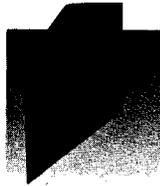


Big emerging markets and U.S. trade

Linda M. Aguilar and Mike A. Singer



"No nation was ever ruined by trade."

—Benjamin Franklin

The preceding quote by Benjamin Franklin is as true today as it was 200 years ago. United States history is steeped in trade and trade debate, from the pivotal role of the Boston Tea Party in shaping the United States as a nation, to the recent debate over the merits of U.S. ratification of the present round of the General Agreement on Tariffs and Trade (GATT) negotiations.

The U.S. Department of Commerce is actively involved in promoting exports. In 1993, President Clinton announced a National Export Strategy for the United States, described as "a comprehensive plan [that] upgrades and coordinates the government's export promotion and export finance programs to help American firms compete in the global marketplace."¹ In particular, the National Export Strategy identifies past problems with U.S. trade promotion efforts and recommends improvements to current ones. This includes enhancing existing trade finance ones such as the Exim Bank and the Overseas Private Investment Corporation and creating a Tied Aid Fund to help U.S. firms compete on a level playing field. As an outcrop of this initiative, Commerce identified ten foreign nations as the big emerging markets (BEMs) of the upcoming century, markets where the potential for trade growth is the greatest.

It has long been recognized that exports play an important role in the U.S. economy because they support jobs and they represent a significant component of gross domestic product (GDP). Over the last few years, U.S. exports have contributed significantly to overall

GDP growth. But targeting emerging markets is a new concept for the U.S. In the past, the nation could expect trade to expand steadily with its traditional trading partners—mainly Europe, Canada, and more recently, Japan. As the National Export Strategy was being developed, however, it became clear that the U.S. could not rely on these partners as a source of continued growth. In fact, trade with our traditional trading partners has been, and is projected to continue to be, flat.² The next logical step was to determine where growth was likely to occur. Thus was born the BEM initiative.

In addition to growth potential, the ten BEMs have other traits in common. They are all physically large with large populations, have recently undergone some program of economic reform, are politically important to their region of the world, and are likely to spur growth within their regions.³ Where are these markets? Geographically they represent several parts of the world. In Asia they are China, Indonesia, India, and South Korea; in Latin America they are Mexico, Argentina, and Brazil; in Central and Southern Europe they are Poland and Turkey; in Africa it is South Africa.

Commerce estimates that the BEMs and other less developed countries will be the fastest growing import markets through the year 2010. By then, the BEMs are expected to account for 27 percent of total world imports, three times their 1992 share.⁴ U.S. firms will want to capture as much of that market as possible. With accurate knowledge and support from all levels of government, they can realize that goal; to some extent, they are already

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ahead of the curve. In 1987, U.S. commodity exports to the BEMs accounted for nearly 15 percent of all U.S. exports. By 1994, the BEM market had grown to 20 percent of all U.S. exports—an increase of \$65 billion. Total exports to the BEMs increased 177 percent.

State governments also actively promote exports and overseas business opportunities for firms located in their state. In the Seventh Federal Reserve District, which includes all of Iowa and parts of Illinois, Indiana, Michigan, and Wisconsin, efforts by state governments may have helped exports to the BEMs grow from 10 percent of all District exports in 1987 to 13 percent in 1994, an increase of \$5.6 billion in goods.⁵ Total District exports to the BEMs grew 152 percent over the period, with those to Indonesia, Argentina, and Brazil experiencing the largest growth (425 percent, 334 percent, and 249 percent, respectively).

This article will begin by examining the import profiles of the BEMs as a group over the 1988–92 period. We then present U.S. and Seventh District exports to these markets for roughly the same time period. Next we examine agricultural exports separately because of the important role played by Seventh District states in U.S. agricultural output and trade. We then provide additional detail on U.S. trade with several of the larger BEMs. The following section examines current U.S. and District export promotion initiatives. Finally, we sum up and conclude with an assessment of how well U.S. exports are meeting the needs of the BEMs.

The data in this article represent the full range of goods that can be bought and sold in the marketplace, including agricultural goods, minerals, clothing, chemicals, metals, machinery, scrap and waste, secondhand goods, and antiques. They do *not* include services. We used several data sources. Import data on the BEMs came from United Nations data and cover the 1988–92 period. We chose 1988 as the base year for import data since U.S. trade with the BEMs has only recently started to expand. We chose 1987 as the base year for export data solely because that was the start year of one of the data series we used. Detailed Census data on U.S. exports are more current and are available through 1993, but to avoid confusion we used those data only when discussing total U.S. exports or aspects of the BEMs unrelated to the United Nations data. State export data, based on Census data, came from the Massachusetts Insti-

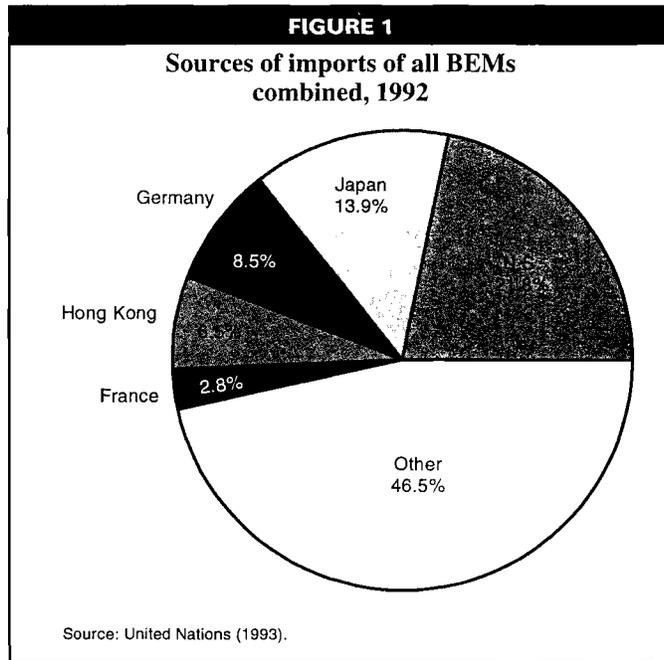
tute for Social and Economic Research (MISER). These data were available through 1994, but we used them only for aspects unrelated to United Nations import data.

One other note on the data. In reporting imports for the BEMs, the United Nations uses the Standard International Trade Classification (SITC) system, a system originally developed in 1950 by the United Nations so that all countries reporting trade statistics would use comparable categories. However, for most purposes, U.S. trade is reported on the basis of the Standard Industrial Classification (SIC) system that was originally developed for analyses of domestic commerce. These two systems (as well as several other reporting systems) are not generally comparable. Although the commodity or industry descriptions may sound similar, the actual components that comprise them are generally not the same.

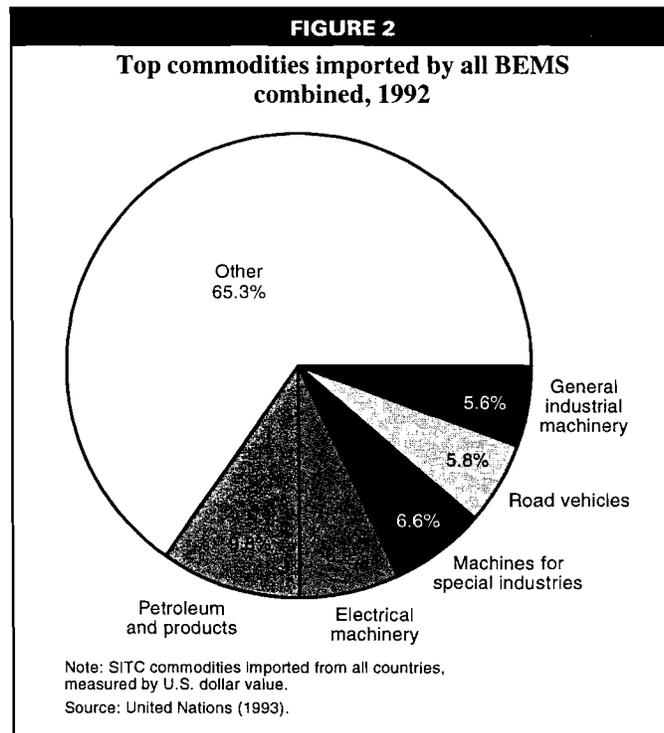
The growing BEM market

The BEMs' share of world imports grew from 7.7 percent in 1988 to 9.3 percent in 1992. In the latter year, the BEMs imported \$357 billion in commodities. The U.S. captured the largest share with nearly 22 percent, up from 20 percent in 1988. Japan held second place with approximately 14 percent, down from 17 percent in 1988. Germany captured nearly 9 percent, as it did throughout the period (see figure 1). South Korea and China are by far the largest of the BEMs in terms of total imports. In 1992, each of those two countries imported around \$81 billion in goods. Mexico was the next largest with nearly \$48 billion.

Two things stand out about the types of goods that the BEMs imported in 1992. First, the single largest import commodity was petroleum and petroleum products (mostly crude petroleum and fuel). Second, the next four largest import commodities were all in machinery and transportation equipment—electrical machinery (such as household appliances and switchgears), machines for special industries (such as textile and leather machinery), road vehicles, and general industrial machinery (such as heating and cooling equipment). Combined, these five commodity categories accounted for \$124 billion, or about 35 percent of total BEM imports (see figure 2).



This collective import profile of the BEMs shows an emphasis on production rather than consumer goods, reflecting a desire to develop the capacity to produce their own goods for consumption or export. Given this desire, the



BEMs need machinery imports to build an industrial structure or upgrade an existing one. Thus several of the Asian BEMs' machinery imports are in the textile and apparel industries. Road vehicles, telecommunications, and electronics and electrical machinery are in demand in the Latin American BEMs, and machinery for special industries is in demand in several others, for example, industrial food processing machinery in Poland. To fuel these industries (literally), petroleum and petroleum products are needed—for the factories, equipment, workers' homes, workers' transportation, and so on.

Individually, some of the BEMs had quite different import profiles than the group as a whole (see table 1). For example, China's second-largest import commodity is textile yarns, which in turn support two of their major export industries—clothing and accessories, and textile yarn and fabrics. Combined, these two industries accounted for 30 percent of China's exports in 1992. India's

only similarity with the BEMs' collective import profile is that its top import commodity is petroleum and petroleum products. Its second-largest import commodity is nonmetal minerals, which include precious and semiprecious stones, primarily rough unset diamonds. Diamonds accounted for 15 percent of India's exports in 1992. Indonesia's imports also vary substantially from the group's overall profile.

Another way in which the BEMs differed from each other was in who their largest sources of imports were (see table 2). As could be expected, several countries had a neighboring country among their top three sources. For example, of all the goods that China imports, Hong Kong was the single largest supplier, capturing over 25 percent of the total. Of Argentina's

TABLE 1

Top commodities imported by selected BEMs, 1992

	Value (\$U.S. billions)	
China	\$8.3	Machines for special industries
	7.8	Textile yarns
	4.9	Electrical machinery, NES ^a
	4.5	Iron and steel
	4.2	Plastic materials
35.6% of total imports		
Indonesia	\$2.7	Machines for special industries
	2.5	General industrial machinery, NES ^a
	2.1	Petroleum and products
	1.7	Power generating equipment
	1.5	Iron and steel
38.3% of total imports		
India	\$6.6	Petroleum and products
	2.8	Nonmetal mineral (manufactures), NES ^a
	0.9	Inorganic chemicals
	0.9	Iron and steel
	0.8	Fertilizers (manufactures)
59.1% of total imports		

Note: SITC commodities imported from all countries, measured by U.S. dollar value.

^aNot elsewhere specified.

Source: United Nations (1993).

total imports, Brazil was the largest source, providing 23 percent. In turn, Argentina was Brazil's third-largest source, providing 8 percent of the latter's imports.

Total import growth for the BEMs over the 1988-92 period was nearly 59 percent. By comparison, total world imports grew 32 percent, and among the industrialized countries, U.S. imports grew by 21 percent, Japan's by 25 percent, and Germany's by 63 percent. Germany's spectacular increase can be attributed to the country's reunification and the increased demand resulting from the effort to bring the former East Germany up to par with the rest of the country. (East Germany was not included in the 1988 data). In addition, the BEMs as a whole registered a higher average annual import growth rate than did either the U.S. or Japan, both of which have experienced recent

periods of economic slowdown. However, Germany still outperformed the BEMs (on average) for the reason noted above.

Individually, BEM import growth ranged from a high of 179 percent for Argentina to a low of 7 percent for South Africa. In addition to Argentina, Mexico and Indonesia also had above-average import growth, rising 145 percent and 106 percent, respectively. South Africa's weaker gains were likely due to its overall stagnant economic growth that persisted through the early 1990s.

To summarize, the import profile of the BEMs over the last few years indicates that they are indeed growth markets. Import growth in seven of the ten BEMs exceeded world import growth, the types of goods the BEMs import are those most needed to support growing economies, and the major industrialized countries of the world have recognized the importance of serving these markets. The next section will present in more detail the export patterns of the U.S. and the Seventh District in terms of meeting the BEMs' needs.

U.S. exports to the BEMs

Over the 1987-94 period, U.S. exports to the BEMs grew \$65 billion, or 177 percent, for an average annual compound gain of 16 percent. U.S. exports to the rest of the world grew by 95 percent over the same period, for an average annual compound gain of 10 percent. With the exception of two industries—mining of quarry nonmetal minerals (such as sand or clay) and lumber and wood products—BEM export growth by industry exceeded U.S. export growth to the rest of the world. The machinery industries did particularly well in terms of absolute increase. Both electrical and non-electrical machinery increased by over \$11 billion each, and transportation equipment increased by nearly \$10 billion.

In terms of market share, the BEMs grew from 15 percent of total U.S. exports in 1987 to

TABLE 2
BEMs' largest import trading partners, 1992

BEM	Largest partner	Imports (\$U.S. billions)	Import share (percent)
Argentina	Brazil	\$3.3	22.5
Brazil	U.S.	5.4	23.2
China	Hong Kong	20.5	25.5
India	U.S.	2.3	9.6
Indonesia	Japan	6.0	22.0
So. Korea	Japan	19.5	23.9
Mexico	U.S.	30.1	62.9
Poland	Germany	3.8	23.9
South Africa	Germany	3.0	16.4
Turkey	Germany	3.8	16.4

Note: This table should be read as follows: Brazil is Argentina's single largest source of imports, supplying \$3.3 billion worth of goods, or 22.5 percent of Argentina's total imports.
Source: United Nations (1993).

20 percent in 1994. While all the BEMs had positive growth over the period, Argentina, Indonesia, and Mexico had the largest percentage increases, at 310 percent, 266 percent, and 247 percent, respectively. However, U.S. exports to Mexico in many ways stand out from those to other BEMs because of certain characteristics unique to Mexico. One major factor is that Mexico is a free trade partner of the U.S. The U.S., Mexico, and Canada have a formal trade agreement that fosters free and open trade among our countries and includes rules and agreements that go beyond GATT. In addition, U.S. trade with Mexico is augmented by their proximity to each other. Thus, while U.S. export growth to the combined BEMs has outpaced export growth to the rest of the world, the Mexican market is especially significant.

While Mexico is by far the largest BEM export market for the U.S., South Korea, China, and Brazil are also major markets for the U.S. The South Korean market is the largest of the three, nearly double the size of the Chinese or Brazilian markets in 1994. The top export industries to South Korea in 1994 were electrical machinery, nonelectrical machinery, and trans-

portation equipment. On a more detailed basis, in 1993 (the latest year for which such data are now available), the top exports to South Korea were semiconductors, aircraft, and meat products. The top exports to China were aircraft, motor vehicles, and radio and TV equipment; those to Brazil were data processing equipment, aircraft, and industrial organic chemicals. (See figure 3 and table 3 for the top U.S. goods exported to the BEMs as a group and individually in 1993.)

Seventh District trade with the BEMs

Exports to the BEMs from the Seventh District states increased by \$5.6 billion, or 152 percent, over the 1987-94 period.

By contrast, exports to the rest of the world grew 90 percent. Almost all industries had positive export growth to the BEMs, with the exception of forestry, scrap and waste, and the two mining industries. Nonelectrical machinery, electrical machinery, and chemicals had the largest absolute increases, accounting for 60 percent of the District's total export increase to the BEMs over the period.

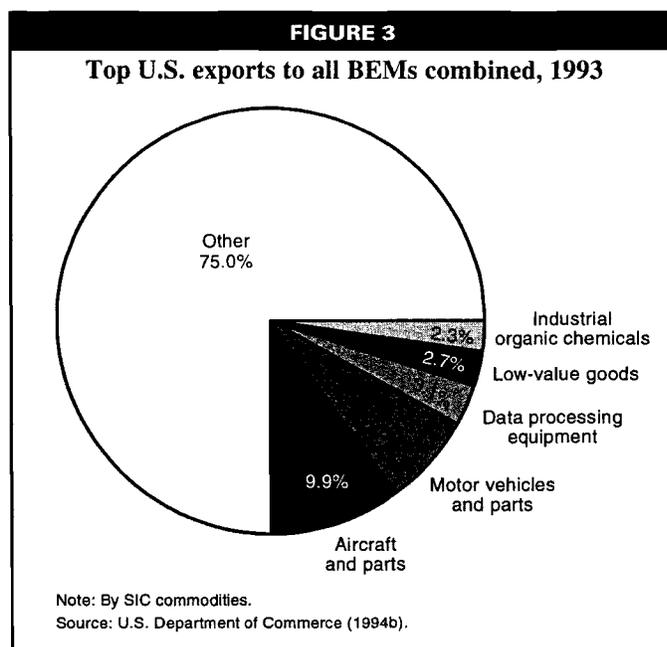


TABLE 3

Top five U.S. exports to the BEMS, 1993
(by U.S. dollar value)

	1993 exports (millions)	Percent of total	SIC commodity		1993 exports (millions)	Percent of total	SIC commodity
Argentina	\$3,775.7		Total	Mexico	\$41,581.1		Total
	349.7	9.3	Automated data processing machines		4,188.4	10.1	Motor vehicle parts, accessories
	160.2	4.2	Aircraft		1,538.1	3.7	Low-value goods
	129.2	3.4	Low-value goods		996.4	2.4	Automated data processing machines
	126.2	3.3	Industrial organic chemicals NEC*		916.5	2.2	Electrical equipment—internal combustion engines
	113.0	3.0	Motor vehicles & car bodies		906.3	2.2	Electronic components NEC*
Brazil	\$6,058.0		Total	Poland	\$911.6		Total
	467.0	7.7	Automated data processing machines		142.4	15.6	Low-value goods
	461.4	7.6	Aircraft		140.4	15.4	Aircraft
	299.9	5.0	Industrial organic chemicals NEC*		85.8	9.4	Corn
	228.4	3.8	Motor vehicles & car bodies		46.4	5.1	Oil field machinery and equipment
	227.5	3.8	Metallurgical bituminous coal		35.1	3.9	Chicken cuts
China	\$8,762.8		Total	South Africa	\$2,188.4		Total
	2,029.7	23.2	Aircraft		272.2	12.4	Aircraft
	645.9	7.4	Motor vehicles and car bodies		129.1	5.9	Automated data processing machines
	331.3	3.8	Radio, TV, & communication equipment		94.9	4.3	Low-value goods
	292.8	3.3	Nitrogenous fertilizers		85.7	3.9	Wheat
	274.2	3.1	Wheat		72.6	3.3	Industrial organic chemicals NEC*
India	\$2,778.1		Total	South Korea	\$14,782.0		Total
	581.6	20.9	Aircraft		1,235.1	8.4	Semiconductors, related devices
	180.2	6.5	Steam, gas, hydraulic turbines		1,052.1	7.1	Aircraft
	175.1	6.3	Nitrogenous fertilizers		695.9	4.7	Meatpacking plants
	117.9	4.2	Aircraft parts		592.0	4.0	Scrap and waste
	81.5	2.9	Industrial organic chemicals NEC*		498.2	3.4	Industrial organic chemicals NEC*
Indonesia	\$2,770.3		Total	Turkey	\$3,428.9		Total
	667.9	24.1	Aircraft		758.8	22.1	Aircraft
	142.6	5.1	Cotton		292.0	8.5	Aircraft parts
	112.4	4.1	Petroleum refining		154.2	4.5	Scrap and waste
	106.7	3.9	Soybeans		153.0	4.5	Aircraft engines
	100.4	3.6	Oil field machinery & equipment		136.9	4.0	Cigarettes

Note: Throughout this table, *total* means total U.S. exports to that country.

*Not elsewhere classified.

Source: U.S. Department of Commerce (1994b).

The BEMs' share of Seventh District exports has also grown. In 1987, exports to the BEMs comprised 10 percent of total District exports; by 1994, that share had risen to 13 percent. The largest BEM export markets for the District were Mexico, South Korea, and China, which together comprised three-fourths of the District's exports to the BEMs in 1994. However, as the fastest-growing markets, Indonesia, Argentina, and Brazil had the largest percentage increases over the period: 425 percent, 334 percent, and 249 percent, respectively. Like the U.S., exports to Mexico tended to dominate the profile of District exports to the BEMs as a group because of the large share Mexico consumes—nearly half of all District exports to the BEMs.

An interesting development in the District between 1987 and 1994 was that transportation equipment declined as a share of total District exports. This was true for total District exports as well as District exports to the BEMs. In 1987, transportation equipment exports comprised 38 percent of total District exports; by 1994, their share had fallen to less than 30 percent. While transportation was still the top export industry for the District as a whole in dollar value, other major industries such as nonelectrical machinery, electrical machinery, and chemicals were either gaining or maintaining market share (see table 4).

District exports to the BEMs show an even more pronounced pattern of change. In dollar value, transportation equipment exports fell in rank from first in 1987 to third in 1994. Also, their market share fell from 32 percent of total District exports to less than 17 percent. This pattern was heavily driven by trade with Mexico, where transportation exports (largely auto parts) fell from 49 percent of the total to 21 percent. Another significant change occurred in electrical machinery exports, which grew from about 11 percent of total District exports to the BEMs to almost 17 percent.

Several positive things can be said about this change in the District's export profile. First, compared with the past, the fortunes of the auto industry will have a smaller impact on the District during both lean times and good times. Second, less concentration of exports along industry lines suggests that overall District export performance will not be so closely tied to one or two industries. Finally, District exports will tend to correspond—even more

than U.S. exports as a whole—to those industries in which BEM purchases are experiencing significant growth.

U.S. agricultural exports to the BEMs

U.S. agricultural exports make an important contribution to farm income as well as to our nation's trade balance. The U.S. Department of Agriculture (USDA) reported that 17 percent of the value of U.S. agricultural production was exported last year, accounting for a tenth of the value of all U.S. exports and generating a major positive contribution to the merchandise trade balance.⁶ Furthermore, current developments suggest that foreign markets will become even more important to U.S. agriculture. The budget constraints so prominent in the 1995 farm bill debate and the trend towards greater market orientation portend a decrease in the level of federal spending on programs that support farm prices and income. Slow population growth in the U.S. will continue to be a significant constraint on future gains in domestic food demand. Moreover, biogenetic research promises to augment strides in agricultural productivity. Given these factors, farmers and agribusinesses must increasingly look to foreign markets as an outlet for continued gains in output and as a vehicle to maintain or improve income levels.

The states of the Seventh District make an important contribution to both agricultural output and trade. Farms in these states account for a substantial share of the nation's domestic livestock, milk, corn, and soybean production. The high level of output propelled District states into an 18 percent share of U.S. farm commodity receipts in 1993 and also provided raw material to a sizable food processing sector. District states also play an important role in international agricultural trade. The USDA estimates that the five states together accounted for over a fifth of the value of U.S. agricultural exports in 1993.⁷

The BEMs represent a major market for U.S. agriculture. From 1987 through 1994, their share of foreign sales of U.S. agricultural products rose from 14 percent to 20 percent. Moreover, the potential for future gains is significant, as rising incomes and international agreements that liberalize trade are expected to boost purchases of U.S. agricultural products. Among the BEMs, the top three buyers of U.S. agricultural products are Mexico, South Korea,

TABLE 4

A. Top five District export industries to the world, 1987 and 1994

Ranked by 1987 value	1987 value	Industry market share ^a	Ranked by 1994 value	1994 value	Industry market share ^a
	(billions)	(percent)		(billions)	(percent)
Transportation equipment	\$14.0	38.1	Transportation equipment	\$21.4	29.6
Nonelectrical machinery	7.8	21.2	Nonelectrical machinery	15.8	21.9
Electrical machinery	2.9	8.0	Electrical machinery	8.6	12.0
Chemicals	2.9	7.8	Chemicals	6.4	8.9
Fabricated metals	2.1	5.7	Measuring instruments	3.4	4.7

B. Top five District export industries to the BEMs, 1987 and 1994

Ranked by 1987 value	1987 value	Industry market share ^a	Ranked by 1994 value	1994 value	Industry market share ^a
	(billions)	(percent)		(billions)	(percent)
Transportation equipment	\$1.2	32.1	Nonelectrical machinery	\$2.4	26.0
Nonelectrical machinery	0.9	24.2	Electrical machinery	1.6	16.8
Electrical machinery	0.4	10.8	Transportation equipment	1.5	16.5
Chemicals	0.4	9.6	Chemicals	1.1	11.4
Measuring instruments	0.2	5.0	Food & kindred products	0.5	5.9

^aIndustry market share is that industry's share of total District exports.

Source: Massachusetts Institute for Social and Economic Research (1992 and 1995).

and China. These three nations accounted for over 80 percent of total U.S. agricultural exports to the BEMs from 1987 through 1994. Sales to Mexico increased nearly four times during this period, while those to China tripled. But the most rapid growth rates in U.S. agricultural sales were to the relatively smaller markets of Argentina, Brazil, and Indonesia. (Agricultural exports to South Africa also rose quickly, but this was due to a severe drought in that nation.)

Much of the growth in the value of agricultural exports to the BEMs stemmed from rising sales of value-added processed products, a trend that is reflected in agricultural exports to other nations as well. Since 1985, the share of U.S. agricultural exports made up of these products has been growing.⁸ Processed products include meat, poultry, dairy products, fats and oils, beverages, and a wide variety of other consumer food products. Foreign sales of processed products have actually exceeded the export value of bulk agricultural commodities (such as wheat, cotton, and other crops) since 1991. In general, bulk exports have suffered as the effects of more favorable exchange rates

have been offset by greater competition from other nations as well as weakened foreign demand. In contrast, U.S. sales of processed products have benefited from reduced trade barriers, income growth in many developing nations, a growing taste for Western foods, and the convenience offered by processed foods. Furthermore, the transport of perishable food items has been aided by advancements in technology that improved cost-effectiveness and reduced the potential for spoilage.⁹

From 1987 through 1994, the processed share of U.S. agricultural exports to the BEMs rose from a third to nearly half. The major processed exports are red meat and poultry, which together accounted for a fifth of the value of U.S. agricultural sales to the BEMs from 1989 through 1993, the latest year for which individual industry data are available. Mexico and South Korea are by far the largest buyers. But while exports of red meat to the BEMs tended to rise from 1989 to 1992, a sharp drop in 1993 pushed the value back down to the level of five years earlier. In comparison, the value of U.S. poultry exports made brisk gains—particularly to Mexico, China, and

Poland—and continued to climb even as sales of red meat faltered.

A host of other processed products exported to the BEMs made only modest individual contributions to total sales, yet together accounted for 21 percent of the aggregate figure from 1989 through 1993. The most important are soybean oil, animal fats and oils, milled corn products, and milk powder. Those products experiencing the most rapid export growth include soft drinks, ice cream and cheese, potato chips and snacks, and breakfast foods. Over the period, the BEMs increased their purchases of all processed products other than red meat and poultry by a remarkable 50 percent. In comparison, purchases of red meat and poultry rose by a more modest 20 percent.

Among the major bulk commodities, sales of wheat and cotton to the BEMs generally declined from 1989 through 1993. The drop in wheat exports was largely attributable to China, which reduced its purchases by roughly 75 percent. Cotton export sales not only declined overall but shifted away from South Korea and China toward Mexico and Brazil. The value of U.S. corn exports to the BEMs also suffered a serious decline from \$1.2 billion to \$288 million. This stemmed mostly from a steady decline in sales to South Korea and Mexico. China supplanted the U.S. as South Korea's major supplier, but China's recent switch from corn exporter to importer will give the U.S. an opportunity to recapture market share. U.S. sales of corn to Mexico suffered partly because of past Mexican policy that encouraged domestic production and erected trade barriers insulating Mexican producers from foreign competition. But reform of those policies and the implementation of the North American Free Trade Agreement (NAFTA) helped revive U.S. corn exports to Mexico last year. In contrast to wheat, cotton, and corn, the value of soybean exports fared much better, rising by over one-third. Most of it went to Mexico and South Korea, though sales to Indonesia also registered strong gains.

What share of agricultural exports to the BEMs is produced within Seventh District states? Though data on state-level exports to the BEMs are available, they must be interpreted with caution for two reasons. First, the data are aggregated along broad product categories rather than by individual commodities. More importantly, exporters may assemble commodities at a central

location (such as a major port) and then report that site as the point of origin of shipments.¹⁰ Consequently, the data on agricultural exports originating from District states tend to be understated, while those from states with major ports are likely inflated. Nevertheless, some insight may be gained regarding District agricultural exports to the BEMs by examining the trends in these data.

From 1987 through 1994, the value of District agricultural exports to the BEMs tripled, a much faster increase than sales to the rest of the world. Nearly all the gain in District exports to the BEMs stemmed from crops and processed products rather than forestry products, fish, or live animals. However, there was considerable difference between the sales pattern of bulk commodities and that of processed products. While the export value of processed products to the BEMs generally gained steadily from year to year, District crop exports experienced wide swings. As an example, China's displacement of the U.S. as the primary corn supplier to South Korea was likely responsible for the sharp decline in District crop exports to the BEMs in 1991.

A closer look at the larger BEMs

It should be clear by now that the BEMs are not a homogeneous group. While they have some similarities, such as in the types of goods they import, individually they appear to present unique challenges for U.S. export promotion and market strategies. Collectively they exhibit considerable growth potential, but several of them already are large export markets for U.S. goods, namely Mexico, China, South Korea, and Brazil. Following is a closer look at these four markets.

Mexico

One clear signal of Mexico's economic reform efforts was its becoming a participant in GATT in 1986. Since then, the country has made significant strides in opening its economy by lowering tariffs (which in some cases were as high as 100 percent), by privatizing many of its state-owned industries, and by reducing barriers to foreign investment. Between 1986 and 1992, Mexico's total imports rose an average of 25 percent per year. Road vehicles and machinery (including electrical, general industrial, and machines for special industries) are Mexico's largest import items. Machinery imports cover a broad spectrum including

telecommunications equipment, metalworking machinery, textile and leather machinery, and civil engineering equipment such as shovels and excavating equipment.

U.S. exports to Mexico have increased 247 percent over 1987–94, the third-largest percentage increase of the BEMs. The U.S. is Mexico's largest trading partner, with approximately 70 percent of all imports coming from the U.S. and approximately 80 percent of all exports going to the U.S. Not surprisingly, our exports to Mexico are in the industries from which Mexico imports the most—electrical and nonelectrical machinery, and transportation equipment. Nearly half of all U.S. exports to Mexico are in these three industries.

In 1993, the U.S., Canada, and Mexico became signatories to NAFTA, which further reduced tariffs between them. As a result, in 1994 U.S. exports to Mexico increased by 22 percent, or \$9 billion from the prior year. The horizon has been clouded, however, by the peso devaluation in late 1994.

South Korea

In terms of imports, South Korea is the largest of the BEMs, importing approximately \$81 billion in goods in 1992. Yet import restrictions still impede trade with South Korea. Policies to reduce barriers have resulted in less formal barriers including still-high tariffs, particularly on agricultural products, as well as emergency tariffs and adjustment tariffs.¹¹ Another major barrier is a restriction to import on credit. U.S. exporters estimate they could increase exports to South Korea by nearly one-third if this restriction were not in place.¹²

Between 1987 and 1994, U.S. exports to South Korea grew by 123 percent. Over that period, exports from all industries except agricultural crops increased. Electrical and nonelectrical machinery exports increased by over \$2 billion each, while transportation equipment exports grew by \$1.5 billion. The top two U.S. exports to South Korea in 1993 were semiconductors and aircraft, accounting for over 15 percent of all U.S. exports to South Korea in that year.

China

U.S. exporters have historically found it difficult to trade with China. In 1991, China's import licensing system covered about half of their imports (by volume), including consumer goods, raw materials, and production equip-

ment.¹³ China also restricts imports by means of quotas, embargoes on certain consumer goods, and stricter quality standards and testing for imports versus domestic products.

In 1992, China's imports topped \$80.5 billion, up \$25 billion from 1988.¹⁴ The country is the second-largest import market of the BEMs, led only by South Korea. Its largest import commodities in 1992 were machinery for special industries such as textile and leather manufacturing, and machinery related to weaving and felt manufacturing. Textile machinery and textile yarns accounted for nearly 20 percent of its imports.

U.S. commodity exports to China grew by 166 percent over the 1987–94 period, with transportation equipment, nonelectrical machinery, and chemicals the largest export industries in the latter year. At a more detailed level, the top U.S. export to China in 1993 was aircraft, accounting for nearly one-fourth of all exports to China in that year. Motor vehicles and car bodies were the next largest export, accounting for over 7 percent of total exports to that country.

Despite the considerable growth in U.S. exports to China in recent years, they comprised less than 2 percent of all U.S. exports in 1994. In an effort to broaden market access for U.S. exports, especially in telecommunications, insurance, and agriculture, the United States and China agreed in March 1995 to an eight-point plan to open the latter's market to U.S. goods. The agreement included U.S. support of China's accession to the newly formed World Trade Organization.

Brazil

Until 1990, Brazil's trade policy in regard to imports was highly restrictive. From 1980 to 1992, annual import growth was nil, and import tariffs averaged 78 percent.¹⁵ However, economic reforms begun in 1989 have helped expand trade. In 1993, imports increased by over \$5 billion, or 25 percent over the prior year. Average tariffs have been reduced to 14 percent.¹⁶

As a result, between 1987 and 1994, U.S. exports to Brazil increased by 101 percent. According to various newspaper reports, Brazil offers several key market opportunities to U.S. companies, particularly in the computer and textile manufacturing industries. With a population of 155 million, the country's computer market is expected to quadruple from

2.5 million units in 1994 to 10 million by the end of the decade.¹⁷ Another growth industry for U.S. exports will be textiles and textile manufacturing equipment. In the city of Fortaleza alone, 45 new textile and clothing companies are expected to open.¹⁸ U.S. cotton exports to Brazil have already increased dramatically, from \$5 million to \$85 million over the 1989-93 period.

U.S. export promotion initiatives: Advocacy and assistance

Various government agencies provide export assistance to U.S. firms in search of foreign sales. To date, these efforts have tended to be fragmented and confusing to users. For example, certain programs are available only to small businesses or new businesses but not to large or established ones, and vice versa; other programs are available only to specific industries or for purposes of job creation. To address this problem, the U.S. Department of Commerce opened export assistance centers in 1994 in Chicago, Baltimore, Los Angeles, and Miami. These are "one-stop shops" that provide exporters and potential exporters with information to help them enter new markets or build on existing ones. The centers provide trade leads, information on overseas-related trade shows, and information on major project and procurement opportunities abroad. In addition, they offer information and assistance on the various trade finance programs available at the federal level, help exporters determine the right program for them, assist with paperwork, and provide ongoing support. Nearly a dozen more such centers are scheduled to open in 1995.

Another recent effort by Commerce was to open an in-house information center and clear-

inghouse for advocacy requests.¹⁹ These advocacy efforts represent a coordinated interagency initiative by the federal government to help American firms compete and win major contracts such as infrastructure projects with BEM governments or joint ventures with BEM firms. The center maintains information on major projects and procurement opportunities worldwide and tracks advocacy requests.²⁰

Export promotion efforts at the state level are similar to federal efforts but provide more one-on-one support and are geared more toward helping small and medium-sized businesses. Most states also have overseas trade offices in key markets to help facilitate the process at the other end, as well as to generate new trade leads, host trade shows, and promote their states' exports. Table 5 lists the overseas offices of the Seventh District states. Note that most of the states have at least two offices in the BEMs.

The USDA also operates several agricultural export promotion programs. The two largest and best-known are the Export Enhancement Program (EEP) and an export credit guarantee program. The EEP offers "bonus" payments to U.S. exporters that enable them to meet the subsidized prices offered by other nations, particularly the European Union. Over time, implementation of GATT will reduce the amount of direct subsidies that member nations may use to promote agricultural exports. The export credit guarantee program provides federal guarantees to private lenders involved in financing purchases of U.S. agricultural commodities from abroad. Unlike the EEP, there is no specific outlay unless a borrower defaults and the lender incurs a loss. Moreover, this program is not affected by GATT. Finally, the USDA also operates separate programs to support exports of soybean oil, cottonseed oil, and dairy products, and to promote the sale of processed products in general.

Summary

This article examined the recent U.S. experience in export sales to the ten nations identified by the Department of Commerce as potential growth markets. Specifically, we assessed the current size and growth potential of the ten BEMs as export markets, and we put the current U.S. presence

TABLE 5

Seventh District overseas trade offices, 1994

Illinois	Indiana	Iowa	Michigan	Wisconsin
Belgium	Canada ^a	Germany	Belgium	Canada ^a
Hong Kong	China	Japan	Canada	Germany
Hungary	Japan		Hong Kong	Hong Kong
Japan	Mexico		Japan	Japan
Mexico	Netherlands		Mexico	Mexico
Poland	So. Korea		South Africa	So. Korea
	Taiwan			

^aIndiana, Wisconsin, and Pennsylvania share a Canadian trade office in Toronto.

in these markets into perspective. We also examined the role played by Seventh District firms in supplying these markets. A separate discussion of U.S. agricultural exports to the BEMs was included because of agriculture's important contribution to the U.S. trade balance and because of the large share of U.S. agricultural production held by Seventh District states.

The ten BEMs clearly represent an important outlet for many types of U.S. products. Recognizing this, U.S. exporters have already made inroads into these markets. U.S. export sales to the BEMs have posted significant gains in recent years, accounting for an ever-larger share of total U.S. exports. Most industries have increased their sales to the BEMs, though they have not shared equally in the overall gain. Furthermore, the rise in U.S. exports to the BEMs has generally outpaced the increase in exports to the rest of the world. In addition, the U.S. share of BEM imports indicates that American exporters are holding their own against tough competitors from nations such as Japan and Germany. This is true despite the fact that the U.S. is the leading supplier to only three of the BEMs.

In 1994, of all U.S. industries, the nonelectrical, electrical, and transportation equipment industries registered the largest sales to the BEMs. These industries also accounted for half of the export sales gain to the BEMs from 1987 through 1994. However, several other industries experienced even more rapid growth over this period. This underscores two important points. First, the U.S. is responding to the BEMs' current requirements, which are characteristic of developing nations. As the economies of these nations grow and evolve, their needs and wants will change. The challenge to U.S. industry is to anticipate and respond to

these potential shifts in demand. To a large extent, this will determine whether we can maintain or increase current levels of export sales to the BEMs. Second, the rapid growth of these markets holds promise for smaller firms, as more opportunities are available in rapidly expanding markets.²¹

Exports from the Seventh District states to the BEMs also rose more quickly than those to the rest of the world from 1987 through 1994. However, the growth of Seventh District exports tended to lag that of the U.S. in general. While Mexico, South Korea, and China were the major customers for Seventh District products, sales to Indonesia, Argentina, and Brazil experienced the fastest growth. Furthermore, of total District export sales to the BEMs, processed food products moved into the top five industries, reflecting rising incomes and the growing demand for U.S. agricultural products in these nations.

Among the industries exporting agricultural products to the BEMs, processed products have showed the steadiest growth in recent years and seem better positioned to achieve future gains than bulk agricultural commodities. This is true because the factors driving foreign demand for processed products are more lasting than the year-to-year production and price variations that tend to exert a relatively greater influence over imports of bulk commodities.

In conclusion, it is clear that there are many opportunities for U.S. exporters in the emerging markets. While several industries have made substantial inroads into these markets, considerable potential for future growth appears to lie in other industries as well.²²

NOTES

¹U.S. Department of Commerce (1994a).

²"The big emerging markets" (1994).

³Ibid.

⁴Ibid.

⁵Coughlin and Cartwright (1987) found evidence that state export promotion expenditures support manufacturing export levels.

⁶Capehart (1994) and Carter (1994).

⁷U.S. Department of Agriculture (1994).

⁸Greene (1994).

⁹Tse (1993).

¹⁰Coughlin and Mandelbaum (1991).

¹¹U.S. Department of State (1994b).

¹²Ibid.

¹³U.S. Department of State (1994a).

¹⁴This section uses United Nations data as the source of China's imports and excludes the province of Taiwan.

¹⁵Brooke (1994b).

¹⁶Ibid.

¹⁷Brooke (1994c).

¹⁸Brooke (1994a).

¹⁹U.S. Department of Commerce (1994a).

²⁰U.S. Department of Commerce (1993).

²¹Lyon (1995).

²²Firms that are considering entering these markets may receive further information by contacting a U.S. export assistance center.

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