

Commerce with the Newly Liberalizing Countries: Promised Land, Quicksand, or What?

As liberalization movements have swept across Eastern Europe and the Soviet Union, many observers feel as the fabled Alice must have felt upon being invited by the Red Queen to believe six impossible things before breakfast. But as liberalization takes on convincing shape and substance, international entrepreneurs the world over are entertaining visions of capitalizing on new business opportunities. No doubt the transformation of heretofore centrally directed economies into more nearly market economies will bring such opportunities, and will entail significant, if not dramatic, changes in the international commerce of these economies.

This article presents an overview of trade between what we designate as "newly liberalizing countries," or NLCs, and the rest of the world, and tenders some suggestions on how that trade might develop under liberalization. Some general observations on the creditworthiness of these countries are also offered. Special attention is given to commerce between the NLCs and the United States. The NLCs here include Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, the Soviet Union, and Yugoslavia. (Even though for some time Yugoslavia has widely been considered a "market economy," it has not been immune from the liberalizing wind.)

The Magnitude of NLC Trade

Except for the Soviet Union, the NLCs do not loom at all large in world trade. Even in the aggregate, they account for no more than 8 percent of world merchandise exports, with roughly equal shares for the Soviet Union, on the one hand, and the East European countries (here defined to exclude Yugoslavia), on the other hand (table 1). Larger shares of world exports are contributed by each of the world's three leading trading nations—the United States, West Germany, and Japan.

Norman S. Fieleke

Vice President and Economist, Federal Reserve Bank of Boston. Lisa O'Brien provided research assistance.

Table 1
Merchandise Trade of Eastern Europe, the U.S.S.R., and the World's Leading Trading Nations

Area	Value in 1988 (Billions of Dollars)		Share of World Exports (Percent)	
	Exports	Imports	1988	1980
Eastern Europe	116	107	4.0	4.1
U.S.S.R.	111	107	3.8	3.8
Eastern Europe and U.S.S.R.	226	214	7.8	7.9
United States	322	460	11.2	11.1
West Germany	323	251	11.2	9.5
Japan	265	187	9.2	6.4

Note: Eastern Europe does not include Yugoslavia.

Source: Exports for 1980 for the U.S., Japan, and West Germany are from International Monetary Fund, *International Financial Statistics Yearbook* (Washington, D.C.: IMF, 1989). Other data are from General Agreement on Tariffs and Trade, *International Trade 88-89*, vol. II (Geneva: 1989), Tables I.3, III.37, and A1.

Moreover, the trade of the NLCs with each other exceeds their trade with every other region (table 2). Thus, if the aggregate statistics are any guide, the impact on the rest of the world of trade with the NLCs has been relatively minor.

Potential trade is another matter, and it is the potential dangled by liberalization that has excited the likes of businessmen and economists. Even now, the Soviet Union's merchandise exports, and also its imports, are eighth largest in the world, and the nation ranks first in exports of fuels, fifth in exports of ores, minerals, and nonferrous metals, fifth also in exports of raw materials, sixth in imports of machinery and transport equipment, and seventh in imports of food and also of clothing.¹ And even now, before realizing any of the fruits of liberalization, each of the other NLCs (including Yugoslavia) ranks among the world's top 40 exporters.²

How much might trade grow if liberalization proceeds? An initial approach to evaluating the potential is to examine the ratio of trade to GNP. An uncommonly low ratio for the NLCs would support the interpretation that their international commerce had been artificially constrained and might surge as liberalization widened. As can be seen in table 3, however, the ratio of trade to GNP within Eastern Europe and the Soviet Union is well within the range found across all regions and little different from the ratio for the world.

Table 2
Merchandise Trade of Eastern Europe and the U.S.S.R., by Major Regions, as a Percent of World Trade, 1973, 1980 and 1988

Region	1973	1980	1988
Intra-Eastern Europe and the U.S.S.R.	5.2	4.1	4.4
Western Europe	4.0	4.0	3.1
Asia	1.1	.9	1.0
Latin America	.5	.6	.6
North America	.5	.4	.3
Middle East	.3	.5	.3
Africa	.4	.4	.2

Note: Yugoslavia is included here as part of Western Europe. Trade of region A with region B is defined as the sum of A's exports to B and B's exports to A.

Source: General Agreement on Tariffs and Trade, *International Trade 88-89*, vol. II (Geneva: 1989), Table III.3.

But greater insight from trade-to-GNP ratios can be gained from focusing on individual countries, because the larger countries, of course, tend to exhibit the smaller ratios. Thus, trade-to-GNP ratios are presented for those East European countries for which such data could be obtained and for selected other countries with GNPs of about the same size (as measured with purchasing-power-parity exchange rates). Hungary's GNP may be about the size of Austria's, the GNPs of both Romania and Czechoslovakia may exceed those of Belgium and of Sweden but be less than that of the Netherlands, and the GNP of Poland may be somewhat larger than those of Australia or of Turkey. Comparing the trade-to-GNP ratios for countries with similar GNPs, one would be hard pressed to make the case that Hungary, Czechoslovakia, or Poland have been unusually closed to foreign trade. Romania, on the other hand, may have been, although even this tentative conclusion must be qualified by recognition of the imprecise nature of the data underlying the table. Were liberalization to induce more rapid GNP growth in these countries, a likely prospect at least in the longer run, trade would, of course, be stimulated on that score; and the increase in trade would, in turn, promote faster growth of GNP itself.

Aside from the question of expansion of total NLC trade, it is likely that some of the trade currently flowing among the NLCs will switch to trade between the NLCs and other countries as controls

Table 3
Merchandise Trade as Percent of GNP or GDP for Major Regions and Selected Countries, for Various Years 1986–88

Area	Percent ^a
Western Europe	31
Africa	22
Eastern Europe and the U.S.S.R. ^b	22
Middle East	21
Asia	18
Latin America	15
North America	11
World	20
Hungary	38
Czechoslovakia	35
Romania	20
Poland	20
Belgium	67
Netherlands	51
Austria	35
Sweden	32
Turkey	22
Australia	18

^aOne half the sum of the area's exports and imports, as a percent of GDP or GNP. For the regions and the world, underlying trade data are for 1988, and GDP data are for 1986. Underlying data for individual countries, except Romania, are for 1987; for Romania, underlying data are for 1986.

^bExcluding Yugoslavia, which here is included in Western Europe.

Source: Data for regions and the world are from General Agreement on Tariffs and Trade, *International Trade 88–89*, vol. II (Geneva: 1989), Table III.1. Data for individual East European countries are from L.W. International Financial Research, Inc. GNP data for the remaining countries, except for Turkey, are from *International Financial Statistics*, March 1990; all trade data for these countries, and GDP data for Turkey, are from OECD, *National Accounts 1960–88*, vol. I (OECD, Paris: 1990).

channeling trade among the NLCs are eased. During 1988, 57 percent of NLC merchandise exports went to other NLCs, and 65 percent of their imports came from other NLCs.³

The Composition of NLC Trade

What kinds of goods do the NLCs export and import? For those NLCs that report their trade statistics to the United Nations, machines and transport equipment comprise the largest category of both exports and imports, with second place going to basic manufactures among the exports and to mineral fuels among the imports (table 4). Less confidence can be placed in the figures (indirectly derived) for the NLCs that do not report to the U.N., but for these countries

the data show machines and transport equipment to be even more dominant among imports, with basic manufactures in second place. The exports of the Soviet Union are heavily concentrated in mineral fuels (petroleum), while the exports of the other nonreporters are not highly concentrated, although manufactures predominate.

All of the NLCs except Yugoslavia belong to the CMEA (Council for Mutual Economic Assistance), through which the members have closely managed trade among themselves. The composition of such highly managed trade is likely to differ appreciably from what would prevail under free competition, and the remaining, less directly managed trade of the NLCs with non-CMEA countries is sure to have been distorted as well. What stands out in table 5, which covers the four countries reporting the relevant data, is that for these countries machines and transport equipment comprise a much larger share of their exports to other CMEA members than to non-CMEA countries, while for basic manufactures the reverse is true. This finding accords with reports that the more sophisticated manufactures of these countries, although accepted by state purchasing agencies in CMEA countries, are often rejected as shoddy or obsolete by non-CMEA countries. At least in the short run, then, relaxation of trade controls within the CMEA might well shift the composition of the manufactured exports of these four countries toward that currently prevailing in their exports to non-CMEA countries. In the longer run, of course, skills, management, and equipment might be upgraded so as to promote the more advanced manufactures.

As for imports, a salient fact is that mineral fuels, particularly petroleum, comprise a much larger share of the imports of these four countries from other CMEA members than from non-CMEA countries (table 6). It is well known that the Soviet Union has supplied petroleum to other CMEA countries at below-market prices. Again, greater reliance on market prices within the CMEA could well result in more similar shares for petroleum in imports from CMEA and from non-CMEA sources.

The commodity composition of NLC trade can be examined further to gain insight into the "revealed comparative advantage" of the NLCs. Revealed comparative advantage may be measured by the ratio of a country's net exports (exports minus imports) in each commodity category to the sum of the country's total exports and imports in that category.⁴ This ratio, or index, can take on any value between -1 and 1; the larger the algebraic value for a commodity category

Table 4

Percentage Distribution of Reported Exports and Imports of NLCs by Major Commodity Group, 1986–87

Major SITC Group	NLCs Reporting to the UN			
	Czechoslovakia, Hungary, Poland, Yugoslavia ^a			
	1986		1987	
	Exports	Imports	Exports	Imports
0—Food and live animals	7.3	6.4	10.9	7.0
1—Beverages and tobacco	.8	.8	1.0	.7
2—Crude materials excluding fuels	4.2	8.0	5.2	8.3
3—Mineral fuels, etc.	5.6	24.8	6.0	17.2
4—Animal, vegetable oil, fat	.2	.4	.3	.2
5—Chemicals	8.1	10.1	9.9	14.3
6—Basic manufactures	17.4	12.7	19.8	15.5
7—Machines, transport equipment	42.2	30.6	32.5	31.0
8—Misc. manufactured goods	12.0	4.9	11.9	5.4
9—Goods not classified by kind	2.2	1.4	2.5	.3
All commodities	100.0	100.0	100.0	100.0

^aFor 1987, Czechoslovakia is omitted because data were not available.

^bData were derived from those reported by countries that trade with the nonreporters.

^cTrade between the two Germanys is included.

Note: Detail may not add to totals shown because of rounding.

Source: National Institutes of Health, COMPRO database, UN routine; Statistisches Bundesamt, *Statistisches Jahrbuch 1988, für die Bundesrepublik Deutschland* (Stuttgart und Mainz: Verlag W. Kohlhammer, 1988), p. 249; and International Monetary Fund, *International Financial Statistics Yearbook 1989* (Washington, D.C.: IMF, 1989).

Table 5

Percentage Distribution of Exports of Reporting NLCs by Major Commodity Group, to the CMEA and Other Destinations, 1986–87

Major SITC Group	Czechoslovakia ^a		Hungary		Poland		Yugoslavia	
	CMEA	Other	CMEA	Other	CMEA	Other	CMEA	Other
0—Food and live animals	.9	6.2	15.2	17.5	3.8	12.1	4.8	9.8
1—Beverages and tobacco	.5	.2	2.6	.6	.4	.7	.8	1.2
2—Crude materials excluding fuels	2.3	5.4	1.8	6.9	3.2	8.2	2.5	5.8
3—Mineral fuels, etc.	2.0	7.6	.6	8.0	10.8	13.1	1.1	2.5
4—Animal, vegetable oil, fat	0	.2	.5	1.3	0	.2	0	.1
5—Chemicals	4.8	9.1	8.6	14.3	7.6	6.3	10.6	12.1
6—Basic manufactures	12.5	29.5	8.0	19.4	10.3	22.5	17.4	29.1
7—Machines, transport equipment	62.1	31.8	48.4	18.8	47.9	25.7	43.3	24.4
8—Misc. manufactured goods	13.0	9.0	13.3	10.5	8.9	7.0	19.5	14.7
9—Goods not classified by kind	1.8	1.0	1.0	2.5	7.2	4.2	.1	.3
All commodities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^aData available for 1986 only.

Note: Detail may not add to totals shown because of rounding.

Source: National Institutes of Health, COMPRO database, UN routine.

Table 4 *continued*

NLCs Not Reporting to UN ^b							
Bulgaria, Romania and East Germany ^c				USSR			
1986		1987		1986		1987	
Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
5.8	8.6	6.8	7.5	1.1	10.1	1.5	13.4
1.0	1.0	.9	1.1	.3	.4	.3	.3
9.7	11.3	12.1	13.1	10.0	4.3	12.0	4.9
11.2	6.3	12.6	4.6	63.2	1.7	61.3	1.8
.4	.2	.3	.2	0	.6	0	1.0
12.3	12.3	12.1	14.9	5.0	9.0	5.5	12.2
20.7	15.4	22.4	16.9	8.6	19.1	10.9	23.8
25.9	36.9	17.4	34.5	10.5	42.1	7.4	32.5
12.6	6.0	14.8	5.2	.7	11.1	.7	8.3
.5	2.0	.6	2.0	.6	1.6	.5	1.7
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 6

Percentage Distribution of Imports of Reporting NLCs by Major Commodity Group, from the CMEA and Other Sources, 1986-87

Major SITC Group	Czechoslovakia ^a		Hungary		Poland		Yugoslavia	
	CMEA	Other	CMEA	Other	CMEA	Other	CMEA	Other
0—Food and live animals	3.1	13.5	1.5	10.3	1.4	14.8	3.1	7.0
1—Beverages and tobacco	.7	1.3	1.0	.9	1.2	1.1	.2	.3
2—Crude materials excluding fuels	5.8	12.7	6.3	7.4	6.7	9.1	12.8	8.5
3—Mineral fuels, etc.	39.7	2.0	33.9	3.8	38.4	3.9	28.8	15.7
4—Animal, vegetable oil, fat	.2	.7	0	.2	.1	.9	.3	.3
5—Chemicals	4.3	14.2	7.8	20.8	5.0	14.8	12.9	15.9
6—Basic manufactures	6.8	16.2	12.9	19.5	10.5	15.6	20.1	14.4
7—Machines, transport equipment	33.2	29.7	31.3	27.8	32.1	31.9	20.0	33.4
8—Misc. manufactured goods	3.5	7.8	3.9	8.6	4.6	7.3	1.8	4.5
9—Goods not classified by kind	3.0	1.8	1.4	.5	0	.6	0	.1
All commodities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^aData available for 1986 only.

Note: Detail may not add to totals shown because of rounding.

Source: National Institutes of Health, COMPRO database, UN routine.

Table 7

Revealed Comparative Advantage by Major Commodity Group, for Reporting NLCs and the United States, in Trade with Specified Areas, 1986-87

Major SITC Group	Czechoslovakia ^a			Hungary		
	CMEA	Other Countries	Total	CMEA	Other Countries	Total
0—Food and live animals	-.58	-.34	-.43	.82	.21	.45
1—Beverages and tobacco	-.18	-.71	-.35	.44	-.22	.25
2—Crude materials excluding fuels	-.45	-.38	-.42	-.55	-.09	-.26
3—Mineral fuels, etc.	-.91	.60	-.80	-.96	.31	-.65
4—Animal, vegetable oil, fat	-1.00	-.62	-.75	.92	.74	.79
5—Chemicals	.03	-.19	-.07	.06	-.24	-.14
6—Basic manufactures	.27	.32	.29	-.22	-.06	-.12
7—Machines, transport equipment	.28	.06	.24	.23	-.24	.06
8—Misc. manufactured goods	.56	.09	.44	.56	.04	.29
9—Goods not classified by kind	-.27	-.26	-.27	-.13	.61	.27

^aData available for 1986 only.

Note: Revealed comparative advantage is defined as $(X_{ij} - M_{ij}) / (X_{ij} + M_{ij})$, where X and M represent exports and imports, the subscript i refers to SITC group, and the subscript j refers to country.

Source: National Institutes of Health, COMPRO database, UN routine.

relative to the values for other categories, the greater is the country's revealed comparative advantage in the commodity category concerned. For countries that have closely managed their trade, such as the members of the CMEA, "revealed comparative advantage" could differ appreciably from the comparative advantage that would manifest itself with free markets. Thus, for these countries "revealed comparative advantage" is employed advisedly and should be evaluated separately for the countries' trade within the CMEA and outside it.

Examination of the ratios in table 7 reveals—for the four NLCs reporting the desired data—some patterns that prevail in each country's trade with CMEA countries as well as with other countries. Czechoslovakia displays consistent comparative advantages in basic and in miscellaneous manufactures,⁵ and a consistent comparative disadvantage in animal and vegetable oils and fat, and perhaps comparative disadvantages also in food and live animals, in beverages and tobacco, and in crude materials excluding fuels. Hungary exhibits a marked comparative advantage in animal and vegetable oils and fat and in food and live animals and a marked comparative disadvantage in crude materials other than fuels. For Poland, consistent comparative advantage obtains in miscellaneous manufactures and in food and live animals, with disadvantages in beverages

and tobacco and in animal and vegetable oils and fat. Yugoslavia has noteworthy comparative advantages in miscellaneous manufactures and in beverages and tobacco, with disadvantages in nonfuel crude materials, in mineral fuels, and in animal and vegetable oils and fat.

This kind of analysis could, of course, be applied to subdivisions of the commodity categories in table 7, and might well reveal significant comparative advantages and disadvantages that are not manifested by the broader categories. Another caveat is that a marked comparative advantage in a commodity category does not assure a country of a trade surplus in that category. For such a surplus to exist, aggregate foreign demand for the commodities in question must be relatively strong.

U.S. Trade with the NLCs

What is the magnitude and nature of U.S. trade with the NLCs? As can be seen in table 8, trade with the NLCs comprises but a small fraction of U.S. trade in every major commodity category except U.S. exports of food. In the aggregate, only 1.2 percent of U.S. merchandise exports went to the NLCs during 1987-88, and only 0.7 percent of U.S. merchandise imports came from them. Once again, however, it is

Table 7 *continued*

CMEA	Poland		Yugoslavia			United States		
	Other Countries	Total	CMEA	Other Countries	Total	All NLCs	Other Countries	Total
.44	0	.05	.29	.03	.09	.45	-.12	-.10
-.55	-.11	-.27	.60	.56	.57	-.57	-.13	-.14
-.38	.05	-.07	-.63	-.32	-.43	.75	.24	.24
-.58	.61	-.17	-.91	-.78	-.84	-.53	-.69	-.69
-.82	-.50	-.53	-.83	-.61	-.66	.81	.25	.26
.18	-.31	-.17	-.01	-.27	-.19	.13	.18	.18
-.04	.28	.19	.01	.21	.15	-.82	-.54	-.54
.17	-.01	.08	.44	-.28	-.01	.24	-.23	-.23
.29	.07	.16	.86	.43	.61	-.72	-.65	-.66
1.00	.81	.90	1.00	.58	.61	.13	.16	.16

Table 8
Percentage Distribution of U.S. Trade with the NLCs and the Rest of the World, by Major Commodity Group, 1987-88

Major SITC Group	U.S. Exports		U.S. Imports	
	NLCs	Rest of World	NLCs	Rest of World
0—Food and live animals	7.4	92.6	1.5	98.5
1—Beverages and tobacco	.5	99.5	1.7	98.3
2—Crude materials excluding fuels	1.6	98.4	.5	99.5
3—Mineral fuels, etc.	2.2	97.8	1.3	98.7
4—Animal, vegetable oil, fat	1.9	98.1	.2	99.8
5—Chemicals	1.3	98.7	1.4	98.6
6—Basic manufactures	.4	99.6	1.1	98.9
7—Machines, transport equipment	.4	99.6	.2	99.8
8—Misc. manufactured goods	.6	99.4	.9	99.1
9—Goods not classified by kind	.2	99.8	.3	99.7
All commodities	1.2	98.8	.7	99.3

Source: National Institutes of Health, COMPRO database, UN routine.

the potential that is of interest and that inspires more detailed examination of the trade flows.

From table 9 it seems that the NLCs as a group have craved U.S. foodstuffs more than any other major commodity category offered by this nation. While this may indeed be true, any such judgment can be only tentative, because the United States has restricted the exportation of high technology goods to

the Warsaw Pact countries. Absent such restrictions, the trade pattern might have been appreciably different. Even with the restrictions, machines and transport equipment have been the second largest U.S. export category in U.S. trade with the NLCs as a group.

To these generalizations there are some notable exceptions. Food and live animals comprise only a small proportion of U.S. exports to Czechoslovakia,

Table 9
Percentage Distribution of U.S. Exports to NLCs by Major Commodity Group, 1987-88

Major SITC Group	Bulgaria	Czecho- slovakia	East Germany	Hungary	Poland	Romania	U.S.S.R.	Yugo- slavia	All NLCs
0—Food and live animals	52.8	1.0	59.3	10.6	37.4	3.0	66.1	10.6	49.2
1—Beverages and tobacco	3.7	5.0	0	3.5	2.8	0	0	1.1	.6
2—Crude materials excluding fuels	11.7	31.7	4.3	2.9	10.0	50.3	6.5	13.2	10.6
3—Mineral fuels, etc.	0	0	0	0	3.2	28.7	2.5	11.6	5.2
4—Animal, vegetable oil, fat	0	0	0	0	.2	0	1.1	.1	.7
5—Chemicals	7.0	12.9	3.1	21.8	11.5	4.3	12.5	8.8	11.2
6—Basic manufactures	2.3	7.9	11.1	8.8	2.8	1.0	1.6	3.8	2.5
7—Machines, transport equipment	20.6	32.7	19.1	43.5	15.4	11.7	6.3	47.8	15.4
8—Misc. manufactured goods	2.3	6.9	3.1	6.5	3.2	1.0	3.3	2.1	3.1
9—Goods not classified by kind	0	3.0	1.2	1.8	13.6	.3	.1	1.0	1.4
All commodities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Detail may not add to totals shown because of rounding.

Source: National Institutes of Health, COMPRO database, UN routine.

Hungary, Romania, and Yugoslavia, and machines and transport equipment a small proportion of U.S. exports to the Soviet Union. Crude materials bulk large among U.S. exports to Romania and Czechoslovakia.

As for imports, the largest shares of U.S. imports from the NLCs as a group are in basic manufactures and miscellaneous manufactures (table 10). Again, marked exceptions exist. Miscellaneous manufactures account for only a small share of U.S. imports from Bulgaria, East Germany, and the Soviet Union, and basic manufactures for only a very small share from Bulgaria. Food and live animals, beverages and tobacco, mineral fuels, and chemicals each account for the largest or second largest share of U.S. imports from some countries.

Just as the pattern of U.S. exports to these countries has been influenced by restrictions on high technology items, so has the pattern of U.S. imports been influenced by U.S. import barriers. This influence may have been severe in the case of imports from Bulgaria, Czechoslovakia, East Germany, Romania, and the Soviet Union, for they have been among the communist countries whose exports to the United States have been subjected to much higher duties than those applied to U.S. imports from other countries in general. Reduction of these higher duties to the levels applied for other countries, a likely step if liberalization proceeds, would open the U.S. mar-

ket much wider to imports from these five countries. In addition, both U.S. exports and U.S. imports could well be enlarged by the relaxation of the government management of trade in the NLCs.

Because of such governmentally induced distortions of trade patterns, the data in table 7 on U.S. comparative advantage with the NLCs should be viewed as merely suggestive. What the data do suggest, rather strongly, is a marked U.S. comparative advantage in animal and vegetable oils and fat and in crude materials excluding fuels, and a lesser comparative advantage in food. Notable U.S. comparative disadvantages seem to exist in both basic and miscellaneous manufactures. This pattern accords fairly well with the ranking of commodity categories by comparative advantage ratios reported in the table for U.S. trade with countries other than the NLCs, a finding that inspires greater confidence in the tentative conclusions offered here.

Aside from the pattern of U.S. trade with the NLCs, how large is the U.S. share of the NLC market for imported goods? And how does the U.S. share compare with those of the leading exporters to the NLCs? Table 11 presents data on the imports supplied to each NLC by its leading non-CMEA supplier and by the United States, along with data on the exports of each NLC to its leading export market and to the United States.

Table 10

Percentage Distribution of U.S. Imports from NLCs by Major Commodity Group, 1987-88

Major SITC Group	Bulgaria	Czecho- slovakia	East Germany	Hungary	Poland	Romania	U.S.S.R.	Yugo- slavia	All NLCs
0—Food and live animals	7.7	11.0	0	22.8	44.6	2.0	1.2	5.7	10.3
1—Beverages and tobacco	44.9	1.6	0	.6	.4	.3	4.6	3.0	2.5
2—Crude materials excluding fuels	.0	1.1	1.8	.6	.3	.6	9.2	0.5	2.1
3—Mineral fuels, etc.	5.1	0	4.9	.3	0	52.6	28.8	1.4	18.6
4—Animal, vegetable oil, fat	0	0	.9	0	.1	0	0	0	0
5—Chemicals	25.6	3.3	25.1	8.3	5.8	1.4	24.0	4.7	8.8
6—Basic manufactures	3.8	39.0	48.4	20.1	22.6	15.6	26.5	21.7	22.3
7—Machines, transport equipment	5.1	13.2	9.0	22.5	9.8	5.1	2.2	21.1	11.8
8—Misc. manufactured goods	7.7	29.1	9.4	24.2	15.0	22.2	1.8	40.0	22.4
9—Goods not classified by kind	0	2.2	.9	.5	1.2	.3	1.6	1.8	1.1
All commodities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Detail may not add to totals shown because of rounding.

Source: National Institutes of Health, COMPRO database, UN routine.

The outstanding feature in the table is the dominance of West Germany. West Germany is the primary source of imports for every NLC except Romania, and is the leading purchaser of exports from every NLC except Romania and Yugoslavia. It is not surprising that West Germany seems to be experiencing greater economic stimulus from the liberalization underway in Eastern Europe and the Soviet Union than any other country outside the liberalizing area. The relatively intense two-way trade between West Germany and virtually all of the NLCs testifies to strong commercial relationships on which West Germany can build as liberalization advances.

By contrast, the United States is not a first-echelon competitor for the international trade of any of the NLCs except perhaps Romania. This is true not only for aggregate exports and imports but for nearly all of the major commodity categories. Only in beverages and tobacco do U.S. sales exceed those of West Germany in more NLCs than not, and the dollar volumes involved in this category are very small.

Creditworthiness of the NLCs

Among the lessons to be learned, or relearned, from the international debt crisis of the early 1980s is that debt crises are an enemy of trade. Economies

forced to undertake harsh adjustments in order to meet external debt obligations generally reduce their imports, and the import reductions can substantially exceed any increases in their exports. The NLCs have been no exception to this rule. In the early 1980s the commercial banks—alarmed by Polish and Romanian debt reschedulings and by a general deterioration in the perceived creditworthiness of the East European countries—undertook to curtail their loans to the region. This action, together with historically high interest rates, sharply reduced the foreign exchange available to the region for the purchase of imports. Between 1980 and 1982 the dollar value of merchandise imports into Eastern Europe (including Yugoslavia) plunged by 13 percent, and the 1982 level was not recovered until 1986.⁶

This abrupt adjustment on the part of the East European countries shifted their collective international current-account balance from sizable deficit into comfortable surplus and restored the confidence of creditors in the capability of these authoritarian societies to do what was necessary to meet their external obligations. By 1985 lending had resumed. Between 1984 and 1989 the gross external debt in convertible currencies of the East European countries (excluding Yugoslavia) increased by 68 percent, from \$59.6 billion to \$100.2 billion, while for the Soviet Union the increase was 113 percent, from \$22.5

Table 11

Trade of NLCs with Their Primary Non-CMEA Trading Partners and the United States, by Major Commodity Category (SITC Group), 1987

Millions of Dollars

Description	0- Food and live animals	1- Bev. and tobacco	2- Crude materials excl. fuels	3- Mineral fuels etc.	4- Animal, veg. oil, fat	5- Chem- icals	6- Basic manu- factures	7- Machines, transport equip.	8- Misc. manuf. goods	9- Goods not classified by kind	All commod- ities
Bulgaria											
Exports to: West Germany	24	11	17	15	0	13	29	13	52	24	197
United States	3	23	0	4	0	8	2	3	4	0	47
Imports from: West Germany	22	1	20	4	2	176	175	423	43	10	875
United States	33	5	10	0	0	9	2	26	3	0	88
Czechoslovakia											
Exports to: West Germany	85	7	126	206	3	128	333	84	164	39	1,175
United States	13	1	1	0	0	3	31	10	25	2	86
Imports from: West Germany	44	2	30	8	3	245	214	723	74	25	1,367
United States	0	3	17	0	0	9	3	12	3	1	47
East Germany											
Exports to: West Germany	345	8	1,284	0	0	409	843	391	380	40	3,700
United States	0	0	1	1	1	22	50	9	11	1	96
Imports from: West Germany	341	13	1,043	0	0	703	522	1,311	122	65	4,119
United States	28	0	5	0	0	3	0	15	3	1	54
Hungary											
Exports to: West Germany	189	12	69	52	3	92	175	148	167	40	947
United States	54	1	2	1	2	27	58	76	67	0	288
Imports from: West Germany	40	2	42	9	1	313	272	583	109	0	1,372
United States	39	4	3	6	0	67	16	99	16	1	251
Poland											
Exports to: West Germany	206	2	107	141	8	94	348	136	190	73	1,304
United States	133	1	1	0	1	12	71	63	38	0	319
Imports from: West Germany	113	3	49	6	20	248	210	413	74	0	1,136
United States	68	2	20	0	0	3	5	28	12	0	139
Romania											
Exports to: Italy	25	0	17	597	0	34	59	44	97	2	874
United States	19	2	5	404	0	8	131	36	175	2	782
Imports from: Egypt ^a	0	0	14	131	0	0	0	0	0	0	146
United States	4	0	101	47	0	11	1	25	3	1	192
U.S.S.R.											
Exports to: West Germany	20	19	288	2,835	1	223	396	73	26	116	3,998
United States	3	20	50	107	0	118	142	8	9	12	470
Imports from: West Germany	241	2	62	11	11	735	1,573	1,428	237	79	4,379
United States	860	0	57	54	19	264	23	130	69	1	1,477
Yugoslavia											
Exports to: Italy	263	4	230	53	2	142	533	182	78	0	1,487
United States	35	23	3	13	0	29	147	177	279	26	732
Imports from: West Germany	30	3	48	21	3	471	412	1,174	130	0	2,293
United States	107	8	89	63	1	92	27	292	33	1	713

^aAccording to the IMF, *Direction of Trade Yearbook*, 1989, Iran is Romania's primary supplier of imports, and Egypt is second. Because neither Iran nor Romania reports commodity category detail to the U.N., data are reported here for Egypt. It happens that the U.N. trade data, which perhaps are incomplete for Egypt, show Romania importing less from Egypt than from the United States.

Note: Detail may not add to totals shown because of rounding.

Source: Primary non-CMEA trading partners were identified from IMF, *Direction of Trade Statistics Yearbook*, 1989. Data on trade between the two Germanys are from Statistisches Bundesamt, *Statistisches Jahrbuch 1988 für die Bundesrepublik Deutschland* (Stuttgart und Mainz: Verlag W. Kohlhammer, 1988), p. 249. Other data are from National Institutes of Health, COMPRO database, U.N. routine. Only Hungary, Poland and Yugoslavia reported 1987 trade data in the U.N. routine. Data for the remaining five countries (Bulgaria, Czechoslovakia, East Germany, Romania, and the U.S.S.R.) are based on data reported to the U.N. by countries that trade with the five.

Table 12

Reserves as a Percentage of Annual Imports^a in Eastern Europe and the U.S.S.R., 1981-89

Area	1981	1982	1983	1984	1985	1986	1987	1988	1989 ^p
Bulgaria	29	35	44	52	62	38	32	42	31
Czechoslovakia	27	20	28	30	30	28	32	30	26
East Germany ^b	49	48	72	84	130	145	189	191	165
Hungary	20	18	33	41	54	47	30	25	19
Poland	13	19	28	36	35	37	55	61	53
Romania	4	6	11	14	8	16	42	21	27
Total Six	21	23	36	44	55	55	66	63	57
U.S.S.R.	30	35	39	42	50	60	58	54	48
Total Seven	25	29	38	43	52	58	62	59	53

^ppreliminary^aReserves are deposits in Bank for International Settlements area banks, and imports are those paid for in convertible currencies.^bExcluding transactions with West Germany.Source: *Financial Market Trends*, vol. 45, February 1990, pp. 25-26.

billion to \$48.0 billion.⁷

Should these countries be entrusted to carry much more debt in the near future, or might lenders encounter a quicksand of arrears, reschedulings, and losses? On the one hand, liberalization should allow more efficient use of resources and more rapid growth. On the other hand, less authoritarian governments will have less power to extract the wherewithal to pay foreign debts on schedule in circumstances such as the early 1980s. And the transition from centrally directed to market-oriented economic systems can be difficult, temporarily reducing output and employment and boosting inflation, thereby imperiling the liberalization itself.

For assistance in evaluating the burdensomeness of the debt currently outstanding, one can, of course, consult the conventional indicators, such as those presented in tables 12 to 15. The higher the ratio of reserves to imports (table 12), the easier it is for a country to avoid a liquidity crisis in the event of either a sudden decrease in foreign-exchange receipts (from, say, a decrease in exports) or a sudden increase in foreign-exchange outlays (from, say, a rise in interest rates on outstanding debt). A rule of thumb is that reserves should amount to 25 percent or more of imports. Only Hungary falls short, although the figure for Poland is inflated by deposits that have been pledged as collateral and thus are not freely available to the nation.⁸

Another indicator is the ratio of net interest payments to exports (table 13), which is interpreted

as the share of a country's export receipts that must be devoted to interest payments on external debt. For Czechoslovakia, East Germany, Romania, and the Soviet Union, the ratio seems comfortably low, and, except for the Soviet Union, considerably lower than in the early 1980s. For Poland, the high ratio correctly signals an extraordinary debt burden.

A somewhat broader and more popular indicator encompasses not only interest but also principal payments in relation to export receipts (table 14). This "debt service ratio" is about the same as, or lower than, it was in 1981 or 1982 for most of the countries, but has doubled for Bulgaria and remains very high for Poland.

While these three indicators all contribute to the evaluation, many analysts rely most heavily on the ratio of net debt to exports (table 15). In general, it is thought that a ratio (percentage) of less than 100 represents a light debt burden, a ratio of 100 to 200 a medium burden, and a ratio of more than 200 a heavy burden.⁹ By this scale, the debt burden is light for Czechoslovakia and Romania, moderate for East Germany and the Soviet Union, and heavy for Bulgaria, Hungary, and Poland.

In sum, the various indicators suggest that Czechoslovakia, East Germany, Romania, and the Soviet Union could readily assume more debt, as of end-1989, but that Bulgaria, Hungary, and especially Poland, are less capable of doing so. Indeed, in March of this year Bulgaria suspended principal payments on \$10 billion of debt owed to major

Table 13
Net Interest Payments as a Percentage of Exports in Eastern Europe and the U.S.S.R., 1981-89

Area	1981	1982	1983	1984	1985	1986	1987	1988	1989 ^p
Bulgaria	7	7	6	3	3	6	10	12	14
Czechoslovakia	10	11	8	6	5	4	5	5	5
East Germany ^a	23	19	13	9	7	6	7	8	8
Hungary	24	18	13	13	15	17	20	21	20
Poland	78	62	52	50	49	42	39	40	49
Romania	20	20	14	12	9	7	6	4	1
Total Six	28	24	18	16	15	14	15	15	16
U.S.S.R.	8	7	4	4	4	5	5	6	7
Total Seven	19	16	11	10	10	10	10	11	12

^ppreliminary

^aIncluding transactions with West Germany.

Source: *Financial Market Trends*, vol. 45, February 1990, p. 25.

Western banks. And Poland has already sought relief from making its scheduled debt payments, which represent a burden comparable to that borne by the most heavily indebted countries of Latin America. Accordingly, in the secondary market, bank loans to Poland have been selling at huge discounts, amounting to about 85 percent in March, while discounts of 15 and 20 percent have been reported on loans to Hungary and Bulgaria, respectively. The debt of Yugoslavia, for which no debt burden indicators are presented here, has also sold at sizable discounts, amounting to more than 40 percent this spring.¹⁰ More generally, the risk premia (or spreads over LIBOR) charged by commercial banks on loans to the NLCs rose during 1988 and 1989 as debt burden indicators generally turned somewhat less favorable and as social turmoil spread in these countries.¹¹

Partly because of the rise in risk premia charged the NLCs on borrowed funds, it seems appropriate for at least some of these countries to seek to attract a higher proportion of their future foreign financing in the form of equity rather than debt. Unlike the interest on debt, which falls due by contract regardless of changes in the borrower's circumstances, dividends on equity may legitimately be slashed if the paying firm's circumstances turn adverse. Thus, with more of their foreign financing from equity investors, the NLCs would have more flexibility to reduce their outflow of income payments in the event of recession or other adversity. Moreover, the risk of providing

financing for these countries would be spread more widely, beyond the foreign banking sector.

This is not to say that equity financiers, such as participants in joint ventures, are oblivious to a country's indebtedness. Heavy indebtedness on the part of a government, in particular, may generate fears of a host of measures the government might take, in search of the wherewithal to service its debt, that would reduce the rate of return on equity investments. Among these measures could be higher taxes on profits and various controls designed to enhance the country's net foreign-exchange receipts, such as controls over what firms may import or requirements that they export a minimum percentage of their output. And more generally, overindebtedness almost by definition implies an inability, for the time being, to generate a competitive return on additional capital investment, whether the additional capital takes the form of loans or equity. Thus, while a heavily indebted country may seek to attract equity capital, its success will surely be compromised by its indebtedness.

Prior to the liberalization, of course, it was not indebtedness so much as government barriers that deterred foreign equity investment in Eastern Europe and the Soviet Union; under communism, it is the state, and not private entrepreneurs, that is to own the basic means of production. To the extent that this principle and other barriers to private investment are abandoned, and to the extent that the NLCs offer a

Table 14
Debt Service Ratios^a in Eastern Europe and the U.S.S.R., 1981-89

Area	1981	1982	1983	1984	1985	1986	1987	1988	1989 ^p
Bulgaria	20	23	20	17	15	32	34	39	40
Czechoslovakia	17	20	20	17	17	17	18	16	17
East Germany ^b	75	67	46	41	41	46	50	72	70
Hungary	42	37	36	45	53	65	50	54	45
Poland	188	183	147	109	96	63	79	76	88
Romania	36	46	35	25	27	27	30	23	15
Total Six	63	63	51	43	41	42	43	47	46
U.S.S.R.	23	20	14	16	20	24	23	23	23
Total Seven	43	41	33	29	31	33	33	35	35

^ppreliminary

^aAll interest and amortization on medium- and long-term debt as a percent of one year's exports.

^bIncluding transactions with West Germany.

Source: *Financial Market Trends*, vol. 45, February 1990, p. 26.

Table 15
Net Debt/Export Ratios^a in Eastern Europe and the U.S.S.R., 1981-89

	1981	1982	1983	1984	1985	1986	1987	1988	1989 ^p
Bulgaria	67	59	44	22	50	143	175	196	263
Czechoslovakia	82	80	64	52	61	66	78	78	95
East Germany ^b	198	141	103	78	89	89	107	106	118
Hungary	160	148	143	147	211	312	324	290	326
Poland	502	466	483	459	546	570	556	504	532
Romania	135	152	134	95	100	98	76	32	-1
Total Six	195	183	166	146	174	205	218	202	211
U.S.S.R.	65	55	40	36	58	79	82	90	113
Total Seven	135	120	104	94	123	152	158	153	169

^ppreliminary

^a(Debt - Reserves)/Exports (goods only) in convertible currencies, as a percentage.

^bIncludes transactions with West Germany.

Source: *Financial Market Trends*, vol. 45, February 1990, p. 24.

sound economic and stable political environment, many profitable opportunities should arise that equity investors will find impossible to refuse.

U.S. Investment in the NLCs

Loans by U.S. commercial banks to the NLCs comprise only a small fraction of the banks' total capital and a minuscule fraction of their total assets. Thus, by contrast with its exposure to the LDC debt problem, the U.S. banking system is not vulnerable

to any debt crisis that might erupt in the NLCs in the immediate future. As can be deduced from table 16, outstanding loans by the nine "money center banks" to the NLCs amounted to only 0.3 percent of their total assets and 3.6 percent of their total capital in September 1989.

U.S. direct investment in these countries has been even less formidable. At the end of 1988, only in Romania was the U.S. investment position such that the Commerce Department determined the figure could be published without disclosing data of individual companies, and there the amount was a mere \$3 million.¹²

Table 16

Amounts Owed Nine U.S. Money Center Banks by Borrowers in NLCs, and Bank Assets and Capital, September 1989

Description	Millions of Dollars
Bulgaria	64
Czechoslovakia	11
East Germany	154
Hungary	197
Poland	205
Romania	26
U.S.S.R.	214
Yugoslavia	1,214
Total	2,085
Total bank assets	615,100
Total bank capital	57,200

Note: Amounts owed are after adjustments for guarantees and external borrowings. Bank capital includes equity, subordinated debentures, and reserves for loan losses.

Source: Federal Financial Institutions Examination Council, "Country Exposure Lending Survey: September 1989." (Washington, D.C.: Board of Governors of the Federal Reserve System, Statistical Release E.16 (126)).

These data confirm the impression conveyed by the trade data that U.S. commerce with the NLCs is but an infant. How the infant grows will depend largely on how it is nurtured.

Summary and Conclusion

The prospect of expanding commerce with the NLCs has aroused much interest in the more advanced industrial countries. Currently the NLCs account for only a small portion of world trade, and it is questionable whether their trade will enlarge very much in relation to their GNP. However, a substantial fraction of the trade that has gone on among these countries might be switched to trade with the rest of the world as trade and payments controls within the NLCs are relaxed. In addition, total trade of the NLCs should be boosted by any growth in GNP that is stimulated by their liberalizing economic reforms.

As for the composition of NLC trade, the exports of the Soviet Union are heavily concentrated in petroleum, but machines and transport equipment comprise the largest single category of exports for half of

the NLCs and the largest single import category for all of them. However, their exports of machines and transport equipment are more important in their trade with each other than in their trade with other countries, which reportedly have applied higher standards for these items. Another major import category for a number of NLCs is petroleum, which in the past has been supplied to them by the Soviet Union at below-market prices.

Some inferences are drawn in the article regarding the comparative advantages of a few of the NLCs. Because of the likely influence of government controls over trade patterns, such inferences can be only tentative, but they are suggestive of patterns of specialization that might prevail as liberalization proceeds.

Trade with the NLCs comprises only a small fraction of total U.S. trade. Nearly half of U.S. exports to these countries is food, and most of U.S. imports from them is divided fairly evenly among basic manufactures, miscellaneous manufactures, and petroleum. The volume of this trade could be significantly expanded, and its pattern notably altered, as NLC governments relax their controls and as the United States both eases its restrictions on high technology exports and reduces its tariffs on imports from NLCs to the levels applied to imports from other countries generally. Current data suggest that the United States has marked comparative advantages in animal and vegetable oils and fat and in crude materials excluding fuels, and comparative disadvantages in basic and in miscellaneous manufactures, not only in trade with the NLCs but with the rest of the world.

In competition for the trade of the NLCs, the United States has not been in the front ranks. By contrast, among non-CMEA countries West Germany is the primary source of imports for every NLC except Romania, and is the leading purchaser of exports from every NLC except Romania and Yugoslavia. This dominance surely helps to explain why West Germany seems to be experiencing a significant economic stimulus from the liberalization.

The NLCs offer opportunities not only for trade but for investment. While liberalization should allow more efficient use of resources and more rapid growth at least in the long run, it is also true that less authoritarian governments will have less power to extract the wherewithal to pay foreign debts, and the liberalization process may be painfully disruptive for some of the NLCs. Indicators of creditworthiness suggest that some NLCs could readily assume more debt but that others are less capable of doing so, and

risk premia charged on loans to the NLCs generally rose during 1988 and 1989.

In any event, U.S. banks have loaned only a small fraction of their total assets and capital to the NLCs and thus have only a slight exposure to the risk of adverse developments there. U.S. direct investment outstanding in the NLCs is also very small,

¹ General Agreement on Tariffs and Trade, *International Trade 88-89*, vol. II (Geneva: 1989), Tables IV.9, IV.12, IV.21, IV.24, IV.44, and IV.68.

² *Ibid.*, Table I.3.

³ Excluding Yugoslavia. *Ibid.*, Table III.2.

⁴ See: Bela Balassa and Marcus Noland. 1989. "The Changing Comparative Advantage of Japan and the United States." *Journal of the Japanese and International Economies*, vol. 3 (June), p. 175.

⁵ "Miscellaneous manufactures" includes a variety of light manufactures, such as furniture, apparel, footwear, instruments, photographic equipment, watches and clocks, toys, sporting goods, silverware, jewelry, and musical instruments. "Basic manufactures" includes such items as rubber tires, paper and paper

confirming the impression given by the trade data that U.S. commerce with the NLCs has yet to blossom. While the NLCs hardly represent a promised land for U.S. business, they should offer numerous profitable opportunities if liberalization proceeds within a reasonably stable environment.

products, textiles, basic wood products, basic iron and steel products, and nonferrous metals and basic products thereof.

⁶ Economic Commission for Europe, *Economic Survey of Europe in 1988-1989* (New York: United Nations, 1989), p. 258, and International Monetary Fund, *International Financial Statistics Yearbook 1989*, (Washington, D.C.: IMF, 1989), p. 753.

⁷ *Financial Market Trends*, vol. 45, February 1990, p. 20.

⁸ *Ibid.*, p. 27.

⁹ *Ibid.*, p. 22.

¹⁰ *Indicative Prices for Less Developed Country Bank Loans*, March 15, 1990 (New York: Salomon Brothers, Inc.), and staff at Salomon Brothers, Inc.

¹¹ *Financial Market Trends*, vol. 45, February 1990, pp. 31-32.

¹² *Survey of Current Business*, vol. 69, August 1989, p. 85.