CHAPTER 4

THE COMPETITIVENESS OF THE STEEL INDUSTRY IN MALAYSIA: A COMPETITIVE ANALYSIA

4.1 The Porter's Five Forces Analysis

The Malaysian steel industry has grown in production capacity. Now the question is whether Malaysian steel companies are competitiveness compared to the other countries.

As a way of analyzing the competitive position of companies, Porter (1981) pointed out that companies should see the environment surrounding them and analyze five basic competitive forces, viz., industry competitors, potential entrants, suppliers, buyers, and substitutes. The collective strength of these forces determines the ultimate profit potential in the industry, measured in terms of long run return on invested capital.

The intensity of competition in an industry is neither a matter of coincidence nor bad luck. Rather, competition in an industry is rooted in its underlying economic structure, which is reflected in the strength of the forces, and goes well beyond the behavior of current competitors. This underlying structure of an industry is

different in the short - run due to factors like strike, business cycle, and material shortage which can affect competitiveness and profitability in a transient way.

4.2: ASEAN Free Trade Area (AFTA) and Common Effective Preferential Tariff (CEPT)

The analysis will be divided into two periods; one before the implementation of CEPT scheme under the ASEAN Free Trade Area (AFTA) and one after the implementation of CEPT scheme. The reason is because Malaysian steel industry will be affected once is launched.

The AFTA program was initiated in 1992 to create an integrated market among ASEAN's close to half a billion people and thus make the ASEAN economies more efficient and competitive and attractive for investment.

Originally, tariff reductions were scheduled to be implemented in two parallel track programs i.e. fast track and normal track. The normal track program (which includes steel products) was planned to have tariff reduction implementation in two categories.

- for products with existing tariff of above 20%, the tariff will be reduced first to 20% within 8 years beginning 1993. Upon reaching 20% i.e. by the year 2001,

the tariff will be reduced to 0 - 5% within 7 years in three stages i.e. year 2003 (15%), year 2005 (10%), and end of the year 2007(5%).

- For products with existing tariff of 20% and below, the tariff will be reduced to 0 - 5% within 10 years.

Table No. 4-1 Lists of Tariff and Non-Tariff Barrier on Major Products

Products	Tariff
Steel bars	RM 180 per ton
Wire rod	RM 180
Sections	20% or 30%
Plates	0%
H/R coil	0%
C/R coil	0%
Pipe and Tubes	30%
Scrap	0%

Sources: MDC (1998), *The Malaysian Trade Classification and Custom Duties Order*

The tariffs are not be imposed on the products which are not produced locally, but only for the items produced locally.

The program, however, is to be speeded up. In a Statement released at the end of ASEAN's sixth summit meeting in Hanoi on Dec., 16, 1998, ASEAN leaders announced their decision to hasten the implementation of the ASEAN Free Trade Area by a speedier reduction of tariffs.

Each of the six older members of ASEAN - Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand - will, by the year 2000, reduce tariffs on at least 85 percent of products to zero or to no more than five percent. By 2001, tariffs of zero to five percent will be applied to 90 percent of products and, by 2002, to all of them.

ASEAN's newer members - Vietnam, Laos and Myanmar - will expand the number of tariff lines that will be subject to tariffs of zero to five percent by 2003 in the case of Vietnam and by 2005 in the case of Laos and Myanmar. They will abolish tariffs on an increased number of tariff lines three years later (http://www.asean.or.id/news/new_ bold.htm, 1998).

This CEPT scheme will affect Malaysian steel industry in two ways.

1) Since the Malaysian market is not big enough for its steel mills to grow continuously, they could not establish big factories to enjoy the economies of scales from the beginning. However, the ASEAN market will give Malaysian companies an opportunity to expand their capacity.
2) With the implementation of CEPT scheme, the Government will not be able to protect the local mills. The tariff and non - tariff barriers which are Approved Permit (AP) system and Letter of No-objection from the mills will be removed. The market prices will be lowered. Local companies will not be able to enjoy higher protected prices.

4.3: Analysis for Long Products/Bar, Wire rod, and Section

4.3.1 Intensity of Rivalry among Exiting Competitors

Rivalry among existing competitors takes the familiar form of jockeying for position - using tactics like price competition, advising battles, product introductions, increased customer service or warranties (Porter,1981).

As seen in Table No. 3-3 in Chapter 3, major producers of steel are Perwaja, Amsteel, Southern Steel, Malayawata, and Antara. They are also major producers of long products. Hereby, the players are listed briefly again.

Table 4-2: Major Manufacturers of Long Products

Companies	Major products	Capacity	Establishment
Perwaja	bar & wire rod Beam & Section	450,000 700,000	1982
Amsteel	bar & wire rod	850,000	1980
Malayawata	bar & wire rod	450,000	1961
Southern Steel	bar & wire rod	1,000,000	1963
Antara	bar & angle	574,000	1975

Source: Malaysian Iron and Steel Industry Federation, (1998), *DIRECTORY 1997/98*

Before CEPT

The Government has banned the import of bar, wire rod and sections, which are produced locally. High custom duty and Approved Permit (AP) have served to protect the Malaysian steel industry.

Malaysia requires prospective importers of wire rod , for example, to apply for an Approved Permit (AP) from the Ministry of International Trade and Industry (MITI). MITI is very strict about issuing such APs and approval is rarely given for the import of steel products that is available locally. In addition, the importer has to obtain, via MITI, a Letter of No Objection from local steel mills which produce the intended imports. For example, wire rods can not be imported if Perwaja Steel, which produces the product, opposes the application (Business Times, Dec., 07, 1998).

The local producers, therefore, did not have to compete with overseas suppliers. There had not been serious competition among local manufacturers because the demand of long products had increased rapidly with the continuous growth of Malaysian economy during mid of 1990s. Furthermore, the Government protection allowed local producers to sell their products to the domestic market with higher prices than international prices. The price of medium sections like angle and beams, for example, is about U$ 294 in Korea,

and U$ 309 in Taiwan while its price in Malaysia is about U$ 370 (International Steel Review, Jun., 1998 and Business Times, Dec., 07, 1998).

However, producers of long products experienced an over supply of products for the first time due to the shrinking market which occurred in 1998 as a result of economic crisis in South East Asia.

Output of primary iron and steel during Jan - Jul in 1998 dropped by 42.8% compared to the same period in last year (Economic Report, 1998/99).

The competition became serious among the mills since the economic crisis. It will continue until the economy recovers.

After CEPT

Stiff rivalry doesn't come only from inside of Malaysia but also from outside (Malaysian Iron Steel Industry Federation). High tariffs and non-tariff barriers have served to protect Malaysian domestic steel industry. The protection, however, will disappear with the implementation of CEPT. Tariff and non-tariff barriers in the region would be lowered by 2002. Companies from ASEAN countries will become potential competitors. The domestic market will be accessible by all the ASEAN suppliers.

Furthermore, local producers will not be able to maintain the high prices, which they have enjoyed, due to the threat of low prices from outside suppliers.

The followings are the major potential rival companies from Indonesia, the Philippines, Singapore and Thailand.

Table 4-3: Potential Rivalry from ASEAN Countries

Indonesia

Companies	Establishment (Year)	Products	Capacities (tons)	Capital ('000)& Employment
PT Budidharma	1974	bar	150,000	- -
PT Gunung Garuda	1989	wire rod, bar, angle, beam, tee, channel	180,000	- 850 persons
PT Inter World Steel Mills Indonesia	1971	angle bar	35,000 250,000	U$8,500 470 persons
PT Ispat Indo	1976	wire rod, bar	650,000	- -
PT Jakarta Kyoei Steel Works Ltd	-	wire rod	120,000	- -
PT Jakarta Prima Steel Industries	1984	wire rod, bar	900,000	- -
PT Jatim Taman Steel Mfg	1972	bar, channel	150,000	U$40,000 950 persons
*PT Krakatau	1971	wire rod	240,000	- 9,000 persons
PT Toyogiri Iron & Steel	1976	bar, angle	120,000	- -
PT Wahana Garuda Lestari	1986	bar	120,000	- -

Singapore

NatSteel Ltd	1961	bar wire rod	600,000 350,000	- -

Philippines

Capitol Steel Corp	1974	wire rod, bar, angle, channel	60,000	- -
Cathay Pacific Steel Corp	-	bar wire rod	200,000 60,000	- -
Binan Steel	-	bar, section	210,000	-
Maxima Steel	-	bar, section	120,000	-
Kudos steel	-	bar, section	210,000	
Cebu Steel Corp	-	bar angle	60,000 10,000	-

Thailand

The Bangkok Iron & Steel Works Co Ltd	1964	light section and bar wire rod	190,000 60,000	- -
Bangkok Steel Industry Public Co Ltd	1964	bar	430,000	- -
Namheng Steel Co Ltd	1994	bar wire rod	150,000 150,000	- 280 persons
NTS Steel Group Co Ltd	1988	bar, wire rod	350,000	- -
The Siam Construction Steel Co Ltd	1993	bar	300,000	Baht1,050 million
The Siam Iron & Steel Co Ltd	1966	bar, wire rod	240,000	Bahht360 million 980 persons
Siam Yamato Steel Co Ltd	-	wide-flange beams (heavy)	600,000	- -
Triumph Steel Co Ltd	1977	flat, angle, channel	140,000	Baht150 million 490 persons

Source: Metal bulletin, (1994), *Iron and Steel Works of the world*

All the companies in Table 4-3 may not necessarily be involved in export. The reason is because producers usually give priority to their domestic market for

the long-term relation with their domestic customers. However, they will consider exporting their products if the selling prices in the other countries are higher than their domestic prices.

4.3.2: Threat of New Entry from Inside and Outside of Country

New entrants to an industry bring new capacity and cause the members of the ndustry to compete their market shares. The rivalry among companies will be nore serious.

For the time being, there are no new entrants from the inside of Malaysia. The Malaysian mills have only planned to expand the capacities for long products in he future. Amsteel has obtained approval to produce 500,000 tons of wire rod, and Southern and Malaysian Steel Works has obtained the approval for the production of Billet.

Potential competitors will come from outside of Malaysia as seen in Table 4-4.

Table 4-4: Potential New Entrants for Long Products by Countries

Project	Country	products	Capacity	Remarks
Steel Asia Manufacturing	Philippines	bar, sections	500,000	
Bacnotan Steel corporation	"	bar	300,000	
Filipino Metals	"	bar, sections	320,000	Contract Awarded
Sugarsteel	"	bar, sections	210,000	Contract Awarded

Source: Metal bulletin, (1994), *Iron and Steel Works of the world*

4.3.3 Bargaining Power of Buyers

Buyer's bargaining power means the extent that buyer can influence suppliers' prices or service. It can be obtained through a few factors. In Porter's viewpoint, the factors related to steel industry are mainly:

1) the volume of purchase
2) whether the amount of purchase represents a significant fraction of the buyer's cost.
3) whether the product purchased is standard or not.
4) whether the buyer has full information on the product and market

Bargaining power of buyers will change as CEPT goes on.

Before CEPT

Long products are used mainly for construction. The major usage of each item is shown in Table 4-5. The products are usually supplied either direct to construction companies or through distribution channels. The long items produced locally have been protected by tariffs. The Government has imposed tariff or non-tariff barriers to importers.

Therefore, the buyers, either construction companies or traders, had no choice except to keep good relation with local suppliers.

The bargaining power of buyers is low as the number of suppliers is limited and prices of long products are controlled by the Government.

Table 4-5: Buyers of Long Products by Major Usage

Type	Products	Major Uses	Number of buyers	Rated Capacity ('000 tons)
Long Products	Bars and small section	• Construction industry	N.A	2,700
	Wire Rods	• Galvanized wire	7	84
		• High-Carbon Wire and Strand	2	120
		• Barbed Wire	20	20
		• Bolts and Nuts	16	100
		• Welded Mesh	35	400
		• Nails	16	50
		• Welding Electrodes & Polished Shaft	9	42
		• Cold-Drawn Flat Bars	7	70
	Medium and Large sections	• High-Rise Building	N.A	N.A
		• Steel Bridges	N.A	N.A
		• Factory/Warehouse Building	N.A	N.A
		• General Engineering Works	N.A	N.A

Source: Malaysian Iron and Industry Federation (1996), *Status & Outlook of Malaysian Iron & steel Industry*

Note: N.A means Not Available.
Many companies, both big and small, involve in construction jobs. Therefore, it is not easy to count numbers of buyers in construction industry.

After CEPT

However, when the CEPT scheme goes on stream, buyers' bargaining power will increase. When the market is open to ASEAN suppliers, buyers will have more choices in choosing.

4.3.4: Bargaining Power of Supplier (Applicable For both Long and Flat Products)

Main suppliers to the Malaysian steel industry, both to long product and flat product manufacturers, are same. They are scrap suppliers. Here, the bargaining power of suppliers for long products will be analyzed together with the one for flat products.

Suppliers have bargaining power over steel producers by threatening to raise prices or by allocating smaller quantities to buyers. The power of supplier depends on the following:

1) whether an industry is dominated by a few companies

2) whether suppliers' product is an important input to the buyer's business.

i) Steel Scraps as Primary Materials for Making Steel

The raw materials of bar, wire rod, and sections are billet and bloom. The raw material of H/R coil is slab. Malaysian major producers of bar, wire rod, sections produce billets and/or blooms by themselves. The Malaysian Hot Rolled coil manufacturer produces Slab. This means that they are all vertically-integrated mills which produce billet, bloom, and Slab in their own factories in order to produce bar, wire rod, sections, and Hot Rolled coil.

Steel scraps are used for making billet, bloom, and slab in the Malaysian factories because all their furnaces are Electrical Arc Furnaces (EAF). Steel Scraps are the main materials for making steel in Electrical Arc Furnace.
Therefore, the main suppliers to long products and Hot Rolled coil manufacturers are suppliers of steel scraps.

Meanwhile, there are two types of scrap-substitutes, Hot-Briquetted Iron (HBI) and Direct Reduced Iron (DRI). There are two mills producing scrap-substitutes in Malaysia. Perwaja Steel is the sole producer of DRI and Amsteel is the sole producer of HBI.
Nevertheless, these two mills also used scraps as a majority of their raw materials instead of HBI/DRI because prices of scraps are usually cheaper than

those of HBI/DRI. Most quantities of DRI/HBI have been exported to overseas as seen in Table 4-6.

Table 4-6: Production of DRI/HBI by Years

(Unit:1,000 tons)

Year	Production	Import	Export	Consumption
1994	964	-	801	163
1995	1,178	21	952	247
1996	1,172	6	1,057	115
1997	1,486	-	949	537

Sources: South East Asia Iron & Steel Institute, Statistical Committee, (1998), *Steel Statistical Yearbook (1997)*

ii) Bargaining Power of Scrap Suppliers

A primary raw material for the Malaysian steel industry is scrap as explained above. What is the relation between scrap suppliers and buyers?

1) Nearly 40% of the scrap used in the Malaysian steel mills is imported. The rest of 60% is local scrap. The main reason for import is mainly due to insufficient local scraps.
2) the other hidden reason for import is to control local scrap collectors. Imported scraps sometimes are cheaper than local scraps due to the purchase in large volume like 10 - 20,000 tons in one shipment. This provide pressure on local

collectors to reduce their prices. Due to the government's policy to ban the export of scraps, prices of local scraps had been controlled by the steel mills, not by the sellers.

3) In the international market, scraps are available almost everywhere in the world. The major exporters are United States, Australia, Europe and China. The international prices fluctuate, depending on the demand and supply conditions.

   As Electric Arc Furnace mills which use mostly scraps are increasing in the world, either in developed or undeveloped countries, the quantities of available scraps will be reduced. Then, the bargaining power of international suppliers will increase. The Malaysian steel producers should try to substitute HBI/DRI for steel scraps in order to reduce the bargaining power of international scrap suppliers.

4.3.5: Pressure from Substitute Products (Applicable for both Long and Flat Products)

The pressure from substitute is not serious either in long products or flat products. Steel has been used mainly for automotive, construction, electronic, and shipbuilding industries. Usually, steel consumption remains proportionate to the production of each industry.

Aluminum and plastic can substitute steel for a certain usage. A case of substitution can be seen in automobiles which aim for light weight and power, even though the amount of usage is not big. One example is the automotive industry in the United States. In 1973, the automotive industry purchased 23.2 million tons from the domestic steel producer for the production of 12.7 million vehicles. In 1987, although production dropped to 11.2 million vehicles or 12 %, the purchase of steel fell to 12.5 million or 46 %. This was a result of the downsizing of automobiles, as well as replacing certain steel component with substitute materials, such as aluminum, plastics, and sourcing of automobile parts from abroad. Nevertheless, steel will remain a basic material for the automobile industry.

4.3.6: Government Policy (Applicable for both Long and Flat Products)

Government policy is applied identically to both long and flat product manufacturers.

The role of the Malaysian Government is quite critical to the local manufacturers for ensuring their success. The Malaysian steel industry can not compete without the support of the Government. Tariffs or non-tariff barrier imposition on overseas suppliers gives protection to the Malaysian steel industry.

However, the Government will not be able to protect local manufacturers once the market is being liberalized.

4.4: Analysis for Flat Products/ Hot Rolled and Cold Rolled Coil

4.4.1 Intensity of Rivalry among Exiting Competitors

The production of Hot Rolled and Cold Rolled coils is not well developed in Malaysia. Only a few companies, which are shown in Table 4-7, have been involved in the manufacturing of these items. Therefore, Malaysia has been importing large quantities of Hot Rolled and Cold Rolled coil as seen in Table 4-8. The rivalry can be intensive as foreign suppliers may come into the market without hindrance. There is no tariffs of Hot Rolled and Cold Rolled coil.

Table 4-7 Producers of Flat items(Hot Rolled and Cold Rolled Coils)

Hot Rolled (H/R) (unit : tons)

	Year of establishment	Capacity
Mega Steel	-	2,400,000

Note: Trial run of production is known in Dec., 1998

Cold Rolled (C/R) (unit : tons)

	Year of establishment	capacity (tons)
Maruichi Cold Rolling Industry	1990	200,000
Ornasteel Corporation	1994	300,000

Source: Malaysian Iron Steel Industry Federation, (1998), *Directory 1997/98*

Table 4-8: Dependency on Import for Flat Items

Items	production (tons)	import (tons)	consumption (tons)	dependency rate of each product on import (%)
H/R coil	-	1,518,000	1,518,000	100.0
C/R coil	485,000	620,000	1,105,000	56.1

-Source: South East Asia Iron & Steel Institute, Statistical Committee, (1998), *Steel Statistical Yearbook 1997*

-As Mega steel is just on the trial run, its production figure is not shown here.

The Government has not banned the import of H/R and C/R coil from overseas.

Tariffs are not imposed on these items because:

- Local manufacturers do not produce H/R coil.
- The manufacturers for C/R coil are not local companies but foreign firms. Orna Steel was owned 100% by foreigners. The ownership of Maruichi shows 55% by Malaysian and 45% by foreigners (Malaysian Iron and Steel Industry Federation, Directory,1997/98).

The rivalry will be analyzed by product type that is by H/R coil and C/R coil.

i) The Analysis of Rivalry for H/R coil

Malaysia has been a good market to foreign H/R suppliers. It was fortunate for them that Malaysia has no H/R manufacturer. They could sell their products to the Malaysian market as long as their prices remain competitive.

The situation, however, will be different once Mega Steel starts its production. This is a significant event because Malaysia has all along imported H/R coils from abroad. The import quantity reached 1,518,000 tons in 1997. Mega Steel is aiming to replace the import for general usage like pipe making from the beginning stage, although it cannot cater for high grade products like gas cylinder and container usage for the time being.

Two scenarios can happen:

First, in case the Government does not change the tariff on H/R coil even though local H/R producer, Mega Steel starts its production. Mega Steel would compete with major foreign H/R suppliers like Japan, Korea, and Taiwan. Table 4-9 shows the quantities of H/R from major countries.

Table 4-9: Imports of H/R Coil by Malaysia

(Unit:1,000 tons)

Country	Import by Malaysia in 1997	major producers in each country	production quantity of crude steel in 1997
Australia	92	BHP	8,900
Indonesia	90	PT Krakatau	1,599
Japan	425	Nippon Steel NKK Kawasaki Sumitomo Kobe Steel	28,100 12,000 10,900 10,600 7,000
Korea	184	POSCO	26,400
Russia	291	Cherepovets	8,900
Taiwan	142	China Steel	8,700
Thailand	21	-	-

-Source: Ministry of International Trade and Industry (1998), *Malaysia Import in Metric Ton by countries*
-South East Asia Iron and Steel Institute Statistical Committee, (1998), *Steel Statistical Yearbook 1997*
-International Iron and Steel Institute, Steel Data Center (1998), *The Largest Steel Producing Companies 1996 and 1997*

As a new manufacturer, Mega Steel will face big problems because:

- its quality may not be accepted by the market.
- Mega Steel is not competitive in terms of price. High interest costs due to a new investment will be a burden to them. They will suffer losses if they continue to follow other foreign suppliers' prices. Its cost of H/R coil will be much higher due to initial huge amount of investment

Secondly, in the case whether the Government imposes custom duty on Hot Rolled after Mega Steel starts its production, Mega Steel will be in better position to compete. The situation will be different if CEPT proceed.

Before CEPT

Import duty will be imposed on all the foreign imports from ASEAN countries.

- Then Mega Steel will be made competitive in the domestic market. Mega Steel capture a big market share in commercial grade of Hot Rolled coil which is mostly used for steel pipe marking.
- Current foreign suppliers will lose their market share for commercial grade but can continue to supply high quality Hot Rolled coil, which is used for making gas cylinder, container, or C/R coil making. It will take time for Mega Steel to produce such a high grade because a high grade needs \ technology and know-how for production.

After CEPT

No tax will be levied on ASEAN suppliers . However, foreign suppliers, excluding ASEAN countries, will continue to face obstacles in selling their products of commercial grades to the Malaysian market. The market will be opened only to ASEAN.

The ASEAN countries will see the opportunities in the Malaysian market as CEPT proceeds. There will be serious competition for commercial grade among ASEAN as other ASEAN suppliers too are producing mostly commercial grades.

The followings are the potential rivals from Indonesia, the Philippines, and Thailand. Krakatau Steel and Sahaviriya can be formidable competitors.

Table 4-10: Potential Competitors for H/R Coil from ASEAN Countries

	start - up (Year)	capacity ('000 tons)	Remarks (product type)
Nakornthai Strip Mill (Thailand)	1997	1,500	commercial grade
Sahaviriya (Thailand)	-	2,200	commercial grade
Krakatau Steel (Indonesia)	1971	2,000	-
National Steel Corp (Philippines)	1974	1,700	old facilities

Source: - South East Asia Iron and Steel Institute, Statistical Committee, (1998), *Steel Statistical Yearbook 1997,*
- Steel Times International, (1998), *Asian steel woes*
- Metal Bulletin, *Iron and Steel Works of the World, 1994*

ii) Analysis of Rivalry for C/R coil

At present, there is no tax on C/R coil. It is not known that the Malaysian Government will impose custom duty on C/R coil in future. Accordingly, the competitors will not be different from current suppliers. As long as there is no custom duty on C/R, ASEAN suppliers will not be able to take advantages in capturing Malaysian market even if CEPT proceeds.

The followings are countries which are competitors to Malaysian C/R producers. They are all world -class producers. As such, Malaysian C/R mills will be in a difficult position to compete with them. The rivalry among them will be very intensive.

Table 4-11: Imports of C/R coil by Malaysia

(Unit:1,000 tons)

Country	Imports by Malaysia (1997)	major producers in each country	production quantity of crude steel in each company (1997)
Australia	30	BHP	8,900
Indonesia	4	PT Krakatau	1,599
Japan	524	Nippon Steel NKK Kawasaki Sumitomo Kobe Steel	28,100 12,000 10,900 10,600 7,000
Korea	143	POSCO	26,400
Russia	34	Cherepovets	8,900
Taiwan	139	China Steel	8,700
Thailand	2	-	-

Source: -Ministry of International Trade and Industry (1998), *Malaysia Import in Metric Ton by countries*
-South East Asia Iron and Steel Institute Statistical Committee, (1998), *Steel Statistical Yearbook 1997*
-International Iron and Steel Institute, Steel Data Center (1998), *The Largest Steel Producing Companies 1996 and 1997*

4.4.2: Threat of New Entry from Inside and Outside of Country

New factories are expected to come out not only from inside but also from outside of Malaysia as seen in Table 4-12.

Table 4-12: Potential New Entrants for H/R and C/R Coils By Countries

H/R coils

Companies	Start - up (Year)	Capacities ('000 tons)	Remarks
Nusantra (Malaysia)	-	2,500	Mini mill
Tahan (Malaysia)	-	540	
F. Jacinto Group Inc. (Philippines)	2001	1,250	Electric Arc Furnace/thin slab casting
Krakatau Steel-Posco (Indonesia)	-	2,000	Mini mill
Baja Inti Manunggal (Indonesia)	-	2,400	-

Source: - South East Asia Iron and Steel Institute, Statistical Committee, (1998), *Steel Statistical Yearbook 1997,*
- Steel Times International, (1998), *Asian steel woes*

Cold Rolled

Companies	Start - up (Year)	Capacities ('000 tons)
Mega Steel	-	1,000
Soon Seng	-	150
Mindanao Steel Corp (F. Jacinto Steel Corp)	2000	150

Source: - South East Asia Iron and Steel Institute, Statistical Committee, (1998), *Steel Statistical Yearbook 1997,*
- Steel Times International, (1998), *Asian steel woes*

4.4.3: Bargaining Power of Buyer

Table 4-13 shows buyers' structure for H/R and C/R coils. Major buyers for H/R coils are steel pipe, cold-rolled coil, LPG cylinder, and freight container manufacturers. Major buyers for C/R coils are tinplate, steel furniture, kitchenware and tableware, automotive body, and steel drum manufacturers.

Table 4-13: Buyers of Flat Products by Major usage

Type	Products	Major Uses	Number of buyers	Rated Capacity (1,000 tons)
Flat Products	Hot-Rolled Coils	Steel Pipes (including C/R pipes)	18	600
		Cold-Rolling	2	500
		Freight Container	2	-
		LPG Cylinders	-	-
	Cold-Rolled Coils	Galvanized, Pre-painted and Rolled Formed Sheet	25	200
		Tinplate	1	240
		Steel Furniture	-	-
		Kitchenware and Tableware	-	-
		Automotive Body	-	-
		Steel Drums	-	-
		Steel Service Centers (including H/R cutting)	9	720

Source: Malaysian Iron and Industry Federation, (1996), *Status & Outlook of Malaysian Iron & steel Industry*

What will be bargaining power of buyers for H/R coils?

Two scenarios can be considered.

1) In the case where the Malaysian Government does not impose any tariff on H/R even when Mega Steel starts to produce H/R, buyers will have choices not only from the only local mill, Mega Steel, but also from foreign suppliers. Buyer's bargaining power will be strong.

2) In the case where tariff is to be imposed on H/R after Mega Steel starts to operate. Bargaining power will be different according to types of buyers. buyers are divided into two categories;
   i) pipe manufacturers using commercial grade: buyers will have to deal with the only Malaysian supplier, Mega Steel. Buyer's bargaining power will be reduced.
   ii) C/R, gas cylinder, and container manufacturers: it takes a time for Mega Steel to produce a high quality C/R. Accordingly, buyers can choose their suppliers at their option from overseas. Buyer's bargaining power will be strong.

What will be bargaining power of buyers for C/R coils?

It is not known that the Malaysian Government will impose the tariff on C/R in future. Accordingly, buyers have many choices not only local mills but also from overseas suppliers. The competition among suppliers can be serious.

Their bargaining power will be strong if they have large purchasing volume.

4.5: A Summery of the Porter's Five Forces Analysis

1) Rivalry has been limited among local manufacturers with the protection of the Malaysian Government. However, rivalry will be intensified as the market is opened to overseas suppliers. The new H/R mill, Mega Steel, will face tough competition from ASEAN suppliers.
2) The new entrants from ASEAN countries will make the rivalry more intensive as CEPT goes on. ASEAN countries are planing for big projects.
3) Bargaining power of buyers will increase as CEPT implements. The Malaysian buyers will be able to have more choices in choosing suppliers.
4) The main suppliers to the Malaysian steel mills are steel scrap suppliers. Bargaining power of local supplier is weak because the price is being controlled by local steel mills. However, bargaining power of suppliers will be strong as steel scraps are expected to face shortage. The Malaysian steel

producers should try to substitute HBI/DRI for steel scraps in order to reduce the bargaining power of international scrap suppliers.

5) The role of the Government is reduced when the market is liberalized. Private companies should prepare to compete.

6) Overall, the Malaysia steel industry will face tough competition with the opening of the domestic market. It is a risk to the steel industry. However, the steel industry, in the other hand, will see an opportunity in getting a bigger market in ASEAN countries. Malaysian steel mills can expand their capacity not only for the local market but also for the ASEAN market.