%*	47,80	*0,28%*	137,48	*0,46%*	411,73	*0,54%*
	total			10,68	*0,52%*	1663,58	*24,94%*	6284,30	*36,60%*	12225,04	*40,92%*	30582,44	*40,02%*
Goup 3	GE					0,00	*0,00%*	486,25	*2,83%*	1133,28	*3,79%*	3303,46	*4,32%*
	FR			0,77	*0,04%*	158,15	*2,37%*	177,97	*1,04%*	414,21	*1,39%*	1035,53	*1,36%*
	UK			1,12	*0,05%*	100,75	*1,51%*	173,14	*1,01%*	420,15	*1,41%*	743,06	*0,97%*
	IT			0,40	*0,02%*	152,93	*2,29%*	193,42	*1,13%*	271,93	*0,91%*	668,12	*0,87%*
	NL			0,40	*0,02%*	54,64	*0,82%*	161,90	*0,94%*	364,00	*1,22%*	686,18	*0,90%*
	total			2,69	*0,13%*	466,48	*6,99%*	1192,69	*6,95%*	2603,58	*8,71%*	6436,36	*8,42%*
Group 4	US			8,77	*0,43%*	1543,09	*23,14%*	2837,00	*16,52%*	3394,28	*11,36%*	7566,52	*9,90%*
	CA			0,00	*0,00%*	212,25	*3,18%*	306,42	*1,78%*	622,00	*2,08%*	1752,85	*2,29%*
	total			8,77	*0,43%*	1755,34	*26,32%*	3143,43	*18,31%*	4016,28	*13,44%*	9319,38	*12,20%*
Grand total				22,70	*1,11%*	4008,31	*60,10%*	11113,62	*64,72%*	20709,26	*69,32%*	51093,38	*66,87%*
Rest of world				2013,08	*98,89%*	2661,57	*39,90%*	6057,06	*35,28%*	9166,84	*30,68%*	25318,79	*33,13%*
World total				2035,78	*100,00%*	6669,88	*100,00%*	17170,68	*100,00%*	29876,09	*100,00%*	76412,16	*100,00%*

Table 18.1.2. Chinese chemicals imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Indonesia - Chemicals imports (SITC 5) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	40,57	*3,21%*	27,08	*1,50%*	116,63	*3,47%*	281,06	*4,57%*	297,97	*5,16%*	780,13	*9,92%*
	IN												
	MA	6,95	*0,55%*	7,43	*0,41%*	26,84	*0,80%*	93,42	*1,52%*	292,22	*5,07%*	476,58	*6,06%*
	PH	2,49	*0,20%*	15,63	*0,87%*	33,33	*0,99%*	16,37	*0,27%*	20,56	*0,36%*	39,95	*0,51%*
	TH	2,39	*0,19%*	4,53	*0,25%*	15,23	*0,45%*	161,45	*2,63%*	339,70	*5,89%*	597,99	*7,60%*
	total	52,40	*4,15%*	54,66	*3,03%*	75,40	*2,24%*	271,24	*4,41%*	652,49	*11,31%*	1114,52	*14,17%*
Group 2	HK	8,75	*0,69%*	10,44	*0,58%*	22,48	*0,67%*	37,84	*0,62%*	55,52	*0,96%*	30,55	*0,39%*
	SI	58,59	*4,64%*	143,51	*7,96%*	244,58	*7,28%*	481,18	*7,83%*	722,84	*12,53%*	1129,60	*14,36%*
	SK	18,62	*1,47%*	60,02	*3,33%*	120,86	*3,60%*	496,76	*8,08%*	586,53	*10,17%*	496,80	*6,32%*
	JP	358,70	*28,41%*	370,85	*20,58%*	591,62	*17,61%*	1223,97	*19,91%*	785,96	*13,62%*	747,73	*9,51%*
	AU	26,88	*2,13%*	118,96	*6,60%*	77,26	*2,30%*	109,52	*1,78%*	98,20	*1,70%*	166,31	*2,11%*
	total	471,54	*37,35%*	703,78	*39,05%*	1056,80	*31,45%*	2349,27	*38,21%*	2249,05	*38,98%*	2570,99	*32,69%*
Goup 3	GE					0,00	*0,00%*	419,55	*6,82%*	309,85	*5,37%*	312,44	*3,97%*
	FR	41,43	*3,28%*	58,27	*3,23%*	106,03	*3,16%*	161,49	*2,63%*	97,53	*1,69%*	165,52	*2,10%*
	UK	57,06	*4,52%*	84,29	*4,68%*	116,23	*3,46%*	247,00	*4,02%*	143,36	*2,48%*	208,74	*2,65%*
	IT	12,33	*0,98%*	15,16	*0,84%*	34,69	*1,03%*	103,81	*1,69%*	62,24	*1,08%*	67,51	*0,86%*
	NL	28,35	*2,25%*	56,36	*3,13%*	94,55	*2,81%*	175,81	*2,86%*	119,98	*2,08%*	111,91	*1,42%*
	total	139,18	*11,02%*	214,08	*11,88%*	351,50	*10,46%*	1107,66	*18,02%*	732,97	*12,70%*	866,13	*11,01%*
Group 4	US	271,91	*21,54%*	281,69	*15,63%*	475,01	*14,14%*	784,73	*12,76%*	596,82	*10,34%*	587,64	*7,47%*
	CA	15,97	*1,27%*	64,04	*3,55%*	181,23	*5,39%*	112,42	*1,83%*	71,67	*1,24%*	114,59	*1,46%*
	total	287,88	*22,80%*	345,73	*19,18%*	656,24	*19,53%*	897,15	*14,59%*	668,50	*11,59%*	702,22	*8,93%*
Grand total		951,00	*75,33%*	1318,25	*73,14%*	2139,95	*63,69%*	4625,32	*75,23%*	4303,01	*74,59%*	5253,87	*66,81%*
Rest of world		311,41	*24,67%*	484,01	*26,86%*	1219,96	*36,31%*	1522,61	*24,77%*	1466,20	*25,41%*	2609,94	*33,19%*
World total		1262,41	*100,00%*	1802,25	*100,00%*	3359,91	*100,00%*	6147,93	*100,00%*	5769,22	*100,00%*	7863,81	*100,00%*

Table 18.2.2. Indonesian chemicals imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Malaysia - Chemicals imports (SITC 5) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	24,99	*2,69%*	22,49	*2,06%*	55,40	*2,25%*	142,71	*2,65%*	201,00	*3,50%*	570,06	*6,48%*
	IN	3,41	*0,37%*	28,16	*2,58%*	56,96	*2,32%*	130,16	*2,42%*	248,69	*4,34%*	474,93	*5,40%*
	MA												
	PH	2,62	*0,28%*	6,49	*0,59%*	6,57	*0,27%*	8,18	*0,15%*	16,79	*0,29%*	40,19	*0,46%*
	TH	3,11	*0,33%*	9,58	*0,88%*	30,40	*1,24%*	116,25	*2,16%*	293,82	*5,12%*	682,48	*7,75%*
	total	34,12	*3,67%*	66,71	*6,11%*	93,92	*3,82%*	254,60	*4,73%*	559,30	*9,75%*	1197,59	*13,61%*
Group 2	HK	11,09	*1,19%*	17,64	*1,62%*	41,97	*1,71%*	88,16	*1,64%*	90,46	*1,58%*	82,30	*0,93%*
	SI	53,36	*5,74%*	123,21	*11,28%*	314,88	*12,80%*	552,05	*10,25%*	709,76	*12,38%*	1388,37	*15,77%*
	SK	11,79	*1,27%*	18,07	*1,65%*	50,31	*2,05%*	227,66	*4,23%*	386,12	*6,73%*	465,54	*5,29%*
	JP	164,53	*17,70%*	170,52	*15,61%*	497,01	*20,21%*	1417,82	*26,33%*	1133,88	*19,77%*	1213,28	*13,78%*
	AU	17,67	*1,90%*	28,12	*2,57%*	63,33	*2,58%*	110,94	*2,06%*	101,32	*1,77%*	157,61	*1,79%*
	total	258,44	*27,80%*	357,57	*32,74%*	967,50	*39,34%*	2396,62	*44,50%*	2421,54	*42,22%*	3307,10	*37,57%*
Goup 3	GE					0,00	*0,00%*	280,35	*5,21%*	268,16	*4,68%*	349,40	*3,97%*
	FR	19,14	*2,06%*	23,63	*2,16%*	73,15	*2,97%*	130,27	*2,42%*	119,99	*2,09%*	165,33	*1,88%*
	UK	84,46	*9,09%*	94,29	*8,63%*	137,85	*5,61%*	173,38	*3,22%*	130,70	*2,28%*	179,34	*2,04%*
	IT	19,44	*2,09%*	6,42	*0,59%*	22,87	*0,93%*	64,53	*1,20%*	67,95	*1,18%*	99,40	*1,13%*
	NL	12,27	*1,32%*	19,86	*1,82%*	40,96	*1,67%*	94,17	*1,75%*	95,82	*1,67%*	174,05	*1,98%*
	total	135,31	*14,56%*	144,20	*13,20%*	274,83	*11,17%*	742,70	*13,79%*	682,61	*11,90%*	967,52	*10,99%*
Group 4	US	203,25	*21,86%*	225,41	*20,64%*	352,76	*14,34%*	783,70	*14,55%*	787,25	*13,73%*	859,77	*9,77%*
	CA	32,09	*3,45%*	28,06	*2,57%*	77,05	*3,13%*	116,61	*2,17%*	92,85	*1,62%*	146,78	*1,67%*
	total	235,34	*25,32%*	253,47	*23,21%*	429,81	*17,48%*	900,31	*16,72%*	880,09	*15,35%*	1006,55	*11,44%*
Grand total		663,22	*71,34%*	821,95	*75,26%*	1766,07	*71,81%*	4294,22	*79,74%*	4543,53	*79,22%*	6478,76	*73,60%*
Rest of world		266,39	*28,66%*	270,13	*24,74%*	693,28	*28,19%*	1091,19	*20,26%*	1191,44	*20,78%*	2323,33	*26,40%*
World total		929,61	*100,00%*	1092,08	*100,00%*	2459,35	*100,00%*	5385,41	*100,00%*	5734,98	*100,00%*	8802,09	*100,00%*

Table 18.3.2. Malaysian chemicals imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Philippines - Chemicals imports (SITC 5) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	6,22	*0,77%*	3,31	*0,52%*	4,11	*0,28%*	95,60	*3,73%*	100,97	*3,46%*	293,34	*8,36%*
	IN	17,72	*2,19%*	32,01	*4,99%*	65,93	*4,46%*	104,05	*4,05%*	168,13	*5,76%*	156,20	*4,45%*
	MA	0,86	*0,11%*	2,83	*0,44%*	16,64	*1,12%*	52,88	*2,06%*	120,67	*4,14%*	168,72	*4,81%*
	PH												
	TH	0,68	*0,08%*	1,29	*0,20%*	12,10	*0,82%*	42,25	*1,65%*	152,81	*5,24%*	199,29	*5,68%*
	total	25,48	*3,14%*	39,44	*6,15%*	98,78	*6,68%*	294,78	*11,49%*	542,58	*18,60%*	817,55	*23,30%*
Group 2	HK	15,43	*1,90%*	22,42	*3,50%*	47,35	*3,20%*	60,40	*2,35%*	62,91	*2,16%*	62,77	*1,79%*
	SI	12,77	*1,57%*	15,74	*2,46%*	101,81	*6,88%*	227,53	*8,87%*	319,75	*10,96%*	365,77	*10,42%*
	SK	69,50	*8,57%*	69,13	*10,78%*	74,22	*5,02%*	258,29	*10,06%*	270,31	*9,27%*	235,20	*6,70%*
	JP	188,07	*23,19%*	99,83	*15,57%*	223,13	*15,09%*	266,57	*10,39%*	415,47	*14,24%*	514,25	*14,65%*
	AU	16,25	*2,00%*	11,20	*1,75%*	40,14	*2,71%*	73,36	*2,86%*	75,85	*2,60%*	84,95	*2,42%*
	total	302,02	*37,25%*	218,34	*34,05%*	486,64	*32,90%*	886,15	*34,53%*	1144,29	*39,22%*	1262,93	*35,99%*
Goup 3	GE					0,00	*0,00%*	150,29	*5,86%*	117,56	*4,03%*	160,76	*4,58%*
	FR	18,58	*2,29%*	16,40	*2,56%*	40,61	*2,75%*	81,18	*3,16%*	59,87	*2,05%*	86,55	*2,47%*
	UK	27,64	*3,41%*	26,52	*4,14%*	49,39	*3,34%*	78,42	*3,06%*	76,65	*2,63%*	75,21	*2,14%*
	IT	12,20	*1,50%*	8,12	*1,27%*	20,30	*1,37%*	36,28	*1,41%*	25,40	*0,87%*	35,04	*1,00%*
	NL	18,59	*2,29%*	15,78	*2,46%*	37,61	*2,54%*	60,75	*2,37%*	48,16	*1,65%*	39,60	*1,13%*
	total	77,01	*9,50%*	66,81	*10,42%*	147,92	*10,00%*	406,92	*15,86%*	327,63	*11,23%*	397,16	*11,32%*
Group 4	US	218,55	*26,95%*	151,24	*23,58%*	290,66	*19,65%*	382,67	*14,91%*	351,32	*12,04%*	320,88	*9,14%*
	CA	21,35	*2,63%*	4,68	*0,73%*	23,73	*1,60%*	13,88	*0,54%*	11,80	*0,40%*	19,80	*0,56%*
	total	239,90	*29,58%*	155,92	*24,32%*	314,39	*21,26%*	396,55	*15,45%*	363,12	*12,45%*	340,68	*9,71%*
Grand total		644,42	*79,47%*	480,51	*74,93%*	1047,72	*70,84%*	1984,40	*77,33%*	2377,61	*81,50%*	2818,32	*80,31%*
Rest of world		166,49	*20,53%*	160,73	*25,07%*	431,25	*29,16%*	581,91	*22,67%*	539,79	*18,50%*	691,19	*19,69%*
World total		810,90	*100,00%*	641,24	*100,00%*	1478,98	*100,00%*	2566,31	*100,00%*	2917,41	*100,00%*	3509,51	*100,00%*

Table 18.4.2. Philippine chemicals imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Thailand - Chemicals imports (SITC 5) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	29,23	*2,72%*	25,12	*2,01%*	96,51	*2,82%*	274,49	*3,80%*	310,61	*4,71%*	946,47	*8,09%*
	IN	1,32	*0,12%*	10,13	*0,81%*	28,94	*0,85%*	142,70	*1,97%*	268,85	*4,08%*	425,25	*3,63%*
	MA	3,91	*0,36%*	3,74	*0,30%*	52,69	*1,54%*	136,77	*1,89%*	255,39	*3,88%*	745,07	*6,36%*
	PH	3,53	*0,33%*	16,68	*1,34%*	49,45	*1,45%*	30,21	*0,42%*	19,21	*0,29%*	32,53	*0,28%*
	TH												
	total	37,99	*3,54%*	55,67	*4,46%*	227,59	*6,66%*	584,16	*8,08%*	854,07	*12,96%*	2149,32	*18,36%*
Group 2	HK	8,57	*0,80%*	8,94	*0,72%*	22,80	*0,67%*	39,71	*0,55%*	33,44	*0,51%*	32,26	*0,28%*
	SI	13,17	*1,23%*	64,93	*5,20%*	138,47	*4,05%*	325,91	*4,51%*	511,23	*7,76%*	1138,51	*9,73%*
	SK	10,83	*1,01%*	57,12	*4,58%*	184,45	*5,39%*	460,82	*6,37%*	379,00	*5,75%*	566,73	*4,84%*
	JP	303,89	*28,31%*	311,10	*24,93%*	813,37	*23,78%*	1863,74	*25,78%*	1481,40	*22,48%*	2383,82	*20,36%*
	AU	16,36	*1,52%*	16,73	*1,34%*	45,26	*1,32%*	76,36	*1,06%*	82,25	*1,25%*	121,38	*1,04%*
	total	352,82	*32,86%*	458,82	*36,76%*	1204,34	*35,22%*	2766,54	*38,27%*	2487,31	*37,75%*	4242,70	*36,24%*
Goup 3	GE					0,00	*0,00%*	449,88	*6,22%*	363,10	*5,51%*	563,91	*4,82%*
	FR	30,74	*2,86%*	40,84	*3,27%*	91,64	*2,68%*	175,97	*2,43%*	147,19	*2,23%*	279,78	*2,39%*
	UK	60,50	*5,64%*	71,13	*5,70%*	152,08	*4,45%*	215,45	*2,98%*	170,86	*2,59%*	195,32	*1,67%*
	IT	18,01	*1,68%*	20,10	*1,61%*	64,76	*1,89%*	104,77	*1,45%*	94,67	*1,44%*	151,49	*1,29%*
	NL	45,60	*4,25%*	35,05	*2,81%*	75,58	*2,21%*	186,88	*2,59%*	108,18	*1,64%*	171,58	*1,47%*
	total	154,84	*14,42%*	167,12	*13,39%*	384,06	*11,23%*	1132,96	*15,67%*	883,99	*13,42%*	1362,07	*11,64%*
Group 4	US	228,19	*21,25%*	174,34	*13,97%*	450,52	*13,17%*	921,15	*12,74%*	904,22	*13,72%*	1194,90	*10,21%*
	CA	6,74	*0,63%*	12,26	*0,98%*	54,54	*1,59%*	104,47	*1,45%*	56,87	*0,86%*	93,52	*0,80%*
	total	234,93	*21,88%*	186,60	*14,95%*	505,06	*14,77%*	1025,62	*14,19%*	961,08	*14,59%*	1288,42	*11,01%*
Grand total		780,58	*72,71%*	868,20	*69,56%*	2321,06	*67,87%*	5509,29	*76,21%*	5186,45	*78,71%*	9042,51	*77,25%*
Rest of world		293,01	*27,29%*	379,92	*30,44%*	1098,65	*32,13%*	1719,93	*23,79%*	1402,69	*21,29%*	2663,55	*22,75%*
World total		1073,59	*100,00%*	1248,11	*100,00%*	3419,71	*100,00%*	7229,22	*100,00%*	6589,14	*100,00%*	11706,06	*100,00%*

Table 18.5.2. Thai chemicals imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

China - Chemicals exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH						
	IN		29,61	0,61	1,15	0,63	0,81
	MA		7,06	2,20	1,09	0,34	0,31
	PH		50,30	0,40	9,74	2,87	5,15
	TH		173,69	5,27	1,31	0,34	0,39
	total		21,22	1,39	1,35	0,47	0,53
Group 2	HK		8,34	1,81	2,32	1,53	2,24
	SI		37,19	0,80	0,44	0,20	0,16
	SK			1,65	0,27	0,15	0,17
	JP		21,17	0,56	0,42	0,28	0,30
	AU		341,18	1,68	2,11	1,40	1,46
	total		13,78	1,09	0,58	0,33	0,35
Goup 3	GE				1,18	0,57	0,40
	FR		2,09	0,64	0,70	0,39	0,41
	UK		5,02	0,84	1,37	0,63	0,84
	IT		0,39	0,24	1,12	0,95	1,19
	NL		47,94	3,22	3,03	1,36	1,71
	total		9,92	0,85	1,38	0,70	0,67
Group 4	US		3,72	0,20	0,31	0,49	0,63
	CA			0,08	0,26	0,18	0,17
	total		3,92	0,19	0,30	0,44	0,55
Grand total			9,70	0,67	0,62	0,41	0,44
Rest of world			0,30	0,39	0,35	0,39	0,49
World total			0,41	0,56	0,53	0,40	0,46

Table 18.1.3. Chemicals exports / imports ratio of China

Indonesia - Chemicals exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,00	0,58	0,50	0,36	1,15	0,98
	IN						
	MA	0,26	3,30	1,60	1,00	0,77	0,79
	PH	3,27	1,81	1,71	5,53	5,94	3,88
	TH	0,43	2,09	1,64	0,73	0,70	0,47
	total	0,21	1,43	1,66	1,12	0,90	0,73
Group 2	HK	0,32	0,46	1,71	4,28	3,44	3,29
	SI	0,06	0,21	0,53	0,15	0,27	0,23
	SK	0,00	0,14	0,13	0,09	0,18	0,34
	JP	0,02	0,02	0,07	0,11	0,35	0,66
	AU	0,03	0,02	0,15	0,18	0,99	0,79
	total	0,03	0,08	0,22	0,18	0,38	0,45
Goup 3	GE				0,03	0,14	0,14
	FR	0,06	0,06	0,07	0,05	0,24	0,09
	UK	0,03	0,08	0,04	0,04	0,12	0,15
	IT	0,01	0,00	0,08	0,21	0,27	0,20
	NL	0,20	0,09	0,09	0,21	0,77	0,61
	total	0,07	0,07	0,07	0,08	0,26	0,20
Group 4	US	0,04	0,04	0,04	0,06	0,33	0,50
	CA	0,00	0,01	0,00	0,02	0,12	0,18
	total	0,04	0,03	0,03	0,06	0,30	0,45
Grand total		0,05	0,12	0,19	0,19	0,43	0,47
Rest of world		0,11	0,11	0,18	0,42	0,87	0,77
World total		0,07	0,12	0,18	0,25	0,54	0,57

Table 18.2.3. Chemicals exports / imports ratio of Indonesia

Malaysia - Chemicals exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,01	0,04	0,24	0,44	1,38	1,97
	IN	1,50	0,27	0,42	0,76	1,21	1,36
	MA						
	PH	1,73	0,48	2,06	7,28	7,03	5,31
	TH	1,13	0,31	1,58	1,31	0,86	1,08
	total	0,39	0,22	0,91	1,22	1,20	1,33
Group 2	HK	0,49	0,46	0,91	2,82	3,94	6,91
	SI	0,64	0,36	0,40	0,59	0,69	0,58
	SK	0,03	0,04	0,21	0,86	0,32	0,83
	JP	0,03	0,13	0,16	0,17	0,37	0,68
	AU	0,10	0,16	0,29	0,66	0,98	1,58
	total	0,18	0,22	0,28	0,45	0,61	0,86
Goup 3	GE				0,14	0,34	0,34
	FR	0,00	0,01	0,09	0,12	0,09	0,11
	UK	0,01	0,03	0,04	0,36	0,31	0,17
	IT	0,00	0,05	0,05	0,20	0,45	0,18
	NL	0,00	0,76	0,13	0,95	1,18	1,22
	total	0,01	0,12	0,07	0,30	0,42	0,41
Group 4	US	0,04	0,16	0,06	0,27	0,48	0,40
	CA	0,00	0,00	0,01	0,01	0,04	0,09
	total	0,04	0,14	0,05	0,23	0,43	0,35
Grand total		0,10	0,18	0,23	0,43	0,62	0,80
Rest of world		0,03	0,11	0,12	0,37	0,76	1,27
World total		0,08	0,16	0,19	0,41	0,65	0,92

Table 18.3.3. Chemicals exports / imports ratio of Malaysia

Philippines - Chemicals exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,06	3,11	5,66	0,07	0,20	0,10
	IN	0,09	0,42	0,71	0,12	0,11	0,18
	MA	2,39	1,49	0,30	0,17	0,10	0,21
	PH						
	TH	4,73	9,38	3,46	0,68	0,14	0,15
	total	0,29	1,02	1,18	0,19	0,13	0,15
Group 2	HK	0,47	0,77	0,60	0,65	0,51	0,53
	SI	0,21	0,12	0,08	0,04	0,04	0,04
	SK	0,01	0,03	0,07	0,03	0,07	0,13
	JP	0,29	0,49	0,13	0,13	0,09	0,13
	AU	0,12	0,71	0,20	0,15	0,13	0,24
	total	0,22	0,35	0,16	0,12	0,10	0,13
Goup 3	GE				0,01	0,01	0,02
	FR	0,01	0,10	0,01	0,02	0,06	0,07
	UK	0,01	0,01	0,03	0,10	0,05	0,03
	IT	0,12	0,04	0,07	0,01	0,01	0,03
	NL	0,01	0,27	0,31	0,12	0,04	0,13
	total	0,03	0,10	0,10	0,04	0,04	0,05
Group 4	US	0,03	0,08	0,08	0,07	0,08	0,18
	CA	0,02	0,15	0,03	0,05	0,11	0,10
	total	0,03	0,08	0,08	0,07	0,08	0,17
Grand total		0,13	0,29	0,22	0,10	0,09	0,13
Rest of world		0,04	0,08	0,06	0,21	0,20	0,23
World total		0,11	0,24	0,18	0,13	0,11	0,15

Table 18.4.3. Chemicals exports / imports ratio of the Philippines

Thailand - Chemicals exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,00	0,24	0,12	0,44	1,07	1,47
	IN	2,80	0,46	0,45	0,96	1,33	1,78
	MA	0,58	2,10	0,56	0,89	1,14	0,88
	PH	0,03	0,04	0,17	1,50	8,48	7,56
	TH						
	total	0,16	0,35	0,28	0,73	1,34	1,42
Group 2	HK	1,01	2,00	4,32	7,95	20,54	31,40
	SI	0,36	0,13	0,24	1,23	0,28	0,34
	SK	0,01	0,02	0,05	0,04	0,21	0,34
	JP	0,04	0,03	0,11	0,12	0,28	0,30
	AU	0,01	0,19	0,31	0,41	0,95	1,27
	total	0,07	0,09	0,20	0,36	0,57	0,58
Goup 3	GE				0,04	0,08	0,06
	FR	0,02	0,01	0,01	0,02	0,05	0,05
	UK	0,00	0,02	0,02	0,07	0,09	0,26
	IT	0,06	0,00	0,02	0,08	0,17	0,28
	NL	0,03	0,02	0,13	0,09	0,49	0,44
	total	0,02	0,01	0,04	0,05	0,14	0,16
Group 4	US	0,00	0,01	0,03	0,06	0,15	0,37
	CA	0,00	0,02	0,01	0,07	0,34	0,39
	total	0,00	0,01	0,03	0,06	0,17	0,37
Grand total		0,04	0,07	0,14	0,28	0,55	0,69
Rest of world		0,05	0,08	0,12	0,35	0,87	1,00
World total		0,04	0,08	0,14	0,30	0,62	0,76

Table 18.5.3. Chemicals exports / imports ratio of Thailand

China - Petroleum exports (SITC 33)

		1980		1985		1990		1995		2000		2005	
Group 1	CH												
	IN					2,53	*0,06%*	84,18	*2,60%*	282,09	*6,04%*	1580,11	*15,72%*
	MA					2,92	*0,07%*	5,28	*0,16%*	7,27	*0,16%*	255,08	*2,54%*
	PH					23,49	*0,53%*	27,38	*0,84%*	21,02	*0,45%*	94,75	*0,94%*
	TH					22,35	*0,50%*	35,51	*1,09%*	152,43	*3,26%*	46,99	*0,47%*
	total					51,28	*1,15%*	152,34	*4,70%*	462,81	*9,90%*	1976,93	*19,66%*
Group 2	HK					167,51	*3,75%*	214,44	*6,61%*	306,61	*6,56%*	584,98	*5,82%*
	SI					756,81	*16,92%*	256,14	*7,90%*	599,34	*12,83%*	1272,22	*12,65%*
	SK					120,49	*2,69%*	421,50	*12,99%*	406,83	*8,71%*	965,85	*9,61%*
	JP					2461,46	*55,04%*	1539,27	*47,46%*	1324,88	*28,35%*	1014,73	*10,09%*
	AU					33,51	*0,75%*	7,12	*0,22%*	103,06	*2,21%*	199,06	*1,98%*
	total					3539,77	*79,15%*	2438,47	*75,18%*	2740,72	*58,65%*	4036,83	*40,15%*
Goup 3	GE					0,00	*0,00%*	11,49	*0,35%*	15,32	*0,33%*	122,32	*1,22%*
	FR					0,00	*0,00%*	8,09	*0,25%*	12,44	*0,27%*	83,69	*0,83%*
	UK					0,10	*0,00%*	4,46	*0,14%*	5,32	*0,11%*	48,78	*0,49%*
	IT					0,79	*0,02%*	3,77	*0,12%*	7,57	*0,16%*	24,00	*0,24%*
	NL					0,13	*0,00%*	1,65	*0,05%*	35,78	*0,77%*	121,25	*1,21%*
	total					1,03	*0,02%*	29,47	*0,91%*	76,43	*1,64%*	400,04	*3,98%*
Group 4	US					677,13	*15,14%*	312,96	*9,65%*	574,34	*12,29%*	818,63	*8,14%*
	CA					0,00	*0,00%*	4,43	*0,14%*	10,48	*0,22%*	60,79	*0,60%*
	total					677,13	*15,14%*	317,39	*9,79%*	584,82	*12,52%*	879,42	*8,75%*
Grand total						4269,21	*95,46%*	2937,67	*90,57%*	3864,78	*82,71%*	7293,22	*72,54%*
Rest of world						202,89	*4,54%*	305,98	*9,43%*	808,09	*17,29%*	2761,12	*27,46%*
World total				6268,45	*100,00%*	4472,11	*100,00%*	3243,65	*100,00%*	4672,86	*100,00%*	10054,34	*100,00%*

Table 19.1.1. Chinese petroleum exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Indonesia - Petroleum exports (SITC 33)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	0,00	*0,00%*	0,00	*0,00%*	259,43	*3,50%*	747,92	*11,61%*	960,94	*12,38%*	1626,99	*15,92%*
	IN												
	MA	0,00	*0,00%*	0,00	*0,00%*	13,68	*0,18%*	0,04	*0,00%*	154,23	*1,99%*	125,59	*1,23%*
	PH	168,51	*1,31%*	126,19	*1,39%*	22,27	*0,30%*	41,10	*0,64%*	30,01	*0,39%*	1,45	*0,01%*
	TH	9,45	*0,07%*	5,43	*0,06%*	0,00	*0,00%*	85,48	*1,33%*	128,04	*1,65%*	310,18	*3,04%*
	total	177,96	*1,38%*	131,62	*1,45%*	295,38	*3,99%*	874,54	*13,57%*	1273,21	*16,40%*	2064,21	*20,20%*
Group 2	HK	5,65	*0,04%*	0,00	*0,00%*	14,58	*0,20%*	2,70	*0,04%*	6,23	*0,08%*	7,32	*0,07%*
	SI	1361,94	*10,59%*	755,91	*8,32%*	266,02	*3,59%*	624,68	*9,70%*	768,58	*9,90%*	820,93	*8,03%*
	SK	30,46	*0,24%*	585,50	*6,45%*	507,01	*6,85%*	697,31	*10,82%*	1482,87	*19,10%*	2201,26	*21,54%*
	JP	6601,36	*51,33%*	3963,77	*43,64%*	4708,85	*63,60%*	2636,03	*40,91%*	2555,81	*32,93%*	3343,88	*32,72%*
	AU	294,05	*2,29%*	97,22	*1,07%*	207,61	*2,80%*	381,29	*5,92%*	600,25	*7,73%*	1099,29	*10,76%*
	total	8293,46	*64,49%*	5402,40	*59,48%*	5704,07	*77,04%*	4342,01	*67,39%*	5413,75	*69,74%*	7472,67	*73,13%*
Goup 3	GE					0,00	*0,00%*	1,53	*0,02%*	0,00	*0,00%*	0,00	*0,00%*
	FR	24,45	*0,19%*	7,15	*0,08%*	0,00	*0,00%*	0,00	*0,00%*	0,04	*0,00%*	0,00	*0,00%*
	UK	0,00	*0,00%*	44,88	*0,49%*	0,02	*0,00%*	0,00	*0,00%*	0,02	*0,00%*	0,01	*0,00%*
	IT	34,16	*0,27%*	13,93	*0,15%*	18,73	*0,25%*	124,65	*1,93%*	77,97	*1,00%*	2,65	*0,03%*
	NL	0,00	*0,00%*	0,00	*0,00%*	7,62	*0,10%*	0,81	*0,01%*	3,15	*0,04%*	0,00	*0,00%*
	total	58,61	*0,46%*	65,96	*0,73%*	26,37	*0,36%*	126,98	*1,97%*	81,19	*1,05%*	2,65	*0,03%*
Group 4	US	3279,39	*25,50%*	2859,64	*31,48%*	977,44	*13,20%*	601,04	*9,33%*	453,94	*5,85%*	362,89	*3,55%*
	CA	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*
	total	3279,39	*25,50%*	2859,64	*31,48%*	977,44	*13,20%*	601,04	*9,33%*	453,94	*5,85%*	362,89	*3,55%*
Grand total		11809,43	*91,83%*	8459,63	*93,13%*	7003,25	*94,59%*	5944,58	*92,27%*	7222,09	*93,04%*	9902,43	*96,90%*
Rest of world		1051,02	*8,17%*	623,76	*6,87%*	400,62	*5,41%*	498,32	*7,73%*	540,11	*6,96%*	316,27	*3,10%*
World total		12860,45	*100,00%*	9083,39	*100,00%*	7403,87	*100,00%*	6442,90	*100,00%*	7762,20	*100,00%*	10218,70	*100,00%*

Table 19.2.1. Indonesian petroleum exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Malaysia - Petroleum exports (SITC 33)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	0,98	*0,03%*	0,20	*0,00%*	97,74	*2,23%*	77,10	*2,10%*	197,91	*3,39%*	246,21	*2,02%*
	IN	2,37	*0,07%*	16,63	*0,41%*	166,04	*3,79%*	137,01	*3,73%*	388,19	*6,65%*	749,79	*6,15%*
	MA												
	PH	130,27	*4,08%*	320,28	*7,88%*	180,11	*4,11%*	58,26	*1,59%*	130,20	*2,23%*	336,43	*2,76%*
	TH	100,52	*3,15%*	456,52	*11,23%*	502,86	*11,46%*	753,46	*20,53%*	818,24	*14,03%*	1518,73	*12,45%*
	total	234,14	*7,34%*	793,64	*19,52%*	946,75	*21,58%*	1025,82	*27,95%*	1534,54	*26,30%*	2851,16	*23,37%*
Group 2	HK	1,50	*0,05%*	3,33	*0,08%*	0,15	*0,00%*	1,28	*0,03%*	10,22	*0,18%*	137,80	*1,13%*
	SI	737,94	*23,14%*	1130,81	*27,81%*	1289,45	*29,39%*	875,82	*23,87%*	800,26	*13,72%*	3280,15	*26,89%*
	SK	0,03	*0,00%*	563,43	*13,86%*	538,42	*12,27%*	374,96	*10,22%*	599,17	*10,27%*	800,56	*6,56%*
	JP	1321,36	*41,43%*	1308,38	*32,18%*	894,99	*20,40%*	821,92	*22,40%*	738,39	*12,66%*	790,66	*6,48%*
	AU	2,06	*0,06%*	28,93	*0,71%*	99,94	*2,28%*	143,52	*3,91%*	459,29	*7,87%*	1797,49	*14,73%*
	total	2062,88	*64,67%*	3034,88	*74,64%*	2822,95	*64,35%*	2217,48	*60,43%*	2607,33	*44,69%*	6806,67	*55,80%*
Goup 3	GE					0,00	*0,00%*	5,89	*0,16%*	0,89	*0,02%*	28,22	*0,23%*
	FR	0,01	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	2,03	*0,06%*	3,18	*0,05%*	24,66	*0,20%*
	UK	3,08	*0,10%*	6,43	*0,16%*	0,00	*0,00%*	0,55	*0,02%*	0,01	*0,00%*	7,94	*0,07%*
	IT	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,57	*0,02%*	6,99	*0,12%*	0,04	*0,00%*
	NL	2,51	*0,08%*	2,13	*0,05%*	0,00	*0,00%*	2,14	*0,06%*	50,20	*0,86%*	39,74	*0,33%*
	total	5,60	*0,18%*	8,56	*0,21%*	0,00	*0,00%*	11,18	*0,30%*	61,27	*1,05%*	100,60	*0,82%*
Group 4	US	851,98	*26,71%*	24,16	*0,59%*	288,50	*6,58%*	64,94	*1,77%*	442,89	*7,59%*	348,15	*2,85%*
	CA	0,28	*0,01%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,01	*0,00%*	0,02	*0,00%*
	total	852,26	*26,72%*	24,16	*0,59%*	288,50	*6,58%*	64,94	*1,77%*	442,91	*7,59%*	348,17	*2,85%*
Grand total		3154,89	*98,91%*	3861,25	*94,96%*	4058,21	*92,51%*	3319,42	*90,45%*	4646,05	*79,64%*	10106,60	*82,85%*
Rest of world		34,79	*1,09%*	205,02	*5,04%*	328,53	*7,49%*	350,39	*9,55%*	1188,09	*20,36%*	2092,53	*17,15%*
World total		3189,68	*100,00%*	4066,27	*100,00%*	4386,74	*100,00%*	3669,81	*100,00%*	5834,14	*100,00%*	12199,13	*100,00%*

Table 19.3.1. Malaysian petroleum exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Philippines - Petroleum exports (SITC 33)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	0,00	*0,00%*	0,00	*0,00%*	0,77	*0,58%*	27,23	*17,59%*	42,68	*9,74%*	129,18	*17,38%*
	IN	0,00	*0,01%*	0,00	*0,00%*	0,00	*0,00%*	3,95	*2,55%*	5,11	*1,17%*	1,69	*0,23%*
	MA	0,05	*0,11%*	0,08	*0,31%*	0,21	*0,16%*	1,64	*1,06%*	5,45	*1,24%*	12,40	*1,67%*
	PH												
	TH	21,01	*43,35%*	0,25	*0,92%*	0,42	*0,32%*	0,33	*0,21%*	8,00	*1,82%*	3,17	*0,43%*
	total	21,06	*43,47%*	0,34	*1,23%*	1,40	*1,06%*	33,15	*21,41%*	61,24	*13,98%*	146,45	*19,70%*
Group 2	HK	0,09	*0,19%*	0,16	*0,58%*	0,13	*0,10%*	2,46	*1,59%*	0,02	*0,01%*	7,00	*0,94%*
	SI	3,00	*6,19%*	3,82	*14,03%*	7,35	*5,59%*	18,08	*11,68%*	190,79	*43,55%*	285,86	*38,45%*
	SK	0,28	*0,58%*	0,63	*2,32%*	36,97	*28,15%*	5,27	*3,41%*	22,09	*5,04%*	6,31	*0,85%*
	JP	11,76	*24,27%*	18,31	*67,17%*	81,78	*62,27%*	77,26	*49,90%*	114,24	*26,07%*	22,89	*3,08%*
	AU	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,01	*0,01%*	5,33	*1,22%*	162,11	*21,81%*
	total	15,13	*31,23%*	22,93	*84,11%*	126,22	*96,12%*	103,09	*66,59%*	332,48	*75,89%*	484,17	*65,13%*
Goup 3	GE					0,00	*0,00%*	0,00	*0,00%*	12,14	*2,77%*	0,00	*0,00%*
	FR	3,21	*6,63%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,09	*0,02%*	0,00	*0,00%*
	UK	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,62	*0,14%*	0,36	*0,05%*
	IT	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*
	NL	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,04	*0,01%*	3,05	*0,41%*
	total	3,21	*6,63%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	12,89	*2,94%*	3,40	*0,46%*
Group 4	US	0,04	*0,08%*	0,00	*0,02%*	0,00	*0,00%*	0,00	*0,00%*	8,40	*1,92%*	9,88	*1,33%*
	CA	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,60	*0,14%*	0,00	*0,00%*
	total	0,04	*0,08%*	0,00	*0,02%*	0,00	*0,00%*	0,00	*0,00%*	9,00	*2,05%*	9,88	*1,33%*
Grand total		39,45	*81,41%*	23,27	*85,35%*	127,62	*97,18%*	136,24	*88,00%*	415,62	*94,86%*	643,90	*86,62%*
Rest of world		9,01	*18,59%*	3,99	*14,65%*	3,70	*2,82%*	18,58	*12,00%*	22,52	*5,14%*	99,47	*13,38%*
World total		48,45	*100,00%*	27,26	*100,00%*	131,33	*100,00%*	154,82	*100,00%*	438,14	*100,00%*	743,37	*100,00%*

Table 19.4.1. Philippine petroleum exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Thailand - Petroleum exports (SITC 33)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	0,02	*0,05%*	0,00	*0,00%*	0,02	*0,02%*	1,28	*0,50%*	210,63	*10,88%*	648,20	*14,83%*
	IN	0,16	*0,38%*	0,37	*1,49%*	3,84	*4,36%*	3,74	*1,45%*	103,54	*5,35%*	372,75	*8,53%*
	MA	0,99	*2,43%*	0,82	*3,34%*	0,59	*0,67%*	2,45	*0,95%*	11,54	*0,60%*	90,40	*2,07%*
	PH	2,62	*6,42%*	0,00	*0,00%*	0,00	*0,00%*	1,08	*0,42%*	20,49	*1,06%*	72,84	*1,67%*
	TH												
	total	3,78	*9,28%*	1,19	*4,83%*	4,45	*5,05%*	8,56	*3,33%*	346,20	*17,88%*	1184,19	*27,10%*
Group 2	HK	5,49	*13,46%*	0,11	*0,46%*	0,25	*0,29%*	4,30	*1,67%*	99,95	*5,16%*	62,86	*1,44%*
	SI	2,59	*6,36%*	0,67	*2,71%*	0,74	*0,84%*	66,79	*25,97%*	750,66	*38,76%*	1367,49	*31,29%*
	SK	1,81	*4,43%*	0,00	*0,00%*	0,03	*0,03%*	6,36	*2,47%*	72,29	*3,73%*	176,81	*4,05%*
	JP	2,59	*6,36%*	0,00	*0,00%*	0,34	*0,39%*	10,02	*3,90%*	78,97	*4,08%*	303,31	*6,94%*
	AU	1,99	*4,88%*	0,00	*0,00%*	0,03	*0,04%*	0,01	*0,00%*	107,21	*5,54%*	86,76	*1,99%*
	total	14,46	*35,48%*	0,78	*3,17%*	1,40	*1,58%*	87,49	*34,01%*	1109,09	*57,27%*	1997,23	*45,70%*
Goup 3	GE					0,00	*0,00%*	0,05	*0,02%*	0,03	*0,00%*	0,08	*0,00%*
	FR	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,30	*0,02%*	0,05	*0,00%*
	UK	0,11	*0,28%*	0,00	*0,00%*	0,02	*0,02%*	0,00	*0,00%*	0,00	*0,00%*	0,12	*0,00%*
	IT	0,18	*0,43%*	0,00	*0,00%*	0,24	*0,27%*	0,00	*0,00%*	0,00	*0,00%*	0,02	*0,00%*
	NL	0,04	*0,10%*	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	4,80	*0,25%*	13,81	*0,32%*
	total	0,33	*0,82%*	0,00	*0,00%*	0,26	*0,29%*	0,05	*0,02%*	5,13	*0,27%*	14,09	*0,32%*
Group 4	US	0,68	*1,67%*	0,00	*0,00%*	0,00	*0,00%*	0,59	*0,23%*	93,35	*4,82%*	60,88	*1,39%*
	CA	0,00	*0,00%*	0,00	*0,00%*	0,00	*0,00%*	0,02	*0,01%*	5,08	*0,26%*	8,39	*0,19%*
	total	0,68	*1,67%*	0,00	*0,00%*	0,00	*0,00%*	0,61	*0,24%*	98,43	*5,08%*	69,27	*1,58%*
Grand total		19,26	*47,25%*	1,97	*8,00%*	6,11	*6,93%*	96,70	*37,60%*	1558,86	*80,49%*	3264,77	*74,71%*
Rest of world		21,50	*52,75%*	22,68	*92,00%*	82,01	*93,07%*	160,50	*62,40%*	377,74	*19,51%*	1105,34	*25,29%*
World total		40,77	*100,00%*	24,66	*100,00%*	88,12	*100,00%*	257,21	*100,00%*	1936,60	*100,00%*	4370,11	*100,00%*

Table 19.5.1. Thai petroleum exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

China - Petroleum imports (SITC 33)

		1980		1985		1990		1995		2000		2005	
Group 1	CH												
	IN			0,02	*0,04%*	182,47	*17,32%*	737,92	*16,00%*	970,37	*5,09%*	1829,14	*3,05%*
	MA			0,01	*0,01%*	56,64	*5,37%*	95,19	*2,06%*	234,89	*1,23%*	380,45	*0,64%*
	PH			0,00	*0,00%*	1,03	*0,10%*	24,06	*0,52%*	51,74	*0,27%*	142,21	*0,24%*
	TH			0,00	*0,01%*	0,66	*0,06%*	1,46	*0,03%*	176,69	*0,93%*	646,73	*1,08%*
	total			0,03	*0,06%*	240,81	*22,85%*	858,63	*18,61%*	1433,68	*7,53%*	2998,53	*5,01%*
Group 2	HK			9,55	*20,57%*	40,57	*3,85%*	44,77	*0,97%*	49,51	*0,26%*	31,86	*0,05%*
	SI			5,72	*12,31%*	387,90	*36,81%*	1193,82	*25,88%*	808,91	*4,25%*	2187,91	*3,65%*
	SK			0,00	*0,00%*	0,97	*0,09%*	373,55	*8,10%*	1844,03	*9,68%*	3509,06	*5,86%*
	JP			13,12	*28,25%*	59,63	*5,66%*	192,85	*4,18%*	268,65	*1,41%*	1439,36	*2,40%*
	AU			0,02	*0,04%*	18,49	*1,75%*	10,96	*0,24%*	279,87	*1,47%*	120,65	*0,20%*
	total			28,40	*61,17%*	507,56	*48,16%*	1815,95	*39,37%*	3250,97	*17,07%*	7288,84	*12,17%*
Goup 3	GE					0,00	*0,00%*	10,14	*0,22%*	33,62	*0,18%*	118,15	*0,20%*
	FR			0,11	*0,24%*	0,70	*0,07%*	2,19	*0,05%*	12,26	*0,06%*	48,56	*0,08%*
	UK			0,58	*1,25%*	6,79	*0,64%*	50,81	*1,10%*	287,96	*1,51%*	24,33	*0,04%*
	IT			0,03	*0,07%*	5,97	*0,57%*	7,77	*0,17%*	3,56	*0,02%*	19,02	*0,03%*
	NL			0,37	*0,79%*	1,25	*0,12%*	5,60	*0,12%*	5,46	*0,03%*	47,88	*0,08%*
	total			1,09	*2,34%*	14,71	*1,40%*	76,51	*1,66%*	342,86	*1,80%*	257,94	*0,43%*
Group 4	US			10,34	*22,27%*	45,87	*4,35%*	108,73	*2,36%*	77,74	*0,41%*	358,14	*0,60%*
	CA			0,00	*0,00%*	0,86	*0,08%*	5,07	*0,11%*	1,27	*0,01%*	8,66	*0,01%*
	total			10,34	*22,27%*	46,74	*4,43%*	113,80	*2,47%*	79,01	*0,41%*	366,80	*0,61%*
Grand total				39,86	*85,85%*	809,81	*76,84%*	2864,88	*62,11%*	5106,53	*26,81%*	10912,10	*18,22%*
Rest of world				6,57	*14,15%*	244,02	*23,16%*	1748,04	*37,89%*	13942,78	*73,19%*	48994,96	*81,78%*
World total				46,43	*100,00%*	1053,83	*100,00%*	4612,92	*100,00%*	19049,31	*100,00%*	59907,06	*100,00%*

Table 19.1.2. Chinese petroleum imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Indonesia - Petroleum imports (SITC 33)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	2,29	*0,13%*	4,02	*0,32%*	10,85	*0,56%*	63,52	*2,09%*	277,66	*4,51%*	1295,29	*7,34%*
	IN												
	MA	4,48	*0,26%*	0,07	*0,01%*	167,46	*8,72%*	152,27	*5,00%*	422,31	*6,85%*	767,63	*4,35%*
	PH	0,00	*0,00%*	0,52	*0,04%*	0,13	*0,01%*	0,93	*0,03%*	2,83	*0,05%*	1,80	*0,01%*
	TH	0,06	*0,00%*	0,03	*0,00%*	0,59	*0,03%*	2,86	*0,09%*	87,08	*1,41%*	370,95	*2,10%*
	total	6,84	*0,39%*	4,64	*0,36%*	179,03	*9,32%*	219,57	*7,21%*	789,88	*12,82%*	2435,67	*13,80%*
Group 2	HK	1,44	*0,08%*	0,09	*0,01%*	7,35	*0,38%*	6,45	*0,21%*	1,17	*0,02%*	0,45	*0,00%*
	SI	704,61	*40,39%*	357,60	*28,04%*	439,22	*22,87%*	830,42	*27,27%*	1745,24	*28,32%*	6548,59	*37,09%*
	SK	0,75	*0,04%*	0,12	*0,01%*	1,90	*0,10%*	23,79	*0,78%*	281,19	*4,56%*	1188,16	*6,73%*
	JP	10,48	*0,60%*	16,38	*1,28%*	17,99	*0,94%*	40,91	*1,34%*	52,29	*0,85%*	43,53	*0,25%*
	AU	8,98	*0,51%*	0,21	*0,02%*	223,14	*11,62%*	239,97	*7,88%*	33,52	*0,54%*	321,56	*1,82%*
	total	726,25	*41,63%*	374,39	*29,35%*	689,62	*35,91%*	1141,54	*37,49%*	2113,40	*34,29%*	8102,29	*45,89%*
Goup 3	GE					0,00	*0,00%*	19,19	*0,63%*	10,76	*0,17%*	12,00	*0,07%*
	FR	0,12	*0,01%*	0,38	*0,03%*	0,83	*0,04%*	10,63	*0,35%*	5,30	*0,09%*	5,71	*0,03%*
	UK	2,68	*0,15%*	1,63	*0,13%*	1,90	*0,10%*	7,94	*0,26%*	2,85	*0,05%*	1,03	*0,01%*
	IT	1,30	*0,07%*	0,27	*0,02%*	9,88	*0,51%*	42,12	*1,38%*	7,11	*0,12%*	0,57	*0,00%*
	NL	1,82	*0,10%*	4,11	*0,32%*	3,39	*0,18%*	71,48	*2,35%*	5,51	*0,09%*	1,40	*0,01%*
	total	5,92	*0,34%*	6,39	*0,50%*	15,99	*0,83%*	151,36	*4,97%*	31,52	*0,51%*	20,70	*0,12%*
Group 4	US	29,14	*1,67%*	28,50	*2,23%*	35,50	*1,85%*	86,26	*2,83%*	72,47	*1,18%*	180,24	*1,02%*
	CA	0,04	*0,00%*	0,01	*0,00%*	3,94	*0,21%*	0,21	*0,01%*	0,69	*0,01%*	0,34	*0,00%*
	total	29,17	*1,67%*	28,51	*2,24%*	39,44	*2,05%*	86,47	*2,84%*	73,17	*1,19%*	180,58	*1,02%*
Grand total		768,17	*44,03%*	413,94	*32,45%*	924,07	*48,12%*	1598,94	*52,51%*	3007,97	*48,81%*	10739,25	*60,83%*
Rest of world		976,53	*55,97%*	861,54	*67,55%*	996,36	*51,88%*	1446,17	*47,49%*	3154,72	*51,19%*	6916,00	*39,17%*
World total		1744,70	*100,00%*	1275,48	*100,00%*	1920,43	*100,00%*	3045,10	*100,00%*	6162,69	*100,00%*	17655,25	*100,00%*

Table 19.2.2. Indonesian petroleum imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Malaysia - Petroleum imports (SITC 33)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	3,89	*0,24%*	2,50	*0,17%*	3,27	*0,24%*	4,99	*0,32%*	8,45	*0,23%*	227,63	*2,70%*
	IN	1,37	*0,09%*	0,65	*0,04%*	0,27	*0,02%*	0,29	*0,02%*	72,30	*1,94%*	56,24	*0,67%*
	MA												
	PH	0,04	*0,00%*	0,13	*0,01%*	0,01	*0,00%*	2,05	*0,13%*	5,00	*0,13%*	14,47	*0,17%*
	TH	0,24	*0,02%*	0,17	*0,01%*	0,15	*0,01%*	2,18	*0,14%*	15,14	*0,41%*	82,32	*0,98%*
	total	5,55	*0,34%*	3,46	*0,23%*	3,70	*0,27%*	9,52	*0,61%*	100,88	*2,70%*	380,66	*4,52%*
Group 2	HK	0,33	*0,02%*	0,22	*0,01%*	1,74	*0,13%*	1,55	*0,10%*	1,51	*0,04%*	3,40	*0,04%*
	SI	674,00	*41,86%*	994,76	*66,72%*	1073,64	*79,22%*	1183,41	*75,36%*	1931,50	*51,76%*	3671,92	*43,62%*
	SK	0,13	*0,01%*	0,14	*0,01%*	0,64	*0,05%*	37,90	*2,41%*	44,31	*1,19%*	6,32	*0,08%*
	JP	3,90	*0,24%*	4,06	*0,27%*	9,77	*0,72%*	32,88	*2,09%*	43,68	*1,17%*	31,11	*0,37%*
	AU	3,58	*0,22%*	7,81	*0,52%*	6,37	*0,47%*	13,43	*0,86%*	16,41	*0,44%*	130,29	*1,55%*
	total	681,94	*42,35%*	1006,99	*67,54%*	1092,15	*80,59%*	1269,17	*80,82%*	2037,40	*54,60%*	3843,04	*45,65%*
Goup 3	GE					0,00	*0,00%*	7,06	*0,45%*	5,81	*0,16%*	73,68	*0,88%*
	FR	0,01	*0,00%*	0,37	*0,03%*	0,72	*0,05%*	1,97	*0,13%*	1,95	*0,05%*	6,38	*0,08%*
	UK	4,33	*0,27%*	3,32	*0,22%*	5,94	*0,44%*	6,05	*0,38%*	3,28	*0,09%*	3,12	*0,04%*
	IT	0,01	*0,00%*	2,70	*0,18%*	2,09	*0,15%*	0,33	*0,02%*	6,23	*0,17%*	7,44	*0,09%*
	NL	0,52	*0,03%*	0,50	*0,03%*	0,99	*0,07%*	1,28	*0,08%*	1,37	*0,04%*	4,06	*0,05%*
	total	4,86	*0,30%*	6,90	*0,46%*	9,74	*0,72%*	16,68	*1,06%*	18,64	*0,50%*	94,67	*1,12%*
Group 4	US	4,88	*0,30%*	4,67	*0,31%*	18,16	*1,34%*	23,63	*1,50%*	35,22	*0,94%*	238,79	*2,84%*
	CA	0,00	*0,00%*	0,01	*0,00%*	0,03	*0,00%*	0,17	*0,01%*	0,32	*0,01%*	0,90	*0,01%*
	total	4,88	*0,30%*	4,68	*0,31%*	18,19	*1,34%*	23,80	*1,52%*	35,54	*0,95%*	239,70	*2,85%*
Grand total		697,23	*43,30%*	1022,02	*68,55%*	1123,78	*82,92%*	1319,17	*84,01%*	2192,46	*58,75%*	4558,06	*54,14%*
Rest of world		912,98	*56,70%*	468,98	*31,45%*	231,49	*17,08%*	251,16	*15,99%*	1539,33	*41,25%*	3860,82	*45,86%*
World total		1610,21	*100,00%*	1491,00	*100,00%*	1355,27	*100,00%*	1570,33	*100,00%*	3731,79	*100,00%*	8418,88	*100,00%*

Table 19.3.2. Malaysian petroleum imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Philippines - Petroleum imports (SITC 33)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	193,38	*8,37%*	208,38	*14,52%*	26,84	*1,47%*	4,97	*0,21%*	6,48	*0,18%*	95,62	*1,60%*
	IN	167,03	*7,23%*	116,53	*8,12%*	25,11	*1,37%*	44,41	*1,91%*	32,47	*0,88%*	2,27	*0,04%*
	MA	122,00	*5,28%*	324,82	*22,63%*	162,71	*8,89%*	44,66	*1,92%*	129,90	*3,53%*	298,48	*4,99%*
	PH												
	TH	0,03	*0,00%*	0,00	*0,00%*	0,37	*0,02%*	1,29	*0,06%*	26,63	*0,72%*	32,33	*0,54%*
	total	482,45	*20,89%*	649,73	*45,27%*	215,04	*11,75%*	95,33	*4,10%*	195,48	*5,31%*	428,70	*7,17%*
Group 2	HK	0,62	*0,03%*	0,60	*0,04%*	1,28	*0,07%*	6,48	*0,28%*	11,10	*0,30%*	1,12	*0,02%*
	SI	43,24	*1,87%*	34,89	*2,43%*	77,24	*4,22%*	202,18	*8,70%*	260,56	*7,07%*	952,82	*15,93%*
	SK	0,02	*0,00%*	52,24	*3,64%*	6,31	*0,34%*	22,18	*0,95%*	119,65	*3,25%*	273,45	*4,57%*
	JP	2,44	*0,11%*	4,55	*0,32%*	33,45	*1,83%*	9,63	*0,41%*	27,17	*0,74%*	6,57	*0,11%*
	AU	0,67	*0,03%*	30,28	*2,11%*	11,31	*0,62%*	16,60	*0,71%*	66,79	*1,81%*	21,08	*0,35%*
	total	46,99	*2,03%*	122,57	*8,54%*	129,59	*7,08%*	257,07	*11,06%*	485,27	*13,17%*	1255,04	*20,99%*
Goup 3	GE					0,00	*0,00%*	1,89	*0,08%*	1,39	*0,04%*	1,21	*0,02%*
	FR	0,56	*0,02%*	0,01	*0,00%*	0,08	*0,00%*	1,09	*0,05%*	1,69	*0,05%*	1,18	*0,02%*
	UK	0,82	*0,04%*	0,21	*0,01%*	1,00	*0,05%*	2,25	*0,10%*	0,77	*0,02%*	0,29	*0,00%*
	IT	7,15	*0,31%*	1,90	*0,13%*	0,16	*0,01%*	6,76	*0,29%*	0,17	*0,00%*	3,92	*0,07%*
	NL	0,96	*0,04%*	0,22	*0,02%*	0,45	*0,02%*	0,46	*0,02%*	1,12	*0,03%*	0,55	*0,01%*
	total	9,49	*0,41%*	2,33	*0,16%*	1,69	*0,09%*	12,46	*0,54%*	5,15	*0,14%*	7,14	*0,12%*
Group 4	US	8,98	*0,39%*	2,69	*0,19%*	6,02	*0,33%*	34,51	*1,48%*	9,24	*0,25%*	8,55	*0,14%*
	CA	0,00	*0,00%*	0,04	*0,00%*	0,00	*0,00%*	0,05	*0,00%*	0,24	*0,01%*	0,06	*0,00%*
	total	8,98	*0,39%*	2,73	*0,19%*	6,02	*0,33%*	34,55	*1,49%*	9,49	*0,26%*	8,61	*0,14%*
Grand total		547,91	*23,72%*	777,36	*54,16%*	352,34	*19,25%*	399,40	*17,18%*	695,39	*18,88%*	1699,50	*28,42%*
Rest of world		1762,11	*76,28%*	657,82	*45,84%*	1478,00	*80,75%*	1925,46	*82,82%*	2988,35	*81,12%*	4280,23	*71,58%*
World total		2310,02	*100,00%*	1435,18	*100,00%*	1830,34	*100,00%*	2324,86	*100,00%*	3683,74	*100,00%*	5979,73	*100,00%*

Table 19.4.2. Philippine petroleum imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Thailand - Petroleum imports (SITC 33)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	240,92	*8,48%*	79,62	*3,89%*	59,91	*1,98%*	36,88	*0,78%*	79,83	*1,08%*	41,13	*0,22%*
	IN	12,50	*0,44%*	5,95	*0,29%*	0,00	*0,00%*	46,54	*0,98%*	166,63	*2,26%*	406,70	*2,14%*
	MA	38,32	*1,35%*	456,42	*22,32%*	480,90	*15,86%*	721,59	*15,21%*	442,23	*6,00%*	2174,83	*11,42%*
	PH	30,40	*1,07%*	8,00	*0,39%*	0,45	*0,01%*	1,35	*0,03%*	2,63	*0,04%*	0,18	*0,00%*
	TH												
	total	322,14	*11,34%*	549,99	*26,90%*	541,25	*17,85%*	806,36	*16,99%*	691,32	*9,38%*	2622,84	*13,77%*
Group 2	HK	0,00	*0,00%*	0,16	*0,01%*	0,29	*0,01%*	0,18	*0,00%*	0,18	*0,00%*	3,87	*0,02%*
	SI	491,08	*17,29%*	432,25	*21,14%*	1158,29	*38,20%*	1177,53	*24,82%*	196,36	*2,66%*	672,35	*3,53%*
	SK	16,94	*0,60%*	0,16	*0,01%*	2,78	*0,09%*	133,25	*2,81%*	5,80	*0,08%*	33,18	*0,17%*
	JP	3,09	*0,11%*	8,48	*0,41%*	30,88	*1,02%*	79,20	*1,67%*	61,86	*0,84%*	102,35	*0,54%*
	AU	21,21	*0,75%*	8,10	*0,40%*	21,14	*0,70%*	33,10	*0,70%*	74,43	*1,01%*	522,58	*2,74%*
	total	532,32	*18,74%*	449,15	*21,97%*	1213,38	*40,02%*	1423,27	*30,00%*	338,63	*4,59%*	1334,32	*7,01%*
Goup 3	GE					0,00	*0,00%*	17,80	*0,38%*	13,56	*0,18%*	16,96	*0,09%*
	FR	0,02	*0,00%*	0,33	*0,02%*	1,67	*0,06%*	5,92	*0,12%*	7,73	*0,10%*	9,48	*0,05%*
	UK	1,36	*0,05%*	1,27	*0,06%*	4,43	*0,15%*	8,61	*0,18%*	3,25	*0,04%*	3,36	*0,02%*
	IT	30,66	*1,08%*	0,02	*0,00%*	0,25	*0,01%*	0,91	*0,02%*	1,11	*0,02%*	2,15	*0,01%*
	NL	18,08	*0,64%*	1,75	*0,09%*	1,91	*0,06%*	3,15	*0,07%*	4,38	*0,06%*	3,64	*0,02%*
	total	50,12	*1,76%*	3,38	*0,17%*	8,27	*0,27%*	36,39	*0,77%*	30,03	*0,41%*	35,60	*0,19%*
Group 4	US	22,13	*0,78%*	19,21	*0,94%*	24,62	*0,81%*	139,09	*2,93%*	96,20	*1,31%*	147,22	*0,77%*
	CA	0,04	*0,00%*	0,07	*0,00%*	0,05	*0,00%*	0,23	*0,00%*	1,45	*0,02%*	2,26	*0,01%*
	total	22,17	*0,78%*	19,28	*0,94%*	24,67	*0,81%*	139,32	*2,94%*	97,66	*1,32%*	149,48	*0,78%*
Grand total		926,74	*32,63%*	1021,80	*49,98%*	1787,56	*58,95%*	2405,34	*50,69%*	1157,62	*15,70%*	4142,25	*21,75%*
Rest of world		1913,67	*67,37%*	1022,81	*50,02%*	1244,69	*41,05%*	2339,62	*49,31%*	6213,96	*84,30%*	14901,88	*78,25%*
World total		2840,41	*100,00%*	2044,61	*100,00%*	3032,25	*100,00%*	4744,96	*100,00%*	7371,59	*100,00%*	19044,13	*100,00%*

Table 19.5.2. Thai petroleum imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

China - Petroleum exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH						
	IN			0,01	0,11	0,29	0,86
	MA			0,05	0,06	0,03	0,67
	PH			22,75	1,14	0,41	0,67
	TH			33,64	24,32	0,86	0,07
	total			0,21	0,18	0,32	0,66
Group 2	HK			4,13	4,79	6,19	18,36
	SI			1,95	0,21	0,74	0,58
	SK			124,11	1,13	0,22	0,28
	JP			41,28	7,98	4,93	0,70
	AU			1,81	0,65	0,37	1,65
	total			6,97	1,34	0,84	0,55
Goup 3	GE				1,13	0,46	1,04
	FR			0,00	3,69	1,01	1,72
	UK			0,02	0,09	0,02	2,00
	IT			0,13	0,49	2,13	1,26
	NL			0,11	0,30	6,56	2,53
	total			0,07	0,39	0,22	1,55
Group 4	US			14,76	2,88	7,39	2,29
	CA			0,00	0,87	8,27	7,02
	total			14,49	2,79	7,40	2,40
Grand total				5,27	1,03	0,76	0,67
Rest of world				0,83	0,18	0,06	0,06
World total				4,24	0,70	0,25	0,17

Table 19.1.3. Petroleum exports / imports ratio of China

Indonesia - Petroleum exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH			23,91	11,78	3,46	1,26
	IN						
	MA	0,00	0,00	0,08	0,00	0,37	0,16
	PH	70009,15	241,28	165,63	44,25	10,60	0,80
	TH	151,70	193,98	0,00	29,89	1,47	0,84
	total	26,04	28,36	1,65	3,98	1,61	0,85
Group 2	HK	3,94	0,00	1,98	0,42	5,34	16,36
	SI	1,93	2,11	0,61	0,75	0,44	0,13
	SK	40,86	5085,44	266,36	29,32	5,27	1,85
	JP	630,11	242,02	261,74	64,44	48,88	76,81
	AU	32,75	460,22	0,93	1,59	17,91	3,42
	total	11,42	14,43	8,27	3,80	2,56	0,92
Goup 3	GE				0,08	0,00	0,00
	FR	209,19	19,06	0,00	0,00	0,01	0,00
	UK	0,00	27,49	0,01	0,00	0,01	0,00
	IT	26,31	50,92	1,90	2,96	10,97	4,64
	NL	0,00	0,00	2,25	0,01	0,57	0,00
	total	9,90	10,32	1,65	0,84	2,58	0,13
Group 4	US	112,55	100,33	27,54	6,97	6,26	2,01
	CA						
	total	112,41	100,29	24,79	6,95	6,20	2,01
Grand total		15,37	20,44	7,58	3,72	2,40	0,92
Rest of world		1,08	0,72	0,40	0,34	0,17	0,05
World total		7,37	7,12	3,86	2,12	1,26	0,58

Table 19.2.3. Petroleum exports / imports ratio of Indonesia

Malaysia - Petroleum exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,25	0,08	29,90	15,44	23,41	1,08
	IN	1,73	25,63	618,94	465,66	5,37	13,33
	MA						
	PH	3094,60	2383,60	13879,25	28,35	26,06	23,25
	TH	410,72	2667,88	3407,07	345,67	54,06	18,45
	total	42,18	229,53	256,03	107,73	15,21	7,49
Group 2	HK	4,57	15,26	0,09	0,82	6,78	40,58
	SI	1,09	1,14	1,20	0,74	0,41	0,89
	SK	0,21	3937,25	847,80	9,89	13,52	126,73
	JP	338,94	321,93	91,64	24,99	16,91	25,41
	AU	0,57	3,71	15,70	10,68	27,98	13,80
	total	3,03	3,01	2,58	1,75	1,28	1,77
Goup 3	GE				0,83	0,15	0,38
	FR	1,03	0,00	0,00	1,03	1,62	3,87
	UK	0,71	1,94	0,00	0,09	0,00	2,55
	IT	0,00	0,00	0,00	1,74	1,12	0,01
	NL	4,87	4,23	0,00	1,67	36,70	9,79
	total	1,15	1,24	0,00	0,67	3,29	1,06
Group 4	US	174,53	5,17	15,89	2,75	12,58	1,46
	CA		0,00	0,00	0,00	0,04	0,02
	total	174,59	5,17	15,86	2,73	12,46	1,45
Grand total		4,52	3,78	3,61	2,52	2,12	2,22
Rest of world		0,04	0,44	1,42	1,40	0,77	0,54
World total		1,98	2,73	3,24	2,34	1,56	1,45

Table 19.3.3. Petroleum exports / imports ratio of Malaysia

Philippines - Petroleum exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,00	0,00	0,03	5,47	6,59	1,35
	IN	0,00	0,00	0,00	0,09	0,16	0,75
	MA	0,00	0,00	0,00	0,04	0,04	0,04
	PH						
	TH	605,48	449,08	1,12	0,26	0,30	0,10
	total	0,04	0,00	0,01	0,35	0,31	0,34
Group 2	HK	0,15	0,27	0,10	0,38	0,00	6,26
	SI	0,07	0,11	0,10	0,09	0,73	0,30
	SK	11,94	0,01	5,86	0,24	0,18	0,02
	JP	4,82	4,02	2,45	8,03	4,20	3,48
	AU	0,00	0,00	0,00	0,00	0,08	7,69
	total	0,32	0,19	0,97	0,40	0,69	0,39
Goup 3	GE				0,00	8,71	0,00
	FR	5,70	0,00	0,00	0,00	0,06	0,00
	UK	0,00	0,00	0,00	0,00	0,80	1,23
	IT	0,00	0,00	0,00	0,00	0,00	0,00
	NL	0,00	0,00	0,00	0,00	0,03	5,54
	total	0,34	0,00	0,00	0,00	2,50	0,48
Group 4	US	0,00	0,00	0,00	0,00	0,91	1,16
	CA		0,00	0,00	0,00	2,46	0,00
	total	0,00	0,00	0,00	0,00	0,95	1,15
Grand total		0,07	0,03	0,36	0,34	0,60	0,38
Rest of world		0,01	0,01	0,00	0,01	0,01	0,02
World total		0,02	0,02	0,07	0,07	0,12	0,12

Table 19.4.3. Petroleum exports / imports ratio of the Philippines

Thailand - Petroleum exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,00	0,00	0,00	0,03	2,64	15,76
	IN	0,01	0,06	#DEEL/0!	0,08	0,62	0,92
	MA	0,03	0,00	0,00	0,00	0,03	0,04
	PH	0,09	0,00	0,00	0,80	7,79	397,63
	TH						
	total	0,01	0,00	0,01	0,01	0,50	0,45
Group 2	HK	2744,22	0,72	0,89	23,86	547,38	16,25
	SI	0,01	0,00	0,00	0,06	3,82	2,03
	SK	0,11	0,00	0,01	0,05	12,47	5,33
	JP	0,84	0,00	0,01	0,13	1,28	2,96
	AU	0,09	0,00	0,00	0,00	1,44	0,17
	total	0,03	0,00	0,00	0,06	3,28	1,50
Goup 3	GE				0,00	0,00	0,00
	FR	0,00	0,00	0,00	0,00	0,04	0,01
	UK	0,08	0,00	0,00	0,00	0,00	0,04
	IT	0,01	0,00	0,94	0,00	0,00	0,01
	NL	0,00	0,00	0,00	0,00	1,10	3,79
	total	0,01	0,00	0,03	0,00	0,17	0,40
Group 4	US	0,03	0,00	0,00	0,00	0,97	0,41
	CA	0,00	0,00	0,00	0,08	3,50	3,71
	total	0,03	0,00	0,00	0,00	1,01	0,46
Grand total		0,02	0,00	0,00	0,04	1,35	0,79
Rest of world		0,01	0,02	0,07	0,07	0,06	0,07
World total		0,01	0,01	0,03	0,05	0,26	0,23

Table 19.5.3. Petroleum exports / imports ratio of Thailand

China - Food exports (SITC 0) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH												
	IN			7,83	*0,30%*	35,50	*0,53%*	158,94	*1,60%*	271,83	*2,22%*	340,99	*1,52%*
	MA			22,91	*0,87%*	65,89	*0,98%*	138,63	*1,40%*	376,78	*3,07%*	619,72	*2,76%*
	PH			8,00	*0,30%*	48,12	*0,71%*	53,57	*0,54%*	126,63	*1,03%*	233,54	*1,04%*
	TH			12,30	*0,47%*	104,39	*1,55%*	42,89	*0,43%*	100,39	*0,82%*	242,63	*1,08%*
	total			51,04	*1,94%*	253,90	*3,77%*	394,03	*3,97%*	875,64	*7,14%*	1436,88	*6,40%*
Group 2	HK			92,36	*3,51%*	1768,88	*26,26%*	1963,28	*19,78%*	1306,50	*10,65%*	1913,53	*8,52%*
	SI			32,72	*1,24%*	203,12	*3,02%*	256,77	*2,59%*	167,08	*1,36%*	236,71	*1,05%*
	SK			0,00	*0,00%*	284,11	*4,22%*	412,06	*4,15%*	1381,62	*11,26%*	2523,38	*11,24%*
	JP			49,00	*1,86%*	1532,86	*22,76%*	3968,34	*39,99%*	4842,36	*39,46%*	7170,96	*31,94%*
	AU			0,45	*0,02%*	23,39	*0,35%*	39,76	*0,40%*	65,28	*0,53%*	235,75	*1,05%*
	total			174,52	*6,63%*	3812,37	*56,60%*	6640,22	*66,91%*	7762,84	*63,26%*	12080,33	*53,81%*
Goup 3	GE					0,00	*0,00%*	273,18	*2,75%*	289,67	*2,36%*	633,64	*2,82%*
	FR			1,05	*0,04%*	88,65	*1,32%*	102,51	*1,03%*	99,71	*0,81%*	162,75	*0,72%*
	UK			6,42	*0,24%*	59,83	*0,89%*	78,06	*0,79%*	115,70	*0,94%*	306,05	*1,36%*
	IT			1,37	*0,05%*	71,01	*1,05%*	83,10	*0,84%*	116,84	*0,95%*	185,54	*0,83%*
	NL			3,91	*0,15%*	59,46	*0,88%*	128,96	*1,30%*	213,21	*1,74%*	381,73	*1,70%*
	total			12,74	*0,48%*	278,95	*4,14%*	665,80	*6,71%*	835,12	*6,81%*	1669,71	*7,44%*
Group 4	US			1,50	*0,06%*	369,75	*5,49%*	536,28	*5,40%*	883,42	*7,20%*	2436,61	*10,85%*
	CA			0,16	*0,01%*	55,50	*0,82%*	73,15	*0,74%*	126,84	*1,03%*	337,44	*1,50%*
	total			1,66	*0,06%*	425,25	*6,31%*	609,43	*6,14%*	1010,25	*8,23%*	2774,05	*12,36%*
Grand total				239,97	*9,12%*	4770,47	*70,83%*	8309,49	*83,73%*	10483,85	*85,44%*	17960,96	*80,01%*
Rest of world				2391,30	*90,88%*	1964,69	*29,17%*	1614,51	*16,27%*	1786,91	*14,56%*	4487,85	*19,99%*
World total				2631,26	*100,00%*	6735,16	*100,00%*	9924,00	*100,00%*	12270,76	*100,00%*	22448,82	*100,00%*

Table 20.1.1. Chinese food exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Indonesia - Food exports (SITC 0) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	0,00	*0,00%*	17,61	*1,27%*	10,89	*0,48%*	89,98	*2,51%*	61,91	*1,77%*	120,31	*2,63%*
	IN												
	MA	5,00	*0,39%*	8,93	*0,65%*	41,74	*1,82%*	93,13	*2,60%*	148,34	*4,24%*	332,75	*7,28%*
	PH	3,04	*0,24%*	31,26	*2,26%*	8,67	*0,38%*	26,40	*0,74%*	37,87	*1,08%*	70,07	*1,53%*
	TH	1,73	*0,13%*	5,19	*0,38%*	44,23	*1,93%*	103,96	*2,90%*	45,25	*1,29%*	63,11	*1,38%*
	total	9,77	*0,76%*	62,98	*4,56%*	105,52	*4,61%*	313,49	*8,76%*	293,37	*8,38%*	586,24	*12,82%*
Group 2	HK	19,01	*1,47%*	26,19	*1,89%*	51,18	*2,23%*	117,78	*3,29%*	135,99	*3,89%*	111,53	*2,44%*
	SI	134,97	*10,46%*	71,05	*5,14%*	248,69	*10,86%*	318,27	*8,89%*	360,35	*10,30%*	326,99	*7,15%*
	SK	13,03	*1,01%*	24,41	*1,77%*	36,31	*1,59%*	103,83	*2,90%*	64,43	*1,84%*	102,80	*2,25%*
	JP	250,90	*19,44%*	322,57	*23,33%*	651,11	*28,42%*	1268,85	*35,44%*	914,95	*26,14%*	716,14	*15,66%*
	AU	35,30	*2,73%*	27,08	*1,96%*	27,52	*1,20%*	21,67	*0,61%*	45,37	*1,30%*	61,95	*1,36%*
	total	453,21	*35,11%*	471,31	*34,09%*	1014,82	*44,30%*	1830,40	*51,13%*	1521,08	*43,46%*	1319,41	*28,86%*
Goup 3	GE					0,00	*0,00%*	176,06	*4,92%*	97,51	*2,79%*	148,02	*3,24%*
	FR	19,00	*1,47%*	14,26	*1,03%*	51,68	*2,26%*	36,77	*1,03%*	43,18	*1,23%*	67,88	*1,48%*
	UK	15,77	*1,22%*	18,32	*1,33%*	42,87	*1,87%*	83,10	*2,32%*	82,65	*2,36%*	112,65	*2,46%*
	IT	80,48	*6,24%*	30,03	*2,17%*	15,68	*0,68%*	28,54	*0,80%*	28,45	*0,81%*	53,79	*1,18%*
	NL	135,36	*10,49%*	112,43	*8,13%*	180,45	*7,88%*	149,41	*4,17%*	159,16	*4,55%*	167,93	*3,67%*
	total	250,61	*19,42%*	175,03	*12,66%*	290,68	*12,69%*	473,88	*13,24%*	410,95	*11,74%*	550,28	*12,04%*
Group 4	US	262,45	*20,33%*	243,41	*17,61%*	304,11	*13,28%*	452,31	*12,63%*	674,63	*19,28%*	1065,09	*23,30%*
	CA	4,61	*0,36%*	3,58	*0,26%*	8,94	*0,39%*	15,72	*0,44%*	23,79	*0,68%*	39,80	*0,87%*
	total	267,06	*20,69%*	246,99	*17,87%*	313,05	*13,67%*	468,03	*13,07%*	698,42	*19,96%*	1104,89	*24,17%*
Grand total		980,65	*75,97%*	956,30	*69,18%*	1724,06	*75,26%*	3085,79	*86,20%*	2923,82	*83,54%*	3560,83	*77,89%*
Rest of world		310,13	*24,03%*	426,10	*30,82%*	566,72	*24,74%*	494,09	*13,80%*	576,06	*16,46%*	1010,93	*22,11%*
World total		1290,78	*100,00%*	1382,40	*100,00%*	2290,78	*100,00%*	3579,87	*100,00%*	3499,88	*100,00%*	4571,76	*100,00%*

Table 20.2.1. Indonesian food exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Malaysia - Food exports (SITC 0) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	0,18	*0,04%*	4,40	*0,64%*	9,85	*0,77%*	25,43	*1,41%*	21,53	*1,27%*	76,92	*2,71%*
	IN	1,22	*0,26%*	2,96	*0,43%*	27,15	*2,13%*	49,26	*2,74%*	105,55	*6,21%*	201,09	*7,08%*
	MA												
	PH	6,68	*1,43%*	4,23	*0,61%*	10,93	*0,86%*	28,75	*1,60%*	33,28	*1,96%*	68,53	*2,41%*
	TH	9,12	*1,96%*	5,51	*0,80%*	19,27	*1,51%*	33,91	*1,88%*	58,86	*3,46%*	130,59	*4,60%*
	total	17,21	*3,70%*	17,10	*2,48%*	67,20	*5,27%*	137,34	*7,63%*	219,23	*12,89%*	477,12	*16,80%*
Group 2	HK	12,13	*2,61%*	9,57	*1,39%*	53,49	*4,19%*	154,50	*8,59%*	108,67	*6,39%*	105,70	*3,72%*
	SI	163,69	*35,16%*	273,49	*39,68%*	490,57	*38,45%*	623,22	*34,64%*	520,71	*30,61%*	630,55	*22,21%*
	SK	1,02	*0,22%*	0,98	*0,14%*	13,44	*1,05%*	13,71	*0,76%*	17,60	*1,03%*	31,39	*1,11%*
	JP	53,86	*11,57%*	57,44	*8,33%*	79,55	*6,24%*	151,79	*8,44%*	114,22	*6,72%*	154,08	*5,43%*
	AU	20,81	*4,47%*	31,12	*4,52%*	46,44	*3,64%*	58,93	*3,28%*	44,91	*2,64%*	85,08	*3,00%*
	total	251,50	*54,02%*	372,60	*54,06%*	683,49	*53,57%*	1002,15	*55,70%*	806,11	*47,39%*	1006,80	*35,46%*
Goup 3	GE					0,00	*0,00%*	41,09	*2,28%*	18,37	*1,08%*	32,74	*1,15%*
	FR	2,23	*0,48%*	1,40	*0,20%*	10,43	*0,82%*	8,22	*0,46%*	18,05	*1,06%*	62,41	*2,20%*
	UK	29,32	*6,30%*	16,74	*2,43%*	44,61	*3,50%*	62,19	*3,46%*	33,25	*1,96%*	56,20	*1,98%*
	IT	4,92	*1,06%*	1,99	*0,29%*	3,04	*0,24%*	34,18	*1,90%*	33,56	*1,97%*	59,41	*2,09%*
	NL	36,43	*7,83%*	103,80	*15,06%*	115,16	*9,03%*	111,51	*6,20%*	97,84	*5,75%*	123,20	*4,34%*
	total	72,89	*15,66%*	123,93	*17,98%*	173,25	*13,58%*	257,19	*14,29%*	201,08	*11,82%*	333,96	*11,76%*
Group 4	US	20,31	*4,36%*	51,87	*7,53%*	105,91	*8,30%*	75,42	*4,19%*	85,47	*5,02%*	317,94	*11,20%*
	CA	3,07	*0,66%*	4,93	*0,72%*	10,13	*0,79%*	11,43	*0,63%*	6,64	*0,39%*	18,34	*0,65%*
	total	23,38	*5,02%*	56,80	*8,24%*	116,04	*9,10%*	86,85	*4,83%*	92,11	*5,41%*	336,28	*11,84%*
Grand total		364,98	*78,40%*	570,42	*82,76%*	1039,98	*81,51%*	1483,54	*82,45%*	1318,53	*77,52%*	2154,16	*75,87%*
Rest of world		100,57	*21,60%*	118,80	*17,24%*	235,91	*18,49%*	315,81	*17,55%*	382,43	*22,48%*	685,17	*24,13%*
World total		465,56	*100,00%*	689,22	*100,00%*	1275,90	*100,00%*	1799,35	*100,00%*	1700,96	*100,00%*	2839,33	*100,00%*

Table 20.3.1. Malaysian food exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Philippines - Food exports (SITC 0) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	13,45	*0,96%*	28,09	*3,40%*	2,50	*0,23%*	23,57	*1,76%*	51,22	*3,99%*	47,78	*2,95%*
	IN	93,88	*6,70%*	0,33	*0,04%*	1,65	*0,15%*	8,94	*0,67%*	26,87	*2,09%*	64,99	*4,02%*
	MA	21,28	*1,52%*	1,36	*0,16%*	5,48	*0,51%*	10,99	*0,82%*	10,85	*0,84%*	40,40	*2,50%*
	PH												
	TH	14,98	*1,07%*	2,54	*0,31%*	1,89	*0,18%*	7,77	*0,58%*	13,58	*1,06%*	26,14	*1,62%*
	total	143,59	*10,24%*	32,31	*3,91%*	11,51	*1,07%*	51,26	*3,83%*	102,53	*7,98%*	179,31	*11,08%*
Group 2	HK	16,56	*1,18%*	21,60	*2,62%*	33,00	*3,07%*	75,85	*5,67%*	98,17	*7,64%*	65,51	*4,05%*
	SI	16,48	*1,18%*	23,67	*2,87%*	12,18	*1,13%*	22,79	*1,70%*	35,18	*2,74%*	36,08	*2,23%*
	SK	81,04	*5,78%*	17,03	*2,06%*	22,76	*2,12%*	72,37	*5,41%*	65,78	*5,12%*	124,59	*7,70%*
	JP	306,07	*21,84%*	216,60	*26,24%*	392,38	*36,50%*	516,65	*38,64%*	422,99	*32,92%*	377,50	*23,33%*
	AU	11,62	*0,83%*	12,61	*1,53%*	12,53	*1,17%*	13,80	*1,03%*	11,16	*0,87%*	23,57	*1,46%*
	total	431,76	*30,80%*	291,51	*35,32%*	472,84	*43,98%*	701,46	*52,46%*	633,29	*49,28%*	627,25	*38,76%*
Goup 3	GE					0,00	*0,00%*	31,10	*2,33%*	14,90	*1,16%*	29,02	*1,79%*
	FR	6,42	*0,46%*	2,98	*0,36%*	3,35	*0,31%*	2,65	*0,20%*	2,41	*0,19%*	8,42	*0,52%*
	UK	14,67	*1,05%*	16,34	*1,98%*	26,47	*2,46%*	27,25	*2,04%*	16,51	*1,28%*	29,30	*1,81%*
	IT	26,57	*1,90%*	3,95	*0,48%*	5,75	*0,53%*	8,65	*0,65%*	4,95	*0,39%*	8,14	*0,50%*
	NL	65,14	*4,65%*	14,61	*1,77%*	54,50	*5,07%*	50,86	*3,80%*	20,14	*1,57%*	27,08	*1,67%*
	total	112,81	*8,05%*	37,88	*4,59%*	90,07	*8,38%*	120,51	*9,01%*	58,90	*4,58%*	101,96	*6,30%*
Group 4	US	378,74	*27,02%*	302,73	*36,68%*	334,05	*31,07%*	295,15	*22,07%*	312,11	*24,29%*	350,44	*21,66%*
	CA	14,69	*1,05%*	24,81	*3,01%*	26,33	*2,45%*	31,26	*2,34%*	34,23	*2,66%*	34,89	*2,16%*
	total	393,44	*28,07%*	327,54	*39,68%*	360,39	*33,52%*	326,41	*24,41%*	346,34	*26,95%*	385,32	*23,81%*
Grand total		1081,59	*77,17%*	689,24	*83,50%*	934,81	*86,95%*	1199,64	*89,72%*	1141,05	*88,79%*	1293,85	*79,95%*
Rest of world		320,04	*22,83%*	136,16	*16,50%*	140,32	*13,05%*	137,50	*10,28%*	143,99	*11,21%*	324,40	*20,05%*
World total		1401,63	*100,00%*	825,40	*100,00%*	1075,13	*100,00%*	1337,15	*100,00%*	1285,04	*100,00%*	1618,24	*100,00%*

Table 20.4.1. Philippine food exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Thailand - Food exports (SITC 0) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	52,97	*1,83%*	156,53	*4,95%*	75,54	*1,16%*	950,08	*8,89%*	259,69	*2,69%*	717,20	*5,80%*
	IN	196,95	*6,79%*	20,43	*0,65%*	54,86	*0,84%*	368,08	*3,44%*	277,48	*2,88%*	371,81	*3,01%*
	MA	169,68	*5,85%*	244,66	*7,74%*	297,75	*4,58%*	296,60	*2,77%*	268,97	*2,79%*	466,60	*3,77%*
	PH	10,11	*0,35%*	42,85	*1,36%*	64,23	*0,99%*	105,34	*0,99%*	57,56	*0,60%*	213,59	*1,73%*
	TH												
	total	429,71	*14,82%*	464,47	*14,70%*	492,38	*7,58%*	1720,10	*16,09%*	863,70	*8,96%*	1769,20	*14,30%*
Group 2	HK	132,76	*4,58%*	117,86	*3,73%*	272,24	*4,19%*	465,67	*4,36%*	397,21	*4,12%*	354,70	*2,87%*
	SI	173,67	*5,99%*	159,66	*5,05%*	220,78	*3,40%*	377,82	*3,53%*	455,44	*4,72%*	235,70	*1,91%*
	SK	19,33	*0,67%*	91,33	*2,89%*	208,21	*3,21%*	237,62	*2,22%*	165,97	*1,72%*	246,38	*1,99%*
	JP	278,16	*9,60%*	389,23	*12,32%*	1447,59	*22,29%*	2700,19	*25,26%*	2159,40	*22,40%*	2328,84	*18,83%*
	AU	22,02	*0,76%*	42,97	*1,36%*	119,05	*1,83%*	215,26	*2,01%*	237,19	*2,46%*	351,18	*2,84%*
	total	625,94	*21,59%*	801,05	*25,35%*	2267,86	*34,92%*	3996,54	*37,39%*	3415,20	*35,42%*	3516,80	*28,43%*
Goup 3	GE					0,00	*0,00%*	213,62	*2,00%*	197,73	*2,05%*	232,62	*1,88%*
	FR	46,59	*1,61%*	45,47	*1,44%*	108,59	*1,67%*	164,62	*1,54%*	119,77	*1,24%*	157,78	*1,28%*
	UK	21,31	*0,74%*	44,03	*1,39%*	175,41	*2,70%*	204,34	*1,91%*	228,92	*2,37%*	433,51	*3,51%*
	IT	57,02	*1,97%*	54,44	*1,72%*	92,86	*1,43%*	92,66	*0,87%*	72,00	*0,75%*	170,70	*1,38%*
	NL	513,53	*17,71%*	380,92	*12,05%*	640,24	*9,86%*	472,74	*4,42%*	380,90	*3,95%*	284,22	*2,30%*
	total	638,45	*22,02%*	524,86	*16,61%*	1017,11	*15,66%*	1147,98	*10,74%*	999,32	*10,36%*	1278,84	*10,34%*
Group 4	US	135,61	*4,68%*	361,70	*11,45%*	949,72	*14,62%*	1586,01	*14,84%*	2096,44	*21,74%*	2246,59	*18,16%*
	CA	11,08	*0,38%*	40,50	*1,28%*	96,98	*1,49%*	216,68	*2,03%*	245,33	*2,54%*	293,75	*2,38%*
	total	146,69	*5,06%*	402,19	*12,73%*	1046,70	*16,12%*	1802,69	*16,86%*	2341,77	*24,29%*	2540,34	*20,54%*
Grand total		1840,80	*63,50%*	2192,58	*69,38%*	4824,05	*74,27%*	8667,31	*81,08%*	7620,00	*79,03%*	9105,17	*73,62%*
Rest of world		1058,19	*36,50%*	967,59	*30,62%*	1670,90	*25,73%*	2022,01	*18,92%*	2021,68	*20,97%*	3262,80	*26,38%*
World total		2898,99	*100,00%*	3160,17	*100,00%*	6494,95	*100,00%*	10689,32	*100,00%*	9641,68	*100,00%*	12367,97	*100,00%*

Table 20.5.1. Thai food exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

China - Food imports (SITC 0) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH												
	IN			0,85	*0,06%*	15,20	*0,44%*	79,04	*1,29%*	102,64	*2,16%*	124,30	*1,33%*
	MA			0,11	*0,01%*	10,04	*0,29%*	40,88	*0,67%*	94,60	*1,99%*	63,63	*0,68%*
	PH			4,19	*0,32%*	5,44	*0,16%*	31,55	*0,52%*	78,70	*1,66%*	103,48	*1,10%*
	TH			2,27	*0,17%*	103,39	*2,99%*	738,95	*12,07%*	275,01	*5,80%*	846,15	*9,02%*
	total			7,42	*0,56%*	134,07	*3,88%*	890,41	*14,54%*	550,95	*11,62%*	1137,56	*12,13%*
Group 2	HK			23,00	*1,74%*	95,69	*2,77%*	58,71	*0,96%*	24,35	*0,51%*	28,34	*0,30%*
	SI			1,56	*0,12%*	6,33	*0,18%*	16,97	*0,28%*	32,75	*0,69%*	81,23	*0,87%*
	SK			0,00	*0,00%*	3,73	*0,11%*	64,12	*1,05%*	108,67	*2,29%*	213,76	*2,28%*
	JP			10,14	*0,77%*	58,97	*1,71%*	202,89	*3,31%*	248,32	*5,24%*	291,18	*3,10%*
	AU			5,49	*0,42%*	426,58	*12,34%*	259,62	*4,24%*	290,12	*6,12%*	703,61	*7,50%*
	total			40,19	*3,05%*	591,31	*17,10%*	602,32	*9,84%*	704,21	*14,85%*	1318,12	*14,05%*
Goup 3	GE					0,00	*0,00%*	61,50	*1,00%*	28,60	*0,60%*	55,58	*0,59%*
	FR			1,19	*0,09%*	197,95	*5,72%*	368,85	*6,02%*	155,68	*3,28%*	286,06	*3,05%*
	UK			0,68	*0,05%*	182,13	*5,27%*	62,03	*1,01%*	42,26	*0,89%*	60,22	*0,64%*
	IT			0,23	*0,02%*	0,34	*0,01%*	1,50	*0,02%*	13,52	*0,29%*	34,37	*0,37%*
	NL			3,24	*0,25%*	35,88	*1,04%*	32,38	*0,53%*	75,18	*1,59%*	138,39	*1,48%*
	total			5,35	*0,41%*	416,30	*12,04%*	526,26	*8,60%*	315,24	*6,65%*	574,63	*6,13%*
Group 4	US			11,18	*0,85%*	749,03	*21,66%*	1731,08	*28,27%*	878,42	*18,52%*	1189,74	*12,69%*
	CA			3,35	*0,25%*	764,44	*22,11%*	1001,56	*16,36%*	318,44	*6,71%*	779,73	*8,31%*
	total			14,53	*1,10%*	1513,47	*43,77%*	2732,64	*44,63%*	1196,86	*25,24%*	1969,47	*21,00%*
Grand total				67,49	*5,12%*	2655,15	*76,79%*	4751,63	*77,61%*	2767,26	*58,35%*	4999,78	*53,31%*
Rest of world				1251,64	*94,88%*	802,63	*23,21%*	1371,11	*22,39%*	1975,01	*41,65%*	4379,06	*46,69%*
World total				1319,13	*100,00%*	3457,78	*100,00%*	6122,74	*100,00%*	4742,26	*100,00%*	9378,84	*100,00%*

Table 20.1.2. Chinese food imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Indonesia - Food imports (SITC 0) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	32,59	*2,54%*	42,13	*7,58%*	65,30	*7,67%*	128,45	*4,25%*	349,25	*12,56%*	264,23	*6,59%*
	IN												
	MA	1,42	*0,11%*	1,02	*0,18%*	15,26	*1,79%*	35,58	*1,18%*	43,03	*1,55%*	89,15	*2,22%*
	PH	74,79	*5,82%*	0,42	*0,08%*	3,10	*0,36%*	11,73	*0,39%*	25,58	*0,92%*	86,69	*2,16%*
	TH	256,25	*19,94%*	18,12	*3,26%*	72,79	*8,55%*	318,93	*10,56%*	272,80	*9,81%*	451,49	*11,26%*
	total	365,05	*28,41%*	61,69	*11,09%*	156,45	*18,38%*	494,69	*16,38%*	690,66	*24,83%*	891,57	*22,23%*
Group 2	HK	93,08	*7,24%*	2,30	*0,41%*	2,56	*0,30%*	3,99	*0,13%*	12,97	*0,47%*	5,71	*0,14%*
	SI	10,98	*0,85%*	8,33	*1,50%*	28,11	*3,30%*	22,88	*0,76%*	39,96	*1,44%*	150,53	*3,75%*
	SK	32,87	*2,56%*	0,08	*0,01%*	39,14	*4,60%*	27,14	*0,90%*	24,03	*0,86%*	38,63	*0,96%*
	JP	86,84	*6,76%*	7,69	*1,38%*	16,51	*1,94%*	28,02	*0,93%*	35,38	*1,27%*	23,28	*0,58%*
	AU	109,16	*8,50%*	130,79	*23,52%*	146,73	*17,24%*	486,35	*16,10%*	559,81	*20,13%*	916,30	*22,85%*
	total	332,94	*25,91%*	149,19	*26,83%*	233,04	*27,38%*	568,38	*18,82%*	672,16	*24,17%*	1134,46	*28,29%*
Goup 3	GE					0,00	*0,00%*	50,51	*1,67%*	32,01	*1,15%*	29,82	*0,74%*
	FR	4,95	*0,39%*	4,00	*0,72%*	8,20	*0,96%*	55,73	*1,85%*	33,03	*1,19%*	40,30	*1,00%*
	UK	1,95	*0,15%*	0,90	*0,16%*	8,75	*1,03%*	18,70	*0,62%*	28,62	*1,03%*	44,20	*1,10%*
	IT	0,26	*0,02%*	0,55	*0,10%*	0,92	*0,11%*	12,02	*0,40%*	27,37	*0,98%*	8,04	*0,20%*
	NL	9,61	*0,75%*	11,90	*2,14%*	16,14	*1,90%*	46,47	*1,54%*	55,93	*2,01%*	95,44	*2,38%*
	total	16,77	*1,30%*	17,35	*3,12%*	34,02	*4,00%*	183,43	*6,07%*	176,95	*6,36%*	217,81	*5,43%*
Group 4	US	197,03	*15,33%*	109,67	*19,72%*	89,17	*10,48%*	433,50	*14,35%*	301,49	*10,84%*	342,17	*8,53%*
	CA	0,88	*0,07%*	62,40	*11,22%*	46,27	*5,44%*	207,51	*6,87%*	133,68	*4,81%*	186,14	*4,64%*
	total	197,91	*15,40%*	172,07	*30,94%*	135,45	*15,91%*	641,01	*21,23%*	435,17	*15,65%*	528,31	*13,17%*
Grand total		912,67	*71,02%*	400,30	*71,99%*	558,95	*65,66%*	1887,52	*62,50%*	1974,94	*71,01%*	2772,14	*69,12%*
Rest of world		372,34	*28,98%*	155,77	*28,01%*	292,28	*34,34%*	1132,50	*37,50%*	806,35	*28,99%*	1238,39	*30,88%*
World total		1285,02	*100,00%*	556,07	*100,00%*	851,23	*100,00%*	3020,02	*100,00%*	2781,29	*100,00%*	4010,53	*100,00%*

Table 20.2.2. Indonesian food imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Malaysia - Food imports (SITC 0) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	80,79	*7,29%*	97,17	*7,66%*	145,88	*8,62%*	188,43	*6,02%*	467,68	*15,63%*	528,14	*11,26%*
	IN	23,51	*2,12%*	36,55	*2,88%*	70,18	*4,14%*	201,56	*6,44%*	206,39	*6,90%*	424,44	*9,05%*
	MA												
	PH	25,14	*2,27%*	2,50	*0,20%*	6,69	*0,40%*	12,48	*0,40%*	11,87	*0,40%*	42,63	*0,91%*
	TH	217,19	*19,61%*	327,28	*25,80%*	373,54	*22,06%*	391,11	*12,50%*	341,08	*11,40%*	512,92	*10,93%*
	total	346,62	*31,29%*	463,49	*36,54%*	596,29	*35,21%*	793,57	*25,36%*	1027,02	*34,32%*	1508,14	*32,15%*
Group 2	HK	5,54	*0,50%*	8,38	*0,66%*	9,64	*0,57%*	17,76	*0,57%*	24,22	*0,81%*	19,51	*0,42%*
	SI	51,58	*4,66%*	32,48	*2,56%*	35,93	*2,12%*	53,95	*1,72%*	48,49	*1,62%*	107,83	*2,30%*
	SK	3,90	*0,35%*	6,36	*0,50%*	4,49	*0,27%*	11,54	*0,37%*	4,43	*0,15%*	7,78	*0,17%*
	JP	40,55	*3,66%*	39,72	*3,13%*	25,47	*1,50%*	29,67	*0,95%*	20,99	*0,70%*	16,48	*0,35%*
	AU	297,38	*26,85%*	271,25	*21,38%*	377,68	*22,30%*	642,59	*20,54%*	594,98	*19,88%*	676,05	*14,41%*
	total	398,96	*36,02%*	358,20	*28,24%*	453,22	*26,76%*	755,52	*24,15%*	693,11	*23,16%*	827,65	*17,64%*
Goup 3	GE					0,00	*0,00%*	27,04	*0,86%*	24,37	*0,81%*	24,77	*0,53%*
	FR	7,24	*0,65%*	6,35	*0,50%*	9,17	*0,54%*	24,38	*0,78%*	21,74	*0,73%*	37,21	*0,79%*
	UK	22,68	*2,05%*	14,04	*1,11%*	18,88	*1,11%*	44,91	*1,44%*	31,11	*1,04%*	30,94	*0,66%*
	IT	0,66	*0,06%*	1,33	*0,10%*	1,34	*0,08%*	2,93	*0,09%*	6,90	*0,23%*	12,68	*0,27%*
	NL	12,51	*1,13%*	16,26	*1,28%*	20,28	*1,20%*	59,54	*1,90%*	67,92	*2,27%*	123,68	*2,64%*
	total	43,08	*3,89%*	37,97	*2,99%*	49,67	*2,93%*	158,80	*5,08%*	152,04	*5,08%*	229,28	*4,89%*
Group 4	US	61,82	*5,58%*	92,00	*7,25%*	92,50	*5,46%*	403,37	*12,89%*	197,84	*6,61%*	266,47	*5,68%*
	CA	4,59	*0,41%*	13,44	*1,06%*	23,04	*1,36%*	42,04	*1,34%*	55,60	*1,86%*	42,24	*0,90%*
	total	66,41	*6,00%*	105,44	*8,31%*	115,54	*6,82%*	445,41	*14,24%*	253,44	*8,47%*	308,71	*6,58%*
Grand total		855,06	*77,19%*	965,11	*76,08%*	1214,73	*71,74%*	2153,29	*68,82%*	2125,61	*71,03%*	2873,78	*61,26%*
Rest of world		252,66	*22,81%*	303,48	*23,92%*	478,61	*28,26%*	975,66	*31,18%*	867,10	*28,97%*	1817,44	*38,74%*
World total		1107,72	*100,00%*	1268,59	*100,00%*	1693,34	*100,00%*	3128,95	*100,00%*	2992,70	*100,00%*	4691,21	*100,00%*

Table 20.3.2. Malaysian food imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Philippines - Food imports (SITC 0) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	3,63	*0,63%*	43,68	*9,05%*	31,51	*2,60%*	45,83	*2,17%*	111,58	*4,95%*	121,04	*4,11%*
	IN	1,45	*0,25%*	33,63	*6,96%*	23,05	*1,90%*	33,11	*1,57%*	52,06	*2,31%*	68,09	*2,31%*
	MA	3,39	*0,59%*	0,40	*0,08%*	16,73	*1,38%*	25,97	*1,23%*	30,19	*1,34%*	53,58	*1,82%*
	PH												
	TH	10,71	*1,87%*	44,82	*9,28%*	68,76	*5,67%*	148,83	*7,06%*	67,87	*3,01%*	174,21	*5,91%*
	total	19,18	*3,35%*	122,53	*25,37%*	140,05	*11,55%*	253,74	*12,04%*	261,70	*11,62%*	416,92	*14,15%*
Group 2	HK	2,86	*0,50%*	5,45	*1,13%*	12,73	*1,05%*	34,53	*1,64%*	16,03	*0,71%*	7,23	*0,25%*
	SI	12,21	*2,13%*	2,26	*0,47%*	17,54	*1,45%*	52,01	*2,47%*	65,28	*2,90%*	78,69	*2,67%*
	SK	0,05	*0,01%*	0,02	*0,00%*	1,59	*0,13%*	9,65	*0,46%*	24,20	*1,07%*	12,57	*0,43%*
	JP	29,20	*5,10%*	5,00	*1,03%*	36,45	*3,00%*	17,74	*0,84%*	5,54	*0,25%*	15,36	*0,52%*
	AU	47,85	*8,36%*	39,71	*8,22%*	155,58	*12,83%*	377,34	*17,91%*	379,20	*16,83%*	185,84	*6,31%*
	total	92,16	*16,10%*	52,44	*10,86%*	223,89	*18,46%*	491,26	*23,31%*	490,26	*21,76%*	299,69	*10,17%*
Goup 3	GE					0,00	*0,00%*	25,02	*1,19%*	40,05	*1,78%*	21,32	*0,72%*
	FR	4,99	*0,87%*	2,42	*0,50%*	22,61	*1,86%*	31,88	*1,51%*	27,07	*1,20%*	38,86	*1,32%*
	UK	3,62	*0,63%*	8,40	*1,74%*	11,62	*0,96%*	27,82	*1,32%*	17,06	*0,76%*	12,26	*0,42%*
	IT	0,31	*0,05%*	0,12	*0,03%*	1,33	*0,11%*	2,04	*0,10%*	7,35	*0,33%*	3,69	*0,13%*
	NL	17,30	*3,02%*	15,73	*3,26%*	40,97	*3,38%*	102,52	*4,87%*	101,56	*4,51%*	46,45	*1,58%*
	total	26,22	*4,58%*	26,67	*5,52%*	76,53	*6,31%*	189,29	*8,98%*	193,10	*8,57%*	122,58	*4,16%*
Group 4	US	251,24	*43,90%*	219,82	*45,51%*	299,32	*24,68%*	684,00	*32,46%*	685,44	*30,43%*	643,11	*21,83%*
	CA	10,60	*1,85%*	3,95	*0,82%*	76,76	*6,33%*	43,98	*2,09%*	99,89	*4,43%*	57,02	*1,94%*
	total	261,84	*45,75%*	223,77	*46,33%*	376,08	*31,00%*	727,98	*34,55%*	785,32	*34,86%*	700,14	*23,77%*
Grand total		399,40	*69,79%*	425,41	*88,08%*	816,55	*67,31%*	1662,27	*78,88%*	1730,38	*76,82%*	1539,33	*52,26%*
Rest of world		172,92	*30,21%*	57,55	*11,92%*	396,49	*32,69%*	445,03	*21,12%*	522,18	*23,18%*	1406,23	*47,74%*
World total		572,31	*100,00%*	482,97	*100,00%*	1213,05	*100,00%*	2107,29	*100,00%*	2252,56	*100,00%*	2945,55	*100,00%*

Table 20.4.2. Philippine food imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Thailand - Food imports (SITC 0) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	35,18	*10,58%*	29,28	*7,80%*	120,92	*8,55%*	54,14	*2,41%*	120,76	*5,81%*	257,42	*6,80%*
	IN	2,87	*0,86%*	12,46	*3,32%*	22,22	*1,57%*	71,51	*3,19%*	141,89	*6,83%*	317,40	*8,39%*
	MA	12,34	*3,71%*	8,03	*2,14%*	13,97	*0,99%*	32,09	*1,43%*	31,39	*1,51%*	95,04	*2,51%*
	PH	20,88	*6,28%*	4,38	*1,17%*	1,82	*0,13%*	9,46	*0,42%*	15,03	*0,72%*	36,36	*0,96%*
	TH												
	total	71,27	*21,44%*	54,14	*14,42%*	158,92	*11,24%*	167,20	*7,45%*	309,07	*14,87%*	706,23	*18,66%*
Group 2	HK	1,79	*0,54%*	0,36	*0,10%*	1,94	*0,14%*	3,55	*0,16%*	1,96	*0,09%*	3,73	*0,10%*
	SI	4,30	*1,29%*	12,47	*3,32%*	40,88	*2,89%*	47,14	*2,10%*	26,60	*1,28%*	66,74	*1,76%*
	SK	16,98	*5,11%*	0,94	*0,25%*	79,35	*5,61%*	54,16	*2,41%*	29,36	*1,41%*	80,81	*2,14%*
	JP	12,35	*3,71%*	37,73	*10,05%*	113,19	*8,00%*	135,60	*6,04%*	75,92	*3,65%*	186,87	*4,94%*
	AU	18,31	*5,51%*	23,06	*6,14%*	85,02	*6,01%*	158,91	*7,08%*	166,00	*7,99%*	290,30	*7,67%*
	total	53,73	*16,16%*	74,55	*19,86%*	320,38	*22,65%*	399,36	*17,80%*	299,84	*14,43%*	628,46	*16,60%*
Goup 3	GE					0,00	*0,00%*	92,45	*4,12%*	30,23	*1,45%*	27,86	*0,74%*
	FR	1,88	*0,57%*	14,38	*3,83%*	51,24	*3,62%*	56,85	*2,53%*	25,60	*1,23%*	52,60	*1,39%*
	UK	14,91	*4,49%*	11,38	*3,03%*	19,63	*1,39%*	35,24	*1,57%*	34,09	*1,64%*	62,73	*1,66%*
	IT	0,39	*0,12%*	0,45	*0,12%*	1,04	*0,07%*	5,03	*0,22%*	9,10	*0,44%*	12,89	*0,34%*
	NL	13,60	*4,09%*	16,27	*4,33%*	34,16	*2,42%*	72,53	*3,23%*	49,96	*2,40%*	99,70	*2,63%*
	total	30,78	*9,26%*	42,48	*11,32%*	106,07	*7,50%*	262,09	*11,68%*	149,00	*7,17%*	255,79	*6,76%*
Group 4	US	47,85	*14,39%*	74,82	*19,93%*	214,26	*15,15%*	301,66	*13,45%*	249,14	*11,99%*	422,82	*11,17%*
	CA	7,54	*2,27%*	4,85	*1,29%*	23,11	*1,63%*	51,12	*2,28%*	52,18	*2,51%*	45,39	*1,20%*
	total	55,39	*16,66%*	79,68	*21,23%*	237,38	*16,78%*	352,79	*15,73%*	301,32	*14,50%*	468,22	*12,37%*
Grand total		211,17	*63,52%*	250,85	*66,83%*	822,74	*58,17%*	1181,44	*52,66%*	1059,22	*50,96%*	2058,69	*54,39%*
Rest of world		121,25	*36,48%*	124,50	*33,17%*	591,67	*41,83%*	1061,95	*47,34%*	1019,20	*49,04%*	1726,31	*45,61%*
World total		332,43	*100,00%*	375,35	*100,00%*	1414,42	*100,00%*	2243,39	*100,00%*	2078,42	*100,00%*	3785,00	*100,00%*

Table 20.5.2. Thai food imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

China - Food exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH						
	IN		9,23	2,34	2,01	2,65	2,74
	MA		212,99	6,56	3,39	3,98	9,74
	PH		1,91	8,85	1,70	1,61	2,26
	TH		5,41	1,01	0,06	0,37	0,29
	total		6,88	1,89	0,44	1,59	1,26
Group 2	HK		4,02	18,48	33,44	53,66	67,51
	SI		21,02	32,07	15,13	5,10	2,91
	SK		#DEEL/0!	76,09	6,43	12,71	11,80
	JP		4,83	25,99	19,56	19,50	24,63
	AU		0,08	0,05	0,15	0,23	0,34
	total		4,34	6,45	11,02	11,02	9,16
Goup 3	GE				4,44	10,13	11,40
	FR		0,88	0,45	0,28	0,64	0,57
	UK		9,40	0,33	1,26	2,74	5,08
	IT		5,92	207,65	55,56	8,64	5,40
	NL		1,21	1,66	3,98	2,84	2,76
	total		2,38	0,67	1,27	2,65	2,91
Group 4	US		0,13	0,49	0,31	1,01	2,05
	CA		0,05	0,07	0,07	0,40	0,43
	total		0,11	0,28	0,22	0,84	1,41
Grand total			3,56	1,80	1,75	3,79	3,59
Rest of world			1,91	2,45	1,18	0,90	1,02
World total			1,99	1,95	1,62	2,59	2,39

Table 20.1.3. Food exports / imports ratio of China

Indonesia - Food exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,00	0,42	0,17	0,70	0,18	0,46
	IN						
	MA	3,51	8,75	2,74	2,62	3,45	3,73
	PH	0,04	74,25	2,79	2,25	1,48	0,81
	TH	0,01	0,29	0,61	0,33	0,17	0,14
	total	0,03	1,02	0,67	0,63	0,42	0,66
Group 2	HK	0,20	11,38	20,02	29,53	10,48	19,52
	SI	12,29	8,53	8,85	13,91	9,02	2,17
	SK	0,40	301,80	0,93	3,83	2,68	2,66
	JP	2,89	41,95	39,45	45,28	25,86	30,76
	AU	0,32	0,21	0,19	0,04	0,08	0,07
	total	1,36	3,16	4,35	3,22	2,26	1,16
Goup 3	GE				3,49	3,05	4,96
	FR	3,83	3,56	6,30	0,66	1,31	1,68
	UK	8,09	20,39	4,90	4,44	2,89	2,55
	IT	311,66	54,46	17,05	2,37	1,04	6,69
	NL	14,09	9,45	11,18	3,21	2,85	1,76
	total	14,95	10,09	8,55	2,58	2,32	2,53
Group 4	US	1,33	2,22	3,41	1,04	2,24	3,11
	CA	5,23	0,06	0,19	0,08	0,18	0,21
	total	1,35	1,44	2,31	0,73	1,60	2,09
Grand total		1,07	2,39	3,08	1,63	1,48	1,28
Rest of world		0,83	2,74	1,94	0,44	0,71	0,82
World total		1,00	2,49	2,69	1,19	1,26	1,14

Table 20.2.3. Food exports / imports ratio of Indonesia

Malaysia - Food exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,00	0,05	0,07	0,13	0,05	0,15
	IN	0,05	0,08	0,39	0,24	0,51	0,47
	MA						
	PH	0,27	1,69	1,63	2,30	2,80	1,61
	TH	0,04	0,02	0,05	0,09	0,17	0,25
	total	0,05	0,04	0,11	0,17	0,21	0,32
Group 2	HK	2,19	1,14	5,55	8,70	4,49	5,42
	SI	3,17	8,42	13,65	11,55	10,74	5,85
	SK	0,26	0,15	2,99	1,19	3,97	4,03
	JP	1,33	1,45	3,12	5,12	5,44	9,35
	AU	0,07	0,11	0,12	0,09	0,08	0,13
	total	0,63	1,04	1,51	1,33	1,16	1,22
Goup 3	GE				1,52	0,75	1,32
	FR	0,31	0,22	1,14	0,34	0,83	1,68
	UK	1,29	1,19	2,36	1,38	1,07	1,82
	IT	7,48	1,50	2,26	11,67	4,87	4,68
	NL	2,91	6,38	5,68	1,87	1,44	1,00
	total	1,69	3,26	3,49	1,62	1,32	1,46
Group 4	US	0,33	0,56	1,15	0,19	0,43	1,19
	CA	0,67	0,37	0,44	0,27	0,12	0,43
	total	0,35	0,54	1,00	0,19	0,36	1,09
Grand total		0,43	0,59	0,86	0,69	0,62	0,75
Rest of world		0,40	0,39	0,49	0,32	0,44	0,38
World total		0,42	0,54	0,75	0,58	0,57	0,61

Table 20.3.3. Food exports / imports ratio of Malaysia

Philippines - Food exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	3,71	0,64	0,08	0,51	0,46	0,39
	IN	64,95	0,01	0,07	0,27	0,52	0,95
	MA	6,27	3,38	0,33	0,42	0,36	0,75
	PH						
	TH	1,40	0,06	0,03	0,05	0,20	0,15
	total	7,49	0,26	0,08	0,20	0,39	0,43
Group 2	HK	5,79	3,96	2,59	2,20	6,12	9,06
	SI	1,35	10,48	0,69	0,44	0,54	0,46
	SK	1711,40	944,66	14,29	7,50	2,72	9,91
	JP	10,48	43,33	10,77	29,13	76,37	24,57
	AU	0,24	0,32	0,08	0,04	0,03	0,13
	total	4,68	5,56	2,11	1,43	1,29	2,09
Goup 3	GE				1,24	0,37	1,36
	FR	1,29	1,23	0,15	0,08	0,09	0,22
	UK	4,05	1,95	2,28	0,98	0,97	2,39
	IT	85,64	32,04	4,32	4,24	0,67	2,21
	NL	3,77	0,93	1,33	0,50	0,20	0,58
	total	4,30	1,42	1,18	0,64	0,31	0,83
Group 4	US	1,51	1,38	1,12	0,43	0,46	0,54
	CA	1,39	6,28	0,34	0,71	0,34	0,61
	total	1,50	1,46	0,96	0,45	0,44	0,55
Grand total		2,71	1,62	1,14	0,72	0,66	0,84
Rest of world		1,85	2,37	0,35	0,31	0,28	0,23
World total		2,45	1,71	0,89	0,63	0,57	0,55

Table 20.4.3. Food exports / imports ratio of the Philippines

Thailand - Food exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	1,51	5,35	0,62	17,55	2,15	2,79
	IN	68,61	1,64	2,47	5,15	1,96	1,17
	MA	13,75	30,48	21,32	9,24	8,57	4,91
	PH	0,48	9,79	35,34	11,14	3,83	5,87
	TH						
	total	6,03	8,58	3,10	10,29	2,79	2,51
Group 2	HK	74,30	329,83	140,24	131,17	202,59	95,05
	SI	40,36	12,81	5,40	8,02	17,12	3,53
	SK	1,14	97,23	2,62	4,39	5,65	3,05
	JP	22,53	10,31	12,79	19,91	28,44	12,46
	AU	1,20	1,86	1,40	1,35	1,43	1,21
	total	11,65	10,74	7,08	10,01	11,39	5,60
Goup 3	GE				2,31	6,54	8,35
	FR	24,74	3,16	2,12	2,90	4,68	3,00
	UK	1,43	3,87	8,94	5,80	6,71	6,91
	IT	147,58	120,88	89,42	18,44	7,91	13,24
	NL	37,76	23,42	18,74	6,52	7,62	2,85
	total	20,74	12,36	9,59	4,38	6,71	5,00
Group 4	US	2,83	4,83	4,43	5,26	8,41	5,31
	CA	1,47	8,35	4,20	4,24	4,70	6,47
	total	2,65	5,05	4,41	5,11	7,77	5,43
Grand total		8,72	8,74	5,86	7,34	7,19	4,42
Rest of world		8,73	7,77	2,82	1,90	1,98	1,89
World total		8,72	8,42	4,59	4,76	4,64	3,27

Table 20.5.3. Food exports / imports ratio of Thailand

China - Textile exports (SITC 26,65,84,85) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH												
	IN			0,00	*0,00%*	44,32	*0,22%*	79,49	*0,18%*	319,96	*0,51%*	820,60	*0,61%*
	MA			1,74	*0,03%*	41,87	*0,21%*	140,55	*0,31%*	311,22	*0,49%*	914,45	*0,68%*
	PH			0,11	*0,00%*	16,10	*0,08%*	115,65	*0,26%*	222,47	*0,35%*	590,27	*0,44%*
	TH			0,03	*0,00%*	77,84	*0,39%*	189,54	*0,42%*	283,26	*0,45%*	545,16	*0,40%*
	total			1,87	*0,04%*	180,13	*0,90%*	525,22	*1,16%*	1136,92	*1,80%*	2870,48	*2,12%*
Group 2	HK			261,57	*4,91%*	9341,49	*46,85%*	12761,29	*28,19%*	12001,24	*19,05%*	15981,80	*11,81%*
	SI			8,90	*0,17%*	280,43	*1,41%*	525,23	*1,16%*	648,99	*1,03%*	1636,34	*1,21%*
	SK			0,00	*0,00%*	146,37	*0,73%*	1754,62	*3,88%*	2504,99	*3,98%*	4485,90	*3,32%*
	JP			349,88	*6,57%*	2397,83	*12,02%*	9930,86	*21,93%*	14464,90	*22,96%*	19013,15	*14,06%*
	AU			35,26	*0,66%*	233,35	*1,17%*	704,12	*1,56%*	1278,14	*2,03%*	2414,94	*1,79%*
	total			655,62	*12,30%*	12399,48	*62,18%*	25676,13	*56,71%*	30898,26	*49,04%*	43532,13	*32,18%*
Goup 3	GE					0,00	*0,00%*	1473,16	*3,25%*	1485,16	*2,36%*	4584,34	*3,39%*
	FR			33,24	*0,62%*	215,38	*1,08%*	412,98	*0,91%*	746,68	*1,18%*	2393,07	*1,77%*
	UK			23,80	*0,45%*	228,36	*1,15%*	564,39	*1,25%*	942,66	*1,50%*	3321,21	*2,46%*
	IT			33,93	*0,64%*	390,38	*1,96%*	699,37	*1,54%*	1111,02	*1,76%*	3399,86	*2,51%*
	NL			22,76	*0,43%*	185,92	*0,93%*	349,58	*0,77%*	541,23	*0,86%*	1667,72	*1,23%*
	total			113,72	*2,13%*	1020,04	*5,12%*	3499,48	*7,73%*	4826,75	*7,66%*	15366,21	*11,36%*
Group 4	US			537,70	*10,09%*	2211,89	*11,09%*	7262,62	*16,04%*	10913,14	*17,32%*	25543,26	*18,88%*
	CA			92,23	*1,73%*	259,22	*1,30%*	524,59	*1,16%*	877,99	*1,39%*	2495,53	*1,84%*
	total			629,92	*11,82%*	2471,11	*12,39%*	7787,21	*17,20%*	11791,13	*18,71%*	28038,78	*20,73%*
Grand total				1401,14	*26,29%*	16070,76	*80,59%*	37488,04	*82,80%*	48653,06	*77,21%*	89807,60	*66,39%*
Rest of world				3927,48	*73,71%*	3870,09	*19,41%*	7786,25	*17,20%*	14358,01	*22,79%*	45459,88	*33,61%*
World total				5328,62	*100,00%*	19940,85	*100,00%*	45274,29	*100,00%*	63011,07	*100,00%*	135267,48	*100,00%*

Table 21.1.1. Chinese textile exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Indonesia - Textile exports (SITC 26,65,84,85) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	0,00	*0,00%*	0,77	*0,13%*	1,40	*0,04%*	53,65	*0,65%*	129,85	*1,29%*	152,26	*1,49%*
	IN												
	MA	0,68	*0,47%*	4,75	*0,81%*	35,55	*1,01%*	132,99	*1,60%*	210,35	*2,09%*	209,34	*2,05%*
	PH	0,04	*0,02%*	5,49	*0,93%*	13,48	*0,38%*	52,60	*0,63%*	76,74	*0,76%*	105,54	*1,03%*
	TH	0,00	*0,00%*	30,40	*5,17%*	23,43	*0,67%*	64,56	*0,78%*	94,99	*0,94%*	106,61	*1,04%*
	total	0,72	*0,49%*	41,41	*7,04%*	73,85	*2,10%*	303,79	*3,66%*	511,93	*5,09%*	573,74	*5,61%*
Group 2	HK	12,54	*8,60%*	23,18	*3,94%*	86,04	*2,45%*	422,98	*5,10%*	270,12	*2,68%*	200,26	*1,96%*
	SI	43,59	*29,92%*	43,35	*7,37%*	428,20	*12,20%*	275,41	*3,32%*	288,80	*2,87%*	218,77	*2,14%*
	SK	0,10	*0,07%*	1,22	*0,21%*	19,38	*0,55%*	105,59	*1,27%*	213,48	*2,12%*	248,04	*2,43%*
	JP	9,04	*6,20%*	20,96	*3,56%*	211,29	*6,02%*	695,63	*8,38%*	571,75	*5,68%*	567,69	*5,55%*
	AU	4,48	*3,07%*	7,97	*1,35%*	67,41	*1,92%*	151,74	*1,83%*	162,25	*1,61%*	105,12	*1,03%*
	total	69,75	*47,87%*	96,68	*16,43%*	812,31	*23,14%*	1651,37	*19,90%*	1506,40	*14,96%*	1339,88	*13,11%*
Goup 3	GE					0,00	*0,00%*	550,86	*6,64%*	513,44	*5,10%*	579,83	*5,67%*
	FR	6,30	*4,32%*	8,07	*1,37%*	137,95	*3,93%*	259,89	*3,13%*	229,71	*2,28%*	177,95	*1,74%*
	UK	12,97	*8,90%*	21,57	*3,67%*	270,60	*7,71%*	605,33	*7,29%*	671,52	*6,67%*	501,34	*4,90%*
	IT	4,65	*3,19%*	11,31	*1,92%*	135,89	*3,87%*	265,80	*3,20%*	250,01	*2,48%*	261,52	*2,56%*
	NL	7,06	*4,84%*	18,86	*3,21%*	174,01	*4,96%*	275,83	*3,32%*	325,25	*3,23%*	227,89	*2,23%*
	total	30,98	*21,26%*	59,80	*10,17%*	718,45	*20,47%*	1957,72	*23,59%*	1989,93	*19,77%*	1748,53	*17,10%*
Group 4	US	8,97	*6,15%*	238,57	*40,56%*	953,32	*27,16%*	2152,71	*25,94%*	3010,65	*29,91%*	3554,68	*34,77%*
	CA	0,56	*0,38%*	19,73	*3,35%*	64,83	*1,85%*	128,04	*1,54%*	160,98	*1,60%*	141,26	*1,38%*
	total	9,53	*6,54%*	258,30	*43,91%*	1018,15	*29,00%*	2280,75	*27,48%*	3171,63	*31,51%*	3695,94	*36,15%*
Grand total		110,97	*76,16%*	456,19	*77,55%*	2622,77	*74,71%*	6193,62	*74,63%*	7179,89	*71,32%*	7358,09	*71,97%*
Rest of world		34,74	*23,84%*	132,05	*22,45%*	887,80	*25,29%*	2105,07	*25,37%*	2886,65	*28,68%*	2865,92	*28,03%*
World total		145,70	*100,00%*	588,24	*100,00%*	3510,57	*100,00%*	8298,70	*100,00%*	10066,54	*100,00%*	10224,02	*100,00%*

Table 21.2.1. Indonesian textile exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Malaysia - Textile exports (SITC 26,65,84,85) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	13,99	*3,40%*	12,92	*2,29%*	8,06	*0,44%*	44,21	*1,21%*	69,78	*1,89%*	130,65	*3,21%*
	IN	6,95	*1,69%*	5,30	*0,94%*	11,93	*0,65%*	40,80	*1,12%*	39,34	*1,06%*	68,91	*1,69%*
	MA												
	PH	12,05	*2,92%*	17,27	*3,07%*	28,22	*1,53%*	48,84	*1,34%*	25,24	*0,68%*	41,56	*1,02%*
	TH	1,18	*0,29%*	6,44	*1,14%*	9,14	*0,50%*	19,45	*0,53%*	25,86	*0,70%*	57,84	*1,42%*
	total	34,17	*8,29%*	41,94	*7,45%*	57,34	*3,12%*	153,30	*4,20%*	160,22	*4,34%*	298,97	*7,34%*
Group 2	HK	27,89	*6,77%*	24,71	*4,39%*	56,04	*3,05%*	333,21	*9,14%*	284,11	*7,69%*	112,21	*2,76%*
	SI	22,54	*5,47%*	32,59	*5,79%*	193,69	*10,53%*	311,36	*8,54%*	235,06	*6,36%*	166,30	*4,09%*
	SK	3,61	*0,88%*	2,73	*0,48%*	6,87	*0,37%*	29,53	*0,81%*	52,92	*1,43%*	52,07	*1,28%*
	JP	21,27	*5,16%*	24,50	*4,35%*	109,14	*5,93%*	238,19	*6,53%*	230,34	*6,23%*	192,81	*4,74%*
	AU	23,18	*5,63%*	24,03	*4,27%*	36,16	*1,97%*	56,10	*1,54%*	58,09	*1,57%*	52,41	*1,29%*
	total	98,50	*23,90%*	108,55	*19,27%*	401,90	*21,84%*	968,40	*26,56%*	860,52	*23,29%*	575,80	*14,14%*
Goup 3	GE					0,00	*0,00%*	195,10	*5,35%*	121,95	*3,30%*	155,95	*3,83%*
	FR	24,96	*6,06%*	15,64	*2,78%*	92,34	*5,02%*	103,68	*2,84%*	76,29	*2,06%*	92,71	*2,28%*
	UK	23,28	*5,65%*	20,08	*3,57%*	148,16	*8,05%*	264,97	*7,27%*	245,87	*6,65%*	200,25	*4,92%*
	IT	15,26	*3,70%*	13,56	*2,41%*	63,05	*3,43%*	104,45	*2,86%*	91,50	*2,48%*	123,05	*3,02%*
	NL	11,94	*2,90%*	7,16	*1,27%*	58,41	*3,17%*	50,63	*1,39%*	56,70	*1,53%*	55,93	*1,37%*
	total	75,44	*18,31%*	56,45	*10,02%*	361,94	*19,67%*	718,83	*19,71%*	592,31	*16,03%*	627,88	*15,42%*
Group 4	US	36,77	*8,92%*	235,79	*41,87%*	600,76	*32,65%*	1174,11	*32,20%*	1281,43	*34,68%*	1256,68	*30,87%*
	CA	7,76	*1,88%*	23,46	*4,17%*	65,23	*3,54%*	77,91	*2,14%*	78,20	*2,12%*	59,88	*1,47%*
	total	44,53	*10,81%*	259,25	*46,03%*	665,98	*36,19%*	1252,02	*34,33%*	1359,63	*36,80%*	1316,56	*32,34%*
Grand total		252,64	*61,31%*	466,19	*82,77%*	1487,17	*80,82%*	3092,55	*84,81%*	2972,68	*80,46%*	2819,21	*69,26%*
Rest of world		159,43	*38,69%*	97,02	*17,23%*	352,86	*19,18%*	553,99	*15,19%*	722,13	*19,54%*	1251,53	*30,74%*
World total		412,07	*100,00%*	563,21	*100,00%*	1840,03	*100,00%*	3646,54	*100,00%*	3694,81	*100,00%*	4070,74	*100,00%*

Table 21.3.1. Malaysian textile exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Philippines - Textile exports (SITC 26,65,84,85) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	1,33	*0,29%*	0,42	*0,11%*	0,05	*0,01%*	1,88	*0,13%*	5,50	*0,18%*	18,50	*0,70%*
	IN	0,35	*0,08%*	0,15	*0,04%*	0,82	*0,09%*	2,30	*0,15%*	10,71	*0,36%*	12,22	*0,46%*
	MA	1,89	*0,42%*	0,41	*0,11%*	1,79	*0,20%*	2,73	*0,18%*	15,87	*0,53%*	14,83	*0,56%*
	PH												
	TH	0,32	*0,07%*	0,50	*0,14%*	1,06	*0,12%*	3,87	*0,26%*	8,31	*0,28%*	9,16	*0,34%*
	total	3,89	*0,86%*	1,49	*0,40%*	3,71	*0,42%*	10,78	*0,72%*	40,38	*1,35%*	54,71	*2,06%*
Group 2	HK	38,03	*8,38%*	14,10	*3,78%*	12,12	*1,39%*	82,96	*5,55%*	40,39	*1,36%*	46,22	*1,74%*
	SI	3,82	*0,84%*	1,34	*0,36%*	3,78	*0,43%*	24,87	*1,66%*	19,35	*0,65%*	21,04	*0,79%*
	SK	1,29	*0,29%*	1,93	*0,52%*	4,70	*0,54%*	7,06	*0,47%*	11,06	*0,37%*	10,41	*0,39%*
	JP	26,83	*5,92%*	27,64	*7,41%*	47,90	*5,48%*	70,26	*4,70%*	137,86	*4,63%*	115,05	*4,33%*
	AU	13,64	*3,01%*	10,08	*2,70%*	12,90	*1,48%*	8,53	*0,57%*	14,29	*0,48%*	13,87	*0,52%*
	total	83,61	*18,43%*	55,09	*14,78%*	81,41	*9,31%*	193,69	*12,95%*	222,94	*7,48%*	206,58	*7,78%*
Goup 3	GE					0,00	*0,00%*	103,11	*6,89%*	85,63	*2,87%*	44,03	*1,66%*
	FR	11,52	*2,54%*	7,79	*2,09%*	29,56	*3,38%*	35,81	*2,39%*	36,71	*1,23%*	45,40	*1,71%*
	UK	22,75	*5,02%*	24,46	*6,56%*	67,95	*7,77%*	86,83	*5,81%*	128,42	*4,31%*	108,03	*4,07%*
	IT	7,35	*1,62%*	1,10	*0,29%*	12,57	*1,44%*	14,78	*0,99%*	14,99	*0,50%*	25,33	*0,95%*
	NL	12,22	*2,69%*	9,27	*2,49%*	20,15	*2,30%*	17,58	*1,18%*	54,35	*1,82%*	32,04	*1,21%*
	total	53,84	*11,87%*	42,62	*11,43%*	130,22	*14,89%*	258,11	*17,26%*	320,11	*10,74%*	254,84	*9,59%*
Group 4	US	155,42	*34,26%*	173,86	*46,63%*	429,92	*49,16%*	720,26	*48,16%*	2103,46	*70,58%*	1878,10	*70,71%*
	CA	10,25	*2,26%*	16,92	*4,54%*	23,57	*2,70%*	31,94	*2,14%*	66,83	*2,24%*	63,77	*2,40%*
	total	165,67	*36,52%*	190,79	*51,17%*	453,49	*51,86%*	752,21	*50,29%*	2170,29	*72,82%*	1941,87	*73,11%*
Grand total		307,00	*67,68%*	289,99	*77,77%*	668,83	*76,48%*	1214,78	*81,22%*	2753,72	*92,39%*	2458,00	*92,54%*
Rest of world		146,61	*32,32%*	82,87	*22,23%*	205,71	*23,52%*	280,88	*18,78%*	226,71	*7,61%*	198,09	*7,46%*
World total		453,61	*100,00%*	372,86	*100,00%*	874,54	*100,00%*	1495,66	*100,00%*	2980,43	*100,00%*	2656,10	*100,00%*

Table 21.4.1. Philippine textile exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Thailand - Textile exports (SITC 26,65,84,85) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	9,22	*1,40%*	24,32	*2,22%*	25,29	*0,55%*	131,62	*1,41%*	113,00	*1,66%*	294,13	*3,56%*
	IN	14,16	*2,15%*	3,83	*0,35%*	16,85	*0,37%*	32,42	*0,35%*	84,43	*1,24%*	152,96	*1,85%*
	MA	12,40	*1,89%*	9,38	*0,86%*	29,39	*0,64%*	102,93	*1,10%*	79,25	*1,17%*	127,92	*1,55%*
	PH	1,14	*0,17%*	4,07	*0,37%*	14,16	*0,31%*	57,51	*0,62%*	73,04	*1,07%*	113,34	*1,37%*
	TH												
	total	36,92	*5,62%*	41,60	*3,80%*	85,70	*1,87%*	324,48	*3,47%*	349,72	*5,14%*	688,35	*8,33%*
Group 2	HK	45,66	*6,95%*	30,48	*2,79%*	122,50	*2,67%*	305,84	*3,27%*	193,95	*2,85%*	186,75	*2,26%*
	SI	25,18	*3,83%*	53,89	*4,93%*	157,99	*3,44%*	589,76	*6,31%*	97,88	*1,44%*	96,93	*1,17%*
	SK	5,13	*0,78%*	3,18	*0,29%*	16,22	*0,35%*	46,92	*0,50%*	63,94	*0,94%*	105,75	*1,28%*
	JP	47,24	*7,19%*	33,18	*3,03%*	295,10	*6,43%*	689,13	*7,38%*	433,79	*6,38%*	517,59	*6,26%*
	AU	15,91	*2,42%*	27,25	*2,49%*	66,37	*1,45%*	131,73	*1,41%*	82,99	*1,22%*	92,94	*1,12%*
	total	139,12	*21,17%*	147,98	*13,53%*	658,18	*14,34%*	1763,39	*18,88%*	872,55	*12,83%*	999,96	*12,10%*
Goup 3	GE					0,00	*0,00%*	366,12	*3,92%*	212,96	*3,13%*	239,55	*2,90%*
	FR	16,89	*2,57%*	25,19	*2,30%*	223,93	*4,88%*	249,53	*2,67%*	173,57	*2,55%*	271,62	*3,29%*
	UK	27,20	*4,14%*	54,22	*4,96%*	270,17	*5,89%*	312,60	*3,35%*	315,95	*4,65%*	352,95	*4,27%*
	IT	49,83	*7,58%*	47,24	*4,32%*	170,00	*3,70%*	125,86	*1,35%*	141,83	*2,09%*	148,73	*1,80%*
	NL	20,72	*3,15%*	23,02	*2,10%*	119,86	*2,61%*	129,56	*1,39%*	140,00	*2,06%*	186,83	*2,26%*
	total	114,64	*17,44%*	149,68	*13,68%*	783,95	*17,08%*	1183,67	*12,67%*	984,31	*14,47%*	1199,67	*14,52%*
Group 4	US	92,14	*14,02%*	322,89	*29,52%*	970,69	*21,15%*	1879,06	*20,12%*	2702,31	*39,73%*	2750,37	*33,29%*
	CA	5,71	*0,87%*	30,50	*2,79%*	85,13	*1,85%*	136,63	*1,46%*	132,02	*1,94%*	126,46	*1,53%*
	total	97,85	*14,89%*	353,39	*32,31%*	1055,82	*23,01%*	2015,68	*21,58%*	2834,33	*41,67%*	2876,82	*34,82%*
Grand total		388,53	*59,12%*	692,65	*63,32%*	2583,66	*56,30%*	5287,22	*56,61%*	5040,92	*74,11%*	5764,81	*69,77%*
Rest of world		268,71	*40,88%*	401,16	*36,68%*	2005,80	*43,70%*	4053,07	*43,39%*	1761,09	*25,89%*	2497,76	*30,23%*
World total		657,24	*100,00%*	1093,81	*100,00%*	4589,46	*100,00%*	9340,29	*100,00%*	6802,01	*100,00%*	8262,57	*100,00%*

Table 21.5.1. Thai textile exports to selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

China - Textile imports (SITC 26,65,84,85) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH												
	IN			4,31	*0,17%*	1,76	*0,02%*	96,02	*0,60%*	219,55	*1,30%*	253,69	*1,05%*
	MA			2,16	*0,08%*	12,09	*0,17%*	101,88	*0,64%*	117,15	*0,69%*	163,97	*0,68%*
	PH			8,17	*0,32%*	0,59	*0,01%*	9,09	*0,06%*	6,83	*0,04%*	22,11	*0,09%*
	TH			21,72	*0,85%*	39,29	*0,54%*	145,74	*0,91%*	147,19	*0,87%*	375,49	*1,55%*
	total			36,36	*1,43%*	53,72	*0,73%*	352,73	*2,20%*	490,72	*2,90%*	815,25	*3,37%*
Group 2	HK			334,46	*13,13%*	3808,81	*52,01%*	2141,22	*13,37%*	1973,27	*11,68%*	1864,27	*7,71%*
	SI			0,46	*0,02%*	4,61	*0,06%*	20,49	*0,13%*	43,87	*0,26%*	45,44	*0,19%*
	SK			0,00	*0,00%*	215,50	*2,94%*	2452,63	*15,31%*	3141,12	*18,59%*	2921,65	*12,08%*
	JP			289,21	*11,36%*	689,35	*9,41%*	3070,78	*19,17%*	3512,09	*20,79%*	3799,76	*15,71%*
	AU			25,60	*1,01%*	167,34	*2,28%*	594,42	*3,71%*	797,40	*4,72%*	1339,78	*5,54%*
	total			649,73	*25,52%*	4885,62	*66,71%*	8279,55	*51,68%*	9467,75	*56,04%*	9970,91	*41,23%*
Goup 3	GE					0,00	*0,00%*	87,09	*0,54%*	66,51	*0,39%*	204,48	*0,85%*
	FR			3,17	*0,12%*	24,00	*0,33%*	38,28	*0,24%*	110,76	*0,66%*	206,82	*0,86%*
	UK			3,56	*0,14%*	41,91	*0,57%*	64,58	*0,40%*	70,19	*0,42%*	129,25	*0,53%*
	IT			5,52	*0,22%*	116,91	*1,60%*	184,82	*1,15%*	237,24	*1,40%*	556,03	*2,30%*
	NL			0,52	*0,02%*	1,15	*0,02%*	7,47	*0,05%*	14,61	*0,09%*	59,08	*0,24%*
	total			12,77	*0,50%*	183,97	*2,51%*	382,25	*2,39%*	499,31	*2,96%*	1155,67	*4,78%*
Group 4	US			155,24	*6,10%*	684,56	*9,35%*	1376,59	*8,59%*	341,11	*2,02%*	2140,64	*8,85%*
	CA			1,18	*0,05%*	15,66	*0,21%*	36,95	*0,23%*	92,44	*0,55%*	46,25	*0,19%*
	total			156,42	*6,14%*	700,22	*9,56%*	1413,55	*8,82%*	433,55	*2,57%*	2186,89	*9,04%*
Grand total				855,27	*33,59%*	5823,53	*79,52%*	10428,07	*65,10%*	10891,34	*64,46%*	14128,71	*58,43%*
Rest of world				1691,09	*66,41%*	1500,10	*20,48%*	5591,21	*34,90%*	6004,51	*35,54%*	10053,38	*41,57%*
World total				2546,36	*100,00%*	7323,63	*100,00%*	16019,28	*100,00%*	16895,86	*100,00%*	24182,09	*100,00%*

Table 21.1.2. Chinese textile imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Indonesia - Textile imports (SITC 26,65,84,85) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	28,53	*5,53%*	58,00	*14,11%*	86,96	*6,11%*	88,96	*3,42%*	217,99	*9,45%*	257,24	*15,49%*
	IN												
	MA	6,09	*1,18%*	5,36	*1,30%*	10,28	*0,72%*	31,62	*1,21%*	17,62	*0,76%*	21,31	*1,28%*
	PH	0,53	*0,10%*	0,37	*0,09%*	1,03	*0,07%*	2,05	*0,08%*	7,41	*0,32%*	2,89	*0,17%*
	TH	10,29	*2,00%*	6,22	*1,51%*	18,26	*1,28%*	27,83	*1,07%*	71,83	*3,11%*	79,66	*4,80%*
	total	45,44	*8,81%*	69,94	*17,01%*	116,53	*8,18%*	150,46	*5,78%*	314,85	*13,64%*	361,10	*21,74%*
Group 2	HK	5,30	*1,03%*	6,98	*1,70%*	74,82	*5,25%*	76,18	*2,93%*	121,48	*5,26%*	39,92	*2,40%*
	SI	5,67	*1,10%*	4,61	*1,12%*	14,20	*1,00%*	15,70	*0,60%*	30,48	*1,32%*	32,48	*1,96%*
	SK	38,66	*7,50%*	20,26	*4,93%*	182,94	*12,85%*	519,83	*19,97%*	329,32	*14,27%*	114,24	*6,88%*
	JP	129,41	*25,10%*	67,36	*16,38%*	140,56	*9,87%*	249,46	*9,58%*	215,73	*9,35%*	96,02	*5,78%*
	AU	9,30	*1,80%*	12,65	*3,08%*	105,00	*7,37%*	219,67	*8,44%*	313,85	*13,60%*	135,58	*8,16%*
	total	188,33	*36,53%*	111,86	*27,20%*	517,52	*36,34%*	1080,84	*41,51%*	1010,86	*43,80%*	418,24	*25,18%*
Goup 3	GE					0,00	*0,00%*	57,46	*2,21%*	47,31	*2,05%*	24,44	*1,47%*
	FR	0,54	*0,11%*	1,24	*0,30%*	3,05	*0,21%*	13,69	*0,53%*	8,96	*0,39%*	5,65	*0,34%*
	UK	6,91	*1,34%*	3,00	*0,73%*	7,79	*0,55%*	17,53	*0,67%*	14,94	*0,65%*	11,25	*0,68%*
	IT	0,47	*0,09%*	2,69	*0,65%*	6,14	*0,43%*	29,85	*1,15%*	30,01	*1,30%*	13,96	*0,84%*
	NL	0,31	*0,06%*	0,82	*0,20%*	3,30	*0,23%*	8,70	*0,33%*	5,00	*0,22%*	4,83	*0,29%*
	total	8,23	*1,60%*	7,74	*1,88%*	20,29	*1,42%*	127,23	*4,89%*	106,22	*4,60%*	60,13	*3,62%*
Group 4	US	155,47	*30,16%*	122,46	*29,78%*	274,42	*19,27%*	500,44	*19,22%*	232,43	*10,07%*	285,11	*17,17%*
	CA	0,08	*0,02%*	2,07	*0,50%*	9,32	*0,65%*	7,26	*0,28%*	6,51	*0,28%*	7,21	*0,43%*
	total	155,56	*30,17%*	124,53	*30,29%*	283,74	*19,93%*	507,69	*19,50%*	238,94	*10,35%*	292,32	*17,60%*
Grand total		397,56	*77,11%*	314,08	*76,39%*	938,08	*65,88%*	1866,22	*71,68%*	1670,87	*72,40%*	1131,78	*68,15%*
Rest of world		118,01	*22,89%*	97,09	*23,61%*	485,84	*34,12%*	737,44	*28,32%*	636,85	*27,60%*	529,02	*31,85%*
World total		515,57	*100,00%*	411,17	*100,00%*	1423,92	*100,00%*	2603,66	*100,00%*	2307,72	*100,00%*	1660,80	*100,00%*

Table 21.2.2. Indonesian textile imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Malaysia - Textile imports (SITC 26,65,84,85) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	28,61	*6,72%*	36,59	*8,13%*	85,25	*6,95%*	261,31	*12,54%*	234,44	*14,57%*	435,81	*27,27%*
	IN	5,08	*1,19%*	8,32	*1,85%*	48,18	*3,93%*	141,40	*6,78%*	145,02	*9,01%*	124,74	*7,80%*
	MA												
	PH	2,23	*0,52%*	1,14	*0,25%*	2,13	*0,17%*	3,80	*0,18%*	7,50	*0,47%*	6,80	*0,43%*
	TH	10,30	*2,42%*	16,61	*3,69%*	36,12	*2,95%*	70,32	*3,37%*	74,65	*4,64%*	131,50	*8,23%*
	total	46,22	*10,86%*	62,66	*13,93%*	171,69	*14,01%*	476,84	*22,87%*	461,61	*28,69%*	698,85	*43,72%*
Group 2	HK	43,88	*10,31%*	62,64	*13,92%*	123,25	*10,05%*	171,34	*8,22%*	175,77	*10,92%*	84,65	*5,30%*
	SI	17,96	*4,22%*	18,56	*4,13%*	82,67	*6,74%*	84,74	*4,06%*	57,51	*3,57%*	36,28	*2,27%*
	SK	42,21	*9,92%*	33,22	*7,38%*	75,02	*6,12%*	85,83	*4,12%*	95,52	*5,94%*	86,74	*5,43%*
	JP	89,33	*21,00%*	99,42	*22,10%*	183,02	*14,93%*	208,64	*10,01%*	125,59	*7,81%*	112,56	*7,04%*
	AU	18,16	*4,27%*	5,73	*1,27%*	63,05	*5,14%*	106,11	*5,09%*	37,72	*2,34%*	39,29	*2,46%*
	total	211,54	*49,72%*	219,58	*48,80%*	527,01	*42,99%*	656,66	*31,50%*	492,11	*30,59%*	359,52	*22,49%*
Goup 3	GE					0,00	*0,00%*	17,39	*0,83%*	13,74	*0,85%*	20,69	*1,29%*
	FR	1,09	*0,26%*	2,80	*0,62%*	5,07	*0,41%*	16,35	*0,78%*	10,10	*0,63%*	29,48	*1,84%*
	UK	12,24	*2,88%*	8,41	*1,87%*	14,08	*1,15%*	37,81	*1,81%*	20,99	*1,30%*	24,73	*1,55%*
	IT	1,24	*0,29%*	2,06	*0,46%*	8,79	*0,72%*	18,09	*0,87%*	16,67	*1,04%*	18,26	*1,14%*
	NL	0,65	*0,15%*	2,42	*0,54%*	2,80	*0,23%*	8,98	*0,43%*	5,94	*0,37%*	3,91	*0,24%*
	total	15,22	*3,58%*	15,69	*3,49%*	30,73	*2,51%*	98,61	*4,73%*	67,44	*4,19%*	97,07	*6,07%*
Group 4	US	28,39	*6,67%*	29,78	*6,62%*	49,11	*4,01%*	79,32	*3,81%*	54,85	*3,41%*	53,75	*3,36%*
	CA	4,79	*1,12%*	2,53	*0,56%*	1,51	*0,12%*	1,52	*0,07%*	6,30	*0,39%*	6,97	*0,44%*
	total	33,17	*7,80%*	32,32	*7,18%*	50,63	*4,13%*	80,84	*3,88%*	61,15	*3,80%*	60,73	*3,80%*
Grand total		306,15	*71,95%*	330,24	*73,40%*	780,06	*63,63%*	1312,94	*62,98%*	1082,31	*67,27%*	1216,17	*76,09%*
Rest of world		119,33	*28,05%*	119,70	*26,60%*	445,84	*36,37%*	771,61	*37,02%*	526,62	*32,73%*	382,22	*23,91%*
World total		425,48	*100,00%*	449,94	*100,00%*	1225,90	*100,00%*	2084,54	*100,00%*	1608,92	*100,00%*	1598,39	*100,00%*

Table 21.3.2. Malaysian textile imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Philippines - Textile imports (SITC 26,65,84,85) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	1,41	*0,53%*	2,42	*1,06%*	13,81	*1,85%*	48,02	*3,78%*	140,89	*9,13%*	248,13	*17,94%*
	IN	0,04	*0,01%*	0,30	*0,13%*	12,69	*1,70%*	57,27	*4,51%*	49,79	*3,23%*	53,39	*3,86%*
	MA	2,45	*0,92%*	2,53	*1,11%*	5,43	*0,73%*	17,13	*1,35%*	13,73	*0,89%*	21,89	*1,58%*
	PH												
	TH	0,82	*0,31%*	2,57	*1,12%*	5,27	*0,70%*	28,58	*2,25%*	59,44	*3,85%*	71,77	*5,19%*
	total	4,73	*1,77%*	7,82	*3,42%*	37,19	*4,98%*	150,99	*11,88%*	263,84	*17,09%*	395,17	*28,56%*
Group 2	HK	55,57	*20,83%*	49,44	*21,63%*	127,30	*17,04%*	246,60	*19,41%*	306,60	*19,86%*	303,83	*21,96%*
	SI	2,01	*0,75%*	1,33	*0,58%*	4,75	*0,64%*	14,18	*1,12%*	10,63	*0,69%*	12,09	*0,87%*
	SK	7,48	*2,81%*	10,37	*4,54%*	56,47	*7,56%*	125,16	*9,85%*	225,94	*14,64%*	225,31	*16,29%*
	JP	60,13	*22,55%*	47,32	*20,71%*	70,63	*9,45%*	69,49	*5,47%*	115,09	*7,46%*	84,49	*6,11%*
	AU	0,82	*0,31%*	2,69	*1,18%*	15,89	*2,13%*	23,87	*1,88%*	16,60	*1,08%*	2,57	*0,19%*
	total	126,01	*47,25%*	111,14	*48,64%*	275,04	*36,80%*	479,29	*37,72%*	674,86	*43,72%*	628,29	*45,41%*
Goup 3	GE					0,00	*0,00%*	13,79	*1,09%*	11,36	*0,74%*	10,45	*0,76%*
	FR	0,98	*0,37%*	0,58	*0,25%*	4,07	*0,54%*	9,24	*0,73%*	7,88	*0,51%*	9,88	*0,71%*
	UK	5,42	*2,03%*	1,45	*0,64%*	3,45	*0,46%*	8,42	*0,66%*	9,92	*0,64%*	12,23	*0,88%*
	IT	0,28	*0,11%*	0,39	*0,17%*	2,02	*0,27%*	5,69	*0,45%*	19,96	*1,29%*	18,76	*1,36%*
	NL	0,39	*0,15%*	0,17	*0,08%*	0,72	*0,10%*	3,60	*0,28%*	1,68	*0,11%*	2,49	*0,18%*
	total	7,07	*2,65%*	2,59	*1,14%*	10,25	*1,37%*	40,75	*3,21%*	50,79	*3,29%*	53,82	*3,89%*
Group 4	US	81,82	*30,68%*	32,11	*14,05%*	77,74	*10,40%*	119,00	*9,37%*	73,94	*4,79%*	57,00	*4,12%*
	CA	2,24	*0,84%*	3,83	*1,67%*	7,91	*1,06%*	6,68	*0,53%*	2,96	*0,19%*	6,54	*0,47%*
	total	84,06	*31,52%*	35,93	*15,72%*	85,66	*11,46%*	125,68	*9,89%*	76,90	*4,98%*	63,54	*4,59%*
Grand total		221,88	*83,19%*	157,49	*68,92%*	408,14	*54,61%*	796,70	*62,71%*	1066,40	*69,09%*	1140,82	*82,46%*
Rest of world		44,84	*16,81%*	71,03	*31,08%*	339,17	*45,39%*	473,83	*37,29%*	477,13	*30,91%*	242,70	*17,54%*
World total		266,72	*100,00%*	228,52	*100,00%*	747,30	*100,00%*	1270,54	*100,00%*	1543,53	*100,00%*	1383,51	*100,00%*

Table 21.4.2. Philippine textile imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

Thailand - Textile imports (SITC 26,65,84,85) (mln US$)

		1980		1985		1990		1995		2000		2005	
Group 1	CH	23,67	*6,93%*	40,48	*8,91%*	173,21	*11,00%*	316,45	*12,63%*	491,87	*20,34%*	743,13	*24,18%*
	IN	0,17	*0,05%*	3,11	*0,68%*	24,09	*1,53%*	69,70	*2,78%*	95,46	*3,95%*	109,31	*3,56%*
	MA	4,45	*1,30%*	8,00	*1,76%*	9,24	*0,59%*	27,56	*1,10%*	26,30	*1,09%*	50,95	*1,66%*
	PH	0,68	*0,20%*	0,61	*0,13%*	2,14	*0,14%*	3,43	*0,14%*	6,15	*0,25%*	15,22	*0,50%*
	TH												
	total	28,96	*8,48%*	52,21	*11,49%*	208,69	*13,26%*	417,14	*16,65%*	619,77	*25,64%*	918,61	*29,89%*
Group 2	HK	24,81	*7,26%*	32,15	*7,07%*	92,65	*5,89%*	97,97	*3,91%*	116,42	*4,82%*	181,83	*5,92%*
	SI	1,84	*0,54%*	0,59	*0,13%*	17,78	*1,13%*	23,54	*0,94%*	15,91	*0,66%*	22,46	*0,73%*
	SK	25,98	*7,61%*	31,11	*6,84%*	168,72	*10,72%*	203,25	*8,11%*	171,73	*7,10%*	126,01	*4,10%*
	JP	71,22	*20,85%*	90,60	*19,93%*	156,67	*9,95%*	298,21	*11,90%*	234,01	*9,68%*	314,05	*10,22%*
	AU	0,35	*0,10%*	6,21	*1,37%*	63,10	*4,01%*	98,14	*3,92%*	188,08	*7,78%*	157,47	*5,12%*
	total	124,19	*36,37%*	160,66	*35,35%*	498,93	*31,69%*	721,11	*28,78%*	726,14	*30,04%*	801,83	*26,09%*
Goup 3	GE					0,00	*0,00%*	33,48	*1,34%*	26,73	*1,11%*	41,53	*1,35%*
	FR	1,18	*0,35%*	2,67	*0,59%*	5,64	*0,36%*	20,56	*0,82%*	17,42	*0,72%*	37,49	*1,22%*
	UK	3,43	*1,00%*	3,10	*0,68%*	12,13	*0,77%*	31,93	*1,27%*	36,32	*1,50%*	36,32	*1,18%*
	IT	0,75	*0,22%*	3,72	*0,82%*	11,22	*0,71%*	49,71	*1,98%*	50,10	*2,07%*	85,48	*2,78%*
	NL	0,30	*0,09%*	0,41	*0,09%*	1,86	*0,12%*	6,49	*0,26%*	7,39	*0,31%*	13,71	*0,45%*
	total	5,66	*1,66%*	9,89	*2,18%*	30,86	*1,96%*	142,16	*5,67%*	137,97	*5,71%*	214,54	*6,98%*
Group 4	US	98,42	*28,82%*	58,88	*12,95%*	172,68	*10,97%*	293,41	*11,71%*	149,19	*6,17%*	294,52	*9,58%*
	CA	7,51	*2,20%*	4,92	*1,08%*	7,18	*0,46%*	10,41	*0,42%*	6,54	*0,27%*	3,06	*0,10%*
	total	105,93	*31,02%*	63,80	*14,04%*	179,86	*11,43%*	303,82	*12,13%*	155,73	*6,44%*	297,58	*9,68%*
Grand total		264,74	*77,52%*	286,56	*63,04%*	918,33	*58,34%*	1584,23	*63,24%*	1639,60	*67,82%*	2232,56	*72,64%*
Rest of world		76,76	*22,48%*	167,99	*36,96%*	655,86	*41,66%*	921,01	*36,76%*	778,03	*32,18%*	840,75	*27,36%*
World total		341,50	*100,00%*	454,55	*100,00%*	1574,19	*100,00%*	2505,24	*100,00%*	2417,62	*100,00%*	3073,31	*100,00%*

Table 21.5.2. Thai textile imports from selected (groups of) countries
CH=China; IN=Indonesia; MA=Malaysia; PH=Philippines; TH=Thailand; HK=Hong Kong; SI=Singapore; SK=South Korea; JP=Japan; AU=Australia; GE=Germany; FR=France; UK=United Kingdom; IT=Italy; NL=Netherlands; US=United States; CA=Canada

China - Textile exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH						
	IN		0,00	25,23	0,83	1,46	3,23
	MA		0,80	3,46	1,38	2,66	5,58
	PH		0,01	27,17	12,72	32,59	26,70
	TH		0,00	1,98	1,30	1,92	1,45
	total		0,05	3,35	1,49	2,32	3,52
Group 2	HK		0,78	2,45	5,96	6,08	8,57
	SI		19,41	60,78	25,63	14,79	36,01
	SK		#DEEL/0!	0,68	0,72	0,80	1,54
	JP		1,21	3,48	3,23	4,12	5,00
	AU		1,38	1,39	1,18	1,60	1,80
	total		1,01	2,54	3,10	3,26	4,37
Goup 3	GE				16,91	22,33	22,42
	FR		10,49	8,97	10,79	6,74	11,57
	UK		6,68	5,45	8,74	13,43	25,70
	IT		6,15	3,34	3,78	4,68	6,11
	NL		44,13	162,27	46,77	37,04	28,23
	total		8,91	5,54	9,15	9,67	13,30
Group 4	US		3,46	3,23	5,28	31,99	11,93
	CA		77,94	16,55	14,20	9,50	53,96
	total		4,03	3,53	5,51	27,20	12,82
Grand total			1,64	2,76	3,59	4,47	6,36
Rest of world			2,32	2,58	1,39	2,39	4,52
World total			2,09	2,72	2,83	3,73	5,59

Table 21.1.3. Textile exports / imports ratio of China

Indonesia - Textile exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,00	0,01	0,02	0,60	0,60	0,59
	IN						
	MA	0,11	0,89	3,46	4,21	11,94	9,82
	PH	0,07	14,86	13,10	25,72	10,36	36,55
	TH	0,00	4,89	1,28	2,32	1,32	1,34
	total	0,02	0,59	0,63	2,02	1,63	1,59
Group 2	HK	2,37	3,32	1,15	5,55	2,22	5,02
	SI	7,69	9,39	30,16	17,54	9,47	6,74
	SK	0,00	0,06	0,11	0,20	0,65	2,17
	JP	0,07	0,31	1,50	2,79	2,65	5,91
	AU	0,48	0,63	0,64	0,69	0,52	0,78
	total	0,37	0,86	1,57	1,53	1,49	3,20
Goup 3	GE				9,59	10,85	23,72
	FR	11,63	6,51	45,17	18,98	25,63	31,51
	UK	1,88	7,19	34,74	34,53	44,95	44,55
	IT	9,84	4,21	22,12	8,90	8,33	18,73
	NL	22,51	23,03	52,71	31,71	65,07	47,23
	total	3,76	7,72	35,42	15,39	18,73	29,08
Group 4	US	0,06	1,95	3,47	4,30	12,95	12,47
	CA	6,66	9,52	6,95	17,65	24,73	19,59
	total	0,06	2,07	3,59	4,49	13,27	12,64
Grand total		0,28	1,45	2,80	3,32	4,30	6,50
Rest of world		0,29	1,36	1,83	2,85	4,53	5,42
World total		0,28	1,43	2,47	3,19	4,36	6,16

Table 21.2.3. Textile exports / imports ratio of Indonesia

Malaysia - Textile exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,49	0,35	0,09	0,17	0,30	0,30
	IN	1,37	0,64	0,25	0,29	0,27	0,55
	MA						
	PH	5,41	15,16	13,23	12,84	3,37	6,11
	TH	0,11	0,39	0,25	0,28	0,35	0,44
	total	0,74	0,67	0,33	0,32	0,35	0,43
Group 2	HK	0,64	0,39	0,45	1,94	1,62	1,33
	SI	1,26	1,76	2,34	3,67	4,09	4,58
	SK	0,09	0,08	0,09	0,34	0,55	0,60
	JP	0,24	0,25	0,60	1,14	1,83	1,71
	AU	1,28	4,19	0,57	0,53	1,54	1,33
	total	0,47	0,49	0,76	1,47	1,75	1,60
Goup 3	GE				11,22	8,87	7,54
	FR	23,00	5,58	18,23	6,34	7,55	3,14
	UK	1,90	2,39	10,52	7,01	11,71	8,10
	IT	12,31	6,60	7,17	5,77	5,49	6,74
	NL	18,25	2,96	20,88	5,64	9,55	14,30
	total	4,96	3,60	11,78	7,29	8,78	6,47
Group 4	US	1,30	7,92	12,23	14,80	23,36	23,38
	CA	1,62	9,26	43,18	51,39	12,42	8,59
	total	1,34	8,02	13,16	15,49	22,23	21,68
Grand total		0,83	1,41	1,91	2,36	2,75	2,32
Rest of world		1,34	0,81	0,79	0,72	1,37	3,27
World total		0,97	1,25	1,50	1,75	2,30	2,55

Table 21.3.3. Textile exports / imports ratio of Malaysia

Philippines - Textile exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,94	0,17	0,00	0,04	0,04	0,07
	IN	9,33	0,51	0,06	0,04	0,22	0,23
	MA	0,77	0,16	0,33	0,16	1,16	0,68
	PH						
	TH	0,39	0,20	0,20	0,14	0,14	0,13
	total	0,82	0,19	0,10	0,07	0,15	0,14
Group 2	HK	0,68	0,29	0,10	0,34	0,13	0,15
	SI	1,90	1,01	0,80	1,75	1,82	1,74
	SK	0,17	0,19	0,08	0,06	0,05	0,05
	JP	0,45	0,58	0,68	1,01	1,20	1,36
	AU	16,69	3,74	0,81	0,36	0,86	5,39
	total	0,66	0,50	0,30	0,40	0,33	0,33
Goup 3	GE				7,48	7,54	4,21
	FR	11,75	13,42	7,26	3,88	4,66	4,59
	UK	4,20	16,82	19,68	10,31	12,95	8,83
	IT	26,15	2,82	6,23	2,60	0,75	1,35
	NL	30,96	54,06	28,17	4,88	32,41	12,85
	total	7,61	16,43	12,70	6,33	6,30	4,74
Group 4	US	1,90	5,42	5,53	6,05	28,45	32,95
	CA	4,57	4,42	2,98	4,78	22,55	9,75
	total	1,97	5,31	5,29	5,99	28,22	30,56
Grand total		1,38	1,84	1,64	1,52	2,58	2,15
Rest of world		3,27	1,17	0,61	0,59	0,48	0,82
World total		1,70	1,63	1,17	1,18	1,93	1,92

Table 21.4.3. Textile exports / imports ratio of the Philippines

Thailand - Textile exports / imports

		1980	1985	1990	1995	2000	2005
Group 1	CH	0,39	0,60	0,15	0,42	0,23	0,40
	IN	82,05	1,23	0,70	0,47	0,88	1,40
	MA	2,79	1,17	3,18	3,73	3,01	2,51
	PH	1,69	6,63	6,60	16,78	11,88	7,44
	TH						
	total	1,27	0,80	0,41	0,78	0,56	0,75
Group 2	HK	1,84	0,95	1,32	3,12	1,67	1,03
	SI	13,70	91,97	8,88	25,05	6,15	4,31
	SK	0,20	0,10	0,10	0,23	0,37	0,84
	JP	0,66	0,37	1,88	2,31	1,85	1,65
	AU	45,85	4,39	1,05	1,34	0,44	0,59
	total	1,12	0,92	1,32	2,45	1,20	1,25
Goup 3	GE				10,94	7,97	5,77
	FR	14,31	9,44	39,68	12,14	9,96	7,24
	UK	7,94	17,51	22,27	9,79	8,70	9,72
	IT	66,48	12,70	15,15	2,53	2,83	1,74
	NL	68,56	56,49	64,41	19,97	18,94	13,62
	total	20,26	15,13	25,41	8,33	7,13	5,59
Group 4	US	0,94	5,48	5,62	6,40	18,11	9,34
	CA	0,76	6,20	11,86	13,13	20,19	41,35
	total	0,92	5,54	5,87	6,63	18,20	9,67
Grand total		1,47	2,42	2,81	3,34	3,07	2,58
Rest of world		3,50	2,39	3,06	4,40	2,26	2,97
World total		1,92	2,41	2,92	3,73	2,81	2,69

Table 21.5.3. Textile exports / imports ratio of Thailand