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Yugoslavia: Export Performance and Policies

October 16, 1980

Europe, Middle East and North Africa Region

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Currency Equivalents 1/

1971	1 US Dollar	=	14.96 Dinars
	1 Dinar	=	0.067 US Dollar
1972	1 US Dollar	=	17.00 Dinars
	1 Dinar	=	0.059 US Dollar
1973	1 US Dollar	=	16.19 Dinars
	1 Dinar	=	0.062 US Dollar
1974	1 US Dollar	=	15.91 Dinars
	1 Dinar	=	0.063 US Dollar
1975	1 US Dollar	=	17.39 Dinars
	1 Dinar	=	0.058 US Dollar
1976	1 US Dollar	=	18.19 Dinars
	1 Dinar	=	0.055 US Dollar
1977	1 US Dollar	=	18.30 Dinars
	1 Dinar	=	0.055 US Dollar
1978	1 US Dollar	=	18.64 Dinars
	1 Dinar	=	0.054 US Dollar
1979	1 US Dollar	=	19.00 Dinars
	1 Dinar	=	0.053 US Dollar

Glossary of Abbreviations

BOAL	Basic Organization of Associated Labor
BLS	US Bureau of Labor Statistics
CIFER	Community of Interest for Foreign Economic Relations
CPE	Centrally Planned Economies
EEC	European Economic Community
EER	Effective Exchange Rate
IMF	International Monetary Fund
LDC	Less Developed Country
NBY	National Bank of Yugoslavia
NIC	Newly Industrialized Country
OAL	Organization of Associated Labor
OECD	Organization for Economic Cooperation and Development
QR	Quantitative Restriction
SITC	Standard Industrial Trade Classification
YBIEC	Yugoslav Bank for International Economic Cooperation
YDAC	Yugoslav Domestic Activity Classification

1/ Period average exchange rates. The dinar has not been maintained within announced margins since July 12, 1973. Following a devaluation on June 6, 1980 the market rate was adjusted to 27.40 dinars to the US dollar (1 Dinar = 0.036 US Dollar) and was 27.34 dinars per dollar at the end of July 1980.

YUGOSLAVIA:

EXPORT PERFORMANCE AND POLICIES

This report is based on the findings of a mission which visited Yugoslavia in November 1979, consisting of Suman Bery (chief of mission), Cyrus Ardalan (incentives analysis), H. David Davis (tourism), Goran Segerlund (general economist and competitiveness analysis) and Antoine Schwartz (structural developments and market performance). The report was discussed in draft with agencies of the Yugoslav government and other official bodies in June 1980.

Europe, Middle East and North Africa Region
The World Bank
Washington, D.C., USA

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YUGOSLAVIA: EXPORT PERFORMANCE AND POLICIES

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COUNTRY DATA - YUGOSLAVIA

<u>AREA</u>	<u>POPULATION</u>	<u>DENSITY</u>
255,804 sq. km.	22.0 million (mid-1978)	86 persons per sq. km.
	Rate of Growth: 0.9% (from 1970 to 1978)	154 persons per sq. km. of agricultural land

POPULATION CHARACTERISTICS (1978)

Crude Birth Rate (per 1,000)	18.0
Crude Death Rate (per 1,000)	8.0
Infant Mortality (per 1,000 live births)	34.0

HEALTH (1977)

Population per physician	762
Population per hospital bed	166

INCOME DISTRIBUTION (1973)

% share of household income, lowest quintile	6.5
highest quintile	40.0

DISTRIBUTION OF LAND OWNERSHIP (1971)

% owned by top 10% of owners (social sector Kombinats)	15.1
% owned by smallest 10% of owners (private smallholders)	84.9

ACCESS TO PIPED WATER (1978)

Dwellings with piped water (%)	40.5
--------------------------------	------

ACCESS TO ELECTRICITY

% of all dwellings (1978)	89.0
rural (1971)	80.0

NUTRITION (1977)

Per capita Calorie Supply (136% of requirement)	3,445
Per capita protein supply (grams/day)	101

EDUCATION

Adult Literacy rate (%)	85 (1975)
Primary school enrollment (%)	100 (1977)
Secondary school enrollment (%)	79 (1977)

GNP PER CAPITA IN 1978 1/ : US\$2380

GROSS DOMESTIC PRODUCT IN 1978

	<u>US \$ Mln.</u>	<u>%</u>
GDP at Market Prices	53,765	100.0
Total Consumption	38,597	71.8
Gross Domestic Investment	18,811	35.0
Gross Domestic Savings	15,168	28.2
Exports of Goods and Nonfactor Services	8,655	16.1
Imports of Goods and Nonfactor Services	12,247	22.8

AVERAGE ANNUAL RATES OF GROWTH (% , constant prices)

	<u>1970-75</u>	<u>1975-78</u>	<u>1978</u>
GDP at Market Prices	6.6	4.9	6.8
Total Consumption	6.8	4.9	13.4
Gross Domestic Investment	5.9	6.7	-3.3
Gross Domestic Savings	5.7	13.8	2.6
Exports of Goods and Nonfactor Services	5.7	-1.8	2.5
Imports of Goods and Nonfactor Services	6.3	0.7	9.5

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1978

	<u>GDP at Current Factor Cost (1978)</u>		<u>Labor Force 4/</u>		<u>Value Added Per Active Resident Worker</u>	
	<u>US\$ Mln.</u>	<u>%</u>	<u>Mln.</u>	<u>%</u>	<u>US\$ (1978)</u>	<u>%</u>
Agriculture 2/	5,702	11.7	2.67	33.1	2,136	35.4
Industry 3/	21,945	45.1	2.69	33.4	8,158	135.2
Other	20,970	43.2	2.70	33.5	7,767	128.8
Total	48,617	100.0	8.06	100.0	6,032	100.0

GOVERNMENT FINANCE, consolidated, 1978

	<u>US\$ Mln.</u>
Consolidated Public Sector Receipts	20,617
Expenditures	20,885
Surplus	-268
Ratio of Current Receipts to GDP at Market Prices (%)	38.3

MONEY, CREDIT AND PRICES (in billions of dinars)

	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Money Supply 5/ (end-year position)	103.4	137.8	214.3	257.2	329.2
Money Supply as % of GDP at market prices	24.3	25.6	31.4	31.9	32.8
Bank Credit Total 6/	359.6	451.7	569.1	699.3	884.6
Enterprises	276.9	350.9	443.1	539.2	682.7
Government and other Social Sector	54.6	67.2	78.3	98.4	111.6
Households	28.5	38.7	50.5	65.1	90.3
Price Indices (Annual Percentage Change)					
Industrial Producer Prices	29	22	6	10	8
Agricultural Producer Prices	14	13	14	12	11
Retail Prices	26	26	9	13	13

1/ The per capita GNP estimate is at market prices, calculated by the same conversion technique as the 1979 World Atlas. All other conversions to dollars in these tables are at the prevailing period average exchange rate (see inside cover).

2/ Includes irrigation and forestry.

3/ Manufacturing, mining, construction, electricity, gas and water.

4/ Total active resident labor force, excluding unemployed.

5/ Currency in circulation, demand deposits and float.

6/ Short- and long-term credits.

BALANCE OF PAYMENTS, MERCHANDISE TRADE AND DEBT

	Annual Data at Current Prices (US\$ Millions)				
	1975	1976	1977	1978	1979 1/
SUMMARY OF BALANCE OF PAYMENTS					
Exports (f.o.b.)	4,072	4,878	5,254	5,671	6,794
Imports (c.i.f.)	-7,697	-7,367	-9,634	-9,988	-14,019
Trade Balance	-3,625	-2,489	-4,380	-4,317	-7,225
Non-Factor Service Receipts	2,354	2,430	2,600	2,984	3,916
Non-Factor Service Payments 2/	-1,135	-1,386	-1,641	-2,259	-3,507
Non-Factor Services Net Balance	1,219	1,044	959	725	409
Factor Service Receipts	1,746	1,974	2,220	2,791	3,976
Factor Service Payments	-343	-364	-381	-455	-821
Factor Services Net Balance	1,403	1,610	1,839	2,336	3,155
Current Account Balance	-1,003	165	-1,582	-1,256	-3,661
Medium & Long-Term Loans					
Disbursements	2,171	2,096	2,665	2,700	3,160
Amortization	-1,015	-903	-1,050	-1,400	-1,700
Net Disbursements	1,156	1,193	1,615	1,300	1,460
Export Credits Extended (net)	-80	-100	-213	-150	-100
Capital Transactions n.e.i. 3/	127	-47	-19	182	1,170
Use of Reserves	-200	-1,211	199	-315	1,131
MERCHANDISE TRADE					
Imports					
Capital Goods	1,887	1,759	2,436	2,565	3,572
Intermediate Goods	5,052	4,697	5,989	6,325	8,935
Consumer Goods	758	911	1,208	1,065	1,512
Total Merchandise Imports (c.i.f.)	7,697	7,367	9,634	9,988	14,019
Exports					
Capital Goods	695	826	1,080	1,132	1,156
Intermediate Goods	2,156	2,589	2,667	2,809	3,627
Consumer Goods	1,221	1,463	1,509	1,730	2,011
Total Merchandise Exports (f.o.b.)	4,072	4,878	5,256	5,671	6,794
MERCHANDISE TRADE INDICES					
			1975=100		
Index of Export Dollar Unit Values	100	104	118	128	148
Index of Import Dollar Unit Values	100	103	117	124	147
Terms of Trade Index	100	101	101	103	101
RATE OF EXCHANGE					
			Annual Averages		End July 1980
US\$1.00 = Dinar	17.39	18.19	18.30	18.64	27.34
Dinar = US\$0.058		0.055	0.055	0.054	0.037

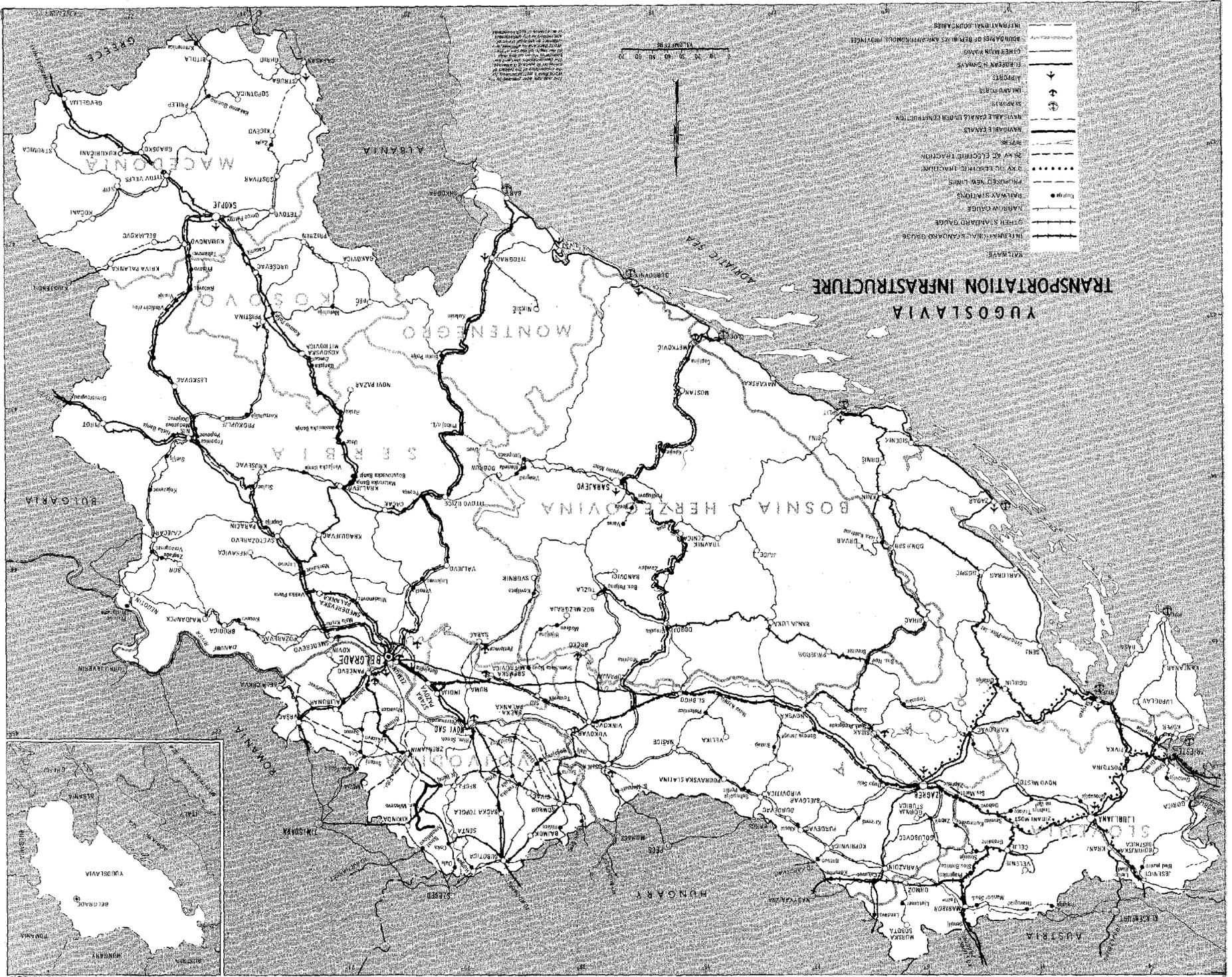
EXTERNAL DEBT, December 31, 1978 4/

	US\$ Millions
Debt Outstanding and Disbursed	11,014
Official	(2,960)
Private	(8,054)
Debt Service Ratio 5/ (%)	21.5
Debt Service Ratio 6/ (%)	16.5

IBRD LENDING, (as of July 31, 1980) (Million US\$)

Outstanding & Disbursed	2,307.1
Undisbursed	1,040.0
	3,347.1

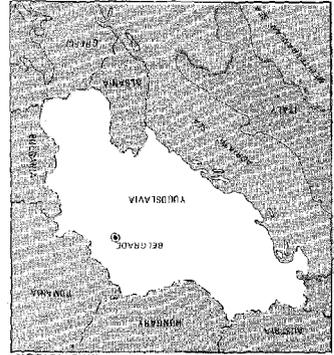
- 1/ Preliminary data.
 2/ Including withdrawals from foreign currency deposits.
 3/ Includes errors and omissions, short-term loans, IMF account, national and commercial bank credits. (Calculated residually.)
 4/ Estimated.
 5/ Debt service as a percentage of exports goods and nonfactor services.
 6/ Debt service as a percentage of exports of goods, nonfactor services and gross receipts from workers' and emigrants remittances.



YUGOSLAVIA
TRANSPORTATION INFRASTRUCTURE

- INTERNATIONAL BOUNDARIES
- BOUNDARIES OF REPUBLICS AND AUTONOMOUS PROVINCES
- COUNTY BOUNDARIES
- AIRPORTS
- INLAND WATERS
- SEAPORTS
- NAVIGABLE CANALS UNDER CONSTRUCTION
- NAVIGABLE CANALS
- ROADS
- RAILWAYS
- RAILWAY STATIONS
- RAILWAY GABLES
- OTHER STANDARD GAUGE
- INTERNATIONAL STANDARD GAUGE

0 10 20 30 40 50 60 70
KILOMETERS



SUMMARY AND CONCLUSIONS

Introduction

(i) Balance of payments difficulties were a recurrent feature of Yugoslavia's development in the 1970s. Despite these difficulties, Yugoslavia was able to maintain the momentum of growth and structural change, but with considerable volatility in economic activity and at the cost of a steady growth in real debt. Both short- and medium-term policy were colored by balance of payments considerations and the current (1976-80) five year plan incorporated an explicit strategy for external adjustment. Despite these efforts the resumption of fast growth since 1977 has again led to balance of payments difficulties, which, partly on account of deteriorating terms of trade, became unusually severe in 1979. The Yugoslav authorities have taken a number of short term measures to respond to the latest crisis, including a major devaluation and monetary and incomes policies to curb investment and consumption. These measures appear to be bearing fruit, and preliminary results for 1980 are encouraging. In addition to these short-term measures, considerable emphasis is again being placed on the strategy and mechanisms for external adjustment in the design of the forthcoming (1981-85) plan.

(ii) Sluggish merchandise export performance has been an important factor contributing to recent balance of payments difficulties, and has served to exacerbate the effects of terms of trade losses. Improved export performance will form an important part of the adjustment envisaged in the next plan. In order to achieve this improvement, it is necessary to understand the sources of past weakness; this is the principal issue addressed by this report. The analysis is concerned with structural developments over the past decade, rather than just with the short-term, and is particularly concerned with performance and prospects for manufactured exports.

Institutional Changes

(iii) While the underlying objectives of the trade and payments system remained unchanged in the 1970s, there have been significant changes in the institutional arrangements for formulating and executing foreign economic policy. These changes were intended to embody the principles of Yugoslavia's 1974 constitution, which seeks to replace the administrative powers of the state by direct negotiation between interested constituencies in given areas of economic and social policy. In the case of trade and foreign exchange policy the premise of the new system is that the rights to foreign exchange earned through trade or other external cooperation belong to Organizations of Associated Labor (OALs) which helped to earn it. A family of new institutions called Communities of Interest for Foreign Economic Relations (CIFER) has been established at the regional and federal levels to bring together earners and users of foreign exchange. These

bodies have been entrusted with important responsibilities, including the preparation and supervision of regional balance of payments plans, the distribution of foreign exchange rights and import quotas to importers and the design and administration of export incentive schemes. The new system began operation at a time of considerable stress in the balance of payments and had to shoulder a massive administrative burden in 1979 before procedures and personnel were fully in place, but appears to be improving with experience.

Growth and Structure of Merchandise Exports

(iv) There have been significant changes in the commodity and regional structure of Yugoslav exports in the 1970s. Exports to the developed countries (DCs) have grown more slowly than those to either the less developed countries (LDCs) or the centrally planned economies (CPEs). By 1977 the CPEs represented a slightly larger market for Yugoslav exports than did the developed countries. The share of manufactured exports has continued to rise and constituted two-thirds of total exports in 1977. The commodity composition of exports differs significantly by market, with primary products being much more important in exports to developed countries than to the other market areas. The continuation of these various trends has meant a sharp reduction in the importance of primary product exports to developed countries, and the emergence of the CPEs as the largest market for Yugoslav manufactures. Among the developed countries Yugoslavia's exports have remained oriented to European markets. There has been greater diversification of market among developing countries, with the oil-exporting countries becoming important markets for both primary products and manufactures.

(v) Among manufactured products Yugoslavia enjoys particular strengths as an exporter of various categories of machinery and transport equipment, and even by developed country standards is relatively specialized as an exporter of heavy electricals, ships and boats and of metal products. In the lighter manufactures, Yugoslavia has been successful in wood products and furniture, certain categories of clothing, and footwear. By international standards Yugoslavia's exports are extremely diversified and becoming more so. In general manufactured exports are a spillover from production for the domestic market, rather than the outcome of a sustained attempt at export specialization.

Performance in Developed Country Markets

(vi) Since growth in exports to developed countries has been by far the slowest, Yugoslavia's performance on these markets has been compared, at a disaggregated level, against the growth of the market and the performance of a reference group of newly industrialized developing countries (NICs). By either standard Yugoslavia's performance in primary

product exports between 1970 and 1977 has been poor, and this conclusion holds even after taking account of the increased value of petroleum imports by the developed countries. Several factors account for this weakness. Given the importance to it of European markets, Yugoslavia may have been adversely affected by market integration movements in Western Europe (the expansion of the EEC, and the reduction in trade barriers between the EEC and EFTA), and by the growth of preferential trading agreements between the EEC and developing countries, particularly those in the Mediterranean basin. In addition Yugoslav domestic prices for metals and minerals have risen much faster than export prices since 1974, resulting in substantial switching of output from exports to the home market. In part this reflects deliberate decisions within Yugoslavia to encourage the development of the raw material base, as well as to export products with higher domestic value added.

(vii) Performance in manufactured exports to developed country markets has been considerably stronger than that in primary products, and has exceeded the growth of the market in aggregate. However Yugoslavia's performance is poorer when compared with the NICs, with growth in Yugoslavia's exports being 25 percent lower between 1970 and 1977. The superior performance of the NICs is true for all markets and virtually all manufactured commodities. While preferential access to the EEC market may have assisted some of these competitors, this would not account for Yugoslavia's performance on non-EEC markets; Yugoslavia's handicap on account of non-preferential treatment in the EEC would in any case have been offset to some degree by the benefits it has enjoyed under the Community's Generalized Scheme of Preferences (GSPs).

(viii) The conclusion is that a better performance in manufactured exports to developed country markets was feasible for Yugoslavia in the 1970s. A stronger performance was also a necessity, given the balance of payments situation and the sluggish performance in primary products. In order to understand why a more sustained response did not materialize analyses were undertaken of external price and cost competitiveness, and of the domestic incentive system.

Competitiveness

(ix) Analysis of price and cost competitiveness is most relevant for products where autonomous price setting is a possibility. This is likely to be the case for only a restricted range of Yugoslavia's manufactured exports to developed countries. The indicators examined suggest that an improvement in competitiveness occurred as a result of two devaluations in 1971 and that the depreciation of the dinar thereafter has been such as to maintain this level of competitiveness over the rest of the decade. The analysis of competitiveness is undertaken solely with reference to the market exchange rate, without taking any account of changes in the level of export incentives or subsidies.

Commercial Policies

(x) Despite moves to liberalize and simplify commercial policies, the Yugoslav system remains complex, with jurisdiction divided between several agencies. Interventions on the import side include customs tariffs, nontariff levies, quotas and, in the case of machinery and equipment, approval from the Chamber of Economy. On the export side interventions include generalized drawback schemes, additional, more selective export incentives, access to subsidized short-term credit and retention rights. The administration, and to some degree the nature, of export incentives has changed under the new trade legislation, and the CIFER system now has direct responsibility for setting and administering the system of export incentives. While the average level of customs duties has tended to decline over time this has been offset by increases in nontariff charges, with the result that the average effective rate of all import charges rose slightly over the 1970s and was about 22 percent of the c.i.f. value of imports in 1979. This trend has been reversed by the abolition of import surcharges in June 1980. The level of customs duties is in general higher for finished goods, particularly machinery and equipment, than for raw materials and intermediates. However the protection offered to capital goods has been reduced and that offered to industrial raw materials increased since 1976, primarily to encourage the development of the latter. Quantitative restrictions (QRs) have continued to form a part of the Yugoslav import regime, although their significance was considerably reduced in the early 1970s. In addition to formal quotas, Chamber of Economy approval is needed for imports of machinery and equipment, to ascertain that the required equipment cannot be supplied by a Yugoslav manufacturer. The system of cash payments for exports is primarily intended to compensate exporters for the implicit burden of trade and direct taxation borne by them; in addition the CIFER have latitude to provide incentive grants on a more selective basis to priority sectors. Apart from these cash payments important incentives to exporters include subsidized shipping credits made available by commercial banks and rediscounted by the regional national banks, and foreign exchange retention rights by which exporters are permitted to retain a portion of the foreign exchange earned for their own use.

(xi) Given the range of policy interventions involved and the data available, no very firm judgment on the intrinsic trade bias of the commercial policy regime can be made, but it is likely that tariff and quota protection slightly exceeds subsidies provided to exporters, creating a modest bias toward home sale. This assessment, of only minor divergences from neutrality, is however at variance with impressions obtained by the mission on its enterprise visits. Firms interviewed uniformly indicated that the profitability of producing for the home market substantially exceeded the profitability of exporting, and that domestic prices of import

substitutes were also much higher than world prices valued at the official exchange rate. These differences seem too large to arise from the commercial policy regime alone and it is probable that much of this divergence has instead resulted from disequilibrium in the market for foreign exchange, and the foreign exchange allocation procedures used to deal with this disequilibrium. Even though exchange rate policy succeeded in maintaining rough purchasing power parity for exports (at least until 1978) this does not necessarily imply that an equilibrium rate for the overall balance of payments had been achieved. Given trends in invisibles and workers' remittances, terms of trade losses, supply problems in primary products and slow growth of major markets, the degree of exchange rate change needed for equilibrium was probably well in excess of that indicated by a purchasing power parity rule. The result of exchange market disequilibrium has been to create a booming domestic market for import substitutes, which have benefited from the implicit premium on foreign exchange. While some of the premium has been shared with exporters through explicit transfer mechanisms this had evidently been insufficient to compensate for the bias toward home sale. While the divergence between equilibrium and official exchange rates has probably become especially marked after 1974, it is possible that throughout the 1970s the value of the exchange rate was inconsistent with Yugoslavia's growth aspirations and possibilities, and that developments in the external environment after 1974 have only served to worsen this situation.

(xii) Compounding these home-sale biases stemming from the trade and payments system are the effects of domestic demand. Given the residual nature of exporting for most Yugoslav enterprises, a buoyant domestic market has been inimical to strong export performance. Past stabilization episodes have generally been too brief to affect the domestic orientation of Yugoslav industry decisively. When domestic growth picked up, resources were again preempted for home use. The maintenance of high levels of demand, a protected home market for many finished goods and the closeness of interenterprise links characteristic of Yugoslavia are probably the major explanations for the unaggressive export performance of the seventies.

Prospects and Future Policies

(xiii) Yugoslavia is unlikely to be able to maintain this domestic orientation in the 1980s. Rising oil prices will imply deteriorating terms of trade for the foreseeable future, and the impact of this deterioration on financing requirements will be the greater given the wide deficit with which Yugoslavia enters the 1980s. Even on relatively optimistic trade assumptions, maintaining growth in GDP at 4.5 percent in the 1981-85 period would entail a near doubling of real debt. The need for a much stronger export performance is fully acknowledged by the Yugoslavs, and has been reflected both in macroeconomic policies for 1980, and in initial drafts of the 1981-85 plan. Policies announced in 1980 included monetary

and incomes policies to restrain both investment and consumption, and a 30 percent gross devaluation of the dinar. The devaluation has been presented as the first step in a medium-term program of adjustment to be embodied in the forthcoming plan. Elements in this strategy include continuation of the considerable investment in domestic energy sources started in the present plan, and a continued stress on the development of the domestic raw and intermediate material base. Despite current balance of payments difficulties there remains a firm commitment to a liberal trading structure, and the intention is to limit still further the protective role of quotas in the trade regime. The criteria for quota protection in the forthcoming plan are to be specific and restricted to the protection of certain key products. It is also intended that quotas, when established, should be of limited duration and that expiry dates for the quotas be announced at the time of their enactment. No major revisions in the fundamental tariff structure are contemplated in the immediate future as the average level of protection and broad relationships between intermediate and final goods are thought to be appropriate for the medium term.

(xiv) The objectives and structure of commercial policy for the future appear to be well conceived, as have indeed been the major moves in the past. However, the beneficial effects of such a structure on domestic resource allocation are contingent upon the market for foreign exchange being in equilibrium. Until full convertibility comes possible it will remain necessary for the central banking authorities to take a view on what an 'equilibrium' dinar exchange rate is at any given time; for the reasons mentioned earlier, this is likely to be a difficult judgment, which takes into account exchange rate influences on both visibles and invisibles, and even on capital movements. If the national, official exchange rate is close to an equilibrium rate, much of the exchange allocation function of the CIFERs would disappear; if however, it departed significantly from equilibrium it is likely that the shadow exchange rates perceived by earners and users of foreign exchange could differ substantially between republics, with resulting loss in overall allocative efficiency.

(xv) By the recent devaluation, by their actions in past crises and by their policy statements, the Yugoslavs have signalled their willingness to use the exchange rate as an active instrument of adjustment policy. In the past though the real devaluation has been fairly quickly eroded, too quickly to persuade enterprises that the shift in relative rewards toward exports was likely to endure. The aim this time should be to maintain a somewhat undervalued real exchange rate for long enough to persuade enterprises that the shift in profitabilities will continue. Maintaining a real exchange rate at a target level is easier said than done and will require not only the willingness to depreciate the dinar as needed, but also less buoyant domestic demand. Reduced domestic absorption will in any case be needed to permit a shift in resource use to exports; it will

be important not to stimulate domestic demand too soon but to let reflation occur through export demand. At the same time the effort should be made to eliminate import rationing as soon as possible so that existing capacities are made effectively available for export supply.

(xvi) While the important policy determinants of Yugoslav export performance are at the level of more general policies, there would also seem to be room for improvement in the institutional infrastructure supporting exports and exporters. Export promotion efforts are coordinated at the Federal level through the Chamber of Economy and the Community of Interest for Foreign Economic Relations. While these constitute a forum for exchange of information, the extent of market intelligence or market development services provided is unclear. Most major exporting enterprises maintain their own network of sales and representative offices in principal markets, but these are of little benefit to the smaller exporters. These issues are under review, particularly by the Chamber of Economy, and a better structure is being designed.

(xvii) In terms of product and market strategies, Yugoslavia's stance is clearest with regard to the developing countries, including the oil-exporters. These countries are seen as providing expanding markets for Yugoslav engineering products, both of capital and consumer goods and sale of Yugoslav technology and consultancy services. The reorganization of the former Export Credit and Insurance Fund into the Yugoslav Bank for International Economic Cooperation (YBIEC) in 1979 is intended to help identify market opportunities for sale of capital goods and services, and to aid in their financing. This strategy makes good sense for Yugoslavia, given its engineering and civil works expertise and its association with the nonaligned movement, but it will face stiff competition both from other NICs and from the developed countries. An important determinant of Yugoslavia's success will be its ability to provide suppliers' credits on terms competitive with Berne Union members, whose ranks now include several developing country exporters. The bulk of this finance will be provided by the YBIEC through its dinar rediscount of long-term credit extended to purchasers by Yugoslav commercial banks. While some exporters of capital goods expressed concern that shortages of long-term export finance at suitable terms could put them at a competitive disadvantage, it is not entirely established that such finance is currently a binding constraint. Measures have in any case been taken within the framework of the 1980 Order on Monetary Policy to augment the resources available to the YBIEC. While competitive credit terms may be a necessity for successful exporting of capital goods, it should be recognized that provision of credit subsidies involves a real economic cost, and that this cost needs to be included in assessing the benefit of the export to the economy. In future trade with the CPEs, Yugoslavia's traditional advantages of superior design in manufactured consumer products and its specialities in capital goods are likely to continue to offer it a broad range of products to trade with these countries.

(xviii) The major structural issues for Yugoslavia's exports have in the past arisen in its trade with the developed countries, particularly the EEC. An important new development in this area has been the conclusion of a new cooperation agreement between Yugoslavia and the EEC, which for the first time provides Yugoslavia with preferential access to the EEC market for its industrial products, as well as improved access for certain agricultural products, particularly beef, tobacco and wine. Some 70 percent of Yugoslavia's industrial products will be admitted duty-free without limit. Twenty-nine 'sensitive' items in which Yugoslavia is considered very competitive will continue to be subject to ceilings. These include such items as wood products, shoes, furniture, mineral and other fertilizers, and rubber tires; at least some of these were identified earlier in this report as areas of strength for Yugoslavia. In addition, tariff dismantling will occur only gradually for six designated non-ferrous metals. Textile products remain subject to 'voluntary restraint' but will be eligible for expanded quotas under the Community's GSP scheme. These terms are considered to be as favorable as those offered under any other cooperation agreement by the Community, and as such should serve to eliminate the less favorable access Yugoslavia has hitherto obtained, and to mitigate the effects of the proposed expansion of the EEC to include Greece and the Iberian countries.

(xix) While the new agreement with the EEC presents Yugoslavia with additional opportunities, it does not by itself guarantee Yugoslavia a reversal of past trends. First, as mentioned, the areas in which Yugoslavia is most competitive will remain subject to ceilings. Second, Yugoslavia will face continuing competition from other semi-industrial countries including some that have already concluded similar preferential agreements with the EEC. Yugoslavia's specific advantages are likely to derive from its location, its resource base, its skill levels, and its experience and craft traditions - particularly in engineering and metal-working industries. Given the assurance of duty-free access to the West European market, the locational advantages Yugoslavia possesses could be put to formidable use, particularly through the development of subcontracting relationships and industrial cooperation agreements with European firms. To the degree that current customs or other procedures impede the establishment of such enclave processing activities they should be reviewed, but the mission was provided no indication of such procedural difficulties by the firms it visited, several of which are already engaged in such relationships with foreign firms.

(xx) The analysis of this report suggests that already, despite a not very purposive effort, Yugoslavia has performed well in relatively sophisticated engineering products, particularly in machinery and transport equipment, and in other product lines where design is a source of market

advantage: garments, footwear, furniture. In addition Yugoslavia has the experience of operating on three disparate sets of markets which gives it an additional source of strength in the future, and continued protection against problems of market access. The new agreement with the EEC, offers it new opportunities for both manufactured and agricultural. With appropriate domestic policies Yugoslavia should be better equipped than many developing countries to face the turbulent period ahead.

CHAPTER I - INTRODUCTION AND OVERVIEW

1. Balance of payments difficulties were a recurrent feature of Yugoslavia's development in the 1970s. Despite these difficulties Yugoslavia succeeded in maintaining the momentum of growth and structural change successfully, albeit with considerable volatility in economic activity from one year to the next, and at the cost of rising real indebtedness. Both short- and medium-term economic policy in the 1970s were heavily colored by balance of payments considerations; the economy was subjected to a series of stop-go episodes to respond to crises as they occurred, while the medium-term plan for 1976-80 stressed both export promotion and reduced import dependency. Despite these efforts fast growth since 1977 has led once again to balance of payments difficulties, which have been of unusual severity in 1979. In response to this latest crisis the Yugoslav authorities have been forced to take a number of short-term measures to bring the balance of payments deficit within manageable limits; these have included a series of stabilization measures and a sizeable devaluation. As the current crisis has hit in the course of preparation of a new (1981-85) five year plan, a great deal of emphasis in the new plan is being placed on the strategy and mechanisms of external adjustment.

2. It is against this background that the present report offers its analysis of export developments in the 1970s. As is discussed below, sluggish merchandise export performance has been an important contributing factor to the recent balance of payments difficulties. A reversal of this trend is likely to be an essential part of any strategy for external adjustment and this has been acknowledged in numerous policy pronouncements by the Yugoslav government. In order to achieve this reversal it is necessary to understand why export performance has been so poor, and this is the principal issue addressed by this report. The analysis here is concerned with medium- and long-term trends rather than short-term developments. In order to place the present set of institutions and instruments in historical perspective this chapter briefly traces major shifts in policy since 1952 and describes recent changes in the institutional framework for foreign trade and payments. Chapter II provides a disaggregated description of Yugoslav merchandise exports: their commodity composition, their geographic distribution, and their degree of specialization. Chapter III assesses export performance, particularly in the markets of the developed market economies, by tracking Yugoslavia's market share performance. Chapters IV and V try to account for the export performance of recent years by analyzing the competitiveness of Yugoslav exports, and by assessing the trade bias of the domestic incentive structure. Chapter VI presents conclusions and prospects.

Institutional Developments 1952-65 1/

3. From 1952 until 1961, Yugoslavia operated a multiple exchange rate system similar to that of the COMECON countries. Effective exchange rates,

1/ This section draws upon the discussion in the World Bank report Yugoslavia: Development with Decentralization, 1975, Chapter 12, and in C.R. Chittle, Industrialization and Manufactured Export Expansion in a Worker-Managed Economy: The Yugoslav Experience, J.C.B. Mohr, Tubingen, 1977, Chapter III.

which were differentiated by commodity, currency of transaction and exporting region, provided a buffer between domestic and foreign price structures, and furnished a limited set of incentives to reinforce the plan. While the range of effective exchange rates on both imports and exports varied widely across commodities, the average effective exchange rate on exports (dinars per US\$) was between fifteen and twenty percent higher than that on imports. 1/ There was in general no attempt to align the structure of domestic prices with that of world prices nor to use the price system as a guide to an efficient trading pattern. The first attempt at a unified exchange rate and a more liberal trading system was made in 1961. While a single official rate for the dinar was announced, the allocative impact of this move was partially offset by the introduction of sectorally differentiated tariffs and import quotas and the maintenance of foreign exchange retention quotas from the earlier period. Nonetheless, there was some narrowing in the range of effective exchange rates on both imports and exports between activities. This attempt at rationalization did not succeed. In the face of rising deficits between 1962 and 1964, import restrictions and selective export incentives were reestablished, resulting again in a de facto multiple exchange rate system.

4. A renewed and more ambitious attempt at liberalization was made with the economic reforms of 1965. In addition to a further devaluation of the dinar, export subsidies and premia were abolished, the importance of import quotas was diminished, and the average level of nominal tariffs was lowered. The aims of this reform were farreaching: integration of the Yugoslav economy into the world economy, alignment of the domestic price structure with world prices and, as an ultimate goal, full convertibility of the dinar. This relatively liberal structure, and this set of goals have characterized Yugoslav trade and payments policies since.

The New System of Trade and Payments

5. Although the underlying economic objectives of the trade and payments system remained unchanged in the 1970s, the institutional arrangements for formulating and executing policy have substantially altered. The changes have been designed to translate the general principles of Yugoslavia's new constitution of 1974 into reality in the area of external economic policy; this parallels development in other areas of social and economic life. As the premises and objectives of the 1974 constitution have been extensively described elsewhere 2/ they are not discussed here. In essence the new constitution seeks to replace the administrative and regulatory power of state bodies by bodies which more directly express the interests of the economic and social constituencies involved, particularly those of organizations of associated labor (OALs).

1/ Estimates quoted in Chittle (op.cit.), Tables 9 and 10.

2/ See World Bank, Yugoslavia: Self-Management Socialism - Challenges of Development, 1979.

6. In the trade and payments areas the new framework is articulated in three basic laws which were passed by the Federal Parliament on March 1, 1977. These are the laws on trade in goods and services with foreign countries, on foreign exchange operations and foreign credit relations, and on conduct of business activities abroad. The major provisions of these laws came gradually into effect in 1978; organizational procedures and practices continue to be developed in the light of experience.

7. A detailed description of the new legislation is beyond the scope of this report but the salient features may be sketched. The major institutional development has been the creation of consultative bodies called communities of interest for foreign economic relations (CIFER). These are constituted at the republican and provincial levels and provide the forum for the articulation and coordination of views and plans in a variety of areas concerned with foreign economic relations. Thus the regional CIFER, in consultation with their constituent organizations of associated labor (OALs), are responsible for preparing regional balance of payments projections and ensuring their consistency with the foreign trade plans of their constituent organizations, for allocating and monitoring external borrowing rights, for the administration of export incentives (as discussed in Chapter V), and for articulating regional views on proposed changes in policy. The regional CIFER are members of the Yugoslav CIFER. Within the latter forum they contribute to the formulation of the Annual Order on Joint Foreign Exchange Policy which accompanies the Annual Plan Resolution each year. In accordance with the objectives and targets of this order the regional CIFER are required to harmonize and coordinate their individual balance of payments projections into a consistent whole. They are then entrusted with the responsibility for ensuring that actual performance in the region accords with the projected balance of payments, by quarter. In the event of nonfulfillment of plans, it is the responsibility of the regional CIFER to take appropriate corrective measures. It is expected that by transferring these responsibilities for overall balance from state bodies (such as the Federal Secretariat for Foreign Trade) to the regional CIFER two gains will be achieved: first that greater discipline will be imposed on importing enterprises through the closer and more direct link with export performance, and second that, if emergency measures to limit imports do need to be undertaken, this could be done with less disruption within the forum of the CIFER than through measures imposed unilaterally by the state. Since the new system has been born in a period of foreign exchange shortage, implementation of these principles has required the CIFER to get heavily involved in the allocation of scarce foreign exchange rights to importers, to a degree that was not envisaged at the beginning, and perhaps in excess of their administrative capabilities.

8. Another feature of the new legislation is the treatment of foreign exchange retention rights. The premise of the new legislation is that rights to foreign exchange earned through exports of goods and services and other forms of cooperation with foreign countries belong to the basic organizations of associated labor which contributed to its realization. In conformity with this spirit and in recognition of the fact that intermediate producers contribute to exports without being able to realize foreign exchange directly, the

new legislation allows OALs to conclude self-management agreements amongst themselves, under the auspices of the regional CIFER, for the distribution of foreign exchange earnings. Such arrangements for sharing of foreign exchange are particularly encouraged between OALs which are engaged in other forms of economic cooperation as well. It is recognized however that there are practical difficulties in making this mechanism the sole source of foreign exchange for importers, and provisions therefore exist for the regional CIFER to make allocations to eligible importers in accordance with current balance of payments policy. Such foreign exchange sales would be made out of foreign exchange voluntarily surrendered by surplus OALs, or such uncommitted sources as workers' remittances. Detailed procedures in this area are still evolving.

9. As noted already, the new system has been launched under inauspicious circumstances and, as such, has had to shoulder a massive administrative burden while procedures and personnel were only partially in place. Partly as a consequence, the machinery for self regulation of deficits did not work well in 1979 and the deficit substantially exceeded planned levels. As discussed more fully in Chapter V, resort to negotiated agreements for the sharing of foreign exchange, usually localized at the regional level, can, in a situation of foreign exchange shortage, lead to a wide variety of effective exchange rates obtaining in the system, with the loss in allocative efficiency that such departures from unified rates produce.

Major Trends, 1965-1979

10. Following the 1965 economic reforms, greater integration with the world economy occurred rapidly on the import side. Between 1967, when the new exchange and trade system became fully effective, and 1971, the ratio of imports of goods and nonfactor services 1/ to GDP at current market prices rose from 20.3 percent to 25.5 percent (see Table 1 and Figure 1). No similar adjustment occurred on the export side. The widened trade deficit was financed initially by net factor income from abroad, largely workers' remittances, which became an important element in the balance of payments for the first time in 1969. Despite the rapid growth in this item the growth in imports soon led to a current account deficit which by 1970 was regarded as unsustainable. A package of stabilization measures (including two devaluations of the dinar) was introduced in 1971 to restore balance of payments equilibrium. The measures had their desired effect; through adjustment in both imports and exports and continued buoyancy in remittances, the deficit was converted into surplus.

11. Following the success of this stabilization phase, policy became more expansionary, and growth proceeded extremely rapidly in 1974. However, the timing of the boom coincided with the increase in oil prices and the recession in the industrial market economies. These developments had their

1/ The terms "imports" and "exports" will hereafter be used to refer to trade in goods and nonfactor services, while "merchandise imports" and "merchandise exports" will be used to refer to visible trade alone.

Table 1: IMPORTS AND EXPORTS, 1965-1979
 (in millions of current dinars ^{1/} and in percent)

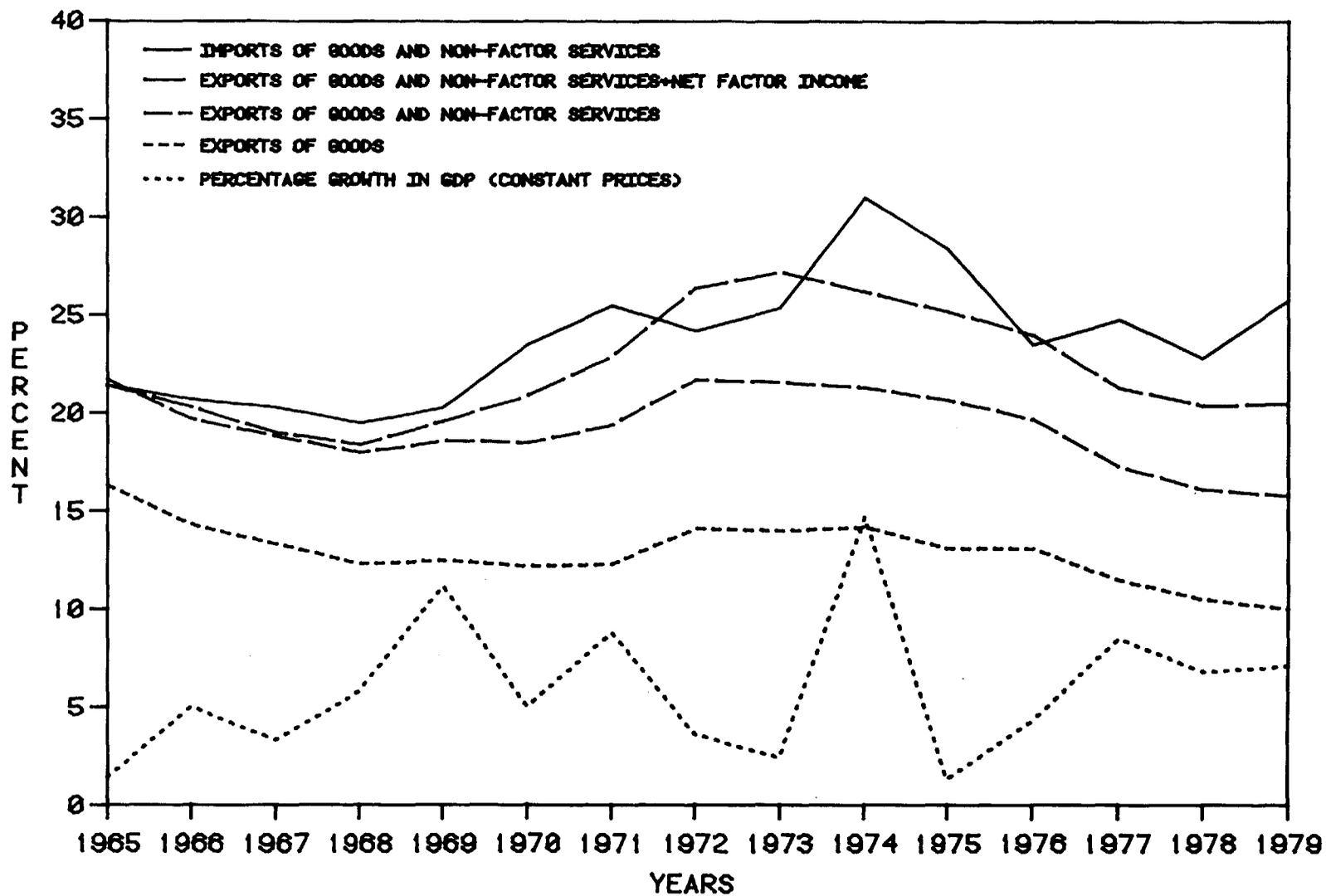
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
1. In Dinars															
<u>Exports:</u>															
A. Goods	13,650	15,275	15,663	15,813	18,438	21,000	27,137	38,029	46,190	60,538	70,812	88,731	96,148	105,707	129,085
B. Goods and Nonfactor Services	18,213	20,988	22,184	23,212	27,383	31,841	42,909	58,225	71,349	90,623	111,748	132,932	143,728	161,329	203,489
<u>Imports:</u>															
C. Goods	16,100	19,688	21,331	22,463	26,675	35,925	48,665	54,859	73,033	119,643	133,851	134,006	176,302	186,176	266,362
D. Goods and Nonfactor Services ^{2/}	18,000	22,088	23,852	25,191	29,894	40,494	56,291	64,957	83,670	132,292	153,588	159,217	206,332	228,284	332,995
E. Net Factor Income from Abroad	-263	663	216	543	1,434	4,125	7,809	12,597	18,424	20,985	24,398	29,286	33,564	43,552	59,945
F. Gross Domestic Product	83,948	106,504	117,732	129,058	147,570	172,080	221,028	268,860	329,607	426,175	540,096	676,107	832,995	1,002,395	1,288,278
2. As Percentages of GDP															
<u>Exports:</u>															
G. Goods	16.3	14.3	13.3	12.3	12.5	12.2	12.3	14.1	14.0	14.2	13.1	13.1	11.5	10.5	10.0
H. Goods and Nonfactor Services	21.7	19.7	18.8	18.0	18.6	18.5	19.4	21.7	21.6	21.3	20.7	19.7	17.3	16.1	15.8
<u>Imports:</u>															
I. Goods	19.2	18.5	18.1	17.4	18.1	20.9	22.0	20.4	22.2	28.1	24.8	19.8	21.1	18.6	20.7
J. Goods and Nonfactor Services	21.4	20.7	20.3	19.5	20.3	23.5	25.5	24.2	25.4	31.0	28.4	23.5	24.8	22.8	25.8
K. Net Factor Income from Abroad (- = outflow)	-0.3	0.6	0.2	0.4	1.0	2.4	3.5	4.7	5.6	4.9	4.5	4.3	4.0	4.3	4.7
L. Balance on Merchandise Trade (G - I)	-2.9	-4.2	-4.8	-5.1	-5.6	-8.7	-9.7	-6.3	-8.2	-13.9	-11.7	-6.7	-9.6	-8.1	-10.7
M. Balance on Goods and Non-Factor Services (H - J)	-0.3	-1.0	-1.5	-1.5	-1.7	-5.0	-6.1	-2.5	-3.8	-9.7	-7.8	-3.8	-7.5	-6.7	-10.0
N. Balance on Current Account (M + K)	0.0	-0.4	-1.3	-1.1	-0.7	-2.6	-2.6	2.2	1.8	-4.8	-3.3	0.5	-3.5	-2.4	-5.3
Memo: Percentage Growth in GDP (Constant 1972 Prices)	1.4	5.0	3.3	5.8	11.2	5.0	8.8	3.6	2.4	14.7	1.3	4.3	8.5	6.8	7.1

^{1/} Dollar values from balance of payments data, converted at period average exchange rate.

^{2/} Includes withdrawals from foreign exchange accounts of residents.

Sources: Statistical Appendix, Tables A.1 and A.2. GDP data from World Bank. All 1979 estimates preliminary.

FIGURE 1: YUGOSLAVIA: IMPORTS AND EXPORTS, 1965-1979
 (Current Price Figures as Percentages of GDP)



SOURCE: TABLE 1 AND WORLD BANK ESTIMATES; 1979 DATA PRELIMINARY

effects on the terms of trade and on the growth of the principal markets for Yugoslavia's exports, and checked the growth in workers' remittances. Yugoslavia was forced into another stabilization phase in 1975 and 1976, which was relatively successful in compressing the share of imports in GDP, but less successful in shifting resources into exports. The general expansion in 1977 once again created pressures on the balance of payments. Attempts were made first to contain imports, in 1978, and then to restrain domestic activity, in 1979. These attempts were only partially successful; the boom continued through 1979, and unhappily coincided once again with a wave of oil price increases. The current account deficit in 1979 was about 5.3 percent of GDP, the highest level for the decade.

12. Since the trends shown in Figure 1 and Table 1 are in nominal terms, it is worth isolating the contribution made by worsened terms of trade. Figure 2 shows movements in the merchandise terms of trade between 1965 and 1979. While it is clear that the events of 1974 did affect Yugoslavia's terms of trade adversely, the medium-term effect has been relatively small; thus the average terms of trade for the 1974-78 period were only about 5 percent worse than for the 1969-73 period. While this terms of trade deterioration may appear relatively modest by comparison with that suffered by many other developing countries in the same period, the low coverage of merchandise imports by merchandise exports in Yugoslavia serves to magnify the consequences for the trade deficit of any loss in the terms of trade. Yugoslavia's terms of trade deteriorated by four percent again in 1979 and this deterioration has apparently continued into 1980. The severity of the current crisis has been substantially increased by these terms of trade developments.

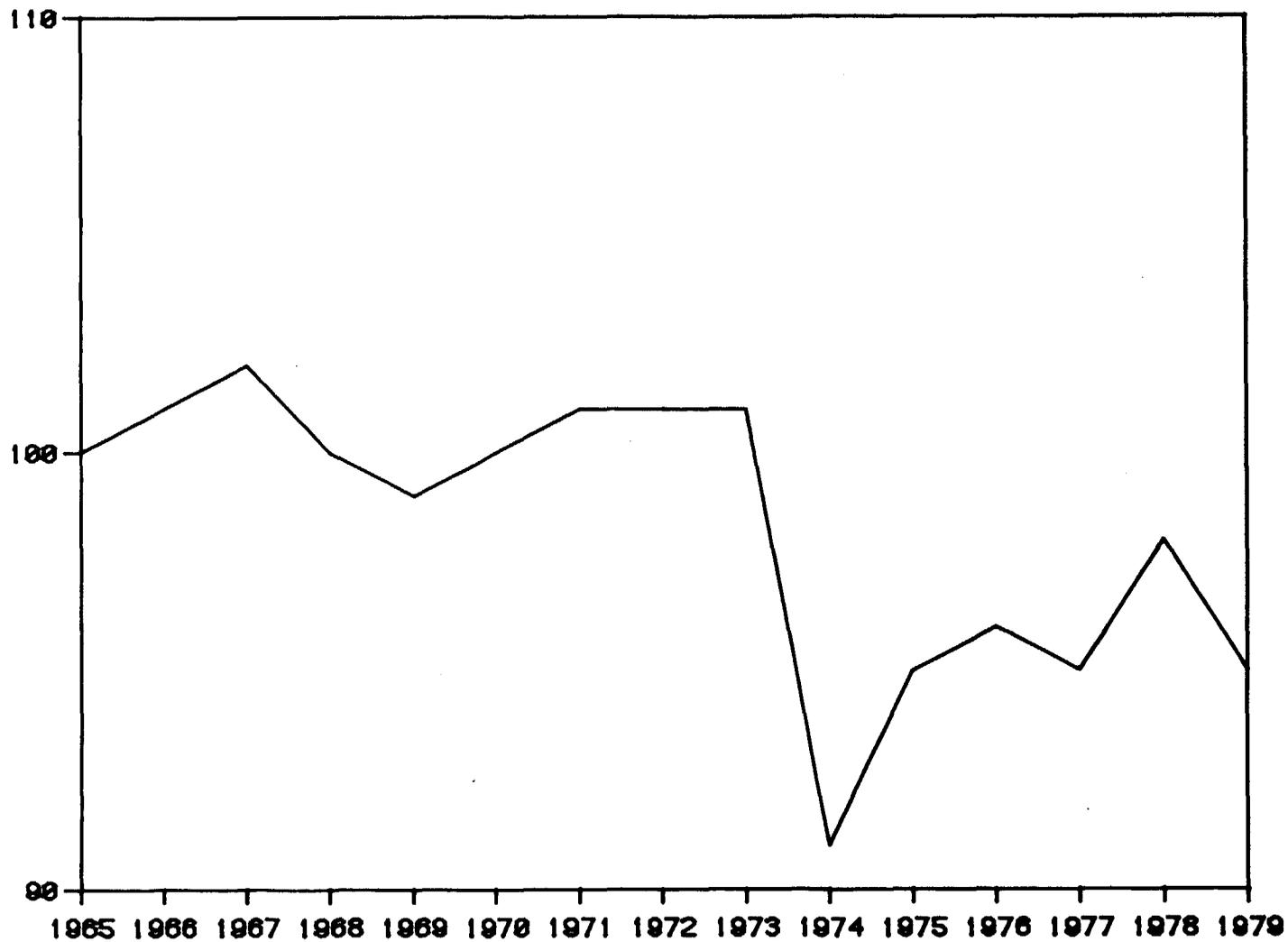
13. As a consequence of the balance of payments difficulties of 1971-72 and 1974-75, improvement in external economic relations was highlighted as one of six areas requiring specific attention in the 1976-85 decade, 1/ and this diagnosis was given operational content in the design of the Five Year Plan for the period 1976-80. The Plan's strategy for external adjustment relied heavily on import substitution, particularly in raw materials and intermediate goods, whose production was to be encouraged primarily through priority investment allocation. Import growth was to be held to 4.5 percent per annum, which, given the GMP growth target of 7 percent, implied a period average import elasticity of about 0.6, about two-thirds of the historic elasticity. 2/ Export growth was projected at 8.0 percent, somewhat higher than historical performance.

14. Table 2 compares these plan targets with actual outcomes for the first four years of the plan. As the table indicates, growth performance has been strong and quite close to target. This achievement though has been at the expense of the targets for exports, with merchandise exports and nonfactor

1/ See Yugoslavia: Self Management Socialism - Challenges of Development, pp. 85-89.

2/ op. cit, p. 91.

FIGURE 2: YUGOSLAVIA: TERMS OF TRADE
(DOLLAR UNIT VALUE INDICES: 1970=100)



APPENDIX TABLES A.5 AND A.6 YEARS

services performing equally well. ^{1/} To some degree the weak performance in exports has been offset by continued strong performance in workers' and emigrants' remittances, whose importance in financing imports has remained undiminished since 1976 (see Table 1). Nevertheless current account deficits have been higher than plan targets, and have entailed a rapid increase in indebtedness. Total external medium- and long-term debt outstanding and disbursed has grown from about \$5.8 billion at the beginning of 1976 to about \$11.0 billion at the beginning of 1979. Over 80 percent of this debt is in convertible currencies; deflating by a unit value index of manufactured exports (c.i.f.) from developed market economies to developing countries, real indebtedness has grown by 14.5 percent per year since 1975, considerably faster than in the period 1970 to 1975. As Table 3 indicates, the growth in nominal debt in the late 1970s has been only slightly higher than in the first half of the decade, but movements in the deflator have differed substantially in the two subperiods.

Table 2: PLAN TARGETS, 1976-80, AND PERFORMANCE, 1976-79
(Average Annual Volume Growth rates, in percent)

	<u>1976-80 Plan</u>	<u>1976-79 Actuals</u> ^{/1}
Gross Material Product (GMP)	7.0	6.5
<u>Exports</u>		
Goods and Nonfactor Services	8.0	3.0
Merchandise only	-	3.0
<u>Imports</u>		
Goods and Nonfactor Services	4.5	7.8
Merchandise only	-	5.5
<u>Average Annual Elasticities with Respect to GMP</u>		
Exports of goods and NFS	1.14	0.46
Merchandise Exports	-	0.46
Imports of goods and NFS	0.64	1.20
Merchandise Imports	-	0.85

^{/1} Period average growth rates; 1979 data preliminary. Services exports and imports deflated by merchandise index.

^{1/} Undue weight should not be placed on this comparison as it is heavily influenced by data for 1979, which are preliminary, and by use of the merchandise deflator for services, which may not be wholly appropriate.

Table 3: GROWTH IN MEDIUM- AND LONG-TERM DEBT (OUTSTANDING AND DISBURSED)
(in millions of US Dollars and in percent)

	<u>Nominal Debt</u>	<u>Deflator</u> (1980 = 100)	<u>Real Debt</u> (1980 dollars)
<u>As on Dec 31</u>			
1970	2,031	31.1	6,594
1975	5,820	63.4	9,180
1978	11,014 <u>/1</u>	79.9	13,784
<u>Average Annual Growth Rates: /2</u>			
	<u>1970-75</u>	<u>1976-78</u>	<u>1970-78</u>
Nominal Debt	21.7	23.7	22.4
Deflator	14.5	8.0	12.3
Real Debt	6.3	14.5	9.0

/1 Estimated.

/2 Base period is year before first year in interval.

Source: World Bank

15. The effects of this accretion of debt on debt service are only now beginning to be felt, but are likely to prove a greater burden than anticipated at the time of borrowing for several reasons. First, that portion of the debt which is at floating rates will bear the effects of the rapid rise in international interest rates that has occurred since 1979. Second, the sustained poor performance on exports after 1976 means that Yugoslavia enters the 1980s with a much lower level of exports than was anticipated at the beginning of the plan, leading to inevitable increases in the debt service ratio. Finally, if recent increases in the relative world price of oil are maintained, Yugoslavia, together with most other oil-importing developing countries, is likely to face substantial incremental borrowing needs, quite apart from the accumulated overhang.

16. Yugoslavia therefore needs to design a strategy for external adjustment in the 1981-85 plan with less margin for error than it has previously enjoyed and at a time when the external environment is less favorable than in the past: growth in OECD countries is likely to be low, international competition (including that from other newly industrialized countries--see Chapter III) more intense, and the prospects for workers' remittances less favorable. At the same time Yugoslavia's current dependence on imported energy makes it likely that its terms of trade will not improve substantially; the probability is that they will continue to deteriorate. A balanced adjustment strategy is likely to include elements of both import substitution and export promotion and guidelines issued for the forthcoming plan reflect this view. This report does not attempt to assess how that balance should be struck except to note that there are well-known dangers associated with excessive import substitution, particularly in manufactures. The remainder of this report instead focuses on merchandise exports. A variety of explanations are current in Yugoslavia on

why export performance has been so poor in the present plan; these explanations typically stress factors on the demand side, such as slow growth in western markets, lack of competitiveness, and problems of market access. The first two explanations are analyzed in some depth in this report; there was insufficient material available to assess the severity of market access problems faced by Yugoslavia. After reviewing the evidence on the demand for Yugoslav exports in Chapters III and IV the report analyzes developments on the supply side in Chapter V; this set of influences has, until recently, received rather less attention in Yugoslavia as factors affecting export performance. The results of these analyses and their implications for the future are analyzed in Chapter VI.

CHAPTER II - MERCHANDISE EXPORTS: GROWTH AND STRUCTURE

Real Growth

17. Over the period 1960-78, Yugoslavia's merchandise exports grew at an annual rate of 6.6 percent in real terms at a time when world exports grew at 7.2 percent. If the period is divided into three subperiods of equal length, there has been a continuous, and sizable deceleration in export growth from the early sixties to the late seventies (Table 4).

Table 4: COMPARATIVE MERCHANDISE EXPORT PERFORMANCE, 1960-78
(Annual average rates of growth in percent)

<u>Growth in Export Volumes</u>	<u>1960-78</u>	<u>1960-66</u>	<u>1966-72</u>	<u>1972-78</u>
Yugoslavia	6.6	9.6	6.4	2.5
World	7.2	7.6	8.4	5.9
Developed Market Economies	7.6	7.8	9.2	5.9
Non-oil-exporting developing countries	5.9	4.6	5.7	7.4
of which:				
Fast growing exporters of manufactures	7.8	4.7	8.0	10.8

Sources: Yugoslavia data from IMF, International Financial Statistics;
Other data from UNCTAD, 1979 Handbook of International Trade and
Development Statistics, Table 2.1.

18. A better sense of Yugoslavia's relative standing is gained by comparing its performance with that of major groups of countries: the developed countries, the non-oil exporting developing countries (NODCs) and, amongst the latter group, the group of 'fast growing exporters of manufactures'

(FGEM). 1/ As Table 4 indicates, over the 1960-78 period Yugoslavia's overall growth of merchandise exports was more or less equal to that of all NODCs, although lower than that of either the developed market economy countries or the FGEM group. Yugoslavia's relative performance though differs considerably in the three time periods distinguished; while it was significantly higher than all of the groups in the 1960-66 period, by the seventies it was significantly lower than any of the groups and world trade as a whole.

19. Figure 3 shows that the turning point in Yugoslavia's export performance is 1966. During the period 1953-66, the trend growth of Yugoslav exports, 2/ in real terms, was 11.4% p.a. as compared to 6.0% p.a. for world exports, suggesting a rather strong Yugoslav penetration in world markets. By contrast, over the period 1966-78, the growth of Yugoslav exports fell to 4.8%, while the pace of growth in world trade quickened to 6.8% per year, implying systematic losses in world market share. The slackening of export growth coincides with the economic reform of 1965. As noted in Chapter I, the reform reduced the strong proexport bias in the exchange rate system in order to generate a more efficient pattern of exporting and of resource allocation. The reduction in export growth is therefore not surprising, and to some degree was intended as part of the general program to increase the living standards of the population. In the following sections developments in merchandise exports are analyzed at a more disaggregated market and commodity level. These analyses are based on tabulations from trade tapes compiled by the GATT, with Yugoslavia as the reporter country, and the U.S. dollar as the currency unit. Details are provided in Annex I. The tabulations are for three benchmark dates, 1963, 1970 and 1977. Principal attention is given to changes over the 1970-77 period with the earlier interval being available for purposes of comparison.

Market and Commodity Structure

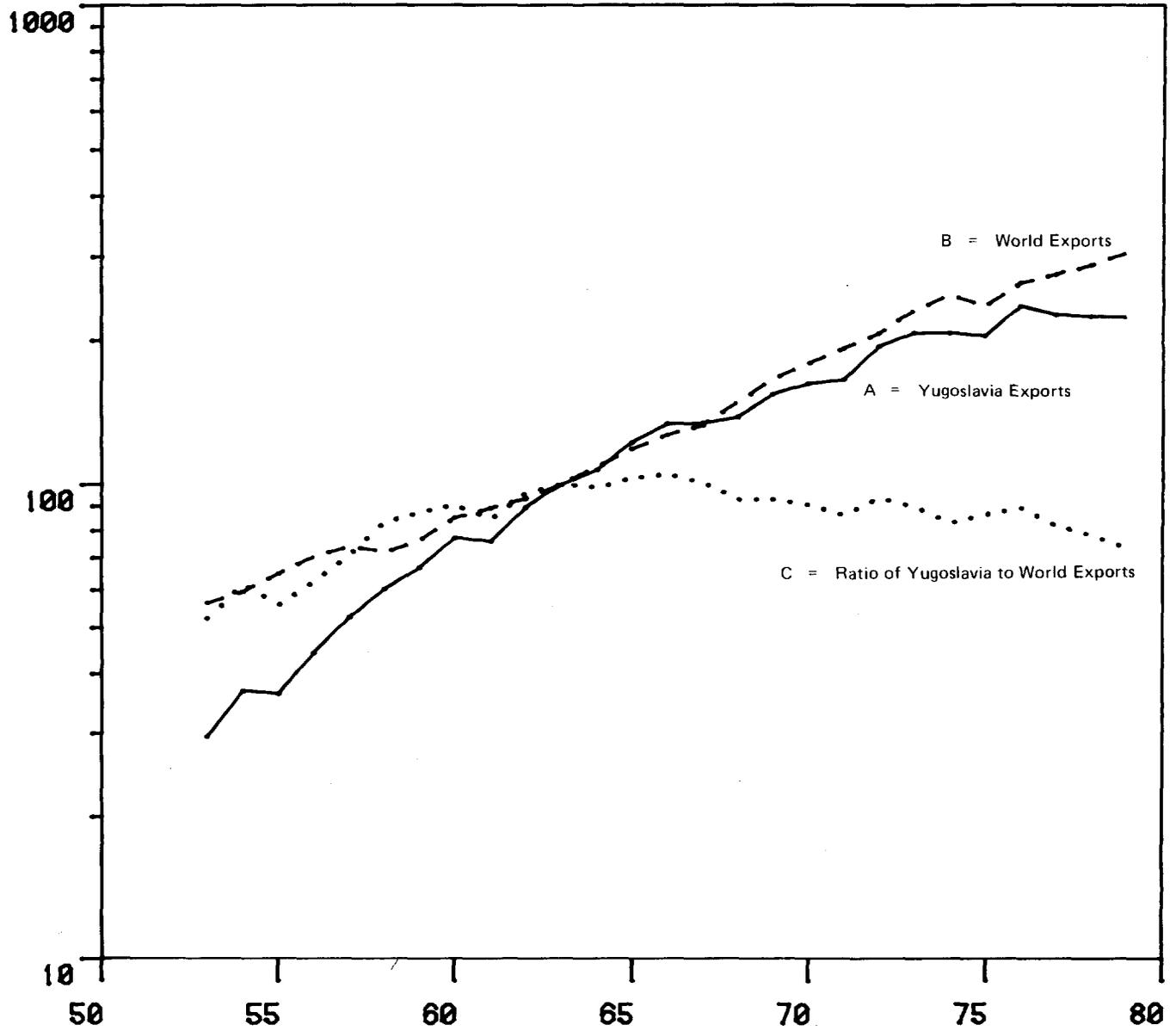
20. In 1963 the developed countries (DCs) accounted for 53 percent of Yugoslavia's merchandise exports, the developing countries (LDCs) (including Southern Europe) for a further 20 percent and the Centrally Planned Economies (CPEs) for the remaining 27 percent. As Table 5 indicates, the commodity structure of trade differed substantially between these markets. Primary products 3/ dominated exports to developed countries but were less important

1/ These groupings follow the definition provided by UNCTAD; in particular, the last category is defined by UNCTAD as countries whose exports of manufactures (i) amounted to more than \$800 million in 1976 and (ii) grew at an average annual rate of more than 20 percent in value during the period 1967 to 1976; they are: Argentina, Brazil, Hong Kong, the Republic of Korea, Mexico and Singapore. See UNCTAD, 1979 Handbook of International Trade and Development Statistics (Table 1.4).

2/ Exponential trend obtained through log-linear regression.

3/ For definitions please see the footnote to Table 5 and Annex I.

FIGURE 3: VOLUME INDICES OF YUGOSLAVIA AND
WORLD EXPORTS, 1953-79^{1/}
(log scale; 1963 = 100)



Source: IMF, International Finance Statistics

^{1/}79 Data Estimates.

Table 3: AGGREGATE REGIONAL AND COMMODITY ^{1/} DISTRIBUTION OF EXPORTS: 1963, 1970 AND 1977

	Exports (values in million US\$)						Regional Distribution (%)						Commodity Distribution (%)						
	Developed Countries	Of which EEC	Developing Countries	Of Which Oil Exporting	Centrally Planned Economies	World	Developed Countries	Of which EEC	Developing Countries	Of Which Oil Exporting	Centrally Planned Economies	World	Developed Countries	Of which EEC	Developing Countries	Of Which Oil Exporting	Centrally Planned Economies	World	
1963																			
Primary	304.9	241.7	38.4	15.1	103.1	446.3	68.3	54.1	8.6	3.4	23.1	100.0	72.8	76.8	24.0	26.8	48.8	56.5	
Agriculture	241.7	203.7	23.0	8.3	63.9	328.5	73.6	62.0	7.0	2.5	19.4	100.0	57.7	64.7	14.4	14.7	30.3	41.6	
Metals & Minerals	63.2	38.0	15.4	6.9	39.2	117.8	53.6	32.3	13.1	5.8	33.3	100.0	15.1	12.1	9.6	12.1	18.6	14.9	
Manufactures	114.2	73.0	121.7	41.2	108.1	344.0	33.2	21.2	35.4	12.0	31.4	100.0	27.3	23.2	76.0	73.2	51.2	43.5	
Chemicals	6.2	4.2	6.6	2.1	12.7	25.5	24.4	16.3	25.9	8.2	49.7	100.0	1.5	1.3	4.1	3.7	6.0	3.2	
Machinery & Transportation	19.9	13.5	84.2	25.6	49.8	154.0	12.9	8.7	54.7	16.6	32.4	100.0	4.7	4.3	52.6	45.5	23.6	19.5	
Equipment																			
Other Manufactures	88.0	55.4	30.9	13.6	45.6	164.5	53.5	33.7	18.8	8.2	27.7	100.0	21.0	17.6	19.3	24.2	21.6	20.8	
Total	419.0	314.7	160.1	56.3	211.2	790.3	53.0	39.8	20.3	7.1	26.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1970																			
Primary	508.6	394.5	63.9	16.4	177.5	750.0	67.8	52.6	8.5	2.2	23.7	100.0	56.8	60.2	26.8	24.0	32.6	44.7	
Agriculture	304.4	243.2	38.7	8.6	88.6	431.6	70.5	56.3	9.0	2.0	20.5	100.0	34.0	37.1	16.2	12.6	16.2	25.7	
Metals & Minerals	204.2	151.3	25.2	7.8	88.9	318.3	64.1	47.5	7.9	2.5	27.9	100.0	22.8	23.1	10.6	11.4	16.3	19.0	
Manufactures	386.8	260.9	174.6	51.9	367.8	929.2	41.6	28.1	18.8	5.6	39.6	100.0	43.2	39.8	73.2	75.9	67.4	55.3	
Chemicals	31.9	22.2	13.4	4.6	51.8	97.1	32.8	22.9	13.8	4.7	53.4	100.0	3.6	3.4	5.6	6.7	9.5	5.8	
Machinery & Transportation																			
Equipment	110.2	78.1	112.3	27.9	158.8	381.3	28.9	20.5	29.4	7.3	41.7	100.0	12.3	11.9	47.1	40.8	29.1	22.7	
Other Manufactures	244.7	160.6	48.9	19.5	157.2	450.8	54.3	35.6	10.9	4.3	34.9	100.0	27.3	24.5	20.5	28.5	28.8	26.8	
Total	895.3	655.4	238.5	68.4	545.3	1,679.1	53.3	39.0	14.2	4.1	32.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1977																			
Primary	870.2	629.7	280.0	123.0	497.8	1,648.1	52.8	38.2	17.0	7.5	30.2	100.0	47.7	48.5	25.2	21.0	25.4	33.7	
Agriculture	576.5	472.9	226.0	92.9	184.3	966.7	59.6	48.9	23.4	9.6	17.0	100.0	31.6	36.4	20.3	15.8	8.4	19.7	
Metals & Minerals	293.8	156.8	54.0	30.1	333.5	681.3	43.1	23.0	7.9	4.4	48.9	100.0	16.1	12.1	4.9	5.1	17.0	13.9	
Manufactures	953.2	669.5	830.7	463.4	1,464.5	3,248.3	29.3	20.6	25.6	14.3	45.1	100.0	52.3	51.5	74.8	79.0	74.6	66.3	
Chemicals	87.6	65.0	66.4	43.3	160.2	314.2	27.9	20.7	21.1	13.8	51.0	100.0	4.8	5.0	6.0	7.4	8.2	6.4	
Machinery & Transportation																			
Equipment	307.1	265.5	504.1	228.4	763.5	1,574.7	19.5	16.9	32.0	14.5	48.5	100.0	16.8	20.4	45.4	38.9	38.9	32.2	
Other Manufactures	558.5	338.9	260.2	191.7	540.8	1,359.5	41.1	24.9	19.1	14.1	39.8	100.0	30.6	26.1	23.4	32.7	27.6	27.8	
Total	1,823.4	1,299.2	1,110.7	586.4	1,962.2	4,896.4	37.2	26.5	22.7	12.0	40.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

^{1/} Commodity groups are defined as follows (SITC Sections):
 Agriculture: 0+1+ 2-(27+28)+4
 Metals & Minerals: 3+27+28+67+68
 Chemicals: 5
 Machinery & Transportation Equipment: 7
 Other Manufactures: 6+8+9 -(67+68)

Source: GATT

in exports to both the CPEs and the LDCs. These differences reflected the very different role of agricultural products in trade with the three market areas, and in particular the importance of such exports in Yugoslavia's trade with the EEC 1/. Corresponding to these differences in primary products were differences in the importance of manufactured exports across markets. Here the major variation was in machinery and transport equipment, which accounted for a half of total exports to the LDCs but were negligible in sales to the developed countries.

21. Between 1963 and 1970 the developed countries remained Yugoslavia's best customers, while the CPEs gained at the expense of the LDCs. By contrast the period between 1970 and 1977 was marked by a sharp decline in the importance of developed country markets and a redirection of trade to both the CPEs and the LDCs, with the oil exporters becoming major markets over the period. Accompanying these shifts in the destination of exports were shifts in the commodity structure. Overall there has been a sustained move from primary products to manufactures, which accounted for two-thirds of total exports in 1977. Differences persist in the commodity structure of trade by market, with exports to the DCs still being relatively concentrated in primary products. The table reveals the importance of the CPEs as markets for Yugoslavia's manufactured exports, accounting for 45 percent of the total in 1977.

22. In view of the substantial shifts in the regional distribution of exports over the period, it is of interest to examine a more detailed breakdown. Table 6 provides data for some of the most important partner countries. There is little to comment on in the 1963-70 period. In the 1970-77 period it appears that the decline in exports to developed countries was fairly widespread with only the US growing in importance as a market. The decline of the UK market is particularly striking. Table 6 confirms the importance of the oil exporting developing countries as emerging markets for Yugoslav exports in the 1970s, and the sustained growth in the USSR as an export market.

Commodity Characteristics: A Disaggregated Analysis

23. In this section Yugoslavia's merchandise exports are examined at the level of 38 commodity groups, 13 of which are primary products and 25 of which are manufactures. 2/ Table 7 shows the share of each commodity group in global exports as well as an index of specialization by market (the share of the commodity in exports to a given market normalized by the share of the commodity in global exports), for each of the three benchmark years 1963, 1970, and 1977. These indices provide an indicator of the differential pattern of specialization across the three market areas.

1/ The EEC is defined consistently throughout the analysis as comprising the present nine members, even for periods prior to the accession of Britain, Ireland and Denmark.

2/ The criteria used to define these groups are detailed in Annex I.

Table 6: DISTRIBUTION OF MERCHANDISE EXPORTS BY COUNTRY: 1963, 1970 AND 1977

	<u>As % of Global Total</u>			<u>As % of Regional Total</u>		
	<u>1963</u>	<u>1970</u>	<u>1977</u>	<u>1963</u>	<u>1970</u>	<u>1977</u>
<u>I. Developed Countries</u>	<u>53.0</u>	<u>53.3</u>	<u>37.2</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
<u>EEC</u>	<u>39.8</u>	<u>39.0</u>	<u>26.5</u>	<u>75.1</u>	<u>73.2</u>	<u>71.2</u>
of which						
Italy	20.0	15.2	12.6	37.7	28.5	33.9
Germany	10.3	11.8	7.4	19.4	22.1	19.9
France	2.2	3.8	2.6	4.2	7.1	7.0
United Kingdom	5.5	5.8	1.3	10.4	10.9	3.5
Netherlands	.8	1.6	1.6	1.5	3.0	4.3
<u>Other Developed</u>	<u>13.2</u>	<u>14.3</u>	<u>10.7</u>	<u>24.9</u>	<u>26.8</u>	<u>28.8</u>
of which						
United States	5.9	5.3	5.6	11.1	9.9	15.1
Austria	3.6	3.0	1.8	6.8	5.6	4.8
Switzerland	1.7	3.1	1.5	3.2	5.8	4.0
<u>II. Developing Countries</u>	<u>20.3</u>	<u>14.2</u>	<u>22.7</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
<u>Oil Exporters</u>	<u>7.1</u>	<u>4.1</u>	<u>12.0</u>	<u>35.0</u>	<u>28.9</u>	<u>52.8</u>
of which						
Iran	.2	.2	3.4	1.0	1.4	15.0
Egypt	2.3	1.6	2.2	11.3	11.3	9.7
Libya	.2	.4	1.9	1.0	2.8	8.4
Indonesia	2.8	.1	.2	13.8	.7	.9
<u>Southern Europe</u>	<u>3.1</u>	<u>3.8</u>	<u>3.1</u>	<u>15.3</u>	<u>26.8</u>	<u>13.7</u>
of which						
Greece	1.2	1.9	1.9	5.9	13.4	8.4
<u>Other Developing</u>	<u>10.1</u>	<u>6.3</u>	<u>7.6</u>	<u>49.7</u>	<u>44.3</u>	<u>33.5</u>
of which						
India	1.9	2.7	1.9	9.4	19.0	8.4
<u>III. Centrally Planned Economies</u>	<u>26.7</u>	<u>32.5</u>	<u>40.1</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
of which						
USSR	10.8	14.4	21.7	40.4	44.3	54.1
Czechoslovakia	2.9	5.3	3.9	10.9	16.3	9.7
East Germany	4.8	3.0	4.1	18.0	9.2	10.2
Poland	4.8	3.4	4.3	18.0	10.5	10.7
Hungary	1.6	2.8	1.9	6.0	8.6	4.7
Romania	.6	1.8	2.1	2.2	5.5	5.2
<u>IV. World</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>			

Source: GATT

**Table 7: COMMODITY STRUCTURE OF YUGOSLAVIA'S EXPORTS BY MAJOR REGION:
1963, 1970 and 1977**

SITC Category	1963				1970				1977				in Millions of US Dollars
	Percentage Shares in Global Exports	Market DC	Spec. LDC	Index ^{1/} CPE	Global Shares In Percentage	Market DC	Spec. LDC	Index ^{1/} CPE	Global Shares In Percentage	Market DC	Spec. LDC	Index ^{1/} CPE	
Agriculture													
Live Animals	2.6	1.73	.27	.04	2.4	1.54	.88	.08	1.6	2.50	.19	-	76.1
Meat fresh, chilled, frozen	8.7	1.64	.22	.31	5.0	1.44	.94	.32	2.6	1.08	2.73	-	128.5
Maize unmilled	.8	1.75	.13	-	1.2	1.75	.03	.17	1.6	.44	.13	2.00	76.7
Other food & live animals	13.6	1.39	.38	.68	6.6	1.44	.15	.67	3.9	2.00	.31	.46	190.1
Beverages & tobacco	4.9	.67	.29	2.20	3.5	.57	.11	2.06	1.9	1.53	.26	.95	93.8
Wood shaped	5.5	1.36	.84	.38	3.1	1.16	1.87	.32	4.7	1.57	1.68	.09	230.2
Other crude agricultural materials	5.6	1.38	.09	.93	3.9	1.49	.54	.41	3.5	1.77	.91	.34	171.4
Metals and Minerals													
Other metals & minerals	4.4	1.25	.27	1.00	3.1	1.16	.32	1.07	2.4	.79	.42	1.50	117.2
Petroleum products	.6	.67	3.00	.17	.6	1.50	.33	.33	2.2	2.41	.14	.14	105.6
Iron & steel	4.3	.84	.72	1.49	4.4	.86	.71	1.34	3.4	.88	.53	1.38	167.0
Copper	1.9	.58	1.21	1.68	6.6	1.46	.53	.46	1.6	1.50	.31	.88	76.1
Aluminium	1.2	.50	.58	2.33	1.8	1.11	.50	1.06	2.7	.78	.22	1.67	133.1
Other non-ferrous metals	2.6	1.50	.15	.62	2.5	1.20	.72	.80	1.7	.82	.35	1.47	82.3
PRIMARY	56.5	1.29	.42	.87	44.7	1.27	.60	.73	33.7	1.43	.75	.75	1,648.1
Chemicals													
Chemical elements & compounds	1.4	.64	1.14	1.79	2.0	1.00	1.10	.95	1.8	1.33	.44	1.00	88.5
Medicinal, etc. products	.2	.50	2.00	1.00	1.5	.47	1.13	1.87	1.4	.64	1.07	1.29	70.4
Other chemicals	1.6	.31	1.38	2.13	2.3	.39	.74	2.13	3.2	.47	1.13	1.38	155.3
Machinery & Transp. Equipment													
Metal working machinery	.7	.29	3.57	.43	.4	1.00	1.00	1.25	1.6	.19	.13	2.25	77.8
Machines, NES, non-electric	.9	.22	2.89	1.23	2.0	.70	1.40	1.30	5.8	.26	.91	1.74	283.7
Other machinery, non-electric	3.9	.05	3.49	1.05	1.9	.32	2.16	1.63	3.1	.65	1.19	1.26	153.3
Electric power machine, switchgear	1.4	.29	1.79	1.79	2.1	.57	2.29	1.19	2.4	1.04	1.25	.83	119.0
Electric distributing machinery	2.8	.07	1.21	2.61	2.3	.39	2.04	1.57	1.8	.61	.78	1.44	87.0
Electrical machinery, NES	.2	.12	3.50	1.00	1.0	.60	.50	1.80	1.8	1.11	.50	1.22	89.8
Other electrical machinery	.3	.67	1.33	1.67	1.7	.59	1.53	1.41	2.5	1.00	.56	1.24	121.2
Road motor vehicles, parts	.1	1.00	1.00	.47	1.1	.82	1.55	.91	1.8	.94	.44	1.33	87.5
Road motor vehicles, excluding parts	.4	.25	3.75	.50	.4	.25	3.00	1.00	1.9	.21	1.63	1.37	92.8
Ships & boats	7.0	.43	3.53	.23	8.5	.44	2.71	1.17	7.9	.11	2.92	.72	386.6
Other transport equipment	1.7	.12	.29	3.29	1.4	1.07	.86	.93	1.6	1.19	1.56	.44	76.0
Other Manufactures													
Wood, cork manufactures, NES	1.9	1.11	.95	.84	1.5	.80	1.53	1.13	1.6	1.50	1.44	.38	80.1
Textile yarn and thread	.6	1.50	1.00	.17	2.0	1.30	.90	.60	1.7	.59	.82	1.47	81.3
Textile excluding yarn & thread	3.5	1.09	1.40	.51	2.7	1.30	.96	.59	2.4	.83	1.33	.96	117.3
Non-metal mineral manufactures, NES	1.5	1.00	1.73	.27	1.6	.88	.25	1.50	1.6	.94	1.00	1.06	78.6
Metal manufactures, NES	2.3	.48	2.44	1.00	3.5	.43	1.94	1.54	3.8	.66	1.47	1.03	184.1
Other basic manufactures	1.6	.88	.69	1.50	2.7	1.04	1.63	.63	2.5	1.40	1.04	.60	121.8
Furniture	2.6	1.54	.04	.69	2.6	1.58	.39	.27	3.3	1.88	.58	.39	159.2
Textile clothing not knitted	1.5	1.33	.20	1.07	2.4	1.29	.08	.92	1.9	1.11	.90	.90	92.3
Clothing, accessories knit	.9	.22	.11	3.00	2.0	.75	-	1.80	1.6	.56	.25	1.88	79.4
Footwear	2.6	.62	.23	2.35	3.3	.73	.01	1.88	4.1	.85	-	1.71	201.6
Other misc. manufactures & unclassified	1.8	1.28	.83	.50	2.6	1.27	.42	.85	3.3	1.52	.85	.67	163.7
MANUFACTURES	43.5	.63	1.75	1.18	55.3	.78	1.32	1.22	66.3	.79	1.13	1.13	3,248.3
TOTAL	100.0	1.00	1.00	1.00	100.0	1.00	1.00	1.00	100.0	1.00	1.00	1.00	4,896.4

Source: GATT

For SITC codes corresponding to these categories please see Annex I

^{1/} Share in exports to the market in question divided by share in global exports for that year.

24. The rankings of individual commodities in global exports are sensitive to the mode and level of disaggregation employed. Nevertheless, certain commodity groups emerge as being of particular importance in Yugoslav exports. Amongst primary products raw meat, wood products and iron and steel have been important, while amongst manufactures nonelectrical machinery, electrical machinery of various sorts, ships and boats, furniture, textiles, clothing and footwear continue to be of importance.

25. The pattern of specialization in Yugoslavia's exports by destination area is of particular interest. At an aggregate level Table 7 merely confirms that Yugoslavia's exports to the developed countries have been concentrated in primary commodities while its exports to the LDCs and the CPEs have been concentrated in manufactures. At a more disaggregated level there have been some interesting shifts in specialization. In agricultural products there has been some reorientation of exports of several commodities away from the heavy dependence on developed country markets. This is the case with raw meat where developing country markets were developed after the restriction on baby beef exports to the EEC; it is the case with maize where there has been a complete reorientation away from the DC market toward CPEs; and it is the case in shaped wood products where the LDC market had become important by 1970. There are also interesting patterns of specialization in the metals and minerals categories, with the developed countries constituting the important markets for petroleum products and copper and the CPEs for practically everything else.

26. Most striking, however, is the picture provided by machinery and transport equipment, and shifts in specialization in this increasingly important sector. In 1963 the exports of these products were primarily concentrated on the LDCs, and to a much lesser degree on the CPEs. By 1977 these patterns had shifted rather sharply. The preponderance of LDCs was considerably reduced, and they remained the most important customers only for certain specific lines, including the important category of ships and boats. Conversely exports to developed countries have gradually become important in a wide range of electrical machinery and in certain categories of transport equipment.

27. In the group of "other manufactures" the crossmarket patterns of specialization are less clearcut and the predominance of the three market areas is fairly evenly distributed over the various commodities. The DCs are the predominant markets for traditional exports such as wood and cork manufactures, furniture, semimanufactured clothing and a whole range of miscellaneous manufactures. The Multifibre Arrangement and various voluntary restraint agreements have greatly reduced the relative importance of DC markets in textiles. Exports to the CPEs are more concentrated in miscellaneous metal manufactures, finished clothing and footwear.

28. Changes in the structure of Yugoslavia's exports are shown in Table 8, which provides average and incremental export shares of the various commodities,

Table 8: COMPARATIVE DYNAMIC CHARACTERISTICS OF YUGOSLAVIA'S EXPORTS BY COMMODITY

	Average shares in Total Exports 1/		Incremental Contribution to Total Exports 2/		Elasticity with respect to Total Exports 3/		Most dynamic markets 4/	
	1963-70 (1)	1970-77 (2)	1963-70 (3)	1970-77 (4)	1963-70 (5)	1970-77 (6)	1963-70 (7)	1970-77 (8)
I. Primary Commodities (0+1+2+3+4+67+68)	50.7	39.3	34.2	27.9	.68	.71	DC	DC
1. Agriculture (0+1+2+4-27-28)	33.7	22.8	11.7	16.6	.35	.73	DC	DC
Live animals	2.5	2.0	2.2	1.1	.88	.55	DC	DC
Meat fresh, chilled, frozen	6.9	3.8	1.8	1.4	.26	.37	LDC	LDC
Maize unmilled	1.0	1.4	1.6	1.8	1.60	1.29	DC	CPE
Other food and live animals	10.1	5.3	.5	2.4	.05	.46	DC	DC
Beverages and tobacco	4.2	2.7	2.2	1.1	.52	.41	CPE	DC
Wood shaped	4.3	3.9	1.0	5.5	.23	1.41	LDC	DC
Other crude agricultural materials	4.8	3.7	2.4	3.3	.51	.89	DC	DC
2. Metals and Minerals (27+28+3+67+68)	17.0	16.5	22.6	11.3	1.33	.69	DC	CPE
Other metals and minerals	3.8	2.8	2.0	2.0	.53	.73	DC/CPE	CPE
Petroleum products	.6	1.4	.6	3.0	1.00	2.14	DC	DC
Iron and steel	4.4	3.9	4.5	2.9	1.03	.74	CPE	CPE
Copper	4.3	4.1	10.8	-1.1	2.54	-.27	DC	CPE
Aluminum	1.5	2.3	2.3	3.2	1.53	1.42	DC	CPE
Other non ferrous metals	2.6	2.1	2.4	1.3	.94	.62	DC	CPE
II. Manufactures [5+(6-67-68)+7+8+9]	49.5	61.0	65.8	72.1	1.33	1.19	DC	CPE
1. Chemicals (5)	4.5	6.1	8.0	6.7	1.78	1.10	CPE	CPE
Chemical elements and compounds	1.7	1.9	2.4	1.7	1.41	.89	DC	CPE
Medicinal, etc. products	.9	1.5	2.7	1.4	3.18	.97	CPE	CPE
Other chemicals	2.0	2.8	2.9	3.6	1.49	1.31	CPE	CPE
2. Machinery and Transport Equipment (7)	21.1	27.5	25.5	37.2	1.21	1.35	CPE	CPE
Metal working machinery	.6	1.0	.2	2.2	.36	2.20	DC	CPE
Machines, NES, non-electric	1.5	3.9	2.9	7.8	2.00	2.00	CPE	CPE
Other machinery, non-electric	2.9	2.5	.1	3.8	.03	1.52	CPE	CPE
Electric power machine, switchgear	1.8	2.3	2.8	2.6	1.60	1.16	DC	DC
Electric distributing machinery	2.6	2.1	1.9	1.5	.75	.73	DC	CPE
Electrical machinery, NES	.6	1.4	1.7	2.3	2.83	1.64	CPE	CPE
Other electrical machinery	1.0	2.1	2.9	2.9	2.90	1.38	CPE	CPE
Road motor vehicle, parts	.6	1.5	1.9	2.2	3.17	1.52	DC	CPE
Road motor vehicle excluding parts	.4	1.2	.3	2.7	.75	2.35	CPE	CPE
Ships and boats	7.8	8.2	9.7	7.6	1.25	.93	CPE	LDC
Other transport equipment	1.6	1.5	1.1	1.6	.71	1.07	DC	LDC
3. Other Manufactures [(6-67-68)+8+9]	23.9	27.4	32.2	28.1	1.35	1.03	DC	CPE
Wood, cork manufactures, NES	1.7	1.6	1.2	1.7	.71	1.10	CPE	DC
Textile yarn and thread	1.3	1.9	3.2	1.5	2.46	.81	DC	CPE
Textile excluding yarn and thread	3.1	2.6	2.1	2.2	.68	.86	DC	CPE
Non-metal mineral manufactures, NES	1.6	1.6	1.7	1.6	1.10	1.00	CPE	CPE
Metal manufactures, NES	2.9	3.7	4.6	3.9	1.59	1.07	CPE	CPE
Other basic manufactures	2.2	2.6	3.6	2.4	1.67	.92	DC	DC
Furniture	2.6	3.0	2.5	3.6	.96	1.22	DC	DC
Textile clothing, not knitted	2.0	2.2	3.1	1.6	1.59	.74	DC	CPE
Textile clothing, knitted	1.5	1.8	2.9	1.4	2.00	.78	CPE	CPE
Footwear	3.0	3.7	3.9	4.5	1.32	1.22	CPE	CPE
Other misc. manufactures and un-classified	2.2	3.0	3.4	3.7	1.55	1.25	DC	DC
TOTAL (0 to 9)	100.0	100.0	100.0	100.0	1.00	1.00	DC	CPE

Source: GATT

1/ Average of commodity shares at start and end of period, in percent.

2/ Ratio of absolute increase in commodity exports to absolute increase in total exports, in percent.

3/ Ratio of columns 3 and 4 to columns 1 and 2 respectively.

4/ Markets with largest contribution to absolute increase in commodity exports.

as well as their elasticity with regard to total exports. 1/ In addition, the table also lists the most dynamic market area for each commodity. Inspection of Table 8 suggests the following broad taxonomy of commodity categories according to their size and relative contribution to the overall growth of Yugoslavia's exports. 2/

A. Major export sectors with increasing contribution to Yugoslav exports

<u>Commodity Category</u>	<u>Most dynamic markets in 1970-77</u>	<u>Relative Performance in DC-markets, 1970-77</u>	<u>Share in global exports, 1977 (%)</u>
Wood shaped	DC	+	4.7
Footwear	CPE	+	4.1
Metal manufactures, NES	CPE	+	3.8
Other machinery, non-electric	CPE	+	3.1
Furniture	DC	+	3.3
Other miscellaneous manufactures and unclassified	DC	+	3.3
Other chemicals	CPE	+	3.2
Machines, NES, non-electric	CPE	+	<u>5.8</u>
			31.3

1/ It should be remembered that all magnitudes are in nominal terms. While the commodity categories are sufficiently disaggregated to make the nominal elasticities a good proxy for the real elasticities, differential movements in price indices across commodity groups may make the nominal elasticity estimates for the aggregate a poor guide to the underlying real elasticities.

2/ Major sectors are defined as those with a share in global exports in 1963-70 (start and end-period averages) that is higher than the arithmetic average within primaries and manufactures respectively, i.e. 3.9% for the former and 2.0% for the latter group. A second criterion is the elasticity of exports from a given sector with respect to total exports, reflecting the sector's growing or declining contribution to the overall increase in exports. These result in the following groupings:

Category A: above average share in exports; elasticity higher than unity in both periods.

Category B: below average share in exports; elasticity higher than unity in both periods or rising above unity in second period.

Category C: above average share in exports; elasticity below unity or declining below unity in second period.

Together, these groupings account for about 90 percent of total exports. In addition, the classification identifies for each sector its most dynamic markets, in terms of their contribution to export growth, as well as its relative performance in DC markets. With regard to the latter, a + sign reflects increasing penetration of these markets by Yugoslav exports, while - indicates losses in market shares.

B. Emerging dynamic export sectors

<u>Commodity Category</u>	<u>Most dynamic markets in 1970-77</u>	<u>Relative Performance in DC-markets, 1970-77</u>	<u>Share in global exports 1977 (%)</u>
Electric power machine, switchgear	DC	+	2.4
Wood, cork manufactures, NES	DC	-	1.6
Non-metal mineral manufactures, NES	CPE	-	1.6
Other transport equipment	LDC	+	1.6
Aluminum	CPE	+	2.7
Other electrical machinery	CPE	-	2.5
Maize unmilled	CPE	-	1.6
Road motor vehicle, parts	CPE	+	1.8
Electrical machinery, NES	CPE	+	1.8
Petroleum products	DC	-	2.2
Metal working machinery	CPE	-	1.6
Road motor vehicles excluding parts	CPE	+	<u>1.9</u>
			23.3

C. Major export categories with declining contribution to Yugoslav exports

<u>Commodity Category</u>	<u>Most dynamic markets in 1970-77</u>	<u>Relative Performance in DC-markets, 1970-77</u>	<u>Share in global exports 1977</u>
Other food and live animals	DC	-	3.9
Ships and boats	LDC	-	7.9
Meat fresh, chilled, frozen	LDC	-	2.6
Other crude agricultural materials	DC	-	3.5
Iron and steel	CPE	-	3.4
Copper	CPE	-	1.6
Beverages and tobacco	DC	-	1.9
Other metals and minerals	CPE	-	2.4
Textile excluding yarn and thread	CPE	-	2.4
Electric distributing machinery	CPE	+	1.8
Other basic manufactures	DC	+	2.5
Textile clothing, not knitted	CPE	+	<u>1.9</u>
			35.8

Category A consists of the most important export sectors, in terms of both the level and the growth of Yugoslav exports. These groups were already firmly established in the early sixties and their contribution to overall export growth has been rising ever since, such that by 1977 they accounted for 31

percent of total exports. Exports from these sectors successfully penetrated developed country markets, even though in most cases these were not the most dynamic markets. Category B illustrates the emergence of the electrical machinery and transport equipment sectors, in most cases heavily oriented towards the CPEs. Most of these sectors, except for other electrical machinery (telecommunications and domestic equipment) also have a successful record in penetrating DC markets; these are sectors where joint ventures and various forms of cooperation with firms in DCs are rapidly increasing. Category C contains major commodity groups whose contribution to Yugoslav export growth has been declining, either steadily since the early sixties or, more recently, through the 1970-77 period. The great majority of these sectors are concentrated in primary commodities and in traditional manufactures such as textile and clothing. With a few exceptions, exports in this category are all losing ground in developed country markets.

29. The above taxonomy largely reflects the relative performance of various sectors in total exports; in that sense there will always be 'leading' and 'lagging' sectors, and no policy conclusion necessarily flows from the ranking. The above typology does suggest a strong correlation between performance in developed country markets and overall export performance; by implication, market penetration of these markets is a useful indicator of export potential.

Diversification

30. Yugoslavia is known to have a highly diversified export structure. In part this reflects the strategy adopted in the 1950s which aimed at reducing the country's dependence on a restricted set of products or markets. Such a strategy was seen as offering Yugoslavia reduced vulnerability to protectionist pressures, and the flexibility to respond to small market opportunities as they occurred. The costs, presumably, of such a strategy are the disadvantages resulting from lack of specialization: little investment in market development, suboptimal exploitation of economies of scale in production and marketing, and an excessive sensitivity of exports to domestic demand conditions.

31. A comparative view of Yugoslavia's diversification is provided by Table 9 which provides various measures of export diversification for Yugoslavia, selected newly industrializing developing countries (the so-called NICs) and three important developed countries: the United States, Japan and the Federal Republic of Germany. Among the developing countries, Yugoslavia appears to have by far the highest degree of export diversification, exceeded only by Spain in 1976. In fact, the diversification of Yugoslav exports is by now equivalent to that of Japan. The concentration index is even more striking; the degree of concentration in Yugoslav exports is lower than for any of the other countries in the table including the United States and West Germany. The comparison with Japan is again revealing: while both countries have the same degree of export diversification, the concentration of Yugoslav exports is about 60% below the Japanese level. These findings are suggestive rather than conclusive. They do raise the issue of whether product diversification, or rather lack of concentration, may not have gone too far, with the associated disadvantages cited earlier.

Table 9: MEASURES OF EXPORT DIVERSIFICATION FOR YUGOSLAVIA AND SELECTED COUNTRIES

	Number of Commodities Exported 1/		Diversification Index 2/		Concentration Index 3/	
	1968	1976	1968	1976	1968	1976
Yugoslavia	158	159	.516	.503	.090	.078
Brazil	123	155	.761	.667	.400	.237
Greece	104	140	.760	.670	.220	.119
Hong Kong	107	109	.781	.791	.342	.399
Israel	115	131	.708	.682	.353	.312
Korea, Republic of	101	142	.771	.561	.267	.221
Mexico	136	142	.669	.542	.147	.174
Portugal	145	137	.641	.612	.124	.126
Singapore	160	164	.608	.574	.310	.288
Spain	157	170	.555	.459	.126	.089
Turkey	71	104	.834	.825	.351	.264
United States	177	180	.330	.394	.107	.110
Japan	165	159	.463	.502	.122	.181
W. Germany	175	180	.355	.376	.129	.133

Source: UNCTAD, 1979 Handbook of International Trade and Development Statistics

1/ Number of products exported at the three-digit SITC level; this figure excludes, however, those products which are less than \$50,000 in 1968 or \$100,000 in 1976 and less than 0.3 percent of the country's total exports.

2/ Absolute deviation of the country commodity shares from world structure, as follows:

$$S_j = \frac{\sum_i |h_{ij} - h_i|}{2}$$

3/ Hirschmann index normalized to make values ranging from 0 to 1 (maximum concentration), according to the following formula:

$$H_j = \frac{\sqrt{\sum_{i=1}^{182} \left(\frac{x_i}{X}\right)^2} - \sqrt{1/182}}{\sqrt{1 - 1/182}}, \text{ where}$$

j = country index;
 x_i = value of exports of commodity i;
 $X = \sum_{i=1}^{182} x_i$.

and 182 = number of products at the three-digit SITC level.

Note: The concentration index discriminates more finely between countries which are relatively more concentrated in their export structure; the diversification index discriminates more finely between countries which are relatively more diversified. Both indices range between zero (maximum diversification and minimum concentration) and unity.

Specialization

32. A further indicator of Yugoslavia's revealed comparative advantage is provided by the specialization indices of Table 10, which compare Yugoslavia's specialization relative to developed and developing countries for a selection of product groups. Given that the product groups have been chosen to represent major exports of Yugoslavia the comparatively high values of the Yugoslav specialization indices are not surprising. It is nevertheless striking that Yugoslavia is substantially more specialized than developed countries in such relatively advanced areas as shipbuilding and electrical dispatch and transmission machinery, and that this relative strength has been growing over the 1970s. Compared to the LDCs as a group Yugoslavia exhibits marked relative specialization in all the product groups listed except for petroleum products. While the specialization gap between the LDCs and Yugoslavia remains substantial the last panel of Table 10 indicates a rapid relative growth in LDC exports in virtually all the product groups distinguished, particularly in electrical equipment, shipbuilding and clothing. This reflects the rise of new competitors for Yugoslavia amongst the developing countries, many of whom are choosing to specialize in a similar range of industrial products similar to those of Yugoslavia. Yugoslavia's relative performance is further analyzed in the next chapter.

Conclusions

33. The profile of exports that emerges from this chapter is what would be expected given the changes in the Yugoslav economy over the fifteen years, and developments in the world economy, particularly in the 1970s. The shift from exports of primary products to exports of manufactures is the outcome of Yugoslavia's growth in per capita income over the period; these structural processes have been reinforced by policies designed to increase the degree of domestic value added in exports. The geographic reorientation of trade in part reflects the shifts in global purchasing power that have occurred in the 1970s, especially from the developed countries to the oil exporters, and Yugoslavia's success at tapping these new markets is a sign of responsiveness and flexibility. The various measures of specialization and of 'revealed' comparative advantage suggest growing strength in many categories of machinery and certain resource based manufactures.

34. Despite these strengths the fact remains that the growth of Yugoslavia's exports in the 1970s has been below that for all major groups of countries, and has also been inadequate to meet its financial requirements. An analysis of Yugoslavia's comparative performance provides a better indication of where performance has been poorest, and this is the object of Chapter III.

Table 10 : EXPORT SPECIALIZATION INDICES ^{1/} FOR YUGOSLAVIA, DEVELOPED AND DEVELOPING COUNTRIES,
1970 and 1975

Commodity	1970			1975			1975 (1970=100)		
	Yugoslavia	Developing Countries	Developed Countries	Yugoslavia	Developing Countries	Developed Countries	Yugoslavia	Developing Countries	Developed Countries
Live animals	603	44	133	666	45	131	110	102	98
Meat fresh, chilled, frozen	475	54	137	287	35	136	60	65	99
Maize unmilled	222	76	124	90	61	130	41	80	105
Tobacco unmanufactured	472	72	105	604	154	82	128	214	72
Wood shaped	400	36	130	485	60	102	121	167	78
Petroleum products	23	139	79	13	204	62	57	147	78
Iron, steel tubes, pipes, etc.	137	5	167	140	10	146	102	200	87
Copper	366	133	94	459	157	87	125	118	93
Aluminum	239	15	151	616	24	128	258	160	85
Metal working machinery	47	1	144	100	3	119	213	300	83
Machines, NES, non-electric	45	3	163	75	6	137	167	200	84
Electric power machine, switchgear	192	5	167	202	13	134	105	260	80
Electric distributing machinery	770	7	163	723	13	132	94	186	81
Electrical machinery, NES	175	12	169	85	29	136	49	242	80
Road motor vehicles and parts	21	2	169	44	7	144	210	350	85
Ships and boats	645	2	161	404	9	137	63	450	85
Textile excluding yarn & thread	199	32	161	216	61	131	109	191	81
Furniture	610	10	140	607	14	137	100	140	98
Clothing	290	61	131	285	128	93	98	210	71
Footwear	579	25	144	888	60	114	153	240	79

Source: UNCTAD, 1979 Handbook of International Trade and Development Statistics

1/ The specialization indicators figuring in the first six columns are defined as: $\frac{x_{ij}}{x_i} \div \frac{x_j}{X}$

x_{ij} = exports of commodity i from country or region j (j = Yugoslavia, LDCs, DCs)

x_i = world exports of commodity i

x_j = total exports from country or region j

X = total world exports.

CHAPTER III - MARKET PERFORMANCE

35. In this chapter Yugoslavia's export performance is examined in detail. The analysis focuses primarily on exports to the developed countries both for reasons of data availability and because the bulk of Yugoslavia's merchandise trade imbalance has been concentrated in that area. 1/ The analysis in this chapter has the following objectives:

- (i) to provide a comprehensive survey of Yugoslavia's recent export performance and significant changes therein;
- (ii) to provide further evidence on patterns of specialization and revealed strength in Yugoslav exports; and
- (iii) to isolate the effects on Yugoslavia's export growth of slow growth markets and the rise of new competitors.

36. As in Chapter II, the analysis covers the period 1963-77, divided into the two subperiods 1963-70 and 1970-77. The earlier interval corresponds to a period with relatively high OECD growth, a liberal international trade climate and low, though accelerating international inflation, the later period by increasing instability in international economic relations, emerging protectionist attitudes in the developed countries and a substantial slowdown in the growth of their economies. The commodity classification is the same as that adopted in Chapter II.

37. For each commodity group and in each foreign market, Yugoslavia's merchandise export performance is compared against two standards:

- (i) The overall growth of imports of a given commodity into the importing country.
- (ii) The corresponding combined export performance of a reference group of newly industrialized countries (NICs). Although this reference group includes developing countries with divergent characteristics, 2/ they all exhibit a high or rapidly increasing

1/ Statistical Appendix, Tables A3 and A4. For countries and country groups covered by the analysis, please see Annex II.

2/ The selected countries are: Brazil, Greece, Hong Kong, Israel, Korea, Mexico, Portugal, Singapore, Spain and Turkey. Per capita GDP in this group ranged from US\$707 (Korea) to US\$3,864 (Israel) in 1976, and the share of manufactures in total merchandise exports from 8.4% (Turkey) to 95.3% (Hong Kong). Yugoslavia ranked fifth in this group in exports of manufactured goods to OECD markets in 1970 and third (behind Hongkong and Spain) in exports of manufactures to the EEC in 1970.

share of manufactures in total exports. As a group they are Yugoslavia's natural "developing country" competitors in both developed and developing country markets. Comparative characteristics of Yugoslavia and this group of countries are summarized in Table 11.

Table 11: YUGOSLAVIA AND THE NEWLY INDUSTRIALIZED COUNTRIES (NICs): COMPARATIVE INDICATORS

	<u>Yugoslavia</u>	<u>NICs</u>
<u>GDP</u>		
average annual real growth 1970-77 %	5.9	6.8
per capita in 1976 (US\$)	1,721	1,472
average annual real growth per capita 1970-77 (%)	4.8	4.2
<u>Exports</u>		
per capita in 1977 (US\$)	225	193
average real growth 1970-77 (%)	3.8	9.9
share of manufactures in total		
1977, in %	66.0	55.8
1977, 1970=100	119.5	124.6
share in GDP		
1977, in %	12.3	12.9

Source: UNCTAD, 1979 Handbook of International Trade and Development Statistics; IMF, International Financial Statistics Yearbook, 1979.

The table shows that in 1977 Yugoslavia was ahead of the NICs in GDP per capita, exports per capita and the share of manufactures in total merchandise exports, although the NICs are closing the gap in the last two areas.

Export Performance in Developed Country Markets

38. Following the lines of conventional "constant market share analysis", export growth is decomposed into four components:

- (i) the growth of total imports of the markets being examined;
- (ii) the effects of commodity composition;
- (iii) the effects of market distribution; and
- (iv) a residual (referred to here as the competitiveness effect) which incorporates the impact of factors such as costs, quality, marketing, supply difficulties, government policies and the like.

Methodology, sources and definitions, commodity and market specification are further documented in Annex II.

39. Whereas in most constant market share analyses the results are shown only at the final stage of aggregation, the present analysis pays particular attention to partial aggregates: commodity composition and competitive effects by market and market distribution and competitive effects by commodity. In addition to the developed countries a group of Mediterranean countries 1/ has been included as markets in the present analysis. Although these countries are important competitors of Yugoslavia, by virtue of their geographic position these countries also constitute important actual and potential markets for Yugoslav exports.

Aggregate Results

40. Table 12 shows the growth of Yugoslav exports decomposed as indicated above.

Table 12: CONSTANT MARKET SHARE ANALYSIS OF YUGOSLAV EXPORTS:
AGGREGATE RESULTS

	<u>1963</u>	<u>1970</u>	<u>1977</u>	
Exports (c.i.f.) to developed markets <u>/1</u> (US\$ millions)	464.5	951.2	2,625.6	
	<u>1963 - 70</u>		<u>1970 - 77</u>	
	<u>US\$ millions</u>	<u>%</u>	<u>US\$ millions</u>	<u>%</u>
Actual increase in exports <u>/2</u> due to:	486.7	100.0	1,674.4	100.0
Overall market growth effect	537.0	110.3	2,282.2	136.3
Commodity composition effect	72.2	14.8	- 345.2	-20.6
Market distribution effect	-37.0	-7.6	-40.2	-2.4
Competitive effect	-85.5	-17.5	-222.4	-13.3
Total shortfall <u>/3</u>	-50.3	-10.3	-607.8	-36.3

/1 Including Mediterranean group. As the data being used are import data of partner countries they are presented on a c.i.f. basis.

/2 From first line.

/3 Sum of commodity composition, market distribution and competitive effects. Alternatively, the total shortfall is the difference between the "ideal" and actual increase in exports, the former being determined by the overall market growth effect.

41. In the 1963-70 period Yugoslav exports grew in a fairly balanced fashion. While there was some loss attributable to the competitive residual

1/ Greece, Israel, Portugal, Spain and Turkey.

and a mildly adverse initial market distribution, Yugoslavia benefited substantially from the commodity composition of its exports. The net effect was that Yugoslavia's exports in 1970 were about \$50 million less than they would have been had they grown in line with the market.

42. The picture is very different for the subsequent period. Total exports would have been 36 percent higher in 1977 than they actually were, had Yugoslavia participated fully in the increase in its partner countries' imports. The value of this shortfall was \$600 million, or over 30 percent of the current account deficit in 1977. As Table 12 shows, the major change from the previous period is in the effects of commodity composition. Competitive effects, though still negative and relatively substantial, were somewhat improved over the previous period.

43. A more disaggregated view of market performance is presented in Table 13, which compares Yugoslavia's performance with three reference groups (all markets, EEC markets and the performance of the NICs on each market) in terms of differences in annual average growth rates. This table reveals that the adverse commodity composition and competitive effects of the later period are wholly attributable to primary products. Taken overall Yugoslav exports of primary products between 1970 and 1977 grew an average of 11 percent a year more slowly than the growth of the market.

Table 13: CONSTANT MARKET SHARE ANALYSIS: SUMMARY OF RESULTS FOR MAJOR
COMMODITY AND MARKET GROUPINGS
(annual average growth rates, in percent)

	<u>1963 - 70</u>		<u>1970 - 77</u>	
	<u>All markets</u>	<u>EEC</u>	<u>All markets</u>	<u>EEC</u>
<u>Primary Commodities:</u>				
Growth of Yugoslav exports	7.9	7.4	8.9	5.3
Growth of markets	8.8	8.1	19.8	17.9
Commodity composition effect	1.3	1.6	-4.5	-3.5
Market distribution effect	- .1	.7	- .6	.1
Competitive effect	-2.1	-3.0	-5.8	-9.2
Relative performance vis a vis NICs <u>/1</u>	- .5	- .5	-9.0	-11.3
<u>Manufactures:</u>				
Growth of Yugoslav exports	14.9	17.0	21.0	22.1
Growth of markets	14.5	13.9	18.4	19.4
Commodity composition effect	1.2	.4	.4	.7
Market distribution effect	- .4	.3	.6	.0
Competitive effect	- .4	2.4	1.6	2.0
Relative performance vis a vis NICs <u>/1</u>	-6.2	1.4	-6.8	-8.7
<u>Total Merchandise:</u>				
Growth of Yugoslav exports	10.8	11.0	15.6	14.9
Growth of markets	11.6	10.7	19.1	18.7
Commodity composition effect	1.0	1.1	-1.6	- .8
Market distribution effect	- .5	.0	- .2	- .3
Competitive effect	-1.3	- .8	-1.7	-2.7
Relative performance vis a vis NICs <u>/1</u>	-1.8	.8	-7.2	-8.0

/1 Yugoslavia's export growth rate less the NICs export growth rate for the period.

Source: Tables 14 and 15.

44. Since the growth in value of fuel imports in the 1970s was very fast, an immediate question which arises is the role of those imports in reducing Yugoslavia's share in primary product imports. As an additional check on this point, trade data from the OECD were examined. Between 1970 and 1977 nonfuel primary product imports of OECD countries as a whole and of the EEC within this group grew at 13.9 percent per year while imports of these categories from Yugoslavia grew at 9 percent and 5.5 percent respectively, indicating significant loss of share even in nonfuel primary products. These data, the substantial negative competitive effect and the weak performance relative to the NICs in primary products indicate that the losses in market share go beyond fuels, and this is confirmed in the more detailed analysis below.

45. Performance in manufactures is relatively strong in the second period and in most respects represents an improvement over the earlier period. In both periods such exports exceed the growth of the market for both the EEC and for all the markets considered. Virtually all of the gain in market share in the 1970-77 period arises from positive competitive effects, which characterize performance in both the market groups. It is only by comparison with the performance of the NICs that the generally favorable assessment of manufactured export performance needs to be qualified--by the standards of the market Yugoslavia has done well.

Comparative Performance by Commodity

46. Using the commodity classification developed in Chapter II, Table 14 shows Yugoslavia's relative export performance by commodity. For each commodity, Yugoslavia's market performance is broken down into a market distribution effect and a competitive effect.

Market Growth and Distribution

47. In the 1963-70 period the growth of demand (as represented by the growth in global imports) was in general much stronger for manufactures than for primary commodities, with demand for clothing and footwear, furniture, transport equipment (other than ships and boats) and medicinal products growing particularly rapidly. In the 1970-77 period, markets for primary commodities expanded faster than for manufactures, principally reflecting the price boom in fuels and other commodities. There was, however, a marked slowdown in market growth for iron and steel, copper and other nonferrous metals. Growth in manufactures occurred by and large in the same products as in the earlier period, with some acceleration in demand for ships and boats and nonmetal mineral manufactures. As already indicated in Table 13, the market distribution of exports appears in general to have been favorable in both periods with the recent period exhibiting relatively strong positive effects in the transportation equipment sector (particularly ships and boats), in wood manufactures, petroleum products and textile yarn and thread.

Competitive Effects and Relative Performance vis-a-vis the NICs

(a) Primary Products

48. Table 14 provides a more disaggregated view of the worsening in Yugoslavia's export performance in primary products. Yugoslavia enjoyed increasing market shares in the bulk of these products in the 1963-70 period, while between 1970 and 1977 losses in share were sustained in all primary categories except for aluminum. A similar pattern emerges if Yugoslavia's performance is measured against the NICs.

49. It was noted in Chapter II (Table 5) that the bulk of Yugoslavia's exports of primary products to developed countries go to the EEC markets. Performance in primary products must therefore substantially reflect developments in these markets. Table 15 provides an analysis of export performance by commodity for the EEC alone. With the exception of beverages and tobacco

Table 14 : YUGOSLAVIA'S RELATIVE EXPORT PERFORMANCE BY COMMODITY:
ALL MARKETS
(annual average percentage rates of change)

Commodity	Imports from Yugoslavia		Global Imports		Market Distribution Effect		Competitive Effect		Relative Performance vis-a-vis NICs	
	1963-70	1970-77	1963-70	1970-77	1963-70	1970-77	1963-70	1970-77	1963-70	1970-77
Live Animals	1.5	6.3	9.7	10.2	5.2	.5	-13.4	-3.4	-9.5	-14.3
Meat fresh, chilled, frozen	.8	8.7	10.3	14.5	.6	.2	-10.1	-6.0	-20.2	2.2
Maize unmilled	16.5	-3.5	6.9	15.2	-6.9	-3.8	16.5	-14.9	-3.0	-9.7
Other food and live animals	2.9	11.2	6.3	17.1	.2	.1	-3.6	-6.0	-4.8	-7.1
Beverages and tobacco	13.5	11.1	6.6	14.0	1.2	-1.1	5.7	-1.8	7.3	-5.2
Wood shaped	1.9	17.1	6.4	16.4	.6	-1.4	-5.7	2.1	-7.8	-3.2
Other crude agricultural materials	8.1	11.4	4.3	13.7	.3	.1	3.5	-2.4	3.4	.9
Petroleum products	18.4	26.3	6.3	27.2	.3	3.2	11.8	-4.1	-.1	-3.3
Other metals and minerals	4.1	-1.6	11.3	28.1	.3	-3.1	-7.5	-26.6	-8.3	-21.2
Iron and steel	16.5	4.2	14.1	13.0	-1.4	.3	3.8	-9.1	-6.6	-26.5
Copper	45.8	2.3	17.0	3.3	-2.1	.2	30.9	-1.2	19.9	-19.3
Aluminum	33.2	17.9	14.2	16.4	-.1	.3	19.1	1.2	-8.0	1.3
Other non-ferrous metals	5.0	8.2	14.2	12.1	.0	1.2	-9.2	-5.1	7.7	-19.0
Chemical elements and compounds	27.3	7.8	15.7	20.3	.0	.4	11.6	-12.1	8.5	-14.7
Medicinal, etc. products	48.2	21.6	18.3	17.1	1.4	1.9	28.5	2.6	36.2	-7.4
Other chemicals	15.3	22.4	13.1	19.2	1.8	.6	.4	2.6	2.9	1.2
Metal working machinery	24.5	7.2	9.4	8.7	3.6	1.3	11.5	-2.8	-2.6	-11.0
Machines, NES, non-electrical	31.2	24.5	14.9	16.1	1.3	-.1	15.0	8.5	-.2	-12.7
Other machinery, non-electrical	29.7	31.3	13.7	16.3	.0	.1	16.0	14.9	-2.7	-2.2
Electric power machine, switchgear	31.4	23.4	15.8	16.8	1.5	-.9	14.1	7.5	-8.5	-16.1
Electric distributing machinery	28.0	17.2	20.1	13.4	3.7	.6	4.2	3.2	-38.2	-21.0
Electrical machinery, NES	45.8	29.6	17.9	19.2	-.9	-.3	28.8	10.7	-17.4	-.4
Other electrical machinery	33.3	19.0	16.6	21.6	4.0	2.5	12.7	-5.1	-8.1	-17.7
Road motor vehicle, parts	17.2	27.2	18.0	21.4	7.3	1.5	-8.1	4.3	-34.6	-17.1
Road motor vehicle excluding parts	5.4	40.1	22.4	20.3	-10.4	1.0	-6.6	12.8	-50.6	-19.9
Ships and boats	3.1	17.1	13.1	23.4	5.5	5.9	-15.5	-12.2	-.9	-31.7
Other transport equipment	46.0	28.7	17.8	12.2	-.5	3.5	28.7	13.0	24.8	-8.9
Wood, cork manufactures, NES	5.0	19.3	12.0	18.3	-2.4	5.8	-4.6	-4.8	-13.2	-.4
Non-metal mineral manufactures, NES	12.2	14.0	14.8	20.6	-.7	-2.3	-1.9	-4.3	-2.1	-12.1
Textile yarn and thread	21.4	-2.6	10.4	13.6	1.5	3.4	9.5	-19.6	4.4	-31.5
Textile excluding yarn and thread	11.1	3.2	8.8	15.4	1.9	1.0	.4	-13.2	-.4	-18.3
Metal manufactures, NES	13.9	21.9	13.7	17.7	1.5	.7	-1.3	3.5	-13.9	-9.2
Other basic manufactures	17.1	22.0	10.7	17.6	1.5	.8	4.9	3.6	-7.7	-8.2
Furniture	9.5	22.3	22.9	24.4	2.5	-3.2	-15.9	1.1	-11.1	-7.0
Textile clothing not knitted	29.5	26.1	19.5	25.0	2.3	.5	7.7	.6	9.5	-3.3
Clothing, accessories knit	39.9	29.4	18.8	19.3	1.7	.5	19.4	9.6	24.5	4.1
Footwear	8.6	31.1	20.0	21.0	-1.4	2.0	-10.0	8.1	-22.6	.5
Other misc. manufactures and unclassified	18.0	21.8	13.1	18.1	1.7	.8	6.6	2.9	-4.1	-1.7

Source: GATT

**Table 15: YUGOSLAVIA'S RELATIVE EXPORT PERFORMANCE BY COMMODITY:
EUROPEAN ECONOMIC COMMUNITY**

(annual average percentage rates of change)

Commodity	Imports from Yugoslavia		Global Imports		Market Distribution Effect		Competitive Effect		Relative Performance vis-a-vis NICs	
	1963-70	1970-77	1963-70	1970-77	1963-70	1970-77	1963-70	1970-77	1963-70	1970-77
Live Animals	1.0	7.6	9.7	10.8	5.8	-1.0	-14.5	-2.2	-14.4	17.8
Meat fresh, chilled, frozen	-2.6	-2.7	10.1	16.1	.8	1.2	-13.5	-20.0	-40.5	-9.0
Maize unmilled	20.9	-8.4	5.1	14.1	.8	-3.7	16.6	-18.8	-12.0	-3.3
Other food and live animals	2.4	7.8	5.7	17.4	.8	.2	-4.1	-9.8	-5.6	-10.9
Beverages and tobacco	14.8	15.6	4.3	14.9	.7	.2	9.8	.5	8.2	-1.1
Wood shaped	.4	18.8	5.3	14.5	1.0	.4	-5.9	3.9	-9.4	2.1
Other crude agricultural materials	7.8	10.1	3.2	13.6	1.3	.1	3.3	-3.6	4.1	.7
Petroleum products	16.7	26.9	5.0	28.1	.6	5.6	11.1	-6.8	.9	12.3
Other metals and minerals	7.6	-4.9	10.6	24.0	1.8	.3	-4.8	-29.2	-4.9	-19.2
Iron and steel	18.0	-1.8	13.4	13.1	-1.8	-.7	6.4	-14.2	-5.1	-35.1
Copper	49.4	-2.4	16.6	3.5	-1.0	-1.1	33.8	-4.8	36.0	-31.5
Aluminum	32.4	11.5	16.7	14.8	3.6	-.3	12.1	-3.0	-28.3	-3.7
Other non-ferrous metals	9.3	-.6	14.9	9.7	1.3	-.8	-6.9	-9.5	14.0	-15.9
Chemical elements and compounds	28.6	6.0	16.0	21.0	-.3	-.9	12.9	-14.1	5.4	-14.4
Medicinal, etc. products	53.5	21.7	19.1	18.2	1.6	1.3	32.8	2.2	26.3	-4.5
Other chemicals	19.1	21.0	14.5	20.2	1.6	-.2	3.0	1.0	8.6	-.4
Metal working machinery	29.6	.2	8.5	8.4	4.8	.4	16.3	-8.6	1.3	-17.0
Machines, NES, non-electrical	29.3	26.3	14.8	16.3	.4	.3	14.1	9.7	-.9	-7.9
Other machinery, non-electrical	28.8	30.5	13.3	16.3	1.1	-.2	14.4	14.4	6.2	-3.6
Electric power machine, switchgear	36.8	26.9	16.1	16.1	-.8	-.8	21.5	11.6	3.0	-3.2
Electric distributing machinery	36.8	15.3	17.0	15.2	.3	2.3	19.5	-2.2	-13.1	-55.9
Electrical machinery, NES	59.9	30.0	16.9	19.0	.5	-.1	42.5	11.1	15.8	-5.0
Other electrical machinery	23.8	27.8	14.2	23.2	8.0	1.4	1.6	3.2	2.0	-14.2
Road motor vehicle, parts	16.6	27.1	17.2	22.5	8.5	.5	-9.1	4.1	-37.5	-9.5
Road motor vehicle excluding parts	19.5	34.8	17.8	24.1	-1.9	-2.6	3.6	13.3	-42.8	-36.6
Ships and boats	20.7	40.9	16.1	28.9	6.3	9.4	-1.7	2.6	-4.7	.8
Other transport equipment	64.6	30.7	17.4	15.3	-.1	1.7	47.3	13.7	57.3	-.3
Wood, cork manufactures, NES	.6	26.2	11.9	19.2	-1.0	10.6	-10.3	-3.6	-11.0	1.8
Non-metal mineral manufactures, NES	13.0	12.8	18.2	21.6	-3.5	-3.8	-1.7	-5.0	-2.0	-15.8
Textile yarn and thread	23.6	-5.1	10.5	15.8	1.5	2.4	11.6	-23.3	1.6	-38.9
Textile excluding yarn and thread	13.1	.7	9.7	17.6	2.0	-.2	1.4	-16.7	3.5	-24.5
Metal manufactures, NES	42.6	23.7	15.0	18.5	-.2	.1	27.8	5.1	14.1	-9.8
Other basic manufactures	20.6	20.3	11.9	18.5	.4	-.3	8.3	2.1	-8.9	-8.1
Furniture	4.3	23.5	22.4	25.7	-1.2	.6	-16.9	-2.8	-18.0	-9.7
Textile clothing not knitted	34.8	26.0	19.2	27.2	3.3	.6	12.3	-1.8	22.0	-9.3
Textile clothing, knitted	57.6	30.8	18.7	19.3	3.5	.2	35.4	11.3	43.4	2.7
Footwear	5.6	26.1	16.3	24.2	1.2	.8	-11.9	1.1	-10.8	-5.5
Other misc. manufactures and unclassified	19.4	22.8	10.8	19.8	-2.1	.0	10.7	3.0	7.5	-5.7

Source: GATT

and shaped wood there have been negative competitive effects for all primary commodities in the 1970-77 period, with very substantial deterioration in fresh meat, maize, other food and live animals, and iron and steel. Given that the market growth data include intertrade within the community, maintenance of market share is a somewhat unrealistic normative standard and a better comparison is with the performance of the NICs. Here too the data show Yugoslavia performing relatively poorly in all foodstuffs (other than live animals), and in all metals.

50. In assessing these developments several events in European trading arrangements need to be kept in mind. First, was the expansion of the EEC from six members to nine in 1973. Second, was the conclusion of agreements between the expanded EEC and the EFTA to reduce tariffs for processed agricultural goods and eliminate all duties on industrial products by July 1, 1977. Third, was the growth in preferential trading agreements between the EEC and many of the countries in the Mediterranean basin, including five of the NICs in the present analysis: Greece, Israel, Portugal, Spain and Turkey. Yugoslavia had only a non-preferential agreement with the EEC in this period. ^{1/} It is possible that these shifts in trading arrangements may have hurt Yugoslavia's primary exports, even though the treatment of primary products in such agreements is less favorable than that of manufactures. Some evidence on this is provided by Table 16. With the exception of the Netherlands, Yugoslavia has negative competitive residuals in primary products on all European markets in the 1970-77 period; equally its performance on all these markets was worse than that of the NICs. Its performance on all non-European markets for the same period is comparatively strong for the same commodities, as is its performance relative to that of the NICs. These results lend some credence to the view that Yugoslavia has been hurt by the growth of trading blocks in Europe, although this is probably just a partial explanation for the poor performance in primary products.

(b) Manufactures

51. Competitive effects in manufactures are positive in both periods for the majority of commodities shown in Table 14. There are, however, some fundamental changes between the two periods. On the one hand, Yugoslavia's relative market performance has worsened in chemical elements and compounds and medicinal products, in electrical and non-electrical machinery and in textiles and clothing. In almost all these cases there is a parallel deterioration in the Yugoslav performance vis-a-vis the NICs. On the other hand, Yugoslavia's relative market performance has improved in most items of the transport equipment sector, in wood materials and furniture and particularly sharply in footwear; nonetheless performance in these groups is inferior to that of the NICs, although it registers some improvement in the later period.

^{1/} The first non-preferential agreement was signed in 1970. A new, preferential agreement was signed in April 1980. The trade and financial protocols of the new agreement came into effect on July 1, 1980. The scope and implications of the new agreement are discussed in Chapter VI.

Table 16: YUGOSLAVIA'S RELATIVE EXPORT PERFORMANCE BY MARKET: PRIMARY COMMODITIES AND MANUFACTURES
(annual average percentage rate of change)

	<u>Imports from Yugoslavia</u>		<u>Global imports</u>		<u>Commodity composition effect</u>		<u>Competitive effect</u>		<u>Relative performance vis-a-vis NICs</u>	
	<u>1963-70</u>	<u>1970-77</u>	<u>1963-70</u>	<u>1970-77</u>	<u>1963-70</u>	<u>1970-77</u>	<u>1963-70</u>	<u>1970-77</u>	<u>1963-70</u>	<u>1970-77</u>
<u>Primary</u>										
<u>Commodities</u>										
Italy	6.4	5.3	9.7	18.2	1.3	- 2.8	- 4.6	-10.1	- 2.0	- 9.3
W. Germany	9.9	6.5	10.5	18.0	.8	- 3.6	- 1.4	- 7.9	- 2.1	- 9.3
France	18.2	2.6	7.7	20.9	2.3	- 6.4	8.2	-11.9	9.0	-18.4
United Kingdom	1.1	-8.1	11.2	20.8	1.7	1.5	-11.8	-30.4	- 4.2	-22.2
Netherlands	7.8	30.9	3.3	13.2	4.1	- 8.4	.4	26.1	- 2.2	8.7
Rest EEC	8.3	-1.2	9.9	18.2	-.1	- 2.0	- 1.5	-17.4	- 1.7	-15.0
Austria	4.2	10.2	8.8	19.4	-.7	-.4	- 3.9	- 8.8	- 9.8	- 4.5
Switzerland	16.8	.4	7.6	14.7	.4	2.1	8.8	-16.4	8.3	-13.8
Rest Europe	14.4	7.7	9.8	16.2	3.0	- 3.9	1.6	- 4.6	5.7	- 5.5
United States	7.7	19.3	7.2	24.6	.7	-11.1	-.2	5.8	2.2	1.5
Rest DC	28.8	24.0	12.5	21.1	-1.7	- 3.2	18.0	6.1	15.2	1.4
Mediterranean	12.1	21.8	10.5	23.5	1.0	-10.0	.6	8.3	- 8.0	-.6
<u>Manufactures</u>										
Italy	10.1	17.0	13.3	18.8	-3.0	- 1.2	-.2	-.6	-15.1	-17.2
W. Germany	23.2	21.7	15.0	19.9	1.7	1.2	6.5	.6	6.1	-10.7
France	26.6	33.4	16.7	20.3	1.1	2.5	8.8	10.6	-.6	- 8.4
United Kingdom	5.5	16.1	13.0	17.9	2.0	.7	- 9.5	- 2.5	- 3.9	- 5.1
Netherlands	21.4	27.2	13.6	20.1	3.2	4.4	4.6	2.7	- 2.7	- 7.1
Rest EEC	13.2	28.6	12.7	19.6	.1	-.5	.4	9.5	- 4.7	- 1.3
Austria	14.7	13.7	12.8	23.2	3.1	1.8	- 1.2	-11.3	-17.8	-16.4
Switzerland	16.2	19.2	12.1	16.2	-.5	-.4	4.6	3.4	- 5.8	- 6.8
Rest Europe	13.8	15.4	11.7	17.9	-.6	2.2	2.7	- 4.7	- 7.8	- 9.5
United States	13.3	19.9	18.8	17.3	3.9	- 1.0	- 9.4	3.6	-13.0	- 4.1
Rest DC	18.3	23.4	14.3	16.1	2.6	2.6	1.4	4.7	- 9.7	- 9.6
Mediterranean	3.4	19.2	10.7	18.7	5.6	- 1.0	-12.9	1.5	- 6.0	-13.3

Source: GATT

Table 16 confirms that while exports of manufactures have performed well relative to market, they have performed poorly compared to the NICs in all markets. While Yugoslavia may have been hurt by market access limitations in specific products and specific markets, the uniformly better performance of the NICs in all markets indicates that factors affecting the supply of exports from Yugoslavia account for much of the difference.

A Taxonomy of Performance

52. It is useful to classify sectoral performance as revealed by Table 14 in a somewhat different way, to highlight sectors in both primary and manufactured goods which have been doing relatively well. As mentioned in Chapter II, a strong performance in developed country markets is a good indicator of performance in other markets as well. Table 17 provides a taxonomy of the better performing sectors, as revealed by the analysis of Table 14, dividing these into sectors where performance has been improving, and those where relative performance has been deteriorating.

Table 17: GROUPING OF SECTORS BY MARKET PERFORMANCE

	<u>Competitive Residual in 1970-77</u>	<u>Change in Residual from 63-70 to 70-77</u>	<u>Performance Compared to NICs 70-77</u>	<u>Change in Performance Compared to NICs from 63-70 to 70-77</u>
<u>I. Positive and improving</u>				
Meat fresh, chilled, frozen	- 6.0	4.1	22.4	2.2
Wood shaped	2.1	7.2	- 3.2	4.6
Aluminum	1.2	-20.3	1.3	6.7
Other chemicals	2.6	2.2	1.2	- 1.7
Other machinery, non-electric	14.9	- 1.1	- 2.2	.5
Electric distributing machinery	3.2	- 1.0	-21.0	17.2
Electrical machinery, NES	10.7	-18.1	- .4	17.0
Road motor vehicle, parts	4.3	12.4	-17.1	17.5
Road motor vehicle excluding parts	18.8	25.4	-19.9	30.7
Metal manufactures, NES	3.5	4.8	- 9.2	4.7
Furniture	1.1	17.0	- 7.0	4.1
Footwear	8.1	18.1	- .5	22.1
Other mis. manufactures and unclassified	2.9	9.5	- 1.7	2.4
<u>II. Positive and declining</u>				
Medicine, etc. products	2.6	-25.9	- 7.4	-43.6
Machines, NES, non-electric	8.5	- 6.5	-12.7	-12.9
Electrical power machine, switchgear	7.5	- 6.6	-16.1	- 7.6
Other transport equipment	13.0	-15.7	- 8.9	-33.7
Wood, cork manufactures, NES	4.8	- .2	- .4	12.8
Other basic manufactures	3.6	- 1.3	- 8.2	- .5
Textile clothing, not knitted	.6	- 7.1	- 3.3	-12.8
Textile clothing, knitted	9.6	-.9.8	4.1	-20.4

53. A variety of criteria have been used to classify sectors into these two categories. The first group contains commodities which exhibited positive competitive effects in the second period and have improved in performance since the first period with respect to either the market or the NICs. ^{1/} Conversely, products in Group II are those with a positive competitive residual in the later period but with deteriorating performance against the market and the NICs.

^{1/} Meat exports are included despite their negative competitive performance in DC markets on account of their very strong performance against the NICs.

54. The selection of commodities in Group I of Table 17 reinforces the identification of strong performers in Chapter II which had been established without reference to Yugoslavia's comparative performance. On the basis of both these tabulations Yugoslavia is shown to have exhibited strength in various items of mechanical engineering (particularly electrical machinery), wood products, meat, and footwear. Group II commodities are those where Yugoslavia faces increasing and successful competition from the NICs. In other sectors the worsening performance is more likely attributable to special market factors, particularly in relation to the EEC; for example, in other transport equipment, other basic manufactures and clothing the deterioration in Yugoslavia's relative export performance is almost exclusively concentrated in EEC markets.

55. To conclude, Yugoslavia's performance in primary products has been poor in virtually all European markets, both as compared to the market and as compared to the NICs. This weakness has been common to both agricultural products and metals and minerals, and goes beyond losses in market share associated with the increasing value of fuel imports in the 1970s. In part this weakness reflects adverse commodity composition, in part the consequences of Yugoslavia not being party to preferential trade agreements with the EEC and being particularly vulnerable to the expansion of the Community and its improved links with the EFTA. These external factors notwithstanding, Yugoslavia has probably suffered a genuine deterioration in its export capacity in primary products. Domestic factors in this deterioration are examined in Chapter V.

56. Assessment of performance in manufactures depends crucially on the view taken of Yugoslavia's performance relative to the NICs, since by the standards of the markets analyzed here Yugoslavia has done relatively well. The performance of the NICs does suggest that an expansion of Yugoslav manufactured exports to developed countries would have been possible in the period under review. The analysis has confirmed Yugoslavia's strength in certain areas, particularly engineering goods and wood products; it also confirms the growing strength of other NICs in most of these product lines, and indicates that competition in developed country markets even in these areas of strength will get steadily more intense.

CHAPTER IV: EXTERNAL COMPETITIVENESS OF MANUFACTURED EXPORTS

57. The last two chapters have identified primary products as the major area of past weakness in Yugoslav exports. Performance in manufactured products has, by the standards of the market, been reasonably satisfactory, but has not been sufficient to offset the weak performance in primary products. At the same time the success of the NICs suggests that increased penetration of developed country markets was a realistic possibility for Yugoslavia, given its needs for foreign exchange.

58. In this chapter and the next, the discussion concerns itself with the domestic side of these developments, and in particular examines whether domestic policy has been conducive to a strong export performance, particularly in manufactured products.

59. This chapter concentrates on the price competitiveness of Yugoslav exports in foreign markets. After reviewing trends in an appropriately weighted measure of the nominal exchange rate, the analysis considers movements in the dinar unit values of Yugoslav exports, and adjusts these for changes in the nominal exchange rate to provide an estimate of movements in Yugoslav export unit values measured in foreign currency. This is then compared with movements in export unit values of Yugoslavia's competitors, similarly adjusted to a common foreign currency basis, to establish whether Yugoslavia gained or lost price competitiveness over its competitors in the 1970s. Such price comparisons are relevant only for that subset of goods where Yugoslav enterprises have some autonomy in setting prices; where they are pure price takers they have no ability to price their goods above world market prices or incentive to price them below world levels. The degree to which Yugoslav export unit values have in fact deviated from those of its competitors provides a loose test of the relative importance of such pricing autonomy in aggregate Yugoslav exports. The analysis is also extended to a consideration of cost trends in Yugoslavia compared with its competitors. The interpretation of these cost trends and their implications for export performance is not unambiguous and depends on the market conditions facing the firm. If the firm is a price setter the usual assumption is that it operates to maintain a target margin on its exports, as measured in local currency. As a result cost developments are assumed to be translated more or less directly into export price movements and in this case cost developments can be interpreted as a leading indicator of price developments. Where the firm is a pure price taker the home currency price of its exports are given to it, and cost developments provide a gross measure of trends in the profitability of exporting over time. While these stylizations may suffice for developed countries, in developing countries there are numerous commercial policy interventions which make the link between cost movements, nominal exchange rate movements and export profitability less immediate, and which make it possible to offset cost developments through the use of other instruments, without affecting the nominal exchange rate. It is nonetheless expositively useful to analyze the effects of exchange rate policy separately from the other instruments of commercial policy and also to separate the discussion of Yugoslav performance relative to other countries from that of domestic resource pulls. Technical discussion of weighting schemes and indicators used in this chapter is provided in Annex III.

Exchange Rate Policy

60. As mentioned in Chapter I, exchange rate unification was a major aspect of the trade liberalization of the 1960s, with dinar devaluations in 1961 and 1965. The rate established in 1965 was 12.5 dinars per US dollar. This rate was maintained until 1971 when Yugoslavia's balance of payments difficulties and the general realignment in world exchange rates led to two devaluations in quick succession - to 15 dinars per US dollar in January 1971 and 17 dinars per dollar in December 1971. Since July 1973 the dinar has not been maintained within announced margins. The National Bank of Yugoslavia

(NBY) intervenes in the domestic interbank foreign exchange market to position the dinar as deemed appropriate. Table 18 provides period average dollar-dinar exchange rates for the 1970s.

Table 18: DINAR RATES AGAINST THE US DOLLAR IN THE 1970s

	<u>Dinars per dollar</u>
Before January 1971	12.50
January 1971 - December 1971	15.00
Period average rate, 1971	14.96
December 1971 - July 1973	17.00
Period average rates:	16.19
1973	15.91
1974	17.39
1975	18.19
1976	18.30
1977	18.64
1978	19.00
1979	

Source: IMF, International Financial Statistics

61. In US dollar terms there has been comparatively little movement since 1973; however, given the orientation of Yugoslav trade, the dinar-dollar rate is not an appropriate indicator of either the magnitude or the adequacy of exchange rate movements, and a suitably weighted index of nominal exchange rates is needed.

Nominal Exchange Rates

62. Since this report concentrates on merchandise export performance, the measures of nominal exchange rates that have been computed are those relevant for measuring Yugoslavia's export competitiveness. As Annex III indicates, choosing an appropriate currency weighting system for even this limited purpose is not straightforward, and choice of different weights may affect the conclusions reached.

63. Two indices of nominal exchange rates are presented in Table 19 below. These represent the application of a bilateral weighting system and a double weighting system. The first system of weights reflects the importance of other countries as markets for Yugoslavia's exports, and implicitly compares the Yugoslav exporting sector with the domestic producers of the importing country. The second system of weights reflects the importance of other countries as competitors for Yugoslavia's exports in markets and commodities important to Yugoslavia. The actual weights given to various currencies in constructing each index are listed in the annex.

Table 19: INDICES OF NOMINAL EXCHANGE RATES FOR MANUFACTURED EXPORTS /1
(Annual averages: 1970 = 100)

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Bilateral weighted	100	85.0	68.6	67.6	74.9	63.8	68.2	67.2	60.6	58.4
Double weighted	100	86.5	67.4	64.1	69.8	59.1	59.9	58.4	50.4	48.7
<u>Percentage Change /2</u> <u>over previous year</u>										
Bilateral weighted		-14.6	-19.3	-1.2	+10.5	-14.8	+6.9	-1.5	-9.8	-3.6
Double weighted		-13.5	-22.1	-4.9	+8.9	-15.1	+1.4	-2.5	-13.7	-3.4

/1 Foreign currency per dinar.

/2 Negative sign indicates depreciation of the dinar.

As Table 19 shows, choice of weights can significantly affect the portrayal of trends, with the bilateral weighted index showing less depreciation than the double weighted index over the period. The double weighted index is used in the subsequent analysis since, given the earlier discussion of market share developments, an index which measures performance relative to other competitors is of more interest than one which is oriented to comparison with the domestic producers in a given market.

64. Figure 4 charts the movements in the nominal exchange rate from 1970 to 1979. As that figure indicates, movements in the nominal rate since 1970 fall into several phases, closely linked with the balance of payments crises described in Chapter I. The nominal rate fell steeply in response to the formal devaluations of 1971; it then stabilized until the difficulties of 1975 when a further devaluation was effected, and has been allowed to drift down further since 1977.

Indicators of Competitiveness

65. A variety of indicators can be chosen as the basis for comparing competitiveness. Three indicators have been selected for the present analysis: export unit values, unit labor costs and consumer prices. Of these the first is a measure of values actually realized in trade while the other two are cost measures. Each of these measures, and other measures considered but rejected, are discussed in the annex. Given the system of worker management in Yugoslavia, unit labor costs reflect both a 'fixed' wage element and a variable element analogous to dividend distribution. While the existence of this discretionary element may require some modification of the model of mark-up pricing which underlies the use of unit labor costs as indicator of price competitiveness (see para. 59) this is unlikely to invalidate the usefulness of this indicator as a rough measure of underlying cost trends.

66. Table 20 shows that, with 1970 again as a base, the nominal growth in domestic currency in all three indicators for Yugoslavia has been considerably

Table 20: YUGOSLAVIA: SELECTED INDICATORS OF EXTERNAL COMPETITIVENESS IN INDUSTRY

1970 = 100	Unit Labor costs (ULC) 1/		Export Unit Values 1/		Consumer Price Index (CPI) 1/		Nominal Ex- 1/Change Rate 2/	Adjusted Nominal Exchange Rates 3/		
	Yugoslavia	Competitors	Yugoslavia	Competitors	Yugoslavia	Competitors	Yugoslavia	Adjusted for relative ULC	Adjusted for relative export Unit Values	Adjusted for Rela- tive CPI
1971	117.0	107.6	114.9	102.7	116.0	105.6	86.5	94.1	96.8	95.0
1972	132.5	113.0	145.5	104.5	135.7	111.7	67.4	79.1	93.8	81.9
1973	148.6	121.5	156.6	110.9	162.9	120.9	64.1	78.4	90.5	86.4
1974	175.2	141.0	216.3	138.9	197.1	136.6	69.8	86.7	108.7	100.7
1975	209.5	165.8	245.2	147.8	244.4	152.7	59.1	74.7	98.0	94.6
1976	239.9	170.2	255.4	163.4	273.7	167.6	59.9	84.4	93.6	97.8
1977	282.1	185.5	292.4	178.7	314.7	187.7	58.4	88.8	95.6	100.5
1978	314.2	195.8	328.6	184.5	358.8	188.9	50.4	80.9	89.8	95.7

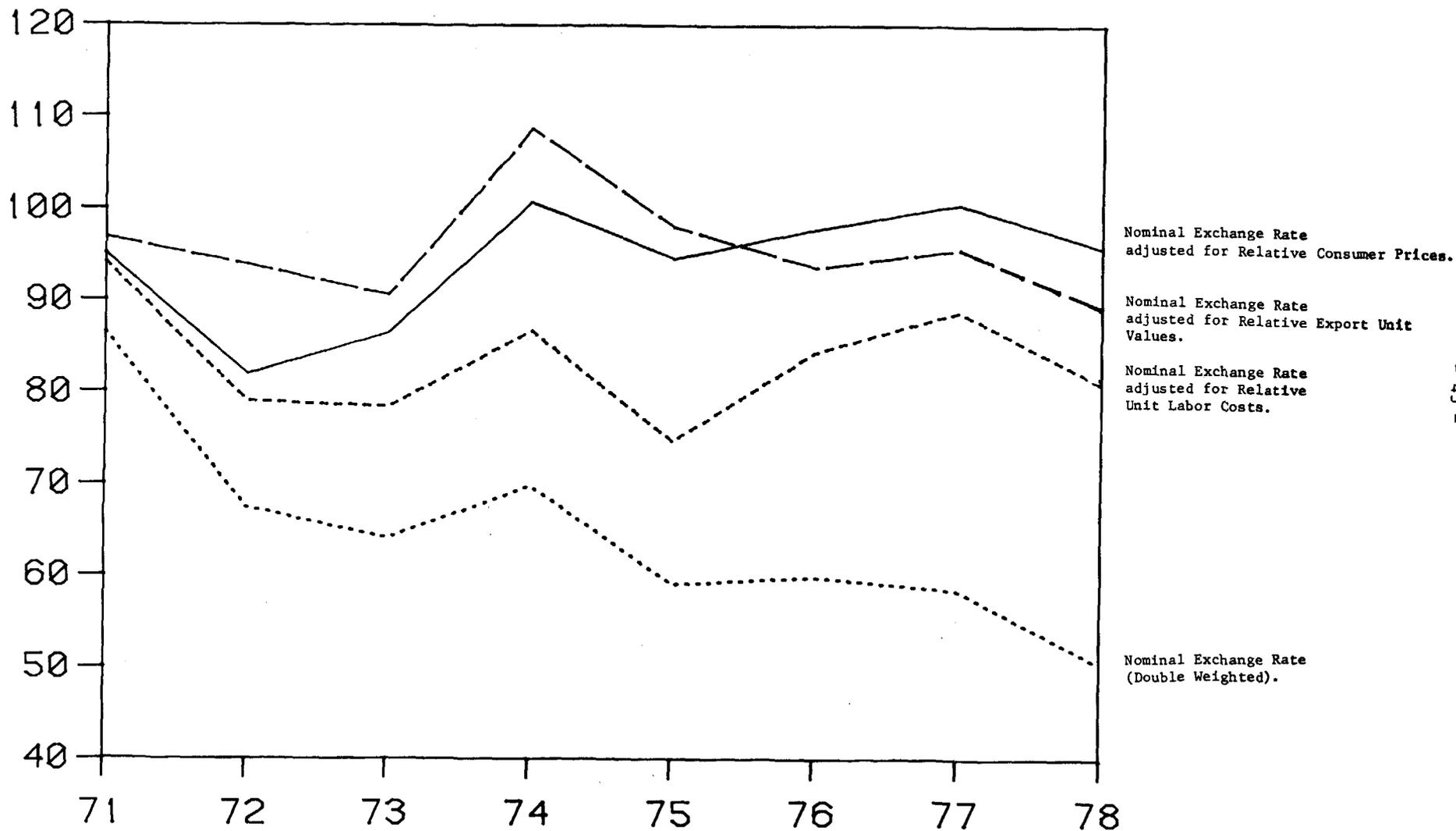
1/ Foreign currency per unit of home currency, 1970 = 100. For weights used, please see Annex III.

2/ Double Weighted.

3/ Nominal exchange rates adjusted for relative price or cost differentials.

Source: IMF, International Financial Statistics; US Bureau of Labor Statistics; Statistical Yearbook of Yugoslavia and World Bank estimates.

FIGURE 4
YUGOSLAVIA: INDICES OF COMPETITIVENESS (1970 = 100)



higher than for a weighted average of its competitors. ^{1/} The increase in consumer prices in Yugoslavia over the eight years has been almost 90 percent greater than for its competitors. The relative increases are somewhat less in the indicators more specific to manufactured exports, namely unit labor costs in manufacturing and export unit values.

67. In order to obtain relative movements in the indicators as they would appear in a common foreign currency, it is necessary first to convert the Yugoslav series into foreign currency through the use of the double weighted nominal exchange rate index and then to deflate the resulting series by the movement in the corresponding indicator for Yugoslavia's competitors. Such adjusted exchange rates are shown on the right hand side of Table 20, and are graphed in Figure 4. By way of illustration Yugoslav unit labor costs measured in dollars in 1978 were 80.9 percent of the unit labor costs of its competitors, also in dollars, as compared to the situation in 1970.

68. Reviewing trends in export unit values, there has been some shift in Yugoslavia's relative position from one year to the next, indicating some autonomous price setting behavior by Yugoslav exporters. It appears that the major devaluations of 1971 were sufficient to generate an improvement in price competitiveness until 1973, but that the combination of an appreciation of the nominal exchange rate with the increases in domestic prices that occurred in 1974 significantly eroded Yugoslavia's competitiveness position in that year. There was a gradual improvement in competitiveness thereafter, such that by 1978 relative export unit values were back to their 1973 standing. The trends revealed by the cost indicators (consumer prices and unit labor costs) differ somewhat from this. With both the 1971 and 1975 devaluations the two cost series exhibit an improvement in competitiveness in advance of this being manifested in export unit values. Both series exhibit a deterioration in competitiveness between 1975 and 1977 at a time when the nominal exchange rate remained relatively unchanged. While the depreciation of the nominal exchange rate after 1977 was sufficient to restore the labor cost series to roughly the position it had reached in 1972, the same was not the case with the consumer price index series, suggesting that movements in the prices of nontradables (which have a substantial weight in the consumer price index) have been more rapid than those of tradables. If export unit values and unit labor costs are taken as the most reliable indicators it appears that by 1978 Yugoslavia was again as competitive as at any time in the seventies.

69. Of equal interest in Figure 4 is the duration of the effect of the exchange rate adjustments. Both with the 1971 and 1974 devaluations the competitive gain was sustained for less than two years, as measured by the CPI and ULC indices. Developments in costs and prices are unlikely to be independent of the movement in the exchange rate in an economy as open as Yugoslavia's and one where the pressure of demand has been maintained at relatively high levels. Thus, even if a change in the real exchange rate were desired, implementing such a change and making it endure over the medium term is not easy to achieve. Since changes in the nominal exchange rate have usually occurred as part of a stabilization package, it is difficult to apportion improvements in export performance between the two sets of policies.

^{1/} The same system of double weights has also been used in aggregating the indicators.

Table 21: YUGOSLAVIA AND SELECTED EXPORT COMPETITORS: INDICES OF UNIT LABOR COSTS

1970 = 100

	<u>Yugoslavia</u>		<u>Germany</u>		<u>Italy</u>		<u>Finland</u>		<u>Austria</u>		<u>Spain</u>	
	Local Currency	Foreign Currency (US$)	Local Currency	Foreign Currency (US$)	Local Currency	Foreign Currency (US$)	Local Currency	Foreign Currency (US$)	Local Currency	Foreign Currency (US$)	Local Currency	Foreign Currency (US\$)
1971	117.0	101.1	108.5	113.8	112.2	118.0	111.5	111.5	109.5	114.1	111.1	111.8
1972	132.5	97.5	114.0	130.9	118.5	126.9	118.9	120.4	116.9	131.4	112.7	122.8
1973	148.6	114.7	121.1	167.1	134.3	150.3	135.4	160.9	127.1	169.8	119.3	143.3
1974	175.2	144.0	131.9	186.5	159.9	153.2	164.8	193.0	140.1	195.2	141.0	171.0
1975	209.5	150.4	141.9	211.2	214.9	205.9	194.6	222.2	162.3	242.6	188.0	229.4
1976	239.9	164.8	138.0	200.8	237.0	178.5	225.5	245.1	160.7	241.1	215.4	225.3
1977	282.1	192.7	151.7	239.2	277.4	196.4	242.4	252.6	171.0	269.2	259.4	239.2
1978	314.2	210.5	156.4	285.3	306.6	225.7	248.2	252.9	176.2	315.7	313.8	286.5

Source: IMF, International Financial Statistics and World Bank estimates.

70. It is useful to supplement the above competitiveness indicators, with a review of developments in Yugoslavia's relative labor costs in the 1970s by competitor country and by product group. Five competitor countries were selected, to represent several income levels, and competition in a range of manufactured products. These countries are Germany, Italy, Finland, Austria and Spain. Table 21 compares unit labor costs in Yugoslav industry with these countries, in both local currency and in US dollars. While in local currency terms Yugoslavia's growth in unit labor costs in the 1970s has been amongst the fastest, exchange rate movements since 1970 have offset these divergences sufficiently to make Yugoslavia's increase in dollar terms the least of the group. The position is somewhat altered if 1972 is chosen as a base. In this case Italy improves in competitiveness quite sharply; nonetheless Yugoslavia's performance does not stand out as being markedly worse than this group of competitors.

71. The analysis of this chapter suggests that the depreciation of the dinar in 1971 produced an improvement in competitiveness of about 20 percent. The stance of policy thereafter has on balance been neutral, although there have been extended periods (such as 1975-77) when the authorities have permitted a significant deterioration in competitiveness to occur. There does not seem to have been any determined attempt to attain a lower real exchange rate to compensate for the rise in energy prices or the stagnation in West European economies; this is indicative of the government's belief that adjustment could be achieved through appropriate investment policies.

72. The aggregate importance of the exchange rate, and of external price competitiveness for Yugoslav industrial exports is difficult to assess. For certain categories of engineering goods, Yugoslav exporters do have latitude in setting prices, but for these goods nonprice attributes (delivery dates, reliability, service networks and credit terms) are probably as important as price. For the lighter manufactures external prices are probably given, and the choice facing Yugoslav exporters is whether or not to export at those prices.

73. The allocative effects of exchange rate policy are likely to be as powerful operating through export supply as through export demand. However, the nominal exchange rate is just one of a range of instruments through which policy makers can influence the relative domestic attractiveness of exporting. The next chapter assesses a variety of such instruments and attempts to determine the overall orientation of the incentive system in the 1970s.

CHAPTER V: COMMERCIAL POLICY AND TRADE BIAS

74. Yugoslavia's transition from a multiple exchange rate system to a more unified structure was sketched in Chapter I. The attempt in the rest of this chapter is to assess the allocative effects of the incentive structure that has since emerged; in particular to determine whether the system of incentives taken as a whole has encouraged or discouraged Yugoslav enterprises from exporting. A more rigorous assessment of the incentive system would

require domestic and international price comparisons at a relatively high level of disaggregation, of the kind usually obtained only from special surveys. Such information was not available to the mission; accordingly the analysis below should be treated as indicative rather than definitive.

75. In what follows a series of policy interventions are analyzed for the effect they may have had in attracting Yugoslav firms to produce for export markets rather than for home sale. In contrast to the analysis of the last chapter which was implicitly concerned with the effects of comparative price and cost movements on the demand for Yugoslavia's exports, particularly manufactured exports, the present discussion is concerned with the supply of merchandise exports. In the previous discussion the price relatives under examination were between goods produced by Yugoslavia and goods produced by Yugoslavia's competitors, and the implicit decision making agent in that analysis was the customer in the importing country. The analysis of this chapter concentrates on the Yugoslav enterprise as the decision agent, and examines the choice it faces between producing a tradable or a nontradable, and, if a tradable is chosen, the choice between producing for domestic sale or for exports.

76. To begin with it is useful to define a few concepts. As mentioned in para. 59, a number of additional interventions such as trade taxes, quotas, subsidies, rebates and the like exist in Yugoslavia. The nominal exchange rate needs to be adjusted for these price measures to get a proper measure of the actual amount of local currency received per unit of foreign exchange; this adjusted nominal exchange rate will be referred to here as the nominal effective exchange rate. The impact of these pricing charges can differ between exports than for imports, and indeed may vary commodity by commodity. It is nonetheless useful to talk of a nominal effective exchange rate on importables and on exportables, with each representing a weighted average of nominal effective exchange rates across the commodities in question. When movements in nominal effective exchange rates (on either importables or exportables) are deflated for price changes the resulting measure is called a price-level deflated effective exchange rate (PLD-EER), or, for convenience a real effective exchange rate. ^{1/} Changes in the average real effective exchange rate over time can be regarded as providing a measure of changes in the relative attractiveness of using domestic resources to produce tradables rather than nontradables, while divergences at a point in time between the nominal effective exchange rates on importables and exportables provide a measure of the 'trade bias' of the incentive system. A 'neutral' incentive regime is one which equalizes effective exchange rates on exportables and importables while an export-biased regime is one where the effective exchange rate on exportables (units of foreign currency per unit of home currency) is lower than that on import substituting home production. While the data do not permit accurate

^{1/} For a more complete discussion of these concepts see Anne O. Krueger, Foreign Trade Regimes and Economic Development: Liberalization Attempts and Consequences, Ballinger, Cambridge, Mass., 1978, Chapter 5.

calculation of trade bias, the framework remains useful for reviewing the data that are available. The instruments reviewed include those which influence the effective price received by producers for their output (import duties, quantitative restrictions, export taxes and subsidies) and those which affect the price of inputs entering into export sales, such as duty drawbacks and credit facilities. Two further influences on the trade bias of the system are also discussed: pricing arrangements under bilateral trade, and the effects of Yugoslavia's foreign exchange system.

Import Levies

77. Import levies in Yugoslavia through the 1970s consisted of import duties and three additional taxes levied on dutiable goods. These taxes were a 'temporary' import surcharge introduced for balance of payments reasons in 1970 and abolished in June 1980; a tax equalization charge intended to compensate for special cesses to which Yugoslav enterprises are liable (such as the contribution to the Federal Fund for Less Developed Regions), and a special tax for customs evidence. Rates for these taxes are shown in Table 22, which also indicates the average effective customs duty rate over the period since 1967. While the effective duty rate has declined slightly over time, this has been offset by increases in the other charges, with the result that the average effective rate of all import charges has tended to rise slightly over the 1970s.

78. While the average level of nominal protection (as measured by these data) provides some guide to movements in effective exchange rates on importables on average, this can mask considerable variations in both levels and changes in effective exchange rates across sectors. Although detailed sectoral information on customs duties is available for the period since 1966, sectoral data for the additional import taxes are available only for the more recent years. Table 23 provides average levels of customs duties alone. As is common in most countries, tariff levels in Yugoslavia tend to escalate with the degree of processing. Agricultural and other primary products have typically attracted relatively low rates of duty while manufactures have been protected by higher duty levels. Certain agricultural products are additionally protected by variable levies. Some of these relationships have been altered over time however. Thus the level of protection afforded by the customs tariff to capital goods (rows 16 to 18 in Table 23) has been gradually reduced in the 1970s, while conversely the protection afforded to certain industrial raw materials, particularly metals, has been increased as a promotional measure to stimulate their development. Over time therefore there has been movement toward relative neutrality in the tariff structure, concurrent with a reduction in average duty rates.

79. Incorporating the effects of nontariff charges changes the picture somewhat. Table 24 provides a coarse but consistent disaggregation of customs duties and other taxes for three sectoral groupings for the years 1977 to 1979. The effective rate of the other taxes varies less across sectors than does the effective rate of customs duty; as such, the allocative effects of the total package is likely to be somewhat more 'neutral' than that of the import tariff alone. At the same time while the higher levels of import protection conferred by these taxes implies a greater divergence of effective rates from

Table 22: AVERAGE VALUES OF IMPORT CHARGES, 1967-79
(in percent)

	Average Effective Customs duties	Additional Charges 2/			Effective rates of additional Charges 4/	Average Effective Import Charges	
		1/	3/	4/			
	(1)	Import Surcharge (2)	Tax Equalization Charge (3)	Customs Evidence Tax (4)	Total (5=2+3+4)	(6)	(7=1+6)
1967	12.3	-	-	-	-	-	n.a.
1968	13.8	-	-	-	-	-	n.a.
1969	13.9	-	3	1	4	n.a.	n.a.
1970	13.3	5	3	1	9	n.a.	n.a.
1971	12.1	6	3	1	10	7.2	19.3
1972	10.4	6	3	1	10	8.7	19.1
1973	9.1	6	3	1	10	8.9	18.0
1974	8.5	6	3	1	10	10.8	19.3
1975	9.4	10	3	1	14	9.1	18.5
1976	10.1	10	5	1	16	12.4	22.5
1977	10.1	10	6	1	17	13.2	23.3
1978	9.8	10	6	1	17	13.4	23.1
1979	8.9	10	6	1	17	13.9	21.8

Source: Secretariat of Finance and IMF, Annual Report on Exchange Arrangements and Exchange Restrictions (various issues).

1/ Customs duties collections as a percentage of merchandise imports.

2/ Legal rates, leviable on all durable commodities.

3/ At reduced rates for certain priority imports. The import surcharge was abolished at the time of the devaluation of the dinar on June 7, 1980.

4/ Tax collections as a percentage of merchandise imports.

Table 23: AVERAGE TARIFFS BY CUSTOMS POSITIONS 1975-79
(as a percentage of the c.i.f. import value)

Customs Positions	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
1. Live animals and animal products	3.3	4.2	5.8	4.2	3.6	3.8	3.9	3.2	5.3	3.7	3.6	5.7	5.8	6.5	8.7
2. Vegetable products	0.7	0.6	1.2	1.8	1.5	1.6	1.1	1.2	1.3	0.8	1.3	3.1	2.3	2.5	4.6
3. Fats, oils and waxes	3.5	4.1	4.2	4.6	5.9	4.5	3.6	3.2	5.4	2.8	1.8	4.9	5.6	5.2	3.8
4. Food industry products, drinks, tobacco	3.5	5.1	6.1	4.8	4.7	4.4	5.2	2.7	1.9	2.3	3.6	5.0	4.8	5.2	6.2
5. Minerals	3.8	3.5	3.7	4.1	4.3	4.9	4.4	3.2	2.0	2.4	4.1	5.2	1.9	1.9	0.9
6. Chemicals	6.9	6.6	7.2	8.0	9.0	9.0	9.0	8.1	8.1	7.4	7.6	8.8	9.1	8.5	7.9
7. Plastics and rubber	9.0	9.4	10.1	11.1	11.2	11.0	11.4	11.5	12.5	12.4	12.1	11.9	12.2	11.7	11.2
8. Leather and furs	1.4	1.1	2.3	4.9	5.5	5.7	6.1	4.9	4.6	4.8	3.9	4.5	5.9	4.4	1.9
9. Wood and veneer	1.1	1.2	1.6	2.6	3.7	2.6	2.9	2.8	3.0	3.0	2.6	9.0	6.0	5.5	5.3
10. Cellulose and paper	5.7	6.9	7.0	10.1	11.6	10.5	10.6	9.0	9.2	9.5	8.8	11.1	8.7	9.2	8.5
11. Textiles	6.9	7.7	8.2	10.0	9.4	10.3	10.6	9.3	8.5	7.4	8.9	9.6	9.8	9.1	9.5
12. Clothing, hats, umbrellas, etc.	13.0	20.7	21.7	21.7	21.7	21.6	21.4	21.1	21.5	21.1	20.6	20.2	21.3	20.2	17.6
13. Manufactures of stone, cement, asbestos, ceramics, glass	10.3	11.5	11.3	12.2	12.2	11.7	10.7	11.7	12.2	11.8	11.9	12.3	12.3	12.6	12.8
14. Pearls, precious stones, and metals etc.	13.3	11.4	12.4	6.5	13.7	16.5	11.9	5.2	4.2	3.8	5.1	7.1	6.8	7.7	7.4
15. Metals and metal products	7.0	7.2	7.2	9.3	8.8	8.2	7.6	7.8	8.5	7.7	8.6	10.2	10.7	10.4	10.3
16. Machines, apparatus, electrotechnical equipment	23.2	21.3	21.7	22.6	23.0	21.9	19.7	16.7	15.1	15.2	13.9	13.9	15.1	14.3	13.1
17. Trucks, planes and their spares, ships, etc.	20.9	18.9	27.0	26.8	28.3	26.7	26.9	20.0	12.3	15.1	13.6	16.5	16.4	15.3	15.3
18. Instruments	20.7	20.0	20.0	20.6	21.7	20.5	18.6	15.9	14.3	13.5	12.4	11.6	12.1	11.2	9.7
19. Arms and ammunition	28.1	27.6	29.0	29.3	27.5	28.6	28.8	27.9	27.7	27.9	26.0	17.1	10.1	7.3	23.5
20. Miscellaneous goods	18.5	18.4	19.4	21.4	20.3	19.4	19.3	18.3	18.7	19.3	18.4	18.1	18.0	17.7	16.3
21. Works of art, collections, and antiques.	-	-	-	-	-	-	-	-	-	-	-	-	3.1	2.3	3.2
TOTAL	10.5	10.3	12.3	13.8	13.9	13.3	12.1	10.4	9.1	8.5	9.4	10.1	10.1	9.8	8.9

Source: Information supplied by the Yugoslav Authorities.

nominal rates at any point in time, it does not seem to require a fundamental adjustment to the time path of nominal exchange rate changes indicated by the calculations of the last chapter.

Table 24: CUSTOMS DUTIES AND IMPORT TAXES, BY CUSTOMS POSITIONS, 1977-79
(as a percentage of c.i.f. import values)

	1977			1978			1979		
	Import Duties	Other Taxes	Total	Import Duties	Other Taxes	Total	Import Duties	Other Taxes	Total
Agriculture and Food Products <u>/1</u>	3.6	15.9	19.5	3.8	16.0	19.8	5.3	15.8	21.1
Capital Goods and Equipment <u>/2</u>	15.2	14.6	29.8	14.9	14.9	29.1	13.4	15.0	28.4
Other <u>/3</u>	7.8	11.8	19.6	7.4	11.9	19.3	6.5	11.0	17.5
Total	10.1	13.2	23.3	9.8	13.4	23.1	8.9	12.9	21.8

Source:

/1 Customs Heads 1 to 4 (see Table 23).

/2 Customs Heads 16 to 18.

/3 Customs Heads 5 to 15 and 19 to 21.

Quantitative Restrictions

80. Quantitative restrictions have continued to form a part of the Yugoslav import regime, although their significance was considerably reduced in the early 1970s. Table 25 summarizes the structure of imports by import regime for various years between 1967 and 1979.

Table 25: IMPORTS BY IMPORT REGIME 1967-79
(Value shares of total imports, in percent)

	1967	1969	1971	1973	1975	1976	1977	1978	1979
LB	16.9	20.8	28.7	51.6	54.3	43.7	45.0	46.3	42.5
LBO	24.0	14.2	-	-	-	-	-	-	-
GDK	54.4	44.8	45.7	21.2	17.2	17.4	18.8	-	-
DK					4.0	4.3	4.4	18.2	18.5
RK	4.3	12.9	20.3	20.6	17.5	16.9	14.7	21.8	23.3
D	0.4	7.3	5.3	6.5	7.0	17.7	17.1	13.7	15.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Federal Secretariat for Foreign Trade and IMF, Annual Report on Exchange Arrangements and Exchange Restrictions, various years.

The various categories distinguished in the table are as follows: 1/

(a) LB - fully liberalized imports. Goods in this category are mainly raw materials, foodstuffs and spare parts although some consumer goods are also included (see Table 26). Protective equipment for workers and all other goods are not specifically included in other lists are also liberalized and free from any quantitative restrictions. Before 1977 exchange for payments for LB imports from the convertible currency area was made freely available; since 1978 exchange for such payments is made available on the basis of self-management agreements concluded within the appropriate republican or provincial CIFER. In the case of imports from countries with which Yugoslavia has bilateral payments agreements, payments may be restricted according to the availability of funds in the appropriate clearing account.

(b) LBO - conditionally liberalized imports; enterprises which undertook to import items on this list from countries with which Yugoslavia had bilateral agreements were thereafter entitled to purchase additional amounts of the same commodities from countries with which Yugoslavia did not have such agreements, and convertible currencies were made available for this purpose. This category was abolished as part of a general reform of the import regime in 1971, and most of these products were transferred to the LB list.

(c) GDK - The GDK regime allowed enterprises to utilize their retention quotas (see below, para. 90) and other priority allocations of convertible currencies to import a variety of industrial and consumer goods not on the liberalized list. While import of capital goods and intermediate goods was largely at the initiative of the importing enterprises, GDK quotas for consumer goods were allocated among trading organizations through the Chamber of Economy. The GDK category was abolished in 1978 as part of the transition to the new system of foreign exchange management and the abolition of formal retention quotas.

(d) DK and RK - goods in these categories are subject to commodity quotas, established either in quantities (RK) or in dinars (DK). There are separate quotas in each case for imports from convertible areas countries and payments agreements countries. The allocation of these quotas among importers is in principle decided by agreements among economic organizations within the Chamber of Economy, although in cases of disagreement the Federal Secretariat for Foreign Trade is empowered to decide on their distribution. Prior to 1978 foreign exchange was provided automatically for payments if imports of goods subject to the RK and DK regimes; at present such allocations have to be agreed upon within the framework of the relevant CIFER.

(e) D - goods subject to ad hoc import licensing. These currently include gunpowder, arms and ammunition, oil, drugs, natural gas and bitumen.

1/ For a more extended description please see IMF, Annual Report on Exchange Arrangements and Exchange Restrictions, from which much of this material is derived.

Table 26: IMPORTS BY IMPORT REGIME 1975-79

(in millions of US dollars)

Import Regime	Total					Raw materials and semi-finished products					Equipment					Consumer goods				
	1975	1976	1977	1978	1979	1975	1976	1977	1978	1979	1975	1976	1977	1978	1979	1975	1976	1977	1978	1979
All Imports																				
Total	7,697	7,366	9,634	9,988	12,862	5,052	4,697	5,990	6,325	8,316	1,887	1,759	2,436	2,565	3,141	758	910	1,208	1,089	1,404
LB	4,163	3,222	4,331	4,623	5,470	3,055	2,185	2,884	2,951	3,476	821	802	1,082	1,221	1,445	288	235	265	451	549
DL	18	1	1	-	-	11	-	-	-	-	4	-	-	-	-	3	1	1	-	-
GDK	1,326	1,283	1,815	-	-	654	659	878	-	-	608	569	816	-	-	64	55	121	-	-
DK	306	317	423	1,816	2,383	13	19	21	675	807	197	214	302	983	1,346	95	84	100	208	230
RK	1,343	1,242	1,412	2,176	2,991	1,115	808	958	1,477	2,018	-	-	-	306	350	228	434	454	393	623
D	541	1,301	1,652	1,373	2,018	204	1,026	1,249	1,272	2,015	257	174	236	55	-	80	101	167	46	2
Percentages																				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LB	54.3	43.7	45.0	46.3	42.5	60.7	46.5	48.1	46.7	41.8	43.7	45.6	44.4	47.6	46.0	38.4	25.8	21.9	41.1	39.1
GDK	17.2	17.4	18.8	-	-	12.9	14.0	14.7	-	-	32.2	32.3	33.5	-	-	8.4	6.0	10.0	-	-
DK	4.0	4.3	4.4	18.2	18.5	0.3	0.4	0.4	9.9	9.7	10.4	12.2	12.4	38.3	42.9	12.5	9.2	8.3	18.9	16.4
RK	17.5	16.9	14.7	21.8	23.3	22.1	17.2	16.0	23.4	24.3	-	-	-	11.9	11.1	30.1	47.7	37.6	35.8	44.4
D	7.0	17.7	17.1	13.7	15.7	4.1	21.8	20.9	20.1	24.2	13.6	9.9	9.7	2.1	-	10.6	11.1	13.8	4.2	0.1

Source: Information received from the Yugoslav authorities.

While in principle only goods in list D require import licenses certain goods in the other import categories are also required to obtain a special license, known as an 'accordance', from the Federal Secretariat for Foreign Trade. Primarily designed to encourage trade with developing countries, the items covered include a wide range of tropical foodstuffs and raw materials, textiles and tin. Furthermore all imports of machinery and equipment have to be approved through the Chamber of Economy, and certification provided that equivalent equipment cannot be supplied by a domestic manufacturer. In addition to the above categories the import regime included a category known as DL, good liberalized under special license. Values imported under this regime are negligible; dollar amounts are shown in Table 26.

81. As Table 25 indicates there was a substantial move toward liberalization between 1967 and 1973, primarily associated with the revision of the regime in 1972. Since then there has been some reduction in the proportion of imports subject to commodity quotas (DK and RK categories) and to ad hoc licensing (D). Raw material and equipment imports in particular seem more susceptible to commodity quotas than before. The increased importance of licensing in part reflects the reclassification of oil imports from the LB category to the D category; however the move of a substantial volume of imports from global quotas (GDK) to commodity quotas with the abolition of the former category does at least raise the possibility that the quota regime has become more restrictive since 1978. The important issue for resource allocation is the degree of actual restrictiveness experienced in practice by potential importers through the application of these quotas. It is difficult to be conclusive about this but the impression gained from firm interviews is that shortages of foreign exchange and the need to obtain Chamber of Economy permission for equipment imports may be more powerful constraints than the existence of protective quotas.

82. The implications of these data for movements in the effective exchange rate on importables, or for disparities in this effective exchange rate across sectors are difficult to establish. Detailed price comparisons would be needed to determine the restrictiveness with which the quota regime in fact was being operated; the degree of restriction could well vary from one year to the next to reflect balance of payments or protective considerations. Even for liberalized imports the situation is not altogether straightforward since, under the new system of foreign exchange allocation, foreign exchange availability is not guaranteed for the import of goods on the LB list. This raises the possibility that domestic prices of importables could rise to reflect any scarcity premium associated with foreign exchange, and create a divergence between nominal and effective exchange rates for a much wider range of goods than those subject to quota. The most that can be said is that if these commercial policy instruments (rather than the foreign exchange allocation regime) in fact determine the pattern of importing then there has probably been some increase in the effective exchange rate on exportables due to quotas, over and above that introduced by change in the average rate of nominal protection.

Export Incentive Policies

83. The previous section has tried to assess whether the nominal effective exchange rate on importables has differed significantly from the unadjusted

nominal exchange rate. Such divergences can cause the share of domestic value added in total cost to differ between production for home sale and for export; if there are not offsetting subsidies on exports a bias toward producing for the home market can arise. Selective export intervention in Yugoslavia has been of two kinds: subsidized inputs for export production, and cash payments to exporters. These both act to alter the ratio of domestic value added in final sale. In what follows the major interventions are reviewed, but only minimal quantification is attempted.

(a) Duty Drawbacks and Fiscal Incentives

84. The system of cash transfers to support exports is difficult to describe with great precision. The principal elements however consist of a uniform system of duty drawback, and additional 'stimulation grants' to support specific sectors. The administration of both schemes now rests with the CIFER; prior to their founding, they were administered by the Federal Secretariat for Finance.

85. The drawback scheme is intended to reimburse exporters for the implicit burden of taxation borne by them, both in the form of duties paid on imported inputs and in the form of direct taxation (a large component of which is related to the size of the work force). On the basis of input-output tables, standard coefficients are calculated for estimating the burden of each form of taxation by sector; both goods and services are included within the scope of this exercise. The funds for these refunds come from an earmarked portion of customs duties collected; in recent years the earmarked portion of customs duties available to the communities of interest for export stimulation of all kinds has been about 50 percent of total customs receipts.

86. In addition to these drawback and reimbursement schemes however, there also appear to be selective interventions to foster exports in certain sectors, and individual republics and provinces enjoy greater latitude in establishing the sectors to be favored in this fashion and the rates of stimulation to be applied. Certain principles of selective export promotion are, however, enunciated at the national level through the annual Orders on Joint Foreign Exchange Policy. Thus the Order for 1980 establishes that exports of goods and services with high domestic content should be stimulated on a selective and differentiated basis; also that exports from the agro-processing sector "shall again be stimulated in 1980 with supplemental resources provided by the Fund for Stimulation and Promotion of Economic Relations with Foreign Countries of the Yugoslav Community of Interest for Foreign Relations from the special import charges on raw and processed foods and through the pooling of resources for those purposes...."

87. While the diversity of interventions and data availability make it impossible to get a detailed sectoral breakdown of export incentives in recent years, some aggregate orders of magnitude are available. Prior to the delegation of powers to the Communities of Interest in 1978, the Budget of the Federation provided a line item for "interventions in the economy" on account of foreign trade. In addition, the mission was provided an estimate of value of these interventions for the first year that the CIFER were involved, 1978. Table 27 relates these interventions to the value of exports of goods and nonfactor services.

Table 27: ESTIMATES OF FISCAL TRANSFERS FOR EXPORT STIMULATION, 1975-78

	Estimated Fiscal Subventions (US\$m.)	Exports of Goods and Nonfactor Services (US\$m.)	Ratio
1975	560	6,426	8.7
1976	730	7,308	10.0
1977	1,082	7,854	13.8
1978	997 <u>/1</u>	8,655	11.3

Source: Federal Budget; information provided to mission; Annex Table A.1.
Dinar values converted at period average exchange rates.

/1 13-month data adjusted to twelve-month total.

These estimates include both goods and nonfactor services. If incentive rates are similar for both, it would appear that explicit levels of export stimulation have been somewhat lower than explicit levels of import charges in recent years.

(b) Credit Subsidies

88. In addition to the fiscal incentives estimated above, exporters are provided with credit assistance in two forms: access via commercial banks to central bank rediscount facilities for short-term shipping credit (with a maximum term of six months) and access to longer-term credit facilities for financing export of capital goods to developing countries, provided in part by the newly formed Yugoslav Bank for International Economic Cooperation (YBIEC). 1/ In both cases commercial banks blend the resources available from these facilities with their own funds to provide credit of the appropriate maturity to the exporter at less than conventional rates. The short-term funds provided by the central banking system are made available to the commercial banks at a one percent interest rate, to a varying proportion of the amount being financed - typically about 50 to 60 percent of the loan being extended by the commercial bank. The commercial bank onlends these funds at a 1 1/2 percent rate, and combines them with its own resources (at rates that vary by bank but which are likely to be in the 7-10 percent range) to provide a package with an effective rate of around 4 percent. In the case of longer-term suppliers' credits the mechanisms are the same except that the YBIEC lends at 5 percent, and the ratio financed may reach 80 percent of the amount being financed by the suppliers, depending on the nature of the export and its country of destination.

1/ This institution began operation on July 1, 1979 as the successor to the Export Credit and Insurance Fund and is intended to function as a Yugoslav Ex-Im Bank.

89. Provision of the longer-term capital goods financing is clearly a requirement imposed on Yugoslavia by international competition and is unlikely to be a factor influencing trade bias in the conventional sense. The allocative consequences of the shorter-term financing made available to exporters are more difficult to establish. The interest subsidy on short-term shipping credits, in and of itself, should be regarded more as an inducement to overcome the higher transaction costs associated with a foreign rather than domestic sale. Probably more important than the subsidy is the much easier access to funds that exporters are provided.^{1/} It was indicated to the mission by several banks that working capital credit is provided to exporters on a priority basis, even in the absence of official support from the monetary authorities. Again, there is no obvious basis for pricing this improved access to commercial bank funds, still less for charting shifts in the premium over time.

(c) Retention Rights

90. As indicated in Chapter I the export promotion system before 1965 consisted of subsidies, premiums, earmarked credits, taxation and foreign exchange retention rights. With the adoption of a unified exchange rate in 1965 the incentive system was considerably simplified. Incentives were limited to import duty drawbacks, foreign exchange retention quotas, and the provision of credit at concessional rates of interest. Prior to 1978 an important component of the export promotion system was the retention quota allowed to enterprises for imports of goods under the GDK quota regime. The percentage of export receipts retained by enterprises varied from 7 to 20 percent and rose with the share of exports in output and with growth in the value of exports. The value of these quotas to the enterprises was avoidance of quota restrictions and licensing procedures, and the appropriation of any scarcity rent associated with an overvalued exchange rate. The role of retention quotas was gradually reduced in the 1970s and they were finally abolished in 1977. No study has apparently been undertaken of the perceived valuation by the enterprises of the retention quota, although such quotas were widely regarded as constituting one of the most important stimuli to exports.

91. Under the new foreign exchange system introduced in 1977, formal retention quotas have been replaced by the more general principle that foreign exchange receipts are the property of the enterprises which contribute to their earning, as established by self-management agreements between participating enterprises. The net result remains similar to the past: enterprises engaged in exporting gain privileged access to foreign exchange for imports, this entitlement is highly prized and is regarded as constituting the most powerful incentive for exporting. Assimilating these premia into an effective exchange rate framework is not straightforward and there is no obvious basis for determining whether the importance of retention rights to enterprises has altered over time.

^{1/} A similar argument is made by Westphal in valuing credit incentives provided exporters in Korea. See L. Westphal, "The Republic of Korea's Experience with Export-led Industrial Development", World Development 1978, Vol. 6, No. 3, pp 347-382.

Bilateral Trading Arrangements

92. A final consideration in assessing the direction and degree of trade bias in Yugoslavia's commercial policy regime is its terms of trade with the COMECON countries. A relatively old study by Amacher 1/ using data for 1966-68 suggested that wide differentials existed in both export and import unit values for Yugoslavia's trade with COMECON as compared with the West. By Amacher's calculations Yugoslavia's 'market advantage' 2/ in its trade with the COMECON countries was 29 percent, ranging from a low of 20 percent for trade with the USSR to a high of 41 percent for trade with Romania. This gain arose wholly through import underpayments (as compared to prices for equivalent SITC 7-digit commodities imported from the West), with export unit values being slightly less than in trade with the West. Since Yugoslavia's trade with COMECON in that period was roughly balanced, the ratio of gains from lower import prices to the value of imports would be approximately double the market advantage ratio. In effect the subsidy to Yugoslavia of importing from COMECON rather than paying world prices was of the order of sixty percent.

1/ See Ryan C. Amacher, Yugoslavia's Foreign Trade - A Study of State Trade Discrimination, Praeger, 1972. Earlier studies cited by Amacher (pp. 67-80) confirmed the existence of significant export unit value differences in Yugoslavia's trade with the COMECON countries as compared to the West.

2/ Defined as follows:

$$\frac{\sum_{j=1}^n Q_j^{xr} (P_j^{xr} - P_j^{xw}) - \sum_{k=1}^m Q_k^{mr} (P_k^{mr} - P_k^{mw})}{\sum_{j=1}^n Q_j^{xr} P_j^{xw} + \sum_{k=1}^m Q_k^{mr} P_k^{mw}}$$

where:

Q_j^{xr} = quantity of exports j to country r

P_j^{xr} = price of export j to country r

P_j^{xw} = price of export j to western countries

Q_k^{mr} = quantity of import k from country r

P_k^{mr} = price of import k to country r

P_k^{mw} = price of import k from western countries

Source: Amacher, op. cit., p. 101.

differentials reflect quality differences; Amacher argues that quality differences are not a sufficient explanation, 1/ and that the differentials arose because in that period COMECON countries faced severe restrictions on their exports to the West, which Yugoslavia was able to exploit.

94. It has not been possible to update Amacher's exercise for this study, and there is no way of telling at a suitably disaggregated level whether these differentials survive. Given the considerable expansion in trade with the West that COMECON has experienced in the 1970s, as well as the dismantling of some trade restrictions faced by these countries in Western markets it would seem a priori that the degree of advantage obtained by Yugoslavia has probably lessened. If significant differentials do persist these would have important implications for the export bias of the incentive system. Thus if the element of subsidy (compared to world prices) were still as high as 50 percent, and 20 percent of Yugoslavia's total imports enjoyed this subsidy, the rate of nominal protection measured at world prices would fall by 10 percentage points. Conversely, if the subsidy did exist in the late sixties but has since been eliminated, this would mean a substantial increase in the implicit protection offered to home producers of import competing goods over the 1970s, and a corresponding relative appreciation of the effective exchange rate for imports over the period.

95. On the basis of the evidence presented so far it is impossible to reach a conclusive judgment on the direction or degree of the net trade bias of the incentive structure facing Yugoslav producers in the 1970s. Discounting any effects from the COMECON subsidy there is some evidence of increased and moderately high levels of protection in the period of the 1976-80 Plan, conferred by both higher rates of import charges, and, possibly a somewhat more restrictive quota regime. While the degree to which this has been offset by increased export subsidization is unclear, the quantifiable elements suggest that the level of export incentives probably did not fully compensate for the protection provided to import substitutes.

96. To complete the discussion of trade bias, two other bits of evidence need to be introduced: aggregate comparisons of domestic and export price trends, and impressions gained from industry visits by mission members in November 1979 and June 1980.

Relative Price Relationships

97. Yugoslav industrial data are provided according to a standard classification scheme which will be referred to here as the Yugoslav Domestic Activity Classification (YDAC). In order to provide an aggregation compatible with the categories used in the market share analysis of Chapter III, the 35 industrial sectors distinguished in the YDAC, together with agriculture and forestry, have been aggregated into twelve sectors at which level rough commonality with the SITC codes can be established. Owing to a recent revision in the YDAC, data for most series are available only after 1973 or 1974, thereby restricting the period of analysis.

1/ Op. cit., pp. 105-112.

98. Table 28 compares export unit values (converted into dinars) with producer prices in aggregate and by sector for 1974 and 1978. As Chapter I indicated, 1974 was the year when the recent slide in export shares commenced, so the interval of analysis is of particular interest. Groups 1 to 4 correspond roughly with primary products as defined in Chapter III, while groups 5 to 12 correspond to manufactures.

99. The ratio of export prices to producer prices may be thought of as a measure of real effective exchange rates of exportables to importables in each sector, and it appears that in aggregate this effective exchange rate has not changed significantly since 1974. This overall stability however, masks considerable differences. Primary products as a group have suffered a significant worsening in their real effective exchange rate, primarily on account of adverse export price trends. By contrast, certain categories of manufactures have experienced an appreciation in the relative yield from exports: these include electrical machinery, "other" machinery and transport equipment, and textiles and footwear. For illustrative purposes, Table 28 provides the residuals from the market share analysis of Chapter III (Table 14), aggregated to the same twelve sector classification. This comparison should be made with caution, since the periods of analysis do not match, but the association does suggest that changes in price relatives between exportables and home goods have played a role in the pattern of export performance.

100. Since the implicit hypothesis here is that output is diverted from export sales to home production in response to shifts in real effective exchange rates, it is of interest to examine the trend of exports to gross output over the same period, which is also done in Table 28. As would be expected from the trends portrayed in Figure 1, the overall ratio of exports to gross output declines by 8 percent over the four years in question. At the sectoral level the association with effective exchange rate changes is loose, but appears to hold for the sectors producing industrial raw materials: iron and steel, other minerals and metals, and chemicals.

101. At variance with the findings of rough neutrality reported earlier (para 95), are impressions obtained by the mission through industry visits. Firms interviewed uniformly indicated that the profitability of producing for the home market was well in excess of the profitability of exporting, and that the compulsion to export arose largely from the need to generate foreign exchange for continued domestic operations. It was also indicated that firms have devised internal transfer procedures to reconcile these profit differentials with the legal (and financial) autonomy of BOALs. At least up to the dinar devaluation of June 1980, it was common for BOALs engaged in domestic production to provide cash incentives to BOALs producing for export in order to gain access to the import rights that the latter group enjoyed. Estimates of this incentive payment were between 10 and 25 percent of the dinar value of the export valued at the official exchange rate. This was secured by exporting BOALs in addition to the formal incentive payments paid them by the CIFER. In addition, as mentioned in Chapter I, the new laws on foreign exchange operations and foreign credit relations permit the pooling of foreign exchange resources amongst organizations of associated labor under agreements approved by the relevant republican or provincial CIFER. This mechanism permits

Table 28: RATIOS OF EXPORT UNIT VALUES TO PRODUCER PRICES, 1978

Sector	Dinar Index of Export Unit Values 1978 (1974=100) (1)	Producer Price Index, 1978 (1974=100) (2)	Ratio of Col. 1 to Col. 2 (3)	Ratio of Exports to Gross Output (1974=100) ^{1/} (4)	Market Share Residual ^{2/} 1970-77, (percentage annual average growth rates) (5)
1. Agriculture	151	163	93	96	- 5.9
2. Petroleum Products	105	128	82	189	- 0.9
3. Iron and Steel	104	177	59	33	- 8.8
4. Other Metals and Minerals (incl. non-ferrous)	121	150	81	45	-19.0
5. Electrical Machinery	165	131	126	78	2.6
6. Ships and Boats	438	n.a.	-	118	- 6.3
7. Other Machinery; Transport Equipment; Metal Manu- factures NES	179	157	114	102	8.8
8. Non-metal mineral manu- factures NES	165	158	104	67	- 6.6
9. Other Basic Manufactures	121	140	86	88	4.4
10. Wood and Cork Products, Furniture	141	142	99	87	0.6
11. Textiles and Footwear	151	130	119	94	3.3
12. Chemicals and Miscell. Manufactures	100	142	70	65	- 0.4
Total All Sectors ^{3/}	164	156 ^{4/}	105 ^{4/}	92	- 3.5

^{1/} At constant 1978 prices

^{2/} Unadjusted for market and commodity effects. See Table 14.

^{3/} Weighted averages

^{4/} Excludes shipbuilding as producer price data are not available for this sector.

Source: Statistical Yearbook of Yugoslavia, 1979; World Bank estimates and information provided by the Yugoslav authorities.

enterprises with foreign exchange earnings in excess of their needs to enter into agreements with enterprises in deficit as part of an income sharing arrangement; however such transfers are encouraged only within the framework of a long-term agreement, and spot transactions are officially discouraged. The impression gained by the mission was that, again, the implicit valuation of foreign exchange in these transactions was in excess of the official exchange rate. Finally there were examples provided by firms producing for import substitution that domestic prices of the import substitute were anywhere from 40 percent to 100 percent higher than world prices, valued at the official exchange rate.

102. These fragments suggest that the protection offered to the domestic market has, at least recently, been higher than examination of the commercial policy regime alone would indicate. It is probable that much of this protection has resulted from disequilibrium in the market for foreign exchange. At least prior to the recent devaluation Yugoslavia exhibited the classic signs of a system operating under non-price rationing of foreign exchange: high premia (and occasional shortages) on imported inputs, high demand for import substitutes, and comparatively low profitability of exports. This analysis is compatible with the exchange rate analysis of Chapter IV; while that analysis indicated that purchasing power parity for exports had roughly been restored by 1978 to the levels of the early 1970s, this does not imply that the equilibrium exchange rate for the overall balance of payments had been achieved. 1/ Given the importance of invisibles in the Yugoslav balance of payments, the terms of trade losses that the country suffered as a result of the 1973 (and later 1979) oil price increases, and supply problems in exports of primary products, the degree of exchange rate change needed to restore equilibrium was probably well in excess of that indicated by following a purchasing power parity rule.

103. It may still be asked: if mechanisms exist for scarcity premia to be transferred from users of foreign exchange to its earners, would these not compensate for any deficiencies in the exchange rate policies pursued by the authorities. The answer is that they would, if there were no frictions to the transfer and if exporters and producers of import substitutes were wholly arms length transactors. In fact, as noted above, Yugoslav legislation frowns upon spot transactions in surplus foreign exchange, except through the interbank market and at the officially specified exchange rate. These frictions are compounded by the requirement that negotiated transfers occur within the framework of republican and provincial communities of interest; as observed by the OECD, "in each self-managed Community of Interest for Foreign Economic Relations, the shadow foreign exchange rate may differ as well as diverging considerably from the official rate." 2/ In addition, as exporting BOALs

1/ For a more rigorous analysis of the inadequacy of purchasing power parity rules as a guide to equilibrium exchange rate policy at a time of structural change in the balance of payments, see K. Dervis and S. Robinson, "The Foreign Exchange Gap, Growth and Industrial Strategy in Turkey: 1973-1983", World Bank Staff Working Paper No. 306, 1978.

2/ OECD Economic Surveys: Yugoslavia, May 1980, p. 39.

within an enterprise participate in the net income of the enterprise they may have less incentive or ability to appropriate the full scarcity rent associated with their foreign exchange earnings.

104. Given this diagnosis, policy initiatives in 1980 are to be commended. The policy package has consisted of both expenditure reducing and expenditure switching measures. In the former category are a combination of monetary and incomes policies designed to restrain the growth of both investment and consumption. In the latter category the most significant measure was a 30 percent gross devaluation of the dinar on June 6, 1980, which changed the parity with the US dollar from 20.3 dinars to 27.3. The extent of net devaluation on the import side was less since the ten percent import surcharge was simultaneously abolished; the duty drawbacks offered to exporters will be adjusted accordingly. The devaluation package was presented as the first step in a medium-term program of adjustment to be announced over time, and to be embodied in the forthcoming 1981-85 Five Year Plan. Elements in this long-term strategy include continuation of the considerable investment in domestic energy sources started in the present plan period, and similarly, stress on the development of the domestic raw and intermediate material base. Despite current balance of payments difficulties there remains a firm commitment to a liberal trading structure, and the intention is to limit still further the protective role of quotas in the trade regime. The criteria for quota protection in the forthcoming plan are to be specific and restricted to the protection of certain key products. It is also intended that quotas, when established, should be of limited duration and expiry dates for the quotas announced at the time of their enactment. No major revisions in the fundamental tariff structure are contemplated in the immediate future as the average level of protection and broad relationships between intermediate and final goods are thought to be appropriate for the medium term.

105. The objectives and structure of commercial policy for the future appear thus to be well conceived, as have indeed been the major moves in the past. As the analysis above has indicated, though, the beneficial effects of such a structure on domestic resource allocation are contingent upon the market for foreign exchange being in equilibrium. Until full convertibility becomes possible it will be necessary for the National Bank system to take a view on what an 'equilibrium' dinar exchange rate is at any given time; for the reasons mentioned earlier, this is likely to be a difficult judgment, which takes into account exchange rate influences on both visibles and invisibles, and even on capital movements. If the national, official exchange rate is close to an equilibrium rate, much of the exchange allocation function of the CIFERs would disappear; if however, it departed significantly from equilibrium it is likely that the shadow exchange rates perceived by earners and users of foreign exchange could differ substantially between republics, with resulting loss in overall allocative efficiency.

CHAPTER VI: CONCLUSIONS AND PROSPECTS

106. Using the results of the last five chapters, this chapter provides an assessment of export performance in the 1970s and raises some issues of strategy and policy for the 1980s.

107. This report started with a discussion of Yugoslavia's balance of payments performance in the 1970s. It was shown there that Yugoslavia has found it difficult to combine rapid growth and balance of payments equilibrium in this period. The economic reforms of 1965 touched off a sharp rise in import absorption and a decline in the share of exports in GDP. These trends led to Yugoslavia's first crisis of the seventies, in 1971 and 1972. The response, of stabilization coupled with exchange rate changes, was successful in remedying the immediate situation. The resumption of growth in 1974 however proved the improvement to be short-lived; any adjustment that had occurred was swamped by the turbulence in the international economy in that and the following year. While two years of slow growth helped bring the situation under control, fast growth in 1977 again revealed underlying weaknesses. These have been exacerbated by deterioration in the terms of trade for Yugoslavia, resulting in perhaps the most severe crisis of the decade.

108. Given the costs to Yugoslavia of its balance of payments difficulties (instability, foregone output and increased debt), strengthening the payments structure was a major objective of the 1976-80 plan. The plan emphasized import-substituting investments (particularly to develop domestic raw materials and intermediaries) although growth in exports was also of substantial quantitative importance. In the event, merchandise import growth has been somewhat contained (although less than envisaged in the plan) while export performance has been considerably worse than targeted. There has been no fundamental improvement in the structure of the balance of payments, leaving Yugoslavia as vulnerable as before to terms of trade changes and other external shocks.

109. Given the well-known limits to efficient import-substitution, and given Yugoslavia's declared and entirely appropriate desire to limit its dependence on workers' remittances, a better export performance will be indispensable to the adjustment strategy in the forthcoming (1981-85) plan. This concurs with Yugoslav views on the subject. However to achieve this it is necessary to understand the sources of poor export performance in the past. Such understanding has been the principal objective of this report; to this end the report has undertaken analyses to assess the importance of commodity and market specific factors on the one hand, and more general policy influences on the other. While performance in exports of invisibles is also of great importance to Yugoslavia, these have not been analyzed in the present report.

110. The analysis of the commodity and regional structure of merchandise exports showed that overall export growth in the 1970s was much slower in the markets of the developed countries than in the other two market areas, the LDCs and the CPEs. As a result the geographic distribution of exports has moved sharply away from developed country markets, particularly those in the EFC. Accompanying this shift has been Yugoslavia's continued evolution from an exporter of primary products to an exporter of manufactures. As might be expected given these concurrent trends, the importance of primary product exports to developed country markets has fallen substantially; at the same time the CPEs have replaced the DCs as the major outlets for Yugoslavia's manufactured exports. The EEC countries have remained important among the developed market economies as markets for Yugoslavia's exports; indeed, outside Europe the United States is the only major developed country market. There has been

greater diversification of market among developing countries as a group, where Yugoslavia has been able to exploit the growth of the oil-exporting developing countries as markets for both primary products and manufactures. The shifts in the commodity pattern of exports are by and large those that would be expected given the development of the Yugoslav economy in the period. While Yugoslavia has been moderately successful in tapping new markets these tend to have been the easier markets to penetrate, particularly the oil-exporting countries.

111. The structural analysis of Chapter II confirms Yugoslavia's strength as an exporter of machinery and transport equipment, and demonstrates the shift in such exports from developing country and CPE markets to the developed countries, a shift which is most evident in the area of heavy electrical machinery. In the lighter manufactures Yugoslavia's major strength in developed country markets appears to be in wood products (including furniture) and in selected clothing categories. Even by developed country standards Yugoslavia is relatively specialized as an exporter of heavy electricals, of ships and boats, of metal products and of clothing and footwear. These specialities notwithstanding, Yugoslavia's exports are extremely diversified and growing more so.

112. Taken together these characteristics indicate a pattern of manufactured exports determined primarily as a spillover from the domestic productive structure, rather than from a sustained effort at export specialization, although there are exceptions to this. In turn the extreme diversification probably derives from two sets of forces: the growth aspirations of enterprises once they have met the needs of the domestic market, and their desire for a pool of discretionary foreign exchange, made available to them via such devices as the retention quota and the new principles of foreign exchange ownership.

113. Since growth in exports to developed countries has been by far the slowest, a market share analysis was undertaken, comparing Yugoslavia's performance against the growth of the market and against the reference group of NICs. By either standard Yugoslavia's performance in primary product exports between 1970 and 1977 was poor, and this conclusion holds after taking into account the increased value of petroleum imports by the developed countries over the period. Several factors account for the weakness in primary products. On the one hand negative competitive effects and performance inferior to that of the NICs is true largely of European markets (see Table 16). This suggests that market integration movements in Western Europe and the growth in preferential trading arrangements between the EEC and developing countries (particularly in the Mediterranean area) may have adversely affected Yugoslavia. At the same time there have been domestic influences at work within Yugoslavia. As analyzed in Chapter V (see Table 28), there have been substantial shifts in relative price relationships against exports for all metals and minerals since 1974, reflecting a combination of below average growth in export unit values for these commodities and an above average growth in domestic producer prices. The latter perhaps arose in part from increased levels of tariff and nontariff protection. While domestic supply difficulties in metals may be a further factor it is important to note that there has been a sharp fall in the ratio of exports to gross output in the sector, suggesting substantial switching of output to the home market (Table 28). A diminished role for primary exports has been an objective of Yugoslav policy, which has stressed the need to export products with higher domestic value added.

114. Performance in manufactured exports to developed country markets has been considerably stronger than that in primary products, and has exceeded the growth of the market in aggregate. The only cause for adverse comment is provided by the performance relative to the NICs, but these differences are substantial, with Yugoslavia's growth over the period being 25 percent less than that of the NICs (Table 13). Yugoslavia managed to increase its penetration of developed country and Mediterranean markets in a variety of manufactured goods, particularly in the areas of strength already identified: heavy electricals and transport equipment, furniture, clothing and apparel, and footwear. It is striking though that the NICs enjoyed superior performance in all markets and virtually all manufactured commodities. While preferential access to the EEC market may have assisted some of the NICs, this would not account for Yugoslavia's performance on non-EEC markets; Yugoslavia's competitive disadvantage on account of non-preferential treatment in the EEC would in any case have been offset to some degree by the benefits it gained under the Community's Generalized Scheme of Preferences (GSPs).

115. The conclusion from the performance of the NICs, and from the rapid growth in domestic output over this period, is that an even better performance in manufactured exports to developed country markets was a realistic possibility in the 1970s for Yugoslavia. It was also a necessity given the exigencies of the balance of payments, and the strategy of diversifying away from primary product exports. Yet the sustained response needed has so far not been forthcoming, and Chapters IV and V have explored the reasons why. The analysis of Chapter IV suggests that there has been no sustained loss of external price and cost competitiveness in the 1970s. Over the medium term the effective exchange rate adjusted for relative export unit values has remained relatively constant (see Table 20 and Figure 4). While the same is by and large true for relative unit labor costs as well, between 1975 and 1977 there was some appreciation in this rate, suggesting a relative compression of export margins in Yugoslavia compared to its competitors. Such analyses of competitiveness are appropriate primarily in cases where autonomous price setting is a possibility, and this condition is probably satisfied for a restricted range even of Yugoslavia's manufactured exports. The general picture of exchange rate changes offsetting relative cost differentials is confirmed by selected bilateral comparisons of labor cost and wage developments between Yugoslavia and its competitors (Table 21). All these measures are comparisons relative to a benchmark date, and their policy relevance depends critically on external assessments of equilibrium at that benchmark, and on the only sources of disequilibrium thereafter deriving from the differences in costs or prices being examined. By the same token, maintaining a constant real effective exchange rate for exports is no guarantee of sustained balance of payments equilibrium, since the latter would require offsetting adjustments for additional shocks such as terms of trade changes, or reduced growth of major markets.

116. Chapter V sought to establish whether the trade regime has systematically been biased against exports and toward home sale. Given the multiplicity of interventions involved, given Yugoslavia's atypical system of industrial organization and given the paucity of data, no firm estimates of either the degree of export subsidization or of the trade bias of the regime could be calculated. What does emerge is that there was some increase in the level of nontariff protection after 1975, and that this has been somewhat skewed towards increased protection of raw materials and semi-finished products. While in principle it would be possible for this structure of protection to be offset by suitable export subsidies, there is no hard evidence that these subsidies have been adequate to compensate for the protection of the home market.

117. The analysis of biases stemming from the trade regime is therefore somewhat inconclusive, but the likelihood is that its intrinsic home sale bias is relatively low. As against this there is repeated and systematic evidence from enterprise interviews that both the price and the profitability of sale on the domestic market are substantially greater than those for export, a finding not consistent with relative neutrality in the trade regime, unless other influences are at work. The explanation provided in Chapter V is that this bias is probably the outcome of the payments system rather than the trade regime and that a purchasing power parity rule for nominal exchange rate movements may have been inadequate to restore balance of payments equilibrium. The result has been to create a booming domestic market for import substitutes which have benefited from the implicit premium on foreign exchange. While some of the premium was shared with exporters through explicit transfer mechanisms, this was evidently insufficient to compensate fully for the bias toward home sale. While this argument is advanced particularly for the post 1974 period, there are indications it might have force for the early seventies as well. This would explain for instance why the retention quota was as highly prized as it was through most of its existence. It also explains the responsiveness of merchandise exports and imports in the period following the devaluation of 1971. It is possible that throughout the 1970s the value of the exchange rate was inconsistent with Yugoslavia's growth aspirations and possibilities. Structural changes in the external environment after 1974 served to worsen this situation.

118. Compounding these in the system is a factor not explicitly analyzed in the report, which is the pressure of domestic demand. It has been suggested in several places ^{1/} that Yugoslavia's trade balance and export performance are especially sensitive to cyclical influences. The reasons for this are easy to discern given the earlier discussion of 'spillover trade' and the nature of the Yugoslav economic system. With labor a fixed rather than a variable factor of production there is a strong incentive in a cyclical downturn to continue

^{1/} See for instance OECD Economic Surveys: Yugoslavia, May 1978, p. 19, and A. Cicin-Sain, "Yugoslavia's Balance of Payments Before and After the Establishment of the Organized Foreign Exchange Market in Yugoslavia", 1979 (mimeo).

producing and to export so long as export sales cover the costs of material inputs. Equally, labor hiring in the peaks is likely to be less immediate than in a conventional market economy, given the impact of such timing on future distributions of enterprise income. Past stabilization episodes have generally been too brief to affect the domestic orientation of Yugoslav industry in any decisive way, and when domestic growth has picked up resources have again been diverted to the home market. The maintenance of high levels of demand, a protected home market for many finished goods and the closeness of interenterprise links characteristic of Yugoslavia have probably been the major factors responsible for the unaggressive export performance of the seventies.

119. Yugoslavia is unlikely to be able to maintain this domestic orientation in the 1980s. Increases in the relative price of oil and oil products are likely to result in deteriorating terms of trade for the foreseeable future. The impact of this deterioration on financing requirements will be all the greater given the wide trade and current account deficits with which Yugoslavia enters the 1980s. Simulations undertaken by the mission suggest that even if a real export growth rate of 8 percent of goods and nonfactor services could be achieved and maintained from 1980 to 1985 - and this must be regarded as an optimistic assumption - achieving even 4.5 percent GDP growth would entail a near doubling of real debt between 1979 and 1985, and a continuing rise in the debt-service ratio from the level of 16 percent in 1978 to above 20 percent in the mid eighties. This 'base case' assumes continued real growth in workers' remittances; an assumption of no real growth in this item would increase financing needs and the debt service ratio still further. These projections are based on relatively optimistic assumptions on imports (an import elasticity of around 0.7). The scope for efficient, sustained import substitution beyond this point is likely to be small.

120. The need for better export performance has been accepted in principle by the Yugoslavs as the major objective in the 1980 Annual Plan, and in the initial drafts of the 1981-85 Five Year Plan. Policy measures in 1980 add substance to this resolve, and initial results for merchandise exports are extremely encouraging for the medium term. Of the three sets of markets to which it sells, Yugoslavia's export strategy is clearest with regard to the developing countries, including the oil-exporters. These countries are seen as providing expanding markets for Yugoslav engineering products, both capital and consumer goods, and sale of Yugoslav technology and consultancy services. The reorganization of the erstwhile Export Credit and Insurance Fund into the Yugoslav Bank for International Economic Cooperation in 1979 is intended to help identify market opportunities for sale of capital goods and services, and to aid in their financing. This strategy makes good sense for Yugoslavia, given its engineering and civil works expertise and its association with the nonaligned movement, but it will face stiff competition both from other NICs and from the developed countries. An important determinant of Yugoslavia's success will be its ability to provide suppliers' credits on terms competitive with Berne Union members, whose ranks now include several

developing country exporters. ^{1/} Such finance is provided by the commercial banks with a portion of their loans (usually about 60 percent) being rediscounted by the YBIEC. The YBIEC's rediscount operations are funded from resources provided through a social compact entered into by commercial banks and major exporters, and from a variety of other sources including the repayment of credits extended by the Export Credit and Insurance Fund, and rediscounts with the National Bank of Yugoslavia. Capitalization of the YBIEC at 1979 was 4.5 billion dinars. The adequacy of these resources remains an issue of some uncertainty; while several exporters interviewed expressed concern that shortages of export credit could put them at a competitive disadvantage, it was not established that shortages of finance were indeed the principal constraint. Steps have in any case been undertaken at the end of 1979 and in connection with the 1980 Order on Monetary Policy to augment the resources of the YBIEC. While provision of such credit at competitive terms may be a necessity in effecting sale of capital goods, the provision of subsidized credit entails a genuine and often sizable economic cost, one that needs to be carefully considered in assessing the overall benefit to the economy of the export in question. In future trade with the CPEs, Yugoslavia's traditional advantages of superior design in manufactured consumer products and its specialities in capital goods are likely to continue to offer it a broad range of products to trade with these countries. Such trade is likely to continue to be governed by bilateral agreements, and for that reason to be balanced, although settlement of outstanding imbalances is increasingly made in convertible currencies.

121. The major structural issues for Yugoslavia's exports have in the past arisen in its trade with the developed countries, particularly the EEC. An important new development in this area has been the conclusion of a new cooperation agreement between Yugoslavia and the EEC, which for the first time provides Yugoslavia with preferential access to the EEC market for its industrial products, as well as improved access for certain agricultural products, particularly beef, tobacco and wine. Some 70 percent of Yugoslavia's industrial products will be admitted duty-free and without limit. Twenty-nine 'sensitive' items in which Yugoslavia is considered very competitive will continue to be subject to ceilings. These include such items as wood products, shoes, furniture, mineral and other fertilizers, and rubber tires; at least some of these were identified earlier in this report as areas of strength for Yugoslavia. In addition, tariff dismantling will occur only gradually for six designated non-ferrous metals. Textile products remain subject to 'voluntary restraint' but will be eligible for expanded quotas under the Community's GSP scheme. These terms are considered to be as favorable as those offered under any other cooperation agreement by the Community, and as such should serve to eliminate the less favorable access Yugoslavia has hitherto obtained, and to mitigate the effects of the proposed expansion of the EEC to include Greece and the Iberian countries.

^{1/} In November 1979 the Berne Union included the following developing country members: Argentina, Hong Kong, India, Israel, Korea, Pakistan, Portugal, Singapore and Spain. Mexico and Cyprus had at that time applied for membership. See IMF Survey, November 26, 1979, p. 366.

122. While the new agreement with the EEC presents Yugoslavia with additional opportunities, it does not by itself guarantee Yugoslavia a reversal of past trends. First, as mentioned, the areas in which Yugoslavia is most competitive will remain subject to ceilings. Second, Yugoslavia will face continuing competition from other semi-industrial countries including some that have already concluded similar preferential agreements with the EEC. Yugoslavia's specific advantages are likely to derive from its location, its resource base, its skill levels, and its experience and craft traditions - particularly in engineering and metal-working industries. Given the assurance of duty-free access to the West European market, the locational advantages Yugoslavia possess could be put to formidable use, particularly through the development of subcontracting relationships and industrial cooperation agreements with European firms. To the degree that current customs or other procedures impede the establishment of such enclave processing activities they should be reviewed, but the mission was provided no indication of such procedural difficulties by the firms it visited, several of which are already engaged in such relationships with foreign firms.

123. It is difficult to recommend changes in the incentive structure on the information available. The Yugoslav authorities have been consistent in their pursuit of a neutral trade regime since 1965, although balance of payments difficulties have necessitated the imposition of ad hoc restrictions from time to time. Discussions in Yugoslavia indicate a continued commitment to a relatively liberal structure, and to a reduction in the protection provided by quantitative restrictions. An indication of these commitments is provided by the abolition of the import surcharge in conjunction with the recent devaluation.

124. The allocative benefits of a liberal trade regime can only be realized if appropriate exchange rate policies are pursued; otherwise the rationing mechanisms for foreign exchange will dominate the trade regime as determinants of resource flows. This point is well understood within Yugoslavia, but there are severe technical difficulties involved in deciding what the equilibrium rate is at any point in time in a world with large and rapid terms of trade changes. The National Bank of Yugoslavia has hitherto relied on a purchasing power parity rule to calibrate its interventions in the interbank market; in the future this may need to be supplemented by other indicators of pressure on the domestic foreign exchange market, such as the premia being paid amongst BOALs within enterprises. The creation of the CIFER system provides a ready-made channel for such information to be made available to the central banking authorities. In their exchange market interventions, the authorities will also need to take into account the need to reduce dependence on workers' remittances over time; this would imply a target of a smaller deficit in the current account than short-term financing possibilities might indicate. For the medium term this objective coincides with another objective of foreign exchange policy, the need to restock reserves, which have been depleted by the unexpectedly large deficit of 1979.

125. By the recent devaluation, by their actions in past crises and by their policy statements, the Yugoslavs have signalled their willingness to use the exchange rate as an active instrument of adjustment policy. In the past

though the real devaluation has been fairly quickly eroded, too quickly to persuade enterprises that the shift in relative rewards toward exports was likely to endure. The aim this time should be to maintain a somewhat undervalued exchange rate for long enough to persuade enterprises that the shift in profitabilities will continue. Maintaining a real exchange rate at a target level is easier said than done and will require not only the willingness to depreciate the dinar as needed, but also less buoyant domestic demand. Reduced domestic absorption will in any case be needed to permit a shift in resource use to exports; it will be important not to stimulate domestic demand too soon but to let reflation occur through export demand. At the same time the effort should be made to eliminate import rationing as soon as possible so that existing capacities are made effectively available for export supply.

126. Connected with these relative price issues is the institutional one of the new system of foreign exchange management. While respecting the principles of decentralization and voluntarism that underlie the design of the new system, it appears that the operation of the system in a situation of extreme excess demand for foreign exchange has led to wide divergences in effective exchange rates by republic and even by enterprise. This could result in misallocation of output and, much more seriously, of new investment. It was not possible to ascertain the magnitude or importance of any such misallocation; the issue is raised here as one that bears review and such review is apparently underway in the context of plan preparation.

127. While the important policy determinants of Yugoslav export performance are at the level of more general policies, there would also seem to be room for improvement in the institutional infrastructure supporting exports and exporters. Export promotion efforts are coordinated at the Federal level through the Chamber of Economy and the Community of Interest for Foreign Economic Relations. While these constitute a forum for exchange of information, the extent of market intelligence or market development services provided is unclear. Most major exporting enterprises maintain their own network of sales and representative offices in principal markets, but these are of little benefit to the smaller exporters. These issues are under review, particularly by the Chamber of Economy, and a better structure is being designed.

128. In conclusion this report has suggested that already, despite a not very purposive effort, Yugoslavia has performed well in relatively sophisticated engineering products, particularly in machinery and transport equipment, and in other product lines where design is a source of market advantage: garments, footwear, furniture. In addition Yugoslavia has the experience of operating on three disparate sets of markets, which gives it an additional source of strength in the future, and continued protection against problems of market access. It furthermore has the additional potential represented by the new agreement with the EEC, including the prospect of additional agricultural exports. With appropriate domestic policies Yugoslavia should be better equipped than many developing countries to face the turbulent period ahead.

ANNEX I: YUGOSLAVIA'S EXPORTS BY COMMODITY AND DESTINATION

The material in Tables 5 to 8 of Chapter II has been extracted from files of the GATT Trade System currently installed at the World Bank. The trade data included in this system are equivalent to the UN series D.

Exports by commodity and country of destination are on an f.o.b. basis in U.S. dollars as reported by Yugoslavia. However, the numbers may be subject to certain biases on account of the Yugoslav practice of converting each external transaction into domestic currency fixed on the basis of an officially established list of exchange rates, rather than market rates. ^{1/} Thus, export earnings originally denominated in currencies that have appreciated against the Yugoslav dinar would tend to be underestimated and vice-versa. Yugoslav trade statistics, when provided to international agencies, are in principle reconverted from dinars into US dollars, at the actual dollar dinar conversion rate used in compiling the data. This clearly does not eliminate the original distortions, since these originate from incorrect cross-rates having been applied in valuing the original transactions. Correction of these biases would necessitate revaluation of the original transactions at correct cross rates to the dollar. Knowledge of partner countries is insufficient for such a correction since data on the currency of denomination of each transaction would be required. The problem did not exist prior to 1971 as major currencies adhered to announced exchange rates in that period. In the period thereafter, the Yugoslav valuation practice does impair the reliability of the country's trade and balance of payments data. Although the sign and the magnitude of the biases is difficult to assess on a cross-sectional basis, it can be assumed that these would not seriously affect the picture of shifts in the commodity and geographic patterns of Yugoslavia's exports described in Chapter II. Furthermore, these trends are largely confirmed in Chapter III, where the analysis is based on partner country import data which are not biased by Yugoslav valuation practices. Finally, any exchange conversion biases that may exist in Yugoslavia's current value trade data are likely to be reflected in the derived unit value indices rather than in the quantum indices. This means that the "real" growth of Yugoslav exports shown in Table 4 as well as in Figure 3 are likely to be unbiased.

Although the GATT trade material is available on a time-series basis, only three benchmark years were selected, 1963, 1970 and 1977, creating two periods of equal length that roughly reflect changes in structure and underlying trends in Yugoslav exports. The choice of these benchmarks is relatively free

^{1/} The Federal Executive Council from time to time promulgates a list of fixed exchange rates to be used for statistical purposes. This list was first imposed in 1971 and revised in 1974 and 1978. While the rates on this list approximately reflect market exchange rates at the time of their imposition, serious divergences may occur in later years. A further complication is that after each revision of rates, all dinar series of trade data are revalued at the new dinar-dollar rate.

from cyclical disturbances, as can be seen from Figure 3. Both Chapters II and III are attempts at a cross-sectional analysis of Yugoslav exports, requiring substantial detail in the specification of commodities and patterns. The benchmark approach was therefore adopted in order to keep data processing within manageable limits.

The categories used in analyzing the geographical distribution of Yugoslavia's exports (Developed Countries, Less Developed Countries and Centrally Planned Economies) in general conform to definitions used in the World Bank's World Development Report. 1/ In particular this means that Southern Europe 2/ is included amongst the developing countries. The oil exporting developing countries are distinguished as a group among the LDCs also according to the Bank's standard taxonomy and include members of OPEC and thirteen non-OPEC developing oil exporters. 3/ With regard to the developed countries, the EEC is defined as including the nine present members throughout the period under consideration. The individual countries shown in Table 6 of Chapter II were selected on the basis of their share in total Yugoslav exports; the cut-off point was one percent of total exports in either 1963 or 1977.

In the disaggregated commodity analysis of Chapters II and III, Yugoslavia's merchandise exports are further broken down into 38 commodity groups, of which 25 groups are in manufactures, and 13 groups in primary commodities. These groups were defined on the basis of their share in Yugoslav exports; again, the cut-off point was about one percent of total exports in 1977. Primary commodities are grouped in two sub-categories (Agriculture and Metals and Minerals) and manufactures in three (Chemicals, Machinery and Transportation Equipment and Other Manufactures). A detailed definition of all commodity categories is given in Annex Table A in terms of the "Standard International Trade Classification" (SITC).

1/ See World Bank, World Development Report, 1979 for details.

2/ Greece, Turkey, Cyprus, Portugal, Malta, Spain, Israel.

3/ Zaire, Angola, Congo, Egypt, Syria, Tunisia, Oman, Bahrain, Malaysia, Brunei, Bolivia, Mexico, Trinidad and Tobago.

Table A: COMMODITY BREAKDOWN OF YUGOSLAVIA'S EXPORTS

<u>Commodity</u>	<u>SITC Code</u>
<u>Total Merchandise</u>	<u>0 to 9</u>
I. Primary Commodities	(0 to 4)+67+68
1. Agriculture	(0 to 2)+4-27-28
Live animals	001
Meat fresh, chilled, frozen	011
Maize unmilled	044
Other food and live animals	0-(001+011+044)
Beverages and tobacco	1
Wood shaped	243
Other crude agricultural materials	(2-243-27-28)+4
2. Metals and Minerals	(27+28+3+67+68)
Other metals and minerals	27+28+(3-332)
Petroleum products	332
Iron and steel	67
Copper	682
Aluminum	684
Other non-ferrous metals	68-682-684
II. Manufactures	[5+(6-67-68)+7+8+9]
1. Chemicals	5
Chemical elements and compounds	51
Medicinal, etc. products	54
Other chemicals	5-51-54
2. Machinery and Transport Equipment	7
Metals working machinery	715
Machines, NES, non-electric	719
Other machinery, non-electric	71-715-719
Electric power machine, switchgear	722
Electric distributing machinery	723
Electrical machinery, NES	729
Other electrical machinery	72-722-723-279
Road motor vehicle, parts	7328
Road motor vehicle excluding parts	732-7328
Ships and Boats	735
Other transport equipment	73-732-735

Commodity

SITC Code

3. Other Manufactures	[(6-67-68)+8+9]
Wood, cork manufactures, NES	63
Textile yarn and thread	651
Textile excluding yarn and thread	65-651
Non-metal mineral manufactures, NES	66
Metal manufactures, NES	69
Other basic manufactures	6-63-65-66-67-68-69
Furniture	821
Textile clothing, not knitted	8411
Textile clothing, knitted	8414
Footwear	8510
Other miscellaneous manufactured and not classified	(8-821-8411-8414-8510)+9

ANNEX II: MARKET SHARE ANALYSIS

The analyses of Chapter III follow the lines of the traditional "constant market share" approach 1/ and compare a country's actual export performance against the hypothetical outcome that would have resulted had the share of that country (the home country) in all its export markets remained constant over time. At the highest level of disaggregation of one commodity and one market, the difference between actual and hypothetical growth of exports is the competitive effect for the home country for that commodity market. Aggregating across markets and across commodities allows further decomposition of the overall deviation of the actual performance from that hypothesized into market and commodity effects. However, the residual at the level of the individual commodity in a specific market is the basic unit of the analysis; these residuals form a matrix, the dimension of which is determined by the number of commodities and markets. 2/ Whereas in most constant market share analyses the results are shown only at the final stage of aggregation, the focus of the present analysis is primarily on partial aggregates, namely:

- (i) commodity composition and competitive effects by market;
- (ii) market distribution and competitive effects by commodity.

As Yugoslavia's export performance is also assessed against that of the NICs there is an alternative matrix of competitive residuals, Yugoslavia versus the NICs, of the same size as the matrix which compares Yugoslavia against all exporters. Comparison of the two sets of indicators, which is undertaken at various levels of aggregation, is intended to throw additional light on Yugoslav export performance. In particular, the comparison with the NICs could be useful in trying to identify cases where protectionist measures may be at work, for protectionism, except where it is discriminatory in nature, can be expected to affect both the Yugoslav and the NIC's export performance.

The markets covered by the analysis include the developed countries, and certain Mediterranean countries. The groupings of developed countries are as follows:

1/ For a detailed discussion please see Leamer and Stern, Quantitative International Economics (Allyn and Bacon, Boston 1970), Chapter 7.

2/ There are 38 commodities and 12 markets. For each time interval the basic matrix of competitive residuals therefore consists of 456 elements.

(i) EEC

- (a) Italy
- (b) West Germany
- (c) France
- (d) The Netherlands
- (e) UK
- (f) Other: Belgium and Luxembourg, Denmark and Ireland

(ii) Other Europe

- (a) Austria
- (b) Switzerland
- (c) Other - Finland, Iceland, Norway, Sweden

(iii) Other Developed

- (a) USA
- (b) Other - Canada, Japan, Australia.

As noted in the text, certain Mediterranean countries have also been included in the analysis. These are Greece, Israel, Portugal, Spain and Turkey.

Accurate measurement of Yugoslavia's "relative" export performance requires that the mutual consistency of data for Yugoslavia, its trading partners and competitors be given the highest priority. For that reason the trade data used in the analysis are based on import statistics, i.e., partner country reports. For each market and commodity c.i.f. import data were compiled by origin: Yugoslavia, the World and the NICs. As a result Yugoslav exports are not comparable between Chapters II and III, for a number of reasons:

- (a) Yugoslavia's exports in Chapter II are on an f.o.b. basis, while they are c.i.f. in Chapter III.
- (b) Discrepancies arising from timing differences in the recording of a trade flow or changes in destination from that recorded in export documents.
- (c) The valuation practices adopted by Yugoslavia, detailed in Annex I. The biases created by this practice are reflected in exports as reported by Yugoslavia, but not in imports reported by the partner countries, the latter being based on actual exchange rates. To that extent, the structure of Yugoslav exports emerging from partner country records may be considered more reliable than from the country's own published records.

The use of import statistics, however, precludes the inclusion of the Soviet and other East European markets in the analysis. The reason for this is that these countries are not included as reporters in international trade statistics. For data reasons as well the developing country markets of Yugoslavia (with the exception of the Mediterranean countries) have had

to be excluded from the analysis. For a fairly high number of relevant LDCs data at the appropriate level of disaggregation are not available for the benchmark years from the GATT trade system.

Owing to the unavailability of appropriate deflators, all trade data in the analysis are at current prices. This is an obvious weakness as it precludes the identification of the volume and price component of Yugoslavia's relative export performance on its various markets. Thus a decline in Yugoslavia's share on a certain market may hide a very competitive performance in terms of volume which is more than offset by worsening relative prices. However, the fairly high degree of commodity disaggregation, hence of homogeneity, applied in the analysis is likely to reduce the magnitude of the problem. At this level of disaggregation, assuming that Yugoslav exporters are generally price takers, the direct impact of relative price movements on nominal market shares should be limited. The above assumption is probably realistic with regard to exports of manufactures in the developed markets, but more questionable with regard to developing country and CPE markets. This therefore provides a further argument for excluding these markets from the analysis.

The present constant market share analysis of Yugoslav exports is not the first of its kind. Compared to earlier attempts, 1/ however, it has the following distinctive features:

- (a) A higher degree of commodity disaggregation;
- (b) Presentation of partial aggregates, either by individual market or commodity;
- (c) The use of an additional standard of reference, the NICs for judging the Yugoslav export performance;
- (d) A more structural approach. Instead of being performed on a year by year basis, the analysis is formulated in terms of average annual growth rates within the two sub-periods. The idea in this respect would have been to work with trend growth rates; however, this would have required handling an unmanageable volume of data. Instead, the required data were selected for three benchmark years only, i.e., 1963, 1970, 1977, as a basis for the computation of period growth rates. The likelihood of cyclical biases obscuring the results of the analysis, already reduced by the choice of the sub-periods, can be considered small to the extent that the emphasis is primarily on "relative" performance indicators. The use of start and end period growth rates, however, does not preclude end-point biases due to erratic disturbances (harvests, strikes, etc.).

1/ See Charles R. Chittle, "Yugoslavia under the Workers' Self-management System: Growth and Structural Change in the External Sector", Kiel Institute of World Economics, Working Paper No. 28, 1975 and OECD, Economic Survey: Yugoslavia, 1977.

ANNEX III: THE MEASUREMENT OF EXPORT COMPETITIVENESS

General Considerations

In competitiveness studies for developed market economies, the analysis usually encompasses both price competitiveness in foreign markets, and the domestic profitability of exporting. The argument for incorporating the latter dimension is that improvements in domestic profitability (resulting, say from an exchange rate change) make possible more aggressive marketing by exporters even if there is no change in the offered price of the home country's goods in foreign markets. In the case of Yugoslavia a variety of domestic interventions (which vary by sector) break the link between aggregate price and cost developments on the one hand, and shifts in relative export profitability on the other. The competitiveness analysis for Yugoslavia undertaken in Chapter IV is therefore oriented to the price competitiveness of Yugoslav merchandise exports in foreign markets. This analysis is primarily relevant for manufactured goods characterized by product differentiation, where autonomous pricing behavior is a possibility. The discussion below first looks at various indicators of relative competitiveness, then at the problem of aggregating these indicators with a suitable system of weights and finally at the problem of translating these indicators to a common numeraire through exchange rates.

Competitiveness Indicators

An ideal measure of competitiveness should cover actual or potential competition between countries in tradeable goods and services and be based on data which are strictly comparable across countries. ^{1/} In practice several statistical and conceptual problems arise:

- (a) The most widely used competitive measures take account only of price, cost and exchange rate developments. Apart from relative developments between countries' offered prices, competitiveness is clearly also affected by factors such as product quality, after-sales service, timely delivery and financing conditions.
- (b) It is difficult to find price indicators which relate only to goods traded or tradeable goods.
- (c) Comparable data on absolute cost and price levels exist for relatively few narrowly defined industries in a small number of countries. For most countries the only data available at the sectoral level are index numbers of costs and prices. For certain

^{1/} For a comprehensive discussion see I.B. Kravis and R.G. Lipsey, Price Competitiveness in World Trade, NBER, New York, 1971.

analytical purposes, this is an important deficiency. However, in analyzing trends in a given country's trade balance, since it is relative changes in competitive positions, rather than absolute levels that are relevant such index numbers can be used, but it must be remembered that the policy conclusions derived from such relative comparisons depend crucially on external evidence on the country's export competitiveness in the base year.

The most widely used indicator of a country's competitive position is the export unit value of manufactures. These are variously weighted averages of individual commodity price relatives derived from basic data on values and quantities traded. The principal advantage of unit values is that they reflect actual prices paid for the traded goods, while other price data typically refer to list prices and do not take account of either discounts or premiums. Another advantage is that this measure relates exclusively to goods which enter into international competition. One limitation of this measure is that it does not compensate for differences in commodity between competitors, nor for relative changes in quality or product composition over time. Another shortcoming is that basic commodity groups used to construct the unit value indices often fall well short of being homogeneous. There are also problems of international comparability as different countries use Laspeyres, Paasche and Fisher indices.

An alternative indicator, which covers all tradeable goods (rather than just traded goods), is the index of wholesale prices of manufactures, which in principle, measures output prices of industry. In practice these indices suffer from a variety of statistical problems, such as differences between countries in coverage, method of construction and weighting. In fact, even for individual countries there are, in practice, very few good output price indices. Given the swings in relative prices between primary and finished goods in recent years, relative movements in wholesale price indexes between countries have often reflected differences in construction and/or commodity composition of the indices rather than shifts in competitiveness.

On account of these limitations associated with the WPI, better measures of the general price level may be either the consumer price index (CPI) or the GNP deflator. The main disadvantage of both these measures is that their coverage includes non-tradeable goods. This is a particular problem with the GNP deflator which includes the government sector. However, in many countries the CPI is directly relevant to the determination of wages, and therefore plays an active role in the price transmission process.

Unit labor costs (ULC) may be particularly suitable as competitiveness indicators between fairly open economies (price takers) in which export prices and to some extent, domestic prices are determined by world prices. In this case, cost series which usually move more independently between countries may be a better indicator of underlying international competitiveness. On the other hand, unit labor costs are not free from problems. The data from which they are constructed are often relatively poor, they are not strictly comparable across countries, costs of tradeable goods could move differently

from those of total industry, and cyclical influences need to be adjusted for in assessing medium term trends. In the case of Yugoslavia there is the further issue, referred to in the text, that the systems of worker management and social ownership of capital may affect the mark-up pricing model which implicitly underlies the use of unit labor costs as a competitiveness indicator. In addition the scale of the mark-up may be influenced by implicit or explicit export subsidies and changes in these over time.

Choice of Weights

For indices of relative prices and costs to be constructed, a set of weights needs to be chosen. ^{1/} Four groups may be distinguished--global trade weights, bilateral trade weights, double weights and the implicit weights of a general equilibrium index such as the IMF's MERM model. As differences in the choice of weighting systems can result in qualitatively different trends over time, choice of an appropriate weighting system is of considerable importance in studying competitiveness. In an ideal weighting system and in an ideal relative index a unit change in the indicator from any source should be associated with an equivalent effect on the trade measure being analyzed. The proper choice of weights depend on the particular policy issue being addressed. As the primary objective of this report is to examine Yugoslavia's export performance, the chosen weighting scheme should reflect the importance of other countries as export markets and export competitors. Indices more suitable for assessing the impact of relative price changes on Yugoslav imports or on the trade balance as a whole have therefore not been chosen.

(a) Global Export Weights

The simplest method of weighting is to select a "basket" of the major trading countries and to allocate to each a weight according to its share in world exports. This implicitly assumes that the commodity and destination composition of the home country's exports resembles or could resemble that of world exports, and the weights given to other countries reflects their position as competitors on this assumption. A disadvantage of this weighting system is that it may seriously understate the effects on home country exports of a change in relative costs, prices or exchange rates with a major trading partner. Given the geographic diversity of Yugoslavia's exports shown in Chapter II, this problem does not exist for Yugoslavia.

(b) Bilateral Export Weights

A system of weighting by bilateral export shares focusses on other countries as markets rather than competitors, and the implicit comparison is with domestic producers in the partner country. However, an index based on

^{1/} For a fuller discussion see R. Rhomberg, "Indices of Effective Exchange Rates", IMF Staff Papers (1976, vol. 20) pp. 88-112.

bilateral weights may seriously underestimate the importance to the home country of a change in relative standing against a country with which there is little direct trade but which is nevertheless an important competitor in third markets. Japan and Germany represent good examples. Japan accounts for only 1 percent of Germany's exports. Thus for instance a 20 percent appreciation of the yen, with all other exchange rates fixed, would show up in a bilaterally weighted index as an effective depreciation of the D-Mark of only 0.2 percent. Given the extent to which these two countries compete against each other in third markets, this is not a sensible result.

(c) The Double Weighting System

A compromise between the extremes of the above two systems of weights is a weighting system which, reflects the importance of all suppliers to each market, and of all markets important to the home country. An approximation to this is given by a double weighting system which consists of an export weighted average of the import-weighted price and cost indices of the home country's trading partners. In this system the importance W_{xj} of competitor j to country x is given by summing, over all markets i , the share of i 's imports supplied by j (the importance of j as supplier to market i) multiplied by the share of x 's exports to i (the importance of i as a market to x):

$$W_{xj} = \sum_{i \neq j} \frac{X_{xi}}{X_x} \frac{M_{ij}}{M_i}$$

where X , M denote exports and imports respectively.

(d) The Double Weighting System Adjusted for Home Supply

While the above method is more country specific than the use of global export weights, the use of import shares to measure competition in market i neglects the role of the home supplier. Countries do not import from themselves ($M_{ii} = 0$), but are obviously important suppliers to their own markets. This adjustment for home supply should properly only refer to that portion of the partner country's output which is in competition with imports. Establishing which sectors these are and computing appropriate markets is a laborious process which needs to be offset against the reduction in bias achieved.

(e) 'General Equilibrium' Weights

A major shortcoming of all above mentioned weighting systems is that they do not take account of export and import price elasticities and price changes that are induced by exchange rate changes. The weights derived from general equilibrium model, such as the multilateral exchange rate model (MERM) developed by the IMF are needed to reflect the multilateral structure of trade, its commodity composition, the price elasticities of trade flows and the effects of changes in exchange rates on prices and costs. In comparison with the other weighting schemes a partner country with, for example, large

demand elasticities will get a larger weight than its trade share alone would warrant. As the MERM model does not as yet encompass Yugoslavia, this was not a choice available to the mission.

Exchange Rate Measures

Since the purpose of the competitiveness analysis is to assess the comparative standing of the home country's actual or prospective offer prices in the representative market, it follows that the same set of weights should be used for compiling the exchange rate index as is used in aggregating the competitiveness indicators. The logic of this is straightforward--as far as the customers in the partner country are concerned, it is irrelevant whether an increase in offered prices arises from domestic price or cost developments in the home country, or from exchange rate changes. A subsidiary issue is whether in computing a (nominal) effective exchange rate index any adjustment should be made for the currency of invoice of trade. In Yugoslavia's case some 60 percent of all convertible currency receipts are denominated in US dollars, far in excess of the importance of the US as either market or competitor. In the present study no adjustment has been made for the currency distribution of exports on the grounds that the currency of invoicing is only of relevance for homogeneous goods whose world price is quoted in a given currency (e.g. the role of the dollar in the market for oil). In such cases there would be a gain in relative domestic profitability of the export in question if the home currency depreciated against the currency of denomination, a gain in 'competitiveness' which would not be picked up by the various weighting schemes listed above. Since the present analysis is explicitly intended for goods where Yugoslavia is not a price taker, an adjustment for currency distribution appears unnecessary.

A further point that should be mentioned is that the analysis here is based solely on trends in the official exchange rate. To the extent that there have been changes in the level of export subsidization or taxation over time these will affect the effective exchange rate facing exporters and may influence their pricing behavior in foreign markets.

2. Specific Choices

Indicators

The three indicators chosen were export unit values, unit labor costs and consumer prices. It is worth including more than one indicator in the analysis for two reasons--divergent movements between the indicators help pinpoint the main sources of change in competitiveness, while similar movements help provide confidence in the results.

Unit labor costs for Yugoslavia have been calculated as gross personal income per unit of value added in constant prices. For competitor countries the data are taken from the US Bureau of Labor Statistics (BLS), and from the IMF. Unit labor costs are defined by the BLS as compensation of employees (total direct and indirect payments to workers) per unit of real value added.

Export unit value calculations for Yugoslavia are complicated by the practice, mentioned in Annex II, of reporting all trade flows at a set of fixed exchange rates established by executive order, rather than at market rates. In order partially to compensate for this, export unit values in dinar terms have been obtained by multiplying the published export unit value indices by the ratio of the period average dinar-dollar exchange rate to the dinar-dollar rate used in compiling the statistics. This still leaves uncorrected the bias arising from inappropriate cross exchange rates, but no easy solution to this problem is available. Export unit values for other countries are in domestic currency and are taken from the IMF's International Financial Statistics (IFS). Data on consumer prices for Yugoslavia are from the Statistical Year Book, while those for other countries are from IFS.

Weights

The basic system of weights used in the analysis is the double weighting system. This was considered a more accurate measure for Yugoslavia than a system of global export weights; equally, given the focus in Chapter III on market share performance, a system of weights oriented to competition from other countries in major markets seemed more appropriate than ones such as bilateral weights, oriented to competition from home producers in the partner country. It did not seem worthwhile to adjust the double weighting system for home supply, given that in many of Yugoslavia's markets for manufactured goods, particularly the CPEs and the LDCs, imports and home supply are largely non-competing.

In constructing the weights for the double weighting system, a group of competitor countries was first defined. This was done by identifying 24 product groups of manufactures of importance to Yugoslavia (at the two to four digit SITC level), and establishing, from the UN Yearbook of International Trade Statistics, the twenty most important exporters in the world for each product group. A list of fifteen competitor countries was selected by weighting each occurrence by the importance of the relevant commodity group in Yugoslav exports. The list of competitor countries so identified is as follows, by rank:

- | | |
|--------------------------------|-----------------|
| 1. Federal Republic of Germany | 9. Canada |
| 2. France | 10. Finland |
| 3. USA | 11. Switzerland |
| 4. Japan | 12. Austria |
| 5. Italy | 13. Sweden |
| 6. The Netherlands | 14. Spain |
| 7. UK | 15. Denmark |
| 8. Belgium | |

The next step was to identify the most important markets for Yugoslav exports. Fourteen individual countries and four geographic zones were distinguished,

which in aggregate accounted for 81 percent of Yugoslav exports in 1978, and each of these markets was assigned as weight according to its importance in Yugoslav exports in 1978. 1/

The final system of 'double weights' for each of the competitors was calculated by each competitor's share in each market by that market's weight in Yugoslav exports, and then normalizing these weights to sum to unity. The resulting system of double weights for the currencies of the fifteen competitor countries is as follows:

Germany 0.196	Canada 0.043
France 0.123	Finland 0.042
USA 0.115	Austria 0.033
Japan 0.105	Switzerland 0.024
Italy 0.083	Sweden 0.024
The Netherlands 0.064	Spain 0.016
UK 0.061	Denmark 0.015
Belgium 0.056	

Bilateral weights were also calculated to provide an alternative measure of effective exchange rate movements. For this purpose the weights used were the bilateral shares of nine market economies in Yugoslav exports in 1978. The countries included in the computation and the weights assigned to their currencies are as follows:

Italy 0.345	Austria 0.050
Germany 0.204	Netherlands 0.044
USA 0.155	Switzerland 0.041
France 0.071	UK 0.035
Greece 0.053	

1/ The individual country markets and the weights assigned are as follows: Soviet Union (.245), Italy (.094), Germany (.083), USA (.065), Czechoslovakia (.043), East Germany (0.044), Poland (.037), Iraq (.026), Greece (.026), France (.021), Hungary (.021), Libya (.021), Romania (.020), Austria (.018). The four geographic zones are: 'Other Middle East' (0.033), 'Other Africa' (0.026), 'Other Asia' (0.023) and South America (0.011). All data are from IMF, Direction of Trade Yearbook 1979.

STATISTICAL APPENDIX

Table No.

A.1	Balance of Payments 1965-79
A.2	Composition of Services Account 1965-79
A.3	Current Account Balance of Payments Convertible Currency Area 1970-79
A.4	Imports and Exports by Area 1970-79
A.5	Composition of Exports by End-Use 1970-79
A.6	Composition of Imports by End-Use 1970-79
A.7	Exports According to SITC Classification 1970-79
A.8	Imports According to SITC Classification 1970-79
A.9	Export and Import Dollar Unit Value Indices According to SITC Classification 1970-78

Table A.1: BALANCE OF PAYMENTS 1965-79
(US\$ Millions)

Items	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979 ^{/3}
Goods and Services															
Exports (f.o.b.)	1,092	1,222	1,253	1,265	1,475	1,680	1,814	2,237	2,853	3,805	4,072	4,878	5,254	5,671	6,794
Imports (c.i.f.)	<u>1,288</u>	<u>1,575</u>	<u>1,708</u>	<u>1,797</u>	<u>2,135</u>	<u>2,874</u>	<u>3,253</u>	<u>3,227</u>	<u>4,511</u>	<u>7,520</u>	<u>7,697</u>	<u>7,367</u>	<u>9,634</u>	<u>9,988</u>	<u>14,019</u>
Trade Balance	-196	-353	-455	-532	-660	-1,194	-1,439	-990	-1,658	-3,715	-3,625	-2,489	-4,380	-4,317	-7,225
Services, receipts	405	529	622	705	877	1,287	1,681	2,094	2,914	3,495	4,100	4,404	4,820	5,775	7,892
Services, payments	213	268	281	317	372	494	664	759	879	1,080	1,478	1,750	2,022	2,714	4,329
Services Balance	192	261	341	388	505	793	1,017	1,335	2,035	2,415	2,622	2,654	2,798	3,061	3,564
Transfers, net ^{/1}	77	59	32	38	45	61	64	74	87	110					
Current Account Balance	73	-33	-82	-106	-110	-340	-358	419	485	-1,190	-1,003	165	-1,582	-1,256	-3,661
Capital Account															
Medium and Long-term loans (net)	163	204	178	165	253	265	479	373	484	612	1,156	1,193	1,615	1,300	1,460
-Disbursement	328	382	351	384	492	640	866	943	1,170	1,426	2,171	2,096	2,665	2,700	3,160
-Amortization	-165	-178	-173	-219	-239	-375	-387	-570	-686	-814	-1,015	903	1,050	1,400	1,700
Exports Credits extended (net)	-44	-39	-39	-46	-92	-55	-23	-42	-80	-130	-80	-100	-213	-150	-100
-Disbursement	-72	-75	-85	-104	-137	-102	-72	-105	-150	-215	..	..	..	..	..
-Amortization	28	36	46	58	45	47	49	63	70	85	..	..	..	..	..
Total Medium and Long-term net	119	165	139	119	161	210	456	331	404	482	1,076	1,093	1,402	1,150	1,360
Short-term (net) ^{/2}	-91	-99	37	-9	49	-81	-50	-97	-205	270	127	-47	-19	182	1,170
Allocation of SDRs	0	0	0	0	0	25	22	22	-226	0	0	0	0	0	
Change in reserves (- = increase)	-101	-33	-94	-4	-100	186	-70	-675	-663	438	-200	-1,211	199	-315	1,131
-Gold, Foreign exch., SDR	-27	-10	0	-52	-158	115	-70	-566	-632	243	-63	-1,065	38	-250	..
-Bilateral Balances	-74	-23	-94	48	38	71	0	-109	-31	195	-137	-146	161	-65	..

.. Not available.

^{/1} Private unrequited transfers are reported as workers' and emigrants' remittances and thus recorded under services after 1975.

^{/2} Includes errors and omissions, IMF account, National Bank, and commercial bank credits.

^{/3} Preliminary; Exchange rate valuation procedure differs from earlier years.

Source: World Bank report, Yugoslavia: Development with Decentralization, Tables 3.1 and 3.2; National Bank of Yugoslavia; staff estimates.

Table A.2: COMPOSITION OF SERVICES ACCOUNT 1965-79
(US\$ millions)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978 ^{/2}	1979 ^{/2/3}
Receipts	405	529	622	705	877	1,287	1,681	2,094	2,914	3,495	4,100	4,404	4,820	5,775	7,892
Nonfactor Services	365	459	525	575	659	829	1,012	1,188	1,554	1,891	2,354	2,430	2,600	2,984	3,916
Tourism	81	117	130	189	241	275	361	463	630	699	768	802	841	1,050	1,183
Transportation	194	226	232	247	280	349	385	414	535	729	886	894	1,051	1,150	1,310
Other	90	116	143	139	138	205	266	311	389	463	700	734	708	784	1,423
Factor Services	40	70	97	130	218	458	669	906	1,360	1,604	1,746	1,974	2,220	2,791	3,976
Workers' & Emigrants' Remittances	32	64	89	122	206	440	652	889	1,310	1,511	1,684	1,884	2,097	2,636	3,788
Investment Income	8	6	8	8	12	18	17	17	50	93	62	90	123	155	188
Payments	213	268	281	317	372	494	664	759	879	1,080	1,478	1,750	2,022	2,714	4,328
Nonfactor Services	152	192	206	232	260	366	517	594	657	795	1,135	1,386	1,641	2,259	3,507
Tourism ^{/1}	18	35	52	53	73	129	220	244	250	295	440	546	760	1,250	2,088
Transportation	76	86	92	103	117	148	168	182	215	336	413	466	488	565	674
Other	58	71	62	76	80	89	129	168	192	164	282	374	393	444	745
Factor Services															
Investment Income	61	76	75	85	102	128	147	165	222	285	343	364	381	455	821
Balance on Services	192	261	341	388	505	793	1,017	1,335	2,035	2,415	2,622	2,654	2,798	3,061	3,564

^{/1} Includes withdrawals from foreign currency deposits.

^{/2} Preliminary.

^{/3} Please see footnote 3 to Table A.1.

Source: World Bank report, Yugoslavia: Development with Decentralization, Tables 3.1 and 3.2; National Bank of Yugoslavia, and staff estimates.

Table A.3: CURRENT ACCOUNT BALANCE OF PAYMENTS
 CONVERTIBLE CURRENCY AREA 1970-79
 (US\$ Millions)

	1970	1971	1972	1973	1974	1975	1976	1977	1978 <u>/1</u>	1979 <u>/1 /3</u>
<u>Goods and Services</u>										
Exports f.o.b.	1,033	1,053	1,381	1,895	2,380	2,555	3,191	3,603	3,833	4,766
Imports c.i.f.	<u>2,133</u>	<u>2,329</u>	<u>2,343</u>	<u>3,350</u>	<u>5,790</u>	<u>6,145</u>	<u>5,671</u>	<u>7,445</u>	<u>7,922</u>	<u>11,336</u>
Trade Balance	-1,100	-1,276	-962	-1,455	-3,410	-3,590	-2,480	-3,842	-4,089	-6,570
Services, receipts	1,090	1,503	1,913	2,748	3,260	3,745	4,093	4,545	5,096	..
Services, payments	<u>425</u>	<u>573</u>	<u>708</u>	<u>844</u>	<u>1,000</u>	<u>1,461</u>	<u>1,695</u>	<u>1,959</u>	<u>2,456</u>	..
Services, Balance	665	930	1,205	1,904	2,260	2,284	2,398	2,586	2,640	3,266
Transfers, net <u>/2</u>	61	64	74	87	110	-	-	-	-	-
Current Account Balance	<u>-374</u>	<u>-282</u>	<u>317</u>	<u>536</u>	<u>-1,040</u>	<u>-1,306</u>	<u>-82</u>	<u>-1,256</u>	<u>-1,449</u>	<u>-3,304</u>

/1 Preliminary.

/2 Transfers are reported as worker remittances and thus recorded under services after 1975.

/3 Please see footnote 3 to Table A.1.

Source: National Bank of Yugoslavia and staff estimates.

Table A.4: IMPORTS AND EXPORTS BY AREA, 1970-79
(US\$ Millions)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979 ^{1/}
Exports										
Developed Countries	940.8	961.4	1275.1	1597.7	1788.4	1465.9	2048.7	2101.6	2155.0	2990.6
USA	89.5	109.1	1503.3	232.6	315.7	264.6	353.0	296.8	371.0	
EEC	655.2	653.0	805.3	1027.1	1027.4	936.6	1317.1	1366.0	1305.4	
Italy	254.6	226.1	308.1	466.3	428.7	371.9	596	664.0	531.0	
Federal Republic of Germany	197.5	210.4	263.8	320.5	363.6	315.9	426	390.4	472.3	
Centrally Planned Economies	554.4	671.2	805.3	970	1560.0	1913.9	2048.8	2154.4	2381.8	2746.3
USSR	241.5	268.1	329.4	408.6	671.9	1012.4	1141.8	1138.4	1394.0	
Developing Countries	184.8	181.4	156.6	285.3	456.6	692.2	780.5	998.3	1134.2	1056.9
TOTAL	1680.0	1814.0	2237.0	2853.0	3805.0	4072.0	4878.0	5254.0	5671.0	6793.9
Imports										
Developed Countries	4165.2	2147.0	2097.6	2841.9	4600.6	4695.2	4051.9	5391.4	5593.3	8530.2
USA	160.2	202.5	198.5	186.7	354.3	417.4	369.8	545.5	615.8	
EEC	1322.0	1431.3	1419.9	1894.6	3016.8	3155.8	2873.1	3853.6	3815.6	
Italy	378	396.3	400.0	530.7	890.6	868.9	760.4	1029.4	827.3	
Federal Republic of Germany	567.2	616.8	604.2	856.3	1360.4	1437.4	1232.7	1571.5	1802.0	
Centrally Planned Economies	603.5	780.7	806.8	1127.8	1734.7	1924.2	2136.4	2697.5	2996.4	3565.5
USSR	193.2	281.3	283.0	406.8	751.8	806.6	1002.0	1301.0	1374.5	
Developing Countries	287.3	325.3	322.6	341.3	1206.7	1077.6	1178.7	1445.1	1398.3	1923.2
TOTAL	2874.0	3253.0	3227.0	4511.0	7520.0	7697.0	7367.0	9634.0	9988.0	14018.9

1/ Preliminary.

Source: Statistical Yearbook of Yugoslavia 1975 and 1979, Table 121.11, Indeks.

**Table A.5: COMPOSITION OF EXPORTS
BY END-USE 1970-79**

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979 ^{1/}
<u>Value (US\$ Millions)</u>										
Raw Materials and Semimanufactures	880	903	1,132	1,514	2,276	2,156	2,589	2,667	2,809	3,627
Capital Goods	242	269	316	389	514	695	826	1,080	1,132	1,156
Consumer Goods	557	642	789	950	1,015	1,221	1,463	1,509	1,730	2,011
Total	1,679	1,814	2,237	2,853	3,805	4,072	4,878	5,256	5,671	6,794
<u>Volume Index (1970=100)</u>										
Raw Materials and Semimanufactures	100	102	125	140	142	128	152	144	144	157
Capital Goods	100	95	104	110	124	128	139	135	114	107
Consumer Goods	100	110	121	120	114	128	143	136	150	154
Total	100	103	120	129	130	128	147	140	138	144
<u>Dollar Unit Value Index (1970=100)</u>										
Raw Materials and Semimanufactures	100	101	103	123	182	191	193	210	221	263
Capital Goods	100	117	126	146	171	224	246	330	409	446
Consumer Goods	100	105	117	142	160	171	183	199	207	234
Total	100	105	111	132	174	190	198	224	244	281

Source: Statistical Yearbook of Yugoslavia, 1975 and 1979.

^{1/} 1979 volume indices calculated from unit value and gross value data. 1979 data preliminary.

Table A.6: COMPOSITION OF IMPORTS
BY END-USE 1970-79

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979 ^{1/}
<u>Value (US\$ Million)</u>										
Raw Materials and Semimanufactures	1,817	2,071	2,042	2,809	5,243	5,052	4,697	5,989	6,325	8,935
Capital Goods	614	682	688	1,004	1,305	1,887	1,759	2,436	2,565	3,572
Consumer Goods	<u>443</u>	<u>499</u>	<u>502</u>	<u>698</u>	<u>972</u>	<u>758</u>	<u>911</u>	<u>1,208</u>	<u>1,065</u>	<u>1,512</u>
Total	2,874	3,252	3,232	4,511	7,520	7,697	7,367	9,633	9,988	14,019
<u>Volume Index (1970=100)</u>										
Raw Materials and Semimanufactures	100	112	107	122	140	132	122	142	147	171
Capital Goods	100	101	89	115	125	158	137	148	135	162
Consumer Goods	<u>100</u>	<u>112</u>	<u>111</u>	<u>114</u>	<u>135</u>	<u>88</u>	<u>111</u>	<u>138</u>	<u>123</u>	<u>159</u>
Total	100	109	102	120	137	133	124	142	140	165
<u>Dollar Unit Value (1970=100)</u>										
Raw Materials and Semimanufactures	100	102	105	127	206	210	212	231	236	288
Capital Goods	100	110	126	142	170	195	209	268	308	360
Consumer Goods	<u>100</u>	<u>101</u>	<u>102</u>	<u>138</u>	<u>163</u>	<u>194</u>	<u>184</u>	<u>197</u>	<u>201</u>	<u>215</u>
Total	100	104	110	131	191	201	207	236	248	295

Source: Statistical Yearbook of Yugoslavia 1975 and 1978, Indeks.

^{1/} 1979 volume indices calculated from unit value and gross value data. 1979 data preliminary.

**Table A.7: EXPORTS ACCORDING TO SITC
CLASSIFICATION 1970-79
(US\$ Millions)**

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	
Code	SITC Classification										
0	Food	255.6	257.0	333.9	398.8	333.5	374.7	499.1	506.1	564.7	572.3
1	Beverages and Tobacco	58.4	61.7	57.8	60.2	78.6	103.6	119.3	100.7	122.7	143.8
2	Inedible Materials	157.6	148.4	184.4	274.6	360.1	282.3	429.1	510.4	450.5	618.8
3	Mineral Fuels	20.3	19.8	17.8	21.8	40.8	30.0	48.5	154.8	149.1	204.3
4	Animal and Vegetable Oils	2.2	4.2	1.2	2.8	7.9	1.5	3.0	5.0	16.5	48.8
5	Chemicals	97.1	129.2	142.9	176.3	383.7	379.4	353.4	331.3	469.3	636.2
6	Manufactures Classified by Materials	491.6	493.9	603.1	813.9	1,244.7	1,180.5	1,336.8	1,204.3	1,258.5	1,605.9
7	Machinery and Transport Equipment	381.2	444.6	546.6	704.5	882.8	1,141.5	1,363.2	1,677.5	1,802.5	2,014.4
8	Miscellaneous Manufactures	215.0	255.2	349.3	401.1	472.3	578.5	725.6	766.6	799.1	924.5
	Unclassified	0	0	0	0	0	0	0	-2.0	38.1	20.9
	Total	1,680.0	1,814.0	2,237.0	2,853.0	3,805.0	4,072.0	4,878.0	5,254.0	5,671.0	6,793.9

1/ Preliminary.

Source: Statistical Yearbook of Yugoslavia 1975 and 1979; Indeks

Table A.8: IMPORTS ACCORDING TO SITC
CLASSIFICATION 1970-79
(US\$ Millions)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
<u>Code</u> <u>SITC Classification</u>										
0 Food	200.6	289.6	301.8	499.8	656.1	392.6	624.2	767.0	589.4	950.4
1 Beverages and Tobacco	6.5	6.6	7.0	8.2	9.9	27.0	13.1	17.1	15.3	26.9
2 Inedible Materials	313.7	311.7	336.2	485.9	1,004.3	738.7	693.4	940.3	994.8	1,204.9
3 Mineral Fuels	138.3	192.6	175.8	385.4	951.1	943.0	1,080.7	1,295.3	1,431.6	2,248.0
4 Animal and Vegetable Oils	19.7	48.6	42.1	21.6	53.6	104.7	61.5	47.4	32.7	33.3
5 Chemicals	266.6	297.3	348.8	450.0	811.0	833.9	790.6	962.2	1,139.6	1,653.0
6 Manufactures Classified by Materials	826.8	916.4	844.3	1,080.7	1,783.0	1,747.3	1,364.2	1,763.1	1,697.9	2,242.6
7 Machinery and Transport Equipment	955.5	1,017.6	1,018.6	1,415.3	1,958.7	2,615.1	2,483.2	3,393.9	3,634.4	5,031.5
8 Miscellaneous Manufactures	146.3	172.6	152.4	191.4	292.1	294.7	258.1	420.1	429.2	605.7
Unclassified	0	0	0	0	0	0	0	0	0	22.7
Total	2,874.0	3,253.0	3,227.0	4,511.0	7,520.0	7,697.0	7,367.0	9,634.0	9,988.0	14,018.9

Source: Statistical Yearbook of Yugoslavia 1975 and 1979, Indeks.

**Table A.9: EXPORT AND IMPORT DOLLAR UNIT VALUE INDICES
ACCORDING TO SITC CLASSIFICATION, 1970-78
(1976=100)**

	1970	1971	1972	1973	1974	1975	1976	1977	1978
SITC Classification									
<u>Exports</u>									
Food	52	54	62	81	79	82	100	106	111
Beverages and Tobacco	55	54	61	64	74	89	100	94	96
Inedible Materials	43	48	50	63	93	91	100	114	112
Mineral Fuels	36	39	40	31	88	95	100	122	128
Animal and Vegetable Oil	..	..	..	..	..	..	..	..	..
Chemicals	49	51	53	56	104	107	100	100	101
Manufactures Classified by Materials	57	56	57	67	101	105	100	108	109
Machinery and Transport Equipment	46	52	54	63	74	92	100	123	149
Miscellaneous Manu- factures	52	56	62	73	87	95	100	114	123
Total	50	52	56	67	88	96	100	113	124
<u>Imports</u>									
Food	54	55	55	78	90	96	100	118	120
Beverages and Tobacco	..	..	..	..	..	..	..	..	..
Inedible Materials	50	48	52	65	104	104	100	108	94
Mineral Fuels	19	25	25	33	92	96	100	107	106
Animal and Vegetable Oil	73	73	67	68	137	145	100	110	107
Chemicals	58	57	59	69	101	103	100	104	107
Manufactures Classified by Materials	57	55	56	65	91	101	100	106	113
Machinery and Transport Equipment	50	55	62	70	82	91	100	125	138
Miscellaneous Manu- factures	55	60	66	74	88	96	100	116	116
Total	48	50	53	63	92	97	100	114	119

.. Not Available.

Source: Statistical Yearbook of Yugoslavia 1977 and 1979, Table 121.4.