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## **International Business Relocation Philippines**

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This chapter provides two illustrations of international relocation in the Philippines, following the broad definition of relocation, wherein one company establishes its operations in a new location without necessarily closing original facilities.

Epson Philippines, a subsidiary of Epson Japan, was established in 1992 to supplement the growing world-wide demand for large and small printers. This case study qualifies under positive relocation, a form of relocation that increases a company's overall capacity for production, usually in response to a growing market for existing products or the creation of a separate market for new products.

In this case, we draw up the criteria for expansion and present a sketch of the social, political and economic conditions in each of the three locations that were studied by top management: Indonesia, Philippines and Vietnam. The expansion process, completed in two stages, is narrated and a comparison of selected economic conditions in the two provinces is presented, followed by a preliminary discussion of the social effects of business investment.

Phil. Steel Gratings<sup>1</sup>, a subsidiary of an Australian conglomerate started in 1996, was set up to capitalise on the demand for steel welded products in an underdeveloped industry. High transportation costs prevent Phil. Steel Gratings to serve other markets outside its immediate area; thus, its motives classify its mode of relocation under localisation.

This case opens with an overview of the supply and demand conditions of the local steel industry as well as the business environment of the province of Laguna, which would be the company's target site for investment. Putting the reader into the shoes of the subsidiary's general manager, the case gives an up-close experience of the dynamics of an investment decision.

The chapter ends with a comparative view of the province before and after the investment year and draws preliminary issues on the social impact of a relocating firm.

We wish to thank the executives and staff of both companies for their gracious accommodation and assistance.

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<sup>1</sup> Company identity has been disguised as requested by interviewee.

## 1. Epson Philippines, Inc.

Seiko Epson Corp. is a US\$5.718 billion company (as of 1994 sales figures) headquartered in Suwa City, Nagano Prefecture, Japan. The top industry player in Japan ranks among the top three global manufacturers of printers by the mid-1990s. It employs 11 850 employees in Japan, and 18 000 in its overseas subsidiaries. It has its origins in two 19<sup>th</sup> century companies, which were later re-established as Seiko Corporation (watch sales), Seikosha Co. Ltd (clock manufacturing) and Seiko Instruments (watch manufacturing).

Established in 1942, Seiko Epson started as a watch manufacturer, selling high quality time instruments under the brands of Seiko, La Salle and Pulsar. It introduced the world's first quartz watch in 1969, beating the standard mechanical watch on price, precision and quality. Its role as the official timekeeper in the 1964 Tokyo Olympic Games upheld its technological reputation in the industry.

Seiko Epson ventured into the manufacture of printers applying the same technology in watch-making. It gave the world its first laptop PC, the HX-20 in 1982. Its dot-matrix, inkjet and laser printers are industry leaders in terms of function, ease of use, quality, sound and speed. Extending its printing technology, it also produces small printers used in calculators, point of sale systems and electronic cash registers. Seiko Epson since then has diversified into computers, printers, semi-conductors, liquid crystal displays, precision electrical parts and optical products. Today, time keeping instruments comprise only about ten percent of total production.

Seiko Epson is a global organisation, with 26 sales offices all over Asia, North America and Europe. Each office sells the full product line to its own geographic territory; however they are coordinated on a regional basis, with its Japanese headquarters retaining central control. Most of its 13 manufacturing subsidiaries are concentrated in Asia, specifically China, Taiwan, Singapore, Malaysia, Indonesia and the Philippines. Manufacturing subsidiaries in Asia produce semi-finished high-end products that are shipped to the United States, the United Kingdom and France for final assembly. Because of lower wage costs, the Asian region produces mostly low-end products that have lower profit margins.

Its international operations are determined by its twin strategies in globalisation and localisation. In order to improve responsiveness to its different market needs, the company has created a network of marketing subsidiaries and affiliates world-wide. Epson America was started in 1975, and Epson Europe, with its regional office in Netherlands, followed later in 1990. All zones are highly interdependent, but ultimately, they will operate as autonomous regional territories, with the power to develop, manufacture and market products that are specific to the needs of its local market.

### 1.1 Historical context of expansion

The growing market for printers in the United States and Europe prompted a survey of new business locations in Asia, in order to supplement to the already exhausted manufacturing capacities in Japan, Hong Kong and Singapore.

Greenfield investment was considered to be more attractive than other options because of several reasons. Although the physical plants were scalable, headquarters preferred to set up additional capacities elsewhere in order to minimise political risk. Subcontracting, however expedient, was not considered because the company relies on proprietary technology to maintain high quality standards. The high costs of transporting machinery also rules out the option of transferring operations from a smaller subsidiary to a new one.

Hence, a feasibility study was commissioned in 1992 for the establishment of new manufacturing operations in Southeast Asia.

According to Epson Phils. Manager Shuji Takayama, the company considers several factors for choosing a site: political risk, level of education, skills, wages, supply in the labour market, language, infrastructure, access to raw materials sources abroad and religion.

Political risk is perhaps one of the most important factors in selection because of the threat it poses to the continuity of supply. Epson maintains dedicated plants for specific product lines due to the scale and the unique type of machinery required. Subsidiaries cannot be easily converted to manufacture a different product from that which its facilities are originally designed to produce. Hence, a new location should have as little political risk as possible.

In terms of quality of labour, technical qualifications matter more than wages because labour costs account only for an insignificant component of total costs. The manufacturing process involves the extensive use of sophisticated equipment; therefore, rudimentary technical skills are necessary for a worker to adapt quickly. Knowledge of English is preferable for ease of supervision, as most top managers are Japanese. Previous working experience with Christian labourers predisposes management to a better working relationship with workers of the same faith. 'Christians are easier to supervise than workers practising other faiths,' according to Mr. Takayama; thus, the company is more comfortable managing them.

The company initially selected Indonesia, Vietnam and the Philippines for their rough qualifications in terms of proximity, availability of technical skills, educational background and liberal investment conditions. How did the foreign investor see these countries in 1992? The succeeding section provides an overview of the locations being evaluated.

## 1.2 Indonesia

Indonesia is an archipelago of 13 000 islands lying south of Japan. A population of 194.0 million people growing at a rate of 1.6 per cent (Asian Development Bank 1993, pp. 224-6 ) makes it one of the world's most populous countries. It has a GNP per capita of US\$670.00 (Euromonitor 1993, pp. 143-6).

Long reigning President Suharto, who has been in power since 1965, enjoyed administrative stability in 1992. Though there was a growing clamour for constitutional changes in time for the next presiden-

tial elections, the domination of his political party, the Golkar, in the parliament and the state bureaucracy, ensured that these changes would not be radical. Since no other presidential candidate had as daunting a political machinery as the incumbent, Pres. Suharto remained to be the only contender for the position (World Bank 1994, pp. 229-33).

The primubi (indigenous) business class has taken a more active role in politics, primarily to protect its interests in the face of strong Chinese control in the business sector. Increasing resentment of the Indo-Chinese wealth has prompted the government to prioritise legislation that will favour the primubi business interests. Pressures to use local labour have intensified. Sinar Mas, the country's second largest business group, was recently put under investigation for importing 700 mainland Chinese workers for the installation of several small power plants. With 2.5 million workers entering the labour force in Indonesia, the government believed that local workers should first have access to such job opportunities (Asiaweek 1992i, p. 42).

Rising imports, accelerating inflation and rising private investment growth were factors that the government had to contend with at the start of 1992 (World Bank 1994b, pp. 229-33). But with deregulation and industrialisation, the economy faced prospects of 6 to 7 per cent growth.

Falling prices of oil, Indonesia's prime export commodity prompted the government to pass measures to make the economy more competitive. Tariffs were cut so that less than 5 per cent of imports bore duties. Requirements on divestiture and minimum capital were eliminated and restrictions on foreign land ownership were relaxed. As a result, domestic and foreign investment was stimulated (World Bank, 1994b, pp. 229-33). Foreign investment soared to US\$26.2 billion in 1989-91, twice the amount for the period of 1969-87 (World Bank 1994b, pp. 229-33). Reforms were not always effective though, as a writer observed, 'Deregulation has sometimes meant little more than the transfer of public monopoly to a private, politically-connected company' (Euromonitor 1993, pp. 143-6).

Rapidly falling inflation prompted the government to loosen monetary policy, to which banks responded by reducing interest rates. Lower interest rates stimulated aggregate demand, particularly in the construction and consumer durable sector while excess funds contributed to the boom in the stock market (World Bank 1994b, pp. 229-33).

With large investments from Japan, South Korea, Taiwan and Singapore, there was a lingering fear that Indonesia might become a mere repository of labour-intensive industries that are disregarded in newly-industrialised countries in Asia (Euromonitor 1993). But cheap labour was Indonesia's greatest attraction to foreign investors. Indonesia's labour force grew by 2.3 per cent from 1985-93. According to the International Labour Organisation, 39.9 per cent of its population is economically active, of which 24 per cent were female and 54 per cent are male (Euromonitor 1993). Unskilled urban wages averaged at 1176 rupiah in 1992 (World Bank 1994a, p. 158).

The country had an illiteracy rate of 27 per cent among people over 15 years of age in 1987-92, down from 32 per cent for the period of 1980-1985 (World Bank 1994a, p. 158). Secondary school completion among people over 20 years of age was 7.1 per cent among females and 13.9 per cent among

males. Only 0.6 per cent women and 1.9 per cent men over 25 years were university graduates (Asian Development Bank 1993, p. 225).

The number of people living below the poverty line was reduced from 60 per cent in 1970 to 15 per cent in 1990. The average income per person was US\$570, and was expected to rise to US\$1000 by the year 2000 (Asian Development Bank 1993, p. 225).

### 1.3 Vietnam

Vietnam is located in a long and narrow country covering the eastern portion of the Indochina Peninsula along the Gulf of Tonkin and the South China Sea (Third World Guide 1991-92), with 70 million people, growing at the rate of 1.9 per cent (Third World Guide 1991-92, pp. 564-9).

Recent National Assembly elections in Vietnam were merely a shadow of its struggling democracy. Despite the turnout of 37 million voters, voter apathy was high. With 90 per cent of the candidates being members of the Communist Party, there was a prevailing feeling that the new assembly will not bring any real reform into the government. Political parties continued to be banned and of the forty independent candidates, all but two were disqualified or withdrew (Asiaweek 1992g, p. 30).

The government was in the process of managing a careful transition to a mixed economy. While recognising the need for reform, it pushed reform very slowly out of fear that it will lose control to organised independent groups. Among the most notable reforms made this year were significant attempts to separate church from state in the new Constitution and the liberalisation of foreign ownership of investments and properties (Asiaweek 1992c, p. 34).

US trade relations have yet to be normalised. Until Vietnam holds UN sponsored elections next year and accounts for several hundred soldiers who were missing in action during the Vietnam War, the US imposed trade embargo will persist (Asiaweek 1992c, p. 34).

Vietnam's deregulation and liberalisation started as early as 1986 and accelerated in 1989. These were accompanied by a unification and devaluation of the exchange rate, raising of interest rates above inflation levels, decontrol of prices and decollectivisation of food production. As a result, the country's inflation rate dropped from 30 per cent (1988) to less than 1 per cent in 1989. In a year, it was transformed from a net rice importer to the third largest rice exporter in the world. Real GDP growth peaked at 8 per cent in 1989 (World Bank 1994, pp. 534-8). Foreign investments for the first quarter of 1992 already reached US\$2.8 billion, spread over 383 licences in Ho Chi Minh City alone (Euromonitor 1993, pp. 166-9).

Inflation escalated to 68 per cent (1990) and 83 per cent (1991) when the Soviet Union collapsed, interrupting a major source of foreign aid (accounting for 7 per cent of GDP) and triggering a return to public credit investment (Euromonitor 1993). Inflation since then, had sunk to 17.5 per cent in 1992 (Euromonitor 1993).

The Vietnamese economy grew by 8.6 per cent in 1992, with industrial growth leading by 12 per cent. Exports grew by 9.5 per cent over 1989-92, with a fair diversification into labour-intensive manufacturing, marine production and agricultural processing. Prospects of greater trade with Malaysia was expected, due to the granting of Vietnam's status as the country's most favoured trading partner (Asiaweek 1992h ).

Economic reform, nevertheless, was underway. A constitution was drafted to allow foreigners to own their assets and a Capital Markets Development Board was established to oversee 35 000 businesses, facilitate the sale of state assets and set up a Vietnamese stock market. The reforms attracted companies like Credit Lyonnais, which set up a Vietnam Growth Fund to invest US\$75 million in 25-35 companies in priority industries. For the government, such venture funds were also a means of testing the waters of foreign participation in the economy (Asiaweek 1992a, p. 55).

Unemployment rose this year as a result of several factors: earlier population growth, demobilisation of troops from Cambodia, lay-off of workers from state enterprises, and the return of overseas contract workers (World Bank 1994b, pp. 534-8). There are no available statistics on wage levels.

Despite poverty, the country's illiteracy rate among people over 15 years of age was only 12 per cent in 1987-92, down from 16 per cent in 1980-85 (World Bank 1994a, p. 373). Secondary school completion was lower though; among females over 20 years it was 4.5 per cent, and among males 6.9 per cent. Among people over 25 years, female university graduates accounted for 1.7 per cent, while males account for 3.7 per cent (Asian Development Bank 1993, p. 240).

Perhaps a reflection of the poor social conditions in Vietnam was the continued emigration of its people. Since 1980, 354 500 citizens have left Vietnam under its 'orderly departure programme', of which 63 per cent went to the United States, 10.5 per cent to Australia and 11.5 per cent to the European Community. Some 102 000 people were still in holding camps, primarily in Hong Kong, Indonesia and Thailand. As of 1992, an estimated 834 000 people have left on their own (Asiaweek 1992l, p. 20). There are no available statistics on poverty and average income for Vietnam.

## 1.4 Philippines

The Philippines is an archipelago of 7100 islands located off the coast of Southeast Asia, south of China and north of Indonesia. It is inhabited by 64.3 million people growing at a rate of 2.2 per cent, with a GNP per capita of US\$770 as of 1992 (World Bank 1994a, pp. 274-5).

The year 1992 marked a transition for the Philippines away from the crisis-stricken administration of Corazon Aquino. During her six years as caretaker of the new but fragile Philippine democracy, her administration suffered no less than seven coup attempts by the renegade military, eight to thirteen hour brownouts and the devastating eruption of Mt. Pinatubo.

Peaceful elections by mid-1992 paved the way for the assumption of a new president who inspired confidence in national stability. Fidel Ramos was a former chief of the Philippine Constabulary who

continued to enjoy military support. He pledged the restoration of energy supply, economic recovery, attraction of foreign investment and the preservation of the environment as his immediate goals (Asiaweek 1992f, pp. 25-30). The 200 seat-Congress initiated the entry of 90 new faces and was expected to be 'more oriented to development, activism and concrete results than its predecessors' (Asiaweek 1992e, p. 48).

Pres. Ramos continued peace talks with the National Democratic Front, the political arm of the Communist Party of the Philippines, which was responsible for the violent rebel movement in the south. Though he refused to heed calls to release 600 political detainees, he freed the party chairman and the commander-in-chief of its New People's Army (Asiaweek 1992j, p. 44).

Economic liberalisation started in 1991, with the government cutting down the negative short list of foreign investment to five. Foreign investors were allowed full equity ownership, new tariffs were reduced and the foreign exchange market was deregulated. Local government authority was increased with the decentralisation of fiscal powers and responsibilities (World Bank 1994b, pp. 414-8).

The new government aimed to attract foreign investment flows of US\$1.0 billion/year over the medium term, as a way of sustaining growth. It also strove to improve export competitiveness by enhancing product quality of Philippine exports, facilitating export promotion, addressing the bureaucratic bottlenecks for exporters and licensing private industrial parks as export processing zones (World Bank 1994, pp. 414-8).

GDP growth fell below 1 per cent in 1990-91 from 5.2 per cent in 1986-89. Several factors accounted for this decline: the country's delayed response to external shocks like the oil crisis and tax revenue shortfalls, the establishment of new oligopolies, inadequate infrastructure, and the threat to trade and capital flows by the country's high foreign debt (World Bank 1994).

Inflation was at 18.7 per cent in 1991, but it fell significantly to 8.9 per cent by 1992. Continued foreign currency remittances by the country's numerous overseas contract workers kept the exchange rate constant (World Bank 1994b, pp. 414-8).

Severe power shortage and the alarming road congestion dominated the country's infrastructure problems. An unexpected drought crippled the hydroelectric Napocor plant, which supplied 60 per cent of the country's energy requirements, to three-fourths of its operating capacity. Poor maintenance reduced the operating capacity of alternative oil and coal powered facilities by half, while nuclear energy sources remained untapped ever since the Bataan nuclear power plant was declared hazardous and consequently shut down (Asiaweek 1992d, pp. 59-61).

Metro Manila has an estimated total road length of 157 000 km, compared to 266 000 km for Indonesia (World Bank 1994a, pp. 274-5). But while roads grew by 2 per cent, private vehicle ownership overtook it at 10 per cent. It was estimated that over 1.0 million people in 154 000 vehicles traversed the 20-km EDSA, Metro Manila's main artery, at a crawl rate of 10 km/hour, one half of New Delhi's (Asiaweek 1992b, pp. 54-7).



The Philippine labour force grew by 19 per cent from 1985-92. Wages averaged at PHP138.80 for the National Capital Region and PHP109.84 for regions outside it (Department of Labor and Employment 1993, pp. 168-9).

The illiteracy rate in the Philippines dropped from 12 per cent during the period of 1980-85 to 10 per cent for the period of 1987-92 (World Bank 1994a, p. 275). By 1992, of those over 15 years, 89.5 per cent females and 90 per cent males were literate in 1992 (Asian Development Bank 1993, p. 234).

Poverty and disaster relief for the Mt. Pinatubo victims increased pressures to cap debt payments, which amounted to US\$5.0 billion or 40 per cent of the national budget (Asiaweek 1992k, p. 40). But they were repudiated by the president's pledge to continue the IMF-endorsed programme of liberalisation, export orientation and fiscal austerity, which ultimately aimed to increase the country's debt-servicing capability. Many nationalists criticised this move as being 'anti-poor'.

After a spate of bank robberies, kidnapping cases began to rise. No less than fifty cases of kidnappings were reported in 1991, four times the total in 1990, with an estimated US\$7.8 million of payoffs having been paid mostly by its Filipino-Chinese victims. Most of the cases involved brazen acts of abduction in broad daylight, the most notable being that of American executive Michael Barnes, GM of Union Oil's local subsidiary. Military men are believed to have orchestrated ninety percent of the cases.

## 1.5 Expansions (1992-1995)

The feasibility study submitted to Japanese headquarters in late 1992 recommended Indonesia as the location of a new subsidiary, and the Philippines as the next candidate for investment, pending better political conditions. Economic conditions in Vietnam were determined to be too premature for investment.

By 1994, political risk in the Philippines was reduced significantly. Epson's Hong Kong subsidiary exerted a lot of pressure to expand in the Philippines because of its attractive investment climate and proximity to China, a new market for small printers. Small printers account for 10 per cent of global product revenues for Epson world-wide.

Improved local conditions gave a go signal to build a 200 000 printer capacity at the Light Industrial Science Park II (LISP II) in Laguna, a province in Southern Luzon. Initially created as a sub-unit of Epson Hong Kong, it eventually gained full subsidiary status by October 1996. This plant contributes to the world-wide supply provided by existing plants in Japan and Hong Kong.

The company registered with the Philippine Economic Zone Authority in order to qualify establishment at the LISP II. As a PEZA-registered company, it is exempt from paying taxes and duties for imported capital machinery, raw materials and construction materials not available locally. Tax credit for import substitution and an income tax holiday up to seven years from the start of operations is also granted.

The first plant in Cabuyao, Laguna, was finished on December 1994, six months before the deadline of the construction project. According to Mr. Takayama, finding qualified workers was easy. Filipinos have a higher acceptance rate of thirty percent, compared to the average of twenty percent.

The company faced initial difficulties in transportation. On the average, forty 40-foot container vans transport its finished goods to the Manila International Container Port, which is only a little over fifty kilometres away. Under normal traffic conditions, the daily trip requires three hours.

When demand for large printers abroad grew sufficiently by 1996 to justify the establishment of a new manufacturing plant in the Philippines, Epson decided to expand its operations down south, to take advantage of a future port being developed in Batangas. Initially the first choice was Carmelrey, a town closer to Cabuyao, Laguna, which had better road infrastructure. However, cheaper land costs and better port access made Batangas a more attractive venue. Hence, by 1996 the company decided to make a strategic investment through a 500 000 printer capacity in Lima, Batangas.

## 1.6 Expectations for the future

Currently, Epson's Laguna plant has a capacity of 200 000 units while its Batangas plant has 500 000 units. Due to poor economic conditions, only half of the Laguna plant capacity and only a tenth of the Batangas plant capacity are being utilised for the moment.

Raw materials account for 58 per cent of total product cost, with 50 per cent still being sourced from Japan, and the remaining divided between suppliers from the Philippines and Southeast Asia. Because the quality of local supplies is comparable with that of other locations, the company seeks to increase its local sourcing and consequently minimise inventory holdings.

For the moment, Mr. Takayama considers road and telecommunications infrastructure to be poor. Telephone connections are frequently busy and the acquisition of new lines follows a long, tedious wait. Personal security is still risky for foreign expatriates, as they are considered good targets for kidnappings. He believes that an improved security climate would further enhance the Philippines as an investment site for multinational businesses.

He also recommends improving the application of legislation, such as the minimum wage law. He believes that as much as 30 per cent of local businesses do not observe the payment of the minimum wage. The reason behind tax shields escapes him; he does not understand why the government will deliberately allow businesses to pay lesser taxes than they should. 'Legislation should be made more systematic, consistent and timely if the government wants to sustain the investment attractiveness of the country,' he said.

## 2. Phil. Steel Gratings, Inc. (Psgi)

World-wide Steel Gratings, Inc. (WWSGI) <sup>2</sup> was established in 1945 in Australia as an automated manufacturer of quality steel gratings. Steel gratings are criss-crossed flat bars that are welded together to form fences to cover openings large and small, or to secure and divide property space. The company was bought in 1989 by the Atlantic Group, an Australian conglomerate that has other business interests in plastic mouldings and automotive spare parts. WWSGI employs about 4000 people world-wide.

Affiliates in Australia, New Zealand, Indonesia, Thailand, China, Vietnam and later, the Philippines establish the company's presence in the Asia-Pacific region. Each subsidiary functions as an independent marketing and manufacturing unit serving the local market where it is based. Because of the weight of its finished products, WWSGI subsidiaries do not export to foreign markets.

WWSGI uses a proprietary technology for manufacturing steel gratings, which are manually fabricated by tradition. Flat bars are aligned according to the design specifications and welded by a large machine; this process hastens the production time, enabling the firm to meet a volume that small foundries are not capable of serving. Since the technology is internally developed, WWSGI has to provide every subsidiary with the capital infrastructure upon its start-up.

The company aims to develop a global network of steel grating manufacturers within the decade. It recently acquired a large British company which is one of the leaders in the European market. It is also setting its sights on a major American firm.

### 2.1 Historical Context of Relocation

#### 2.1.1 The steel industry circa 1996

Steel is an alloy that is made from carbon and iron. Pig iron or scrap iron is melted, heated and formed into various types of steel products, from steel billets to structural beams (BusinessWorld 1995, p. 1,5).

The steel industry is unique in its product flexibility. At each stage of production, a steel product can be sold as a finished good or used as material for a new product. There are several stages for steel processing. Steel ingots are the basic building blocks of processed steel. These steel molds are subjected to a rolling or continuous casting process that produces flat pieces of steel called billets, slabs or blooms, which vary in thickness and length. These pieces are extruded into die casts that shape them into wires, bars, pipes, tubes, sheets, plates, strips and structural beams. Rods can be further cut into nails or coiled into wire rolls.

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<sup>2</sup> Company identities have been changed as requested by the subjects.

Steel gratings are a type of fabricated steel that is produced by specialised foundries. They are formed by welding together vertically and horizontally aligned flat bars. Steel gratings produce sturdy guards over openings like canals, windows, doorways, and mining cavities.

In 1996, the Philippine steel industry continued to be fragmented into subsectors which focused on certain types of steel processing. Steel ingots and billets remained to be in short supply, with the country relying mostly on importers. In 1992, imported steel accounted for as much as 70 per cent of the domestic consumption, with the rest being provided by the country's handful of local producers, the largest steel company being National Steel Company (NSC). Although the country has the lowest steel consumption per capita imports continued to flood the country, indicating the perennial inability of domestic steel producers to keep up with the demand.

Despite the relatively large demand for steel ingots, new entrants have been few and far between. The high costs of energy, the inferior quality of local metal substitutes and a high buyer's propensity to substitute local ingots for cheaper imports discourage firms from expanding their businesses upstream (Manila Chronicle 1996, p. 16).

But downstream, competition is more active. Because of its superior flexibility, availability and durability, steel is becoming a more preferred construction material among contractors. This development has led to the increase of new entrants in the sectors for galvanised iron (GI) sheet, wire rolls and structural steel.

Steel fabrication is a small segment in the overall industry because unlike other sectors, it is labour intensive and low in standardisation. Steel gratings vary in size, width, colour and design specifications and largely require individual customisation. Due to this reason, large domestic steel manufacturers have shunned steel fabrication.

WWSGI is only one of the few steel fabricators that has found a way to mass produce steel gratings. By concentrating on the large industrial market and limiting the variety of product specifications, WWSGI is able to use its mechanised technology for galvanising and welding flat bars into fence guards, handrails, gutter covers and the like. Its target market includes companies in the utilities, petrochemicals, processing and mining industries.

There are no figures for domestic demand for 1996, but as of the latest year 1994, domestic demand was 1.7 million tons, growing at the rate of 5 per cent per annum, up from 1.18 million tons (1970) (Manila Chronicle 1996, p. 16).

### **2.1.2 Political and economic environment circa 1996**

A 1993 World Bank study revealed that the country needed economic reforms and some US\$30 billion every year to hasten economic development.

The government as a result, responded with a series of aggressive government initiatives designed to attract foreign investment. The nationality requirement for property ownership was waived and ex-

tended to include even natural-born Filipinos who have adopted a new citizenship (Philippines Daily Inquirer 1996, p. 1). In the steel industry, a schedule to reduce tariffs until 2003 was drawn out, which placed a cap of 3 to 10 per cent for imported raw materials, 20 per cent for intermediate goods and 30 per cent for finished products (Business World 1995, p. 1,5). A steel body was created to oversee the full integration of steel processing in the industry, a step that was expected to improve the costs of local steel (Philippine Star 1993, p. 12).

Meanwhile, the construction industry, the largest sectoral consumer of steel in the country, was riding high in a period of economic boom which started in 1993. A combination of low interest rates, a renewed investor confidence and increased consumer spending contributed to this boom, which many predicted would not last for more than three years. But construction activity continued to grow at a rate of 8 per cent by 1996, and later by 16 per cent in 1997.

Construction activity was high especially in one area: Southern Luzon's Region 4, comprising the provinces of Calamba, Laguna, Batangas, Rizal and Quezon. The Aquino government launched the ambitious programme of developing the 16 229 km<sup>2</sup> region, dubbed the Calabarzon, as an industrial enclave meant to decongest Metro Manila. The responsibility to develop the region was shared between the government and the private sector. The former committed to establishing the necessary road, shipping, telecommunication infrastructure and to providing fiscal and tax incentives to encourage investment, while the latter was in charge of developing and maintaining the property as industrial estates. These initiatives, in addition to cheap land and affordable labour costs, were expected to attract as much as US\$200 billion in foreign and domestic investments and create as many as 340 000 new jobs (Manila Bulletin 1990, pp. 36-7).

By 1996, Calabarzon was home to many large Filipino and multinational firms, such as San Miguel Corp. and Proctor & Gamble, the consumer goods conglomerates; Meralco, the state electricity provider; Conception Industries and Hitachi, consumer appliance giants; Matsushita Communications and Epson Philippines, electronic heavyweights.

Laguna, located at the northernmost part of the Calabarzon region, consistently outperformed the other provinces in terms of development and investment absorption. Its investments climbed from PHP1.871 billion (1988) to PHP7.549 billion (1989) at the start of the launch. By 1995, its compound growth was an astounding 21.8 per cent, with total investments of PHP6.0 billion and total exports of PHP14.4 billion (Business World 1996, pp. 9-10). Cavite and Rizal were distant favourites.

These were credited to various reasons. Foremost, Laguna's proximity to Metro Manila's air and water transportation hubs served immediate needs in transportation and made support services more accessible. Second, Laguna produced its own energy sources, which were crucial following the severe energy crisis in 1990-91. Lastly, its physical infrastructure continuously improved, which meant that service capabilities grew with the increasing number of companies (Business Star 1991, p. 1).

## 2.2 Alternatives

The idea to open up a subsidiary in the Philippines first crossed the mind of Barry Jackson, international marketing director, when he listened to President Fidel Ramos deliver a speech on the Philippines' investment potentials in Australia. The poor political climate during the early 1990s made the Philippines a risky candidate for subsidiary operations, but with aggressive economic reform and a stable administration, the country seemed to be on its way to relative stability. The president flew abroad frequently with the nation's business leaders in order to sell the Philippines as a foreign investor's springboard to Asia, and in one of those occasions, he left an audience member impressed.

That audience member was Mr. Barry Jackson. Wooed by one of the presentations, he directed Emmanuel Punzalan<sup>3</sup>, a trusted colleague, to conduct a formal study of the feasibility of Philippine operations in 1996. When the study confirmed the existence of favourable business conditions, Mr. Jackson established Phil. Steel Gratings, Inc. and hired Mr. Punzalan, to be its first president and general manager.

Mr. Punzalan established a temporary office in Makati and set out to evaluate several sites for the manufacturing facilities of PSGI. Several conditions were closely investigated.

First and foremost, because of the costs of transporting heavy and voluminous steel gratings, proximity to its target community is necessary. Mr. Punzalan had targeted the booming Calabarzon area, where many large capital-intensive ventures were expected to start.

Second was the presence of galvanising companies. Galvanising is the process of coating steel with anti-corrosive zinc by dipping it into a very hot solution. It is the final step in the manufacturing process. Despite the significance and relative simplicity of the process, the environmental risks of the process persuaded the mother company to subcontract the operation to an external party. The presence of a reliable galvanising firm then became a prerequisite to moving into a new location.

Third was the presence of reliable sources of electricity, water and telephone facilities.

Fourth was the availability of properties outside a residential area. Although the company takes pains to control its noise pollution, it fears that industrial noise even under strict controls will be disruptive to a residential community.

Fifth was the absence of technically advanced competitors in the region. The economies of scale for the manufacturing of steel gratings by machine are large; ideally, a territory can sustain no more than two firms in the same business.

It is interesting to note that certain factors did not have the same significance in the decision as normally expected. First, the significant government incentives for ecozone investors, such as income tax

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<sup>3</sup> Identities have been changed as requested by the subjects.

holidays, waiver of duties on imported machinery and raw materials, tax credits, foreign ownership liberalisation, were not major determinants in the choice of a new location.

Second, the accessibility of raw materials supply was not deemed critical. The company had initially surveyed the quality of flat bars sold by local manufacturers and found them to be unacceptable. 'Most of the flat bars are undersized,' Mr. Punzalan noted, 'and besides, some manufacturers refused to let us inspect the conditions of their operation.' Since then, the company has decided to import its raw materials from Taiwan.

Third, the supply of technically qualified labour was not as important a factor due to the capital intensive nature of the business. Human labour is used primarily to operate the machines and to fabricate specifications that cannot be performed mechanically. In fact, compatibility of the applicant's personality with its corporate culture was stated to be more desirable than technical proficiency.

Mr. Punzalan drew up a list of prospects within the Calabarzon region: Carmona, Cavite; Laguna Technopark, Light Industrial Science Park II (LISP2) in Calamba, Laguna; Subic and Clark industrial zones, which were formerly US air bases.

But somehow, the choices didn't seem right. Units in the Laguna Technopark and the LISP2 were both fully sold, and there were no existing owners willing to sell properties. The Subic and Clark zones had free space, but there were no galvanising companies nearby. The Carmona site was ideal, except that it was located within a residential community.

Luck did turn up one day. One owner of a two-hectare lot in Light Industrial Science Park I in Cabuyao, Laguna, decided to sell its property after scrapping plans to manufacture its local coffee candy. The seller's condition, however, was that both lots should be purchased as a package deal.

The prospective site came closest to his company's needs. It was situated in a well-developed industrial zone that was fully equipped with all necessary utilities, right at the heart of the Calabarzon region. Coincidentally, WWSGI's partner in galvanising decided to set up overseas operations in the nearby province of Cavite. There were no competitors in the area, making PSGI the only automated steel gratings producer in the region, if it so chooses to set up shop. Furthermore, it fit the image of the company as an environmentally responsible corporate citizen. Dirty, ill-maintained and/or smoke belching trucks were prohibited inside the park premises. Architectural designs were consulted with park management, as a way of controlling noise and adhering to the image of the park as a modern, first-class facility. Waste treatment procedures regulated disposal services. Mr. Punzalan wondered, 'Would an extra piece of property be too high a price to pay for the ideal site?' He invited his regional director, John Wallace, to take a look.

Mr. Wallace was immediately impressed. Not only did he envision LISP2 to be the future site of its steel gratings operations in the Philippines, but also of its plastics division in Atlantic, the mother unit. A call to their head office was made to check the cost of buying a second piece of property in advance, and after Mr. Wallace put the phone down, he barked the order to buy the two hectares of land immediately.

## 2.3 Company Operations

The company registered with the Philippine Economic Zone Authority in order to qualify establishment at the LISP2. As a domestic producer, it enjoys tax credit for import substitution and an income tax holiday up to seven years from the start of operations. It also receives a reimbursement for training expenses.

The company started hiring among Laguna's residents, taking care to identify the adaptability and conformity of the individual to the company's value system. Internally, the company's focused on the cultivation of a healthy corporate culture: customer service, respect for the individual, quality and innovation. Policies and rituals were created to reinforce these company values. For example, every morning all employees gather to declare their company oath, and a person is assigned to lead the company prayer and share how one of the four values affected him recently.

Employees are given several benefits. Key technical personnel who reside out of town are given housing and transportation allowance. Every employee subscribes to a stock option plan, wherein upon employment, he is granted a right to a specific number of stocks that he can pay for using cash or a dividend reinvestment plan. Regardless of rank, every employee has the same number of shares entitled to his name.

Since the start of operations last 1997, PSGI has hired fifty-four employees, more than half of whom are assigned on the factory floor.

## 2.4 Expectations for the future

Growth in the construction industry slowed down to 13 per cent for 1997, when interest rates shot up at the height of the Asian currency crisis. Because of the industry's heavy reliance on credit for purchasing raw materials and equipment, many chose to defer their projects until interest rates subsided to more affordable levels. Growth was nonetheless, superior compared to other industries which enjoyed only one to 6 per cent levels (Business World 1998a, p. 8). Of its subsectors, the construction activity for firms in the electricity generation, telecommunication, petrochemical and export business are least likely to be affected (Business World 1998b, p. 8).

Currently, poor economic conditions have forced the company to operate at only twenty percent of its full capacity. However, the company expects to reach full capacity in four to five years. Since a lot of businessmen believe that the economy will fully recover from its crisis stage by the year 2002, Mr. Punzalan believes that the year 1999 will indicate more concrete prospects for growth, given that expansion plans take on the average three years to complete. He expects quite a lot of mining firms in Southern Philippines to reopen, and thereby require new steel gratings to replace worn-out fixtures. The opportunity will give them reason to expansion into the south in the future. In the meantime, since machined produced steel gratings are new in the country, for its first few years PSGI plans to increase the market awareness of their product through aggressively marketing the quality and versatility of their technology.



### 3. A preliminary analysis

#### 3.1 Region 4: A comparative profile

This section presents how the environments of Laguna and Batangas have changed in recent years in terms of employment levels, productivity, poverty and industrial activity. Wage, working hours and number of employment are compared for each of the cases in order to infer how the companies have contributed to social development in their respective communities.

##### 3.1.1 Employment

Laguna and Batangas are two provinces that belong to the rapidly industrialising region of Southern Luzon (Region 4). In 1997, 65 per cent of total households participate in the labour force, slightly higher than the National Capital Region where Metro Manila belongs. Employment levels are significantly higher in Region 4, where they are at 92.5 per cent, compared to the NCR level of 85.5 per cent and the national level of 92.1 per cent (National Statistics Coordination Board 1998, p. 11). Labour participation was roughly the same in 1998, but employment level has decreased to 90 per cent in 1998 (Bureau of Labor and Employment Statistics undated).

Employment in Region 4 has increased from 91.6 per cent (1991) to 92.5 per cent (1997), roughly parallel to the change in national levels. Nominal wages of non-agricultural workers are US\$5.93/day in 1997 compared to the NCR level of US\$6.28. Real wages are much lower: US\$2.93 for Laguna, US\$2.30 for Batangas and US\$2.32 for NCR (Bureau of Labor and Employment Statistics undated). Table 1 compares real and nominal productivity.

**Table 1: Nominal and real productivity\* (in US\$), 1986-97**

	Nominal productivity					
	1986	1988	1990	1991	1996	1997
NCR	4377.03	5024.12	5282.71	5326.10	8226.69	8135.57
Region 4	1737.90	1885.51	2051.25	2125.07	3266.74	3126.50
	Real productivity					
	1986	1988	1990	1991	1996	1997
NCR	4135.33	4008.53	3452.09	2899.26	2940.31	2671.08
Region 4	1719.70	1618.06	1437.78	1246.40	1407.47	1276.17

\* Defined as GDP/ total employed persons.

Sources: 1992 Dept. of Labor and Employment 1993, pp. 2-24.

Bureau of Labor and Employment undated.

Residents of Laguna where the economic zone is located benefit from the establishment of a PEZA-licensed industrial estate. First, they have a priority for hiring. The PEZA requires all registered companies to provide mandatory training to its local employees, starting with no less than two workers during the first year. An up-to-date listing of employment opportunities and training facilities are maintained at the park's Labour Centre, with the help of the company's Human Resources Division.

### 3.1.2 Quality of life

Poverty incidence in the country declined from 45.3 per cent (1991) to 32.1 per cent (1997), with threshold levels climbing at the rate of 55.9 per cent from PHP7302 per annum to PHP11388. In Region 4, poverty incidence declined from 43.2 per cent (1991), 34.9 per cent (1994) and 30.1 per cent (1997). Threshold levels increased at 54.8 per cent, from PHP8075 to PHP12507. A comparison of poverty incidence and thresholds from 1988 to 1997 is found in Tables 2 and 3.

**Table 2: Poverty thresholds (annual per capita, in US\$)**

	1988	1991	1994	1997
Phils	226.45	265.73	336.29	386.42
NCR	311.73	337.93	425.05	487.27
Region 4	229.05	293.86	360.97	424.39

Sources: Dept. of Labor and Employment 1993.  
National Statistics Coordination Board 1998.

**Table 3: Incidence of poor population\***

	1988	1991	1994	1997
Phils	46%	45%	41%	38%
NCR	25%	17%	11%	10%
Region 4	47%	43%	35%	30%

\* defined as the number of individuals whose annual per capita income is below the poverty threshold.

Source: National Statistics Coordination Board 1998.

Average annual income of families in the Philippines climbed 90 per cent from PHP65 186 (1991) to PHP123 881 (1997). In Region 4, it increased by 91.7 per cent from PHP68 960 (1991) PHP132 212 (1997), compared to the NCR levels of PHP138 256 (1991) and PHP274 823 (1997). More statistics are available in Table 4.

**Table 4: Average income and expenditure of families in the Philippines, NCR and Region 4 (in US\$), 1988-97**

	1988	1991	1994	1997
Total number of families				
Philippines	10 533 927	11 975 441	12 754 944	14 192 500
NCR	145 436	1 644 390	1 765 644	1 992 000
Region 4	1 284 464	1 615 856	1 731 396	1 938 200
Average income (in US\$)				
Philippines	1915.52	2372.21	3147.33	4201.25
NCR	3759.84	5031.33	6570.74	9325.51
Region 4	1800.33	2509.55	3316.69	4486.32
Average expenditure (in US\$)				
Philippines	1541.64	1892.02	2561.01	3399.86
NCR	2861.10	3847.70	5239.47	7465.89
Region 4	1519.69	2252.77	2690.57	3634.34

Source: National Statistics Coordination Board 1998, pp. 2-12, 2-13.

Closer inspection of Table 4 shows that income disparity is increasing: whereas in 1988 average income of the Philippines was 50.9 per cent of that in the NCR, this percentage in 1997 was only 45.1

per cent. Region 4's average income levels, however, increased somewhat compared to the NCR levels.

### 3.1.3 Industrial activity and foreign trade

Total establishments with foreign equity increased by 24.7 per cent for 1996-97 on a national level. Region 4 beats that with a growth rate of 135 per cent, while NCR had a more conservative growth rate of 14.7 per cent. This development is significant, because PEZA registered foreign firms must have at least 60 per cent of local equity. Table 5 gives a historical look at the growth of foreign firms in the country.

**Table 5: Number of companies with foreign equity, 1993-97**

	1993	1994	1995	1996	1997	Total 1997
Philippines	2000	2900	2800	3000	3741	43400
NCR	1300	2000	1900	1900	2180	21200
Region 4	200	200	200	200	467	4400

Source: Bureau of Labor and Employment Statistics 1998.

Both companies studied belong to the industry classified under 'Electrical machinery, apparatus, appliance and supplies' (Code 383). According to statistics, total establishments in this sector decreased from 313 establishments, employing a total of 98 834 workers (1993) (Department of Labor and Employment 1996, pp. 146-8) to 287, with a total employment of 127 058. (1995) (National Statistics Coordination Board 1998, pp. 6-4, 6-5). Sectoral revenues increased from US\$2.95 billion (1993) to US\$4.783 billion (1995), an increase of 51.8 per cent. Total costs, on the other hand, increased by only 19.7 per cent, from US\$2.539 billion (1993) to US\$3.206 billion (1995), with employee compensation accounting for an average of 11.7 per cent of total costs. Total value of output per capita improved from US\$30 426 per person (1993) (Department of Labor and Employment 1996, pp. 146-8) to US\$37644.53 per person (1995) (National Statistics Coordination Board 1998, pp. 6-4, 6-5). (See Tables 6 and 7).

**Table 6: Sectoral activity, 1991-1995**

	1991	1992	1993	1995
Total establishments	527	592	565	548
Total employment	26 759	27 312	2958	33 343

Sources: National Statistics Coordination Board 1998, pp. 6-4, 6-5.

Department of Labor and Employment 1996, pp. 146-8.

**Table 7: Sectoral revenues and costs, 1991-95**

	1991	1992	1993	1995
Total revenues (in US\$ mil)	2 558.55	3 150.76	2 985.25	4 783.04
Total costs (in US\$ mil)	2 047.21	2 644.95	2 539.40	3 206.95
Total compensation to cost	11.5%	11.6%	11.8%	not available

Sources:

National Statistics Coordination Board 1998, pp. 6-4, 6-5.

Department of Labor and Employment 1996, pp. 146-8.

Several conclusions can be drawn from these facts. First, industry is obviously technology-intensive and labour is a marginal contributor to production value. The persistence of this structure will be high since the company could easily substitute technology for lower, simpler human tasks. Second, it is an industry that has become increasingly profitable over the years. Smaller start-up costs, made possible by competitive capital incentives, accelerate the realisation of financial returns for the venture. Third, labour productivity has improved positively, as indicated by the value of output per capita, but where this is sourced and if this is significant can be determined only with more specific company details. Unchanged cost contribution of labour over the years implies that productivity must have improved as a result of either on-the-job learning or skills training.

Industry exports accounted for 28 per cent (Department of Labor and Employment 1996, pp. 146-8) of total exports in 1992 and increased to 51.64 per cent in 1997 (National Statistics Coordination Board 1998, pp. 6-4, 6-5) indicating an increasing external orientation of the industry's products. For a complete comparison of export growth by sector, see Table 8.

**Table 8: Total export growth, 1990-97 (in US\$ millions) Sector: Electrical machinery, apparatus, appliance and supplies**

	1990	1992	1994	1996	1997
Total industry exports	1964	2753	4 984	9 988	13 028
Total non-traditional exports	6635	8152	11 723	18 213	22 514
Total exports	8186	9829	13 483	20 543	25 228

Sources:

National Statistics Coordination Board 1998, pp. 6-4, 6-5.

Department. of Labor and Employment 1996, pp. 146-8.

### 3.2 Epson Philippines

Statistics about the company employment conditions follow:

**Table 9: Epson, Laguna and Batangas: average wage, weekly hours, No. of employees**

		1996	1998
Ave Daily Wage	Laguna	US\$ 4.61	US\$ 6.96
	Batangas	n/a	US\$ 3.59
Ave Hours Worked/ Week	Laguna	24.49	42.83
	Batangas	-	30.42
Ave No of Employees/Yr	Laguna	494	604
	Batangas	-	1284

One observes that the wage levels in the Batangas plant are 93 per cent lower than the Laguna plant in 1998. A closer inspection of the trend of working hours and the number of employees at the Laguna plant for the past twelve months (found in Table 10) explains why the wages in Laguna are much higher than in Batangas.

Over the past twelve month from April 1998 to March 1999, the number of employees has decreased by 51 per cent . The average number of working hours has similarly decreased, by a proportion of 30 per cent within the same period. From these one can infer that the company must be shifting into greater value-added labour for its Laguna plant, perhaps in the use of more sophisticated technical skills that lead to better productivity per head. The Laguna plant started with an average of 18.03

hours/week in January 1996, averaging 24.49 hours/week that year, which translates to barely 5 hours/day. Activity stabilised to about 50 hours/week by mid-1998, but started dropping to below-40 levels at the same time when the activity in the Batangas plant started picking up from 24.73 hours in August 1998 to 47.12 hours by March 1999, a 90.54 per cent increase.

**Table 10: Epson, Laguna and Batangas: Average weekly hours worked, average No. of employees**

	No. of hours worked/wk		Average no. of employees	
	Laguna	Batangas	Laguna	Batangas
April 1998	49.80	12.09	893	181
May 1998	45.42	11.49	891	192
June 1998	50.57	13.37	870	215
July 1998	50.33	18.98	845	311
August, 1998	49.90	24.73	801	647
September 1998	39.42	39.65	735	932
October 1998	36.76	10.93	641	1035
November 1998	40.32	47.12	625	1113
December 1998	35.25	44.55	625	1233
January 1999	31.00	45.56	626	1225
February 1999	38.27	49.17	613	1279
March 1999	47.11	47.43	588	1314

From the regional household income in Table 4, the average daily wage in Region 4 was PHP220/day.

Wages for the company's Laguna plant are clearly above regional levels, allowing for a minimum economic security. The high technical skill requirement in Laguna also gives a better advantage in terms of marketability in similar industries.

Wages in Batangas, in contrast, are below regional levels. They are much closer to minimum wage levels, leading one to infer that either many of workers there are employed on a contractual basis, or that employee skill levels are lower. Further inspection of the working hours in the past twelve months reinforces the former, as working hours dropped sharply by October, 1998 from 39.65 hours/week to 10.65 hours/week.

How does the company contribute to social development in Laguna and Batangas? Skills development, as it leads to higher wages, has favourable positive effects on social conditions, but its potential benefits are scaled back by the small labour component utilised in Epson's production process, as well as the company's inclination towards contractual employment. Given the unpredictable levels of activity in the larger Batangas plant, the use of contractual labour is likely to continue.

Capital-intensive industries like Epson, which have a small reliance on labour inputs, do not have as much direct contribution to regional employment, although the company stands to increase hiring over the next few years when the Batangas plant improves capacity utilisation. Indirectly, it will have a favourable effect on local industries supplying their raw materials, from whom Epson plans to source heavily. With raw materials comprising eighty-five percent of costs, this is expected to be significant. Greater consumption of goods stands to elevate sales activity of these factor providers; this hopefully translates to potentially greater employee benefits.

The notable shift in labour activity from the original plant in Laguna to the newer, larger plant in Batangas raises some significant questions about the security of employment opportunities within the company. What conditions will motivate the company to mechanise production systems further, thereby removing or displacing labour-infrastructure for outward bound goods for example? A study of the company's systems of rationalisation and capacity planning will provide some of these answers.

### 3.3 Phil. Steel Gratings Inc. (PSGI)

Statistics about the company employment conditions follow:

**Table 11: Phil. Steel Gratings Inc. (PSGI): average wage, weekly hours, No. of employees**

	1996	1999
Ave Daily Wage	US\$6.67	US\$5.21
Ave Hours Worked/ Week		
Regular workers	44	44
Contractual workers	46	46
Ave No of Employees/Yr	10	78

Company wage levels are below the regional rate of PHP220/day; in 1999, they were 9.09 per cent lower than average. Below-capacity operations and medium-skill requirements explain the difference. As of May 1999, the company is still waiting for the local industrial sector to completely recover from the effects of the Asian currency crisis, thereby allowing it to maintain only a skeletal crew. Its heavily-mechanised processes use manpower primarily for machine operation and customised steel welding, two types of jobs that merit a higher than minimum wage compensation compared to that for narrow assembly work. The company's wage levels seem to adjust accordingly to changes in the minimum wage law.

The company follows a strict policy for working hours which has not changed over the first three years of operation. Regular workers are allowed to work only for 44 hours/week, four hours less than contractual workers. These are stated figures and the actual figures might differ. Given less optimistic working conditions, one can reasonably infer that the actual operating hours are much shorter than provided by the company.

How does PSGI contribute to social development of the region? The scale of the company's operations and the absolute size of its labour force do not give it significant direct influence. Wage levels are somewhat lower and individual earnings are limited by shorter working hours and lesser opportunities in professional development. Marketability of a typical worker to another company or industry does not stand to improve significantly.

As a consumer of production factors, the company cannot be considered a major contributor either, since it continues to import the bulk of its raw material, steel bars, from overseas suppliers in Taiwan. It has not expressed any intention of finding more satisfactory supplies from local sources. The technology for manufacturing is proprietary; hence machinery is also imported from its mother company. The supply market sustained by PSGI is galvanising, which will be provided by a nearby firm.

### 3.4 Relocation and its impact

This chapter produces two preliminary conclusions for discussion.

First, foreign investors lend varying influences to social development. As discussed, both capital-intensive companies do not stand to produce large direct benefits to social development in the communities they operate in. Epson, having close to 2000 total workers in Laguna and Batangas, created a nominally large number of jobs, but compared to its total output of value this is of relatively small social consequence. The material contribution of both firms to society will be the increase of capital stock generated from initial investment and reinvestment. Is this the desired impact of the government?

If the Philippine government aims to use foreign investment as an instrument to alleviate social conditions (i.e., creating more jobs), it might benefit from identifying the types of investor required. Investment incentives attract companies that have a lot to contribute to social welfare, as well as those that have little to impart. Using more concrete measures to assess a prospective investor's social contribution will lead to better liberalisation of entry into country's industrial markets.

Second, despite the conventional desirability of lower factor cost conditions, Epson and PSGI illustrate cases where political risk and proximity to a growing market demand play a more significant role in the choice of where to internationalise.

Epson's stronger deciding factor was political risk. It chose not to expand operations in current locations world-wide because its operations are capital-intensive and are difficult to pull out in the event of a crisis. As a result, its investments in any location are likely to persist in spite of economic fluctuations like inflation and currency revaluation, so long as the relative profitability remains.

PSGI on the other hand is a company that was motivated by the benefits to localise. Its possession of modern and cost-efficient technology in an industry that is relatively unsaturated gives it an undeniable competitive edge that will be difficult to overtake in the market. A smaller company compared to Epson, it manifests greater sensitivity to factor conditions, specifically to the presence of an important allied service, galvanising.

Would both companies have chosen to invest in the Philippines had government investment incentives been less attractive? Would they have invested given these incentives if the economic environment was less secure? The author believes that with the diverse needs of international businesses, financial incentives are only one of the many incentives for investment, but certainly not the only one. Political risk, supply conditions, quality of labour, presence of upstream and downstream markets are some of the many criteria that investing firms will consider. In some cases, certain conditions may be so important that they override the absence of other favourable accessory conditions; in other cases, not even the most competitive conditions and enticements can offset the presence of one serious threat or risk.

Firms may come and go despite the presence of such enticements and local industries may only be disadvantaged with the easy entry of foreign players in the market. Because of the significant allocation and income effects of introducing competition into a local market, governments too must learn to understand the rationale behind business internationalisation in order to profit from its opportunities.

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