

Chapter V - Leading Sectors for U.S. Exports and Investment

The following highlights “leading sector” sales prospects, i.e. sectors of the Indonesian economy that remain active **despite or because of** the current economic recession. It also includes sectors that will bounce back quickest when economic improvement begins. The list is not a shopping guide to immediate sales opportunities, however, because unfortunately there are few such mirages on the horizon. As this is written, the bottom unfortunately has not yet been reached in Indonesia’s economic shake out.

Indonesia’s economic recovery likely will be led by private sector exporters, private -- especially foreign -- investment in existing and new facilities, and by donor-funded infrastructure investment. Major project activity will become more dependent than ever before upon donor financing from IBRD, ADB, Japanese OECF and bilateral lenders. TDA, USAID, and US-AEP training grants, orientation visits, and technical assistance and TDA feasibility studies will become even more crucial to U.S. firms confronting competitor subsidies.

In addition to the leading product and service sectors mentioned below, other sectors that bear watching as they weather the current recession include:

Boats (commercial and fishing): Previous bans on new and used commercial and fishing boats have been removed. Export oriented deep sea fishing and fast ferries offer business opportunities. The government wants to open more distant islands to tourism; with cuts in air flights because of high costs, ferries offer an alternative means.

Hotel and Restaurant Equipment: If tourism remains among Indonesia’s healthier sectors, especially on Bali and resort islands near Singapore, there will be a continuing good market for equipment in this sector. Even in Jakarta, 28 new hotels containing 6,000 rooms are scheduled to be built over the coming two years. Boutique and three star hotels in outer islands offer growth opportunity.

Information Technology: Businesses will want efficiency-inducing new technology to enhance competitiveness, train employees, and take advantage of market openings caused by the IMF-induced new openness. Swings in the exchange rate suggest a need for real-time data networks and financial software. Enhancements in tax auditing and other financial services will require IT.

Security and Safety Equipment: A rash of newspaper ads have appeared since the riots of spring 1998 offering the security of fire proof safes and cabinets, and a miscellany of surveillance and security equipment for office, shop, and home. A prominent kidnaping in September 1997 shows the need for private protective security systems. Business ennui in general, combined with traditional inattentiveness to fire safety and the demonstrated shortcomings this year of city fire departments will

prompt owners to buy fire protection gear for their properties. Another subsector relates to forest and brush fire fighting equipment that would protect plantation owners and land clearers from the threat of uncontrolled fires.

Textile Equipment: Although U.S. firms have been under represented in this sector, textiles and clothing are expected to lead Indonesia's export-led economic recovery and new, efficient equipment is needed.

Used Equipment (in general): New regulations permit the import of used equipment, especially complete assembly or process lines for new factory investment. The rationale is cost-savings and technology that improves upon existing technology, even if it may be used and therefore not the "latest." Cost conscious Indonesian investors, shy of foreign exchange, are the target customers.

In addition to export opportunities, there are investment and marketing opportunities that opened in Indonesia because of the recession. Investors from Taiwan and Hong Kong, Japan, South Korea, Europe and the United States have already bought Indonesian real estate and bought out local partners' shares of manufacturing ventures. Some wealthy Indonesians are doing the same, as local assets become increasingly attractive in value. Long-term opportunities exist for foreign ownership alone, or in joint venture with Indonesians, in the operation and maintenance of public utilities, transport facilities such as toll roads, ferries and airlines, residential and commercial real estate, industrial parks, export-oriented or import substitution factories, and a plethora of service industries.

Wholesale and retail trade was opened to foreign investment in 1998 as a result of the IMF agreements. Although the regulations in these fields remain to be tested and retain some restrictions particularly in retail trade, they give clear, new rights to foreigners that previously were restricted to Indonesians.

The "leading" sectors of opportunity are listed below, both in non-agricultural and agricultural sectors.

Best Prospects for Non-agricultural Goods and Services

Best Prospects are ranked by estimated growth, in U.S. dollar values, of U.S. exports over the coming year. U.S.\$1 = Rp. 10,000

1 Oil and Gas Equipment (OPG)

Oil and gas exploration and production in Indonesia has been largely unaffected by the monetary crisis. Up until the year 2000, it is estimated that this sector will pull in at least a \$4 billion of foreign investment per year.

In the past five years, 76 oil contracts were signed, representing an investment of approximately \$20 billion in exploration, field development, and production activities. In

1997, investments in exploration and production amounted to \$4.5 billion. Investments in these activities are projected reach \$6.3 billion in 1998, of which \$1.5 billion will be for exploration. The target for 1998 is to drill 206 wells. The number of production sharing contracts signed has increased to more than 20 in 1997, up from an average of 15 per year. In the first two months of 1998, up to February 24, 1998, six more contracts had already been signed.

Indonesia imported \$570.5 million worth of oil and gas equipment in 1997. Equipment (including pile-drivers and pile extractors, parts of boring/sinking machinery, line pipe used for oil or gas pipelines, drill pipe used in drilling for oil and gas, other forms of drill and line pipes, and floating or submersible drilling or production platforms) was all imported from various countries.

U.S. products amounted for \$280 million, or 49.1% of the total import equipment. American suppliers are particularly strong in the following equipment: tools for drilling (not rock drilling), self propelled boring and sinking machinery, other forms of boring or sinking machinery, parts of boring/sinking machinery, longitudinally submerged arc welded line pipe, other types of pipe line used for oil or gas pipelines, casing and tubing used for drilling for oil or gas, and floating or submersible drilling or production platforms.

It is predicted that the market for oil and gas equipment will slightly increase in the next two years. Some oil and gas companies with ongoing operations are expected to try to increase their production capacity. In addition, new equipment demands will come from new contractors concentrating on exploration activities. Based on past history, equipment from the United States is expected to lead the market, capturing almost 50% of market share, as American oil and gas equipment has dominated the Indonesian market for the past three years.

USD millions	1997	1998 (Est)	1999 (Est)
A. Total market size	625.0	687.5	756.5
B. Total local production	90.0	100.0	110.0
C. Total exports	35.5	40.0	45.0
D. Total imports	570.5	627.5	690.5
E. Imports from the U.S.	280	310	345.0

Note : The above statistics are unofficial estimates.

2

Telecommunication Equipment

TEL

Indonesia has displayed a strong commitment to the development of its telecommunication infrastructure. In 1997, despite the economic turmoil, Indonesia's telecommunications equipment imports was increased more than 9% from 1996. In that year, Indonesian import value for telecommunications equipment was US\$1,504 million. In 1997, with a 30% market share, United States played a substantial role in Indonesian telecommunications equipment imports. This figure is nearly double compared to that of 1996.

In 1997, the largest Indonesia's telecommunications equipment imports were digital line systems (H.S. 8517.50.000: Other Apparatus for Carrier-Current Line Systems), accounting for 22% of telecommunication imports. The biggest supplier for this telecommunications equipment was the United States (39%), followed by Finland (15.4%), Germany (13%), and the United Kingdom (9.2%). Most of the telephonic switching apparatus imports (H.S. 8517.30.100), accounting for 15.3% of telecommunication imports, came from Germany (52.7%). U.S. imports (30.5%), and imports from the Netherlands (3.6%) followed. Imports of telephone set parts (H.S. 8517.90.100) accounted for 10.8% of imports, and they mostly came from the United States (69.6%), Germany (11.5%) and Taiwan (5.7%).

USD million	1997	1998 (Est)	1999 (Est)
A. Total market size	1,973	2,008	2,068
B. Total local production	678	684	717
C. Total exports	209	205	251
D. Total imports	1,504	1,529	1,602
E. Imports from the U.S.	455	459	481

Note: The above statistics are unofficial estimates.

Exchange Rates: 1 US Dollar equals:

1997: Rp. 5,000

1998: Rp. 10,000 (GOI target by the year of 1998)

Future inflation rate: 70%

3

Mining Equipment

MIN

Indonesia's main mineral resources are coal, gold, some conventional metals, rare metals, industrial metals and building materials. The mining sector comprises about 15% of the national economy, of which 10% is attributed to the oil and natural gas sector, and 5% to the general mining sector, consisting mostly of surface mining activities.

In 1997, the government signed Sixth Generation Contract of Works (COW) with 65 mining companies and Third Generation coal COWs with 68 companies. From January 1998 to June 1998, the government approved 72 mineral COWs and eight coal COWs.

During the past ten years, the export of mining products increased at an annual growth rate of about 21.1%. Coal became the largest export commodity in 1997, with a total value of US\$ 1.65 billion. Copper was the second largest export commodity, with a total export value of US \$1.58 billion. Almost 95% of tin production is exported, while exports of coal amount to 77% of total production. Indonesian nickel, copper concentrate and aluminum are all exported.

The total market for surface mining equipment has grown at an average annual rate of 22% over the past five years. Imported products account for about 82% of all surface mining equipment purchased in Indonesia. Imports of surface mining equipment totaled \$724.8 million in 1996, 57.7% greater than 1995 levels of \$459.7 million, which were in turn 26.1% greater than 1994 imports, valued at \$364.5 million.

Because of the current economic situation, the demand for surface mining equipment is projected to decrease 30% from the demand in 1997. U.S. products accounted for \$147.4 million, or 18.1% of all surface mining equipment imported by Indonesia in 1997. American suppliers are particularly strong in the following equipment: parts of boring and sinking machinery, other machinery for processing earth, stone ore and the like, pile drivers and pile extractors, self-propelled machinery, miscellaneous cranes, bulldozers, parts of loading machinery, conveyors, crushing and grinding machines for stones, and pneumatic elevators.

USD millions	1997	1998 (Est)	1999 (Est)
A. Total Market Size	948.2	663.5	730.0
B. Total local production	174.0	174.0	191.5
C. Total exports	41.2	81.0	89.5
D. Total imports	815.4	570.5	628.0
E. Imports from the U.S.	147.4	103.2	113.5

Note: The above statistics are unofficial estimates.

4 Industrial Pumps PVC

The economic crisis that began in July 1997 is responsible for the decline in demand of industrial pumps; however, prospects remain relatively good for the coming years. Due to the lack of advanced technology, domestic competition will continue to be limited to low to medium-price and medium quality segments. The technological level of the country's pump industry is not expected to improve significantly, and foreign suppliers will continue to dominate the medium to high end markets. American-made industrial pumps are well

represented in Indonesia and enjoy an excellent reputation. U.S. brands, known for their quality and durability, have progressively gained market share, particularly in the petrochemical, oil and gas and energy industries. In addition, the majority of oil industry consultants are American.

Promising Subsectors: oil and gas (API standards) pumps and chemical pumps.

USD millions	1997	1998 (Est)	1999 (Est)
A. Import Market	130.3	52.1	78.1
B. Local Production	2.0	2.0	2.1
C. Export Market	1.6	1.7	1.7
D. Total Market Size	130.6	52.5	78.6
E. Imports from the U.S.	36.5	18.2	21.9

Note: The above statistics are unofficial estimates.

5 Food Processing & Packaging Equipment FPP

Although Indonesia is currently suffering from the economic crisis, Indonesia's food processing sector is still viable for U.S. exporters. The market growth for food processing machinery and equipment in 1996 showed an increase of around 33% from the previous year.

The Government of Indonesia made several reforms that positively effected the growth of the food processing sector in 1998. These reforms include the liberalization of foreign investment in plantation sectors, particularly in the palm oil industry and the sugar industry. The import figures in 1997 for sugar manufacturing machinery and machinery used in the milling industry showed an increase of more than 70% from the previous year. In 1997, imports of palm oil equipment totaled \$397 million: this represents a 36% increase over 1996 levels. Main competitors for U.S. products come from Germany, Italy and Japan.

USD millions	1997	1998 (Est)	1999 (Est)
A. Total market size	418	393	393.5
B. Total local production	38	42	46
C. Total exports	13	14	15.5
D. Total imports	393	365	363
E. Imports from the U.S.	24	21	23

Note: The above statistics are unofficial estimates.

6

Forestry and Woodworking Machinery

FOR

Currency turmoil has led to increased activities in Indonesia's timber and wood-processing industries, as these industries are capable of providing additional sources of foreign exchange and employment and are needed to clear land for plantation crops. Foreign exchange earnings from exports of wood and other forest-related products are estimated to reach \$8.25 billion in 1998. In addition, the opening of palm oil plantations to foreign investment will result in more forest clearing in Kalimantan and Sumatra islands, and potential business for U.S. suppliers of forestry cutting equipment. The government has converted 3.4 million hectares of forest into plantation areas, 2.4 million of which has been converted into oil palm estates.

Promising Subsectors: wood-working equipment.

USD millions	1997	1998 (Est)	1999 (Est)
A. Import Market	749.7	374.8	431.1
B. Local Production	--	--	--
C. Export Market	--	--	--
D. Total Market Size	749.7	374.8	431.1
E. Imports from the U.S.	8.1	4.0	4.5

Note: The above statistics are unofficial estimates.

7

Medical Equipment

MED

Despite the economic crisis, medical equipment and supplies will continue to be in demand due to Indonesia's population of 202 million people, an expanding hospital and health center system, and the growing awareness of the dangers of communicable and infectious diseases, particularly cholera, AIDS, malaria, hepatitis, and dengue fever. Hospitals are expected to cut back on purchases of capital medical equipment, but will concentrate on buying basic supplies, particularly disposable medical equipment. The largest buyer of equipment and supplies, representing about 60% of purchases is the Indonesian government. The government is heavily dependent on soft loan financing for its capital purchases.

The market consists of over 90% imports with very few locally sourced or manufactured items. As a result of high costs caused by the rupiah's devaluation, there has been a shortage of supplies for hemodialysis equipment, i.e. dialysers, bloodlines, and AV fistulas. Other products that will continue to have good market prospects are disposable medical equipment, catheters and reagents. We estimate that the market size for disposable will be at \$19 million. The market for disposable medical equipment is dominated by Japan, followed by the United States. U.S. products are considered to be of excellent quality and very reputable; therefore we envision that the demand for U.S. disposable medical products will continue.

USD millions	1997	1998 (Est)	1999 (Est)
A. Total Market Size	75.2	31.3	32.9
B. Total Local Production	35.8	37.6	39.5
C. Total Exports	34.0	35.7	37.5
D. Total Imports	73.4	29.4	30.9
E. Imports from the U.S.	3.8	1.5	1.6

Note: The above statistics are unofficial estimates.

8

Hand and Power Tools

TLS

Market activity for the supply of hand and power tools has grown continuously during the last few years in Indonesia. Demand for hand and power tools has declined in several industries such as automotive and construction because of the current currency turmoil, but other sectors, such as oil and gas, mining, and wood working show stronger demand. Government plants, such as IPTN (aircraft industry), PAL (shipyard building), and PINDAD (munitions industry), maintenance and repair facilities purchase only the highest quality tools and tools sets. In the absence of any significant domestic production, the demand for all types of hand and power tools is satisfied mainly by imports. Until the overall economic condition of the country improves, the outlook in this sector is relatively good.

Promising Subsectors: oil and gas, mining, and food industries and repair and maintenance tools.

USD thousands	1997	1998 (Est)	1999 (Est)
A. Import Market	76.6	38.3	42.1
B. Local Production	2.0	2.0	2.1
C. Export Market	12.4	7.4	8.2
D. Total Market Size	66.1	33.0	36.3
E. Imports from the U.S.	3.5	4.6	5.5

Note: The above statistics are unofficial estimates.

9

Educational and Training Services

EDS

The Government of Indonesia (GOI) is planning to release a set of new regulations which will allow foreign educational institutions, at all levels of study, to operate in Indonesia. This deregulation offers U.S. educational institutions tremendous opportunities in Indonesia, since U.S. education is considered to be of very high quality to Indonesians. As the world's 4th

largest country, with a population of 202 million, Indonesia offers a huge potential market. In 1997, there were 76 state-run and 1,228 private universities in Indonesia with approximately 1,500,000 students and 850,000 students respectively. Places at state universities are highly sought after because of lower tuition fees and relatively higher quality. In addition to the number of students enrolled in universities across Indonesia, the number of Indonesian students studying in the United States increased to approximately 13,000 students in 1997, with 70% undergraduate and 25% postgraduate.

Because of the on-going economic crisis, studying abroad has become prohibitively expensive for many Indonesians who seek a foreign education. Thus, educational institutions that are able to provide the benefits of a foreign education without the costs of traveling abroad are likely to be popular options. Recently, through cooperation with a local Indonesian company, Australia's Monash and New South Wales University announced plans to open pre-university classes in Jakarta.

Note: statistics for this sector are not yet available.

10 Accounting and Financial Services ACT and FNS

As a result of the monetary crisis, many companies have started to streamline their operations and restructure their organizations, while others have gone bankrupt. Mergers and acquisitions activities, involving both foreign and domestic companies have also increased. In addition, as a result of the agreement in between the Government of Indonesia (GOI) and the International Monetary Fund (IMF), the GOI is initiating major reforms of the country's monetary sector. A number of banks have been liquidated while others have been put under the GOI's supervision. Also, a large portion of Indonesia's insurance industry is technically bankrupt and it is likely that many Indonesian insurers will merge with or be taken over by foreign investors within the next two years. Given the situation, the demand for the internationally-accredited accounting and financial services is expected to increase, especially in assisting mergers and acquisitions activities involving foreign companies. At the present time, U.S. companies dominate this field, and competition among them has been tight.

USD millions	1997	1998 (Est)	1999 (Est)
A. Total market size	13,161	13,819	15,200
B. Sales by local firms	n/a	n/a	n/a
C. Foreign sales by local firms	n/a	n/a	n/a
D. Sales by foreign-owned firms	n/a	n/a	n/a
E. Sales by U.S.-owned firms	n/a	n/a	n/a

Note: The above statistics are unofficial estimates.
Exchange Rate 1995-1996 1 US\$ = Rp 2,500
Exchange Rate 1997-1999 1 US\$ = Rp 10,000

11

Pollution Control Systems and Equipment

POL

The two major markets for environmental technology sales are Industrial and Municipal. Indonesia has fairly rigorous environmental laws and regulations. However, pollution is a major and growing social problem because there is little or no "Best Available Technologies" (BAT) used on municipal infrastructure projects. Enforcement of the laws and regulations are lax because the cost of pollution or the value of the environment is not factored into government or industrial policies' cost-benefit analysis. Therefore, pollution reduction or control is performed through manufacturing process upgrades during "business-cycle" linked expansion or reactive ad-hoc government intervention in the case of major spills or problems.

However, there is a new government program of rating manufacturers according to a color scheme (i.e., gold to black). The government has and will continue to publicize these ratings. There has been limited success in encouraging manufacturers to at least be aware of or to exercise some control over their emissions. The initial group of 300 companies has had their plants audited by independent consultants. The government wants at least 750 firms in this rating program by the year 2000. The government figures that when 2,000 firms are in this program, the program will be catalytic in driving the industries to quickly adopt greener standards.

As a result, opportunities exist for U.S. environmental products and services. The large multi-national corporations operating in Indonesia usually adhere to environmental standards and buy U.S. environmental services and products. In addition, new power plants are required to adhere to stricter environmental standards.

Although local manufacturers are less willing to spend money on pollution controls equipment, their spending habits may change with the implementation of ISO 14000 in the coming years. Although participation in ISO 14000 is voluntary, manufacturers will probably need to upgrade their environmental compliance standards if they wish to continue to export to Europe.

Although the industrial waste treatment industry is still in its early stages of development, there are indications that it will grow in the coming years. One such indication is the willingness of large foreign waste management firms to invest in hazardous waste treatment facilities in Indonesia in the past few years.

The best prospects for U.S. environmental technologies are in the following industries: Textile Industry, Pulp and Paper Industry, Mining Industry, Chemical and Petrochemical Industry, Food Processing Industry, Electronics Industry (including electroplating), Leather Tanning/Leather Products Industry.

The environmental market on the municipal side includes the construction and management of wastewater treatment, water supply, and solid waste facilities. The Indonesian government is taking a hands-off approach, assigning the private sector a greater role in building up the country's much needed urban environmental infrastructure. This approach gives American C&M firms the opportunity to not only bid on large environmental infrastructure projects, but also provide financing and manage revenue collection.

U.S. firms interested in the sector can take advantage of programs offered by the U.S. - Asian Environmental Partnership located in the U.S. Commercial Center in Jakarta (See Chapter XI for more contact information).

USD Millions	1996	1997 (Est)	1998 (Est)
A. Total Market Size	900	1,100	180
B. Total Local Production	0*	0*	0*
C. Total Exports	0*	0*	0*
D. Total Imports	900	1,000	180
E. Imports from the U.S.	175	280	40

Note: the above statistics are unofficial estimates, pending donor loans.

* Negligible amounts, if any.

BEST PROSPECTS FOR AGRICULTURAL PRODUCTS

COTTON

With a large textile industry and insignificant domestic cotton production, Indonesia remains a major cotton importer. Imports approached 470,000 mt in cotton marketing year 1997, with the United States capturing a market share of 24 percent. The textile industry has been seriously affected by the economic crisis that began during the latter half of 1997, leading to a restructuring of the industry. However, the export-oriented mills are expected to lead the recovery, with Indonesia remaining a major importer of U.S. cotton.

1,000 Metric Tons	1996/97	1997/98	1998/99
	Aug/Jul Marketing Year (Est)		
A. Total Market Size	475	390	360
B. Total Local Production	3.8	3.8	3.8
C. Total Exports	0	0	0
D. Total Imports	467	375	360
E. Total Imports from U.S.	114	83	79

SOYBEANS

Indonesia is a major consumer of soybeans for food use. Per capita consumption of soybeans, primarily in the form of tofu and tempe, is over six kilograms annually. The United States is the dominant supplier of the large and growing import market for soybeans. Increased emphasis on corn production suggests that domestic soybean production will remain flat while demand and imports continue to rise. Domestic consumption has not been affected by increased prices, as soybean products remains the most inexpensive protein source for the Indonesian consumer.

1,000 Metric Tons	1996/97	1997/98	1998/99
	Oct/Sept Marketing Year (Est)		
A. Total Market Size	2,130	2,080	2,200
B. Total Local Production	1,460	1,360	1,500
C. Total Exports	0	0	0
D. Total Imports	672	700	700
E. Total Imports from U.S.	672	650	500

SOYBEAN MEAL

During this decade, demand for poultry and other meats showed impressive growth due to the rapid economic expansion and concomitant rise in incomes. Though this sector has been particularly affected by the economic situation, medium to long-term prospects remain bright. Consolidation of the poultry industry and some initial plans to enter the export market for processed poultry products may lead to increased opportunities for higher quality soybean meal from the United States.

1,000 Metric Tons	1996/97	1997/98	1998/99
	Oct/Sep Marketing Year (Est)		
A. Total Market Size	1,065	470	380
B. Total Local Production	0	0	0
C. Total Exports	0	30	0
D. Total Imports	1,104	430	350
E. Total Imports from U.S.	56	60	60

WHEAT

As home to the largest flour mill in the world and the world's largest producer of instant noodles, Indonesia consumer up to four million tons of wheat annually. No wheat is grown in Indonesia, making it totally dependent on imports. Australia remains the major supplier, but de-monopolization of the state trading firm known by its Indonesian acronym of Bulog is expected to lead to expanded opportunities for U.S. wheat.

1,000 Metric Tons	1997	1998 (Est)	1999 (Est)
A. Total Market Size	3,800	3,500	3,600
B. Total Local Production	0	0	0
C. Total Exports	0	0	0
D. Total Imports	3,742	3,500	3,600
E. Total Imports from U.S.	65	100	100

Consumer Ready Food Products

Most consumer ready food product imports are consumed by Indonesia's upper and middle class, business travelers and tourists. U.S. imports have dropped by about 50 percent since the crisis hit in July, 1997. Before the crisis, Indonesia was one of the fastest growing markets for U.S. suppliers and the market should pick back up quickly when the economic situation begins to improve.

Imports of U.S. Consumer Ready Food

USD 1,000,000	1997	1998 (Est)	1999 (Est)
Fresh Fruit	50	25	50
French Fries	16	8	16
Dairy	16	8	16
Meat	13	6	13
Snack Foods	2	1	2
Total Consumer Ready Food	116	58	116