

CURRENCY EQUIVALENTS a/

Unit of Currency: Lev (Pl.: Leva; Lvs)

Exchange Rate: Leva per US Dollar

<u>Period</u>	<u>Period Average</u>			<u>End of Period</u>		
	Official	Commercial/ Premium	Non- Commercial	Official	Commercial/ Premium	Non- Commercial
1970	1.17	-	-	1.17	-	-
1975	0.97	1.65	1.20	0.96	1.64	1.19
1980	0.86	0.99	1.29	0.88	1.01	1.31
1985	1.03	1.19	1.86	1.00	1.15	1.80
1986	0.94	1.42	1.70	0.90	1.35	1.62
1987	0.87	1.30	1.28	0.83	1.24	1.24
1988	0.83	1.67	1.67	0.83	1.64	1.64
1989	0.84	1.82	1.82	0.81	2.02	2.02

Source: National Bank of Bulgaria and Bulgarian Foreign Trade Bank.

a/ The system of exchange rates was substantially reformed on May 2, 1990 when Decree 32 became effective. As of June 1990, Three exchange rates were prevailing: (i) a basic rate (US\$1 = Leva 2.97); (ii) a market rate determined at an auction (US\$1 = Leva 7.06); and (iii) a rate for cash transactions (US\$1 = Leva 7.17).

Report No. 9046-BUL

# Bulgaria

## Crisis and Transition to a Market Economy

(In Two Volumes) Volume I

January 23, 1991

Country Department IV

Europe, Middle East, and North Africa Region

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**BULGARIA**

**CRISIS AND TRANSITION TO A MARKET ECONOMY**

(In Two Volumes)

**Volume I**

**January 23, 1991**

Operations Department IV  
Middle East and North Africa Region

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## GLOSSARY OF ABBREVIATIONS

AIC	Agro-industrial Complexes
CC	Convertible Currency
CHP	Combined heat and power
CMEA	Council of Mutual Economic Assistance
COLSS	Committee on Labor and Social Safety
CSO	Central Statistical Office
FTB	Foreign Trade Bank
FTO	Foreign Trade Organization
GDI	Gross Domestic Investment
GJ	Gigajoule
IBEC	International Bank for Economic Co-operation
IEA	International Energy Agency
JSC	Joint Stock Company
k.o.e.	Kilograms oil equivalent
MOE	Ministry of Environment
MOF	Ministry of Finance
MPC	Municipal People's Council
NBB	National Bank of Bulgaria
NMP	Net Material Product
NPC	Nominal Protection Coefficients
PTRF	Professional Training and Retraining Fund
SICF	State Investment Council Fund
SPA	State Property Agency
SSB	State Savings Bank
TR	Transferable Ruble

COUNTRY DATA - BULGARIA

GDP per capita in US\$ in 1989 <sup>1/</sup>	2,320
<b>General <sup>2/</sup></b>	
Area (sq. km)	111,800
Population (thousands)	8,989
Growth Rate (percent)	0.1
Density (per sq. km)	80
<b>Social Indicators <sup>2/</sup></b>	
<b>Population Characteristics</b>	
Crude Birth Rate (per 1,000)	13.0
Crude Death Rate (per 1,000)	12.0
<b>Health</b>	
Infant Mortality Rate	14.0
Population per Physician	319
Population per Hospital Bed	100
<b>Income Distribution (% of national income)</b>	
Highest Quintile	NA
Lowest Quintile	NA
<b>Distribution of Land Ownership</b>	
% Owned by Top 10% of Owners	NA
% Owned by Smallest 10%	NA
<b>Access to Safe Water <sup>2/</sup></b>	
% of Urban Population	NA
% of Rural Population	NA
<b>Access to Electricity</b>	
% of Urban Population	NA
% of Rural Population	NA
<b>Nutrition</b>	
Calories per Day	3,593
Per Capita Protein Intake (grams per day)	NA
<b>Education</b>	
Primary School Enrollment (% of relevant age group)	96.0
Secondary School Enrollment	93.0
Colleges, Universities, Specialized Schools	40.0

<sup>1/</sup> Converted at commercial exchange rate. This estimate will be revised significantly (downward) when 1990 data are incorporated and the exchange rate adjusts to an equilibrium level.

<sup>2/</sup> Refers to most recent year (in most cases 1989). Based on data from the Bulgarian authorities.

**GROSS DOMESTIC PRODUCT**

	Current Prices (Million Leva)			Real Growth Rates (% p.a.)				
	1980	1985	(Est) 1989	1980/1985/		1987	1988	1989
				1985	1989			
<b>GDP (Market prices)</b>	<b>25791</b>	<b>32595</b>	<b>39475</b>	<b>3.3</b>	<b>2.8</b>	<b>6.1</b>	<b>2.6</b>	<b>-1.4</b>
<b>Total Consumption</b>	17506	22788	27999	3.6	2.6	4.5	2.2	2.5
Private	16049	20031	25129	3.2	2.3	4.0	2.4	2.6
General Government	1457	2757	2870	6.9	4.8	7.5	1.0	2.5
<b>Gross Domestic Investment</b>	8768	10495	12701	3.3	4.5	-2.5	10.0	-4.5
Fixed Investment	7289	8613	10285	3.4	4.5	5.7	4.5	0.2
Change in Stocks	1478	1882	2416	3.0	4.5	-28.4	35.8	-21.6

Source: C.S.O. and staff estimates

**OUTPUT, EMPLOYMENT, AND PRODUCTIVITY**

	GDP in 1989		Employment 1/ in 1989		GDP per worker	
	Leva Mln	% of Total	Thousands	% of Total	Leva	% of Average
Agriculture 2/	4,457	11.3	814	18.6	5,475.4	60.5
Industry 3/	23,432	59.4	2,006	45.9	11,680.9	129.2
Other	11,586	29.3	1,555	35.5	7,450.8	82.4
Total/Average	39,475	100.0	4,365	100.0	9,043.5	100.0

1/ Central Statistical Office

2/ Including Forestry

3/ Including Construction

**GOVERNMENT FINANCE**

	Consolidated General Government 1/			Consolidated State Budget 2/		
	Lv. Mln	% of GDP		Lv. Mln	% of GDP	
	1989	1989	1985	1989	1989	1985
Total Revenues	22,975	58.5	54.1	22,912	58.0	54.1
Total Expenditures	24,304	61.9	55.2	23,137	58.8	55.2
Overall Balance	-1,328	-3.4	-1.1	-225	-0.8	-1.1
Current Expenditures	20,973	53.4	47.4	20,973	53.4	47.4
Capital Expenditures including Net Lending	3,330	8.5	7.8	2,164	5.5	7.8

1/ Comprising of the state budget and State Investment Credit Fund (SICF)

2/ Comprising Republican budget, Budget of Organs of State Management, Regional and Municipal People's Councils, and social security.

**MONEY, CREDIT, AND PRICES**

	1987	1988	1989	September 1990
	----- (Millions of Leva) -----			
Money Supply 1/	29,784	33,101	38,051	39,778
Net Credit to Government 2/	3.3%	6.1%	2.9%	12.0%
Credit to Enterprises and Households	11.1%	7.0%	8.6%	-0.2%

(percentage or index numbers)

Money and Quasi-Money as % of GDP	101.3	106.3	113.2	NA
Consumer Price Index for Goods and Services (1980=100)	100.1	101.2	NA	NA

Annual percentage changes in:

Consumer Price Index for Goods & Services	-3.6	1.1	NA	NA
---	------	-----	----	----

1/ Currency and demand deposits from the monetary survey.

2/ As a percent of broad money, beginning of period.

## BALANCE OF PAYMENTS IN CONVERTIBLE CURRENCIES (in millions US\$)

	1980	1985	1986	1987	1988	1989
<b>1. Current account</b>	<b>907.0</b>	<b>-85.0</b>	<b>-715.0</b>	<b>-773.0</b>	<b>-840.0</b>	<b>-1306.0</b>
Merchandise exports fob	3338.0	3307.0	2656.0	3277.0	3539.0	3138.0
Merchandise imports fob	2532.0	3694.0	3488.0	4232.0	4311.0	4337.0
Services, net	43.0	232.0	56.0	96.0	54.0	-170.0
Receipts	857.0	730.0	651.0	768.0	849.0	908.0
Payments	814.0	498.0	595.0	672.0	795.0	1078.0
Non-interest curr. acct.	1301.0	-56.0	-567.0	-523.0	-477.0	-751.0
Interest, net	-394.0	-26.0	-128.0	-250.0	-363.0	-355.0
Transfers net	56.0	70.0	61.0	66.0	76.0	63.0
Receipts	75.0	90.0	60.0	137.0	155.0	125.0
Payments	17.0	20.0	19.0	51.0	77.0	62.0
<b>2. Capital Account</b>	<b>-716.0</b>	<b>-90.0</b>	<b>228.0</b>	<b>440.0</b>	<b>1882.0</b>	<b>296.0</b>
Med. & LT loans drawn, net	-280.0	495.0	664.0	553.0	2139.0	712.0
Disbursement	1172.0	1981.0	3131.0	2798.0	4225.0	3042.0
Amortization	1452.0	1466.0	2467.0	2243.0	2086.0	2330.0
Loans extended to Developing countries, net	-128.0	-305.0	-436.0	-442.0	-445.0	-187.0
Disbursement	194.0	457.0	558.0	633.0	551.0	217.0
Amortization paid	65.0	152.0	120.0	191.0	106.0	50.0
2b. Short-term debt, net	-347.0	-280.0	0.0	329.0	168.0	51.0
Change in foreign assets		-23.0	-18.0	14.0	-86.0	-74.0
<b>3. Errors &amp; omissions</b>	<b>84.0</b>	<b>473.0</b>	<b>-388.0</b>	<b>-184.0</b>	<b>-385.0</b>	<b>276.0</b>
Overall balance (1+2+3)	235.0	286.0	-865.0	-487.0	657.0	-434.0
<b>Financing</b>	<b>-235.0</b>	<b>-286.0</b>	<b>865.0</b>	<b>487.0</b>	<b>-657.0</b>	<b>434.0</b>
Reserve Valuation adjust.		125.0	237.0	165.0	-62.0	4.0
Change in reser. (- inc.)	-235.0	-423.0	628.0	732.0	-595.0	430.0

Source: Foreign Trade Bank and IMF/World Bank staff estimates.

## BALANCE OF PAYMENTS IN NON-CONVERTIBLE CURRENCIES (in transferable rubles)

	1980	1985	1986	1987	1988	1989
<b>1. Current Account</b>	<b>46.0</b>	<b>-62.0</b>	<b>-320.0</b>	<b>62.0</b>	<b>696.0</b>	<b>933.0</b>
Exports of Goods, fob	4706.0	8338.0	8393.0	8692.0	9135.0	8692.0
Imports of Goods, fob	4664.0	8478.0	8668.0	8762.0	8553.0	8013.0
Services, net	204.4	74.0	147.0	105.0	74.0	29.0
Receipts	490.0	567.0	602.0	623.0	664.0	767.0
Payments	286.0	493.0	455.0	518.0	590.0	738.0
Non-interest cur. acct.	64.0	19.0	-274.0	141.0	801.0	998.0
Interest, net	-18.0	-81.0	-46.0	-79.0	-105.0	-65.0
Transfers net	0.0	4.0	8.0	27.0	40.0	25.0
Receipts	5.0	10.0	12.0	30.0	44.0	31.0
Payments	5.0	6.0	4.0	3.0	4.0	6.0
<b>2. Capital Account</b>	<b>-113.0</b>	<b>-66.0</b>	<b>246.0</b>	<b>43.0</b>	<b>-619.0</b>	<b>-674.0</b>
Med. & LT loans drawn, net	-112.0	17.0	531.0	-205.0	-293.0	-327.0
Disbursement	29.0	513.0	665.0	170.0	98.0	121.0
Amortization	141.0	496.0	134.0	375.0	391.0	448.0
Loans extended to Developing countries, net	-1.0	-22.0	-33.0	-17.0	-12.0	-110.0
Disbursement	37.0	33.0	38.0	22.0	20.0	118.0
Amortization paid	36.0	11.0	5.0	5.0	8.0	8.0
Short-term capital, net	0.0	-83.0	-250.0	265.0	-314.0	-437.0
<b>3. Errors &amp; omissions</b>	<b>96.0</b>	<b>130.0</b>	<b>73.0</b>	<b>-105.0</b>	<b>-77.0</b>	<b>-60.0</b>
Overall balance (1+2+3)	1.0	0.0	1.0	0.0	0.0	-1.0

Source: Foreign Trade Bank and IMF/World Bank staff estimates.

**MERCHANDISE EXPORTS (1989)**

To All Countries	Value <sup>1/</sup> (US\$ Mln.)	% of Total
Foodstuffs	917.7	11.1
Fuel, Mineral Resources, and Metals	1,207.9	14.6
Other Intermediate	4,120.0	49.8
Manufactured Goods and Other Exports	2,033.0	24.6
Merchandise Exports	8,277.9	100.0

<sup>1/</sup> Estimate of consolidated exports (i.e., convertible and non-convertible) in millions of US\$

**RATE OF EXCHANGE**

		Annual Averages			
		1986	1987	1988	1989
Leva 1.00 = US\$	Commercial	0.704	0.770	0.599	0.549
US \$1.00 = Leva	Commercial	1.420	1.300	1.670	1.820

**EXTERNAL DEBT, 1989**

		Millions of US\$
External Debt, December 31, 1989		
Debt in Convertible Currencies		9,201.0
of which:		
Medium- and long-term		5,220.0
L/Cs and Trade Financing		3,127.0
Short-term		854.0
Debt Service Ratio <sup>1/</sup>		
Debt in Convertible Currencies		74.4

<sup>1/</sup> Interest payments and medium- and long-term principal repayments as a percent of exports of goods and services in convertible currencies.



## PREFACE

Bulgaria became a member of the World Bank on September 25, 1990. A World Bank economic mission visited Bulgaria from June 27 to July 13, 1990. This study represents the work of this mission. The mission wishes to thank the Bulgarian authorities, and in particular the National Bank of Bulgaria, for their support and co-operation in providing information and data on the Bulgarian economy which were used in this study. The study was discussed with the Bulgarian authorities in a subsequent mission in November 1990 and revised in light of their comments.

The study presents the first comprehensive review of the Bulgarian economy prepared by the World Bank. It analyzes Bulgaria's problems, policies, and economic prospects at the time of membership. It is divided into two volumes. Volume I focuses on the overall economic structure, the macroeconomic situation, and the needs for reform of the economic system. Volume II contains detailed discussion of individual sectors.

The composition of the economic mission and the principal responsibilities of its members were as follows:

Constantine Michalopoulos, Mission Leader; John Wilton, Deputy Mission Leader; David Craig, Team Leader, Energy; Oscar de Bruyn Kops, Team Leader, Industry; Ralph Harbison, Team Leader, Social Sectors; Millard Long, Team Leader, Finance; Boris Blaznic-Metzner, National Accounts; Michel Bouchet, Debt; Charles Benson, Consultant/Education; Azita Dastghieb, Researcher/Consultant; Hans Fuchs, Consultant/Industry; Louise Fox, Labor Markets & Social Security; Pierre Guislain, Legal Framework; Robert Hunt, Agriculture; Gordon Hughes, Consultant/Energy; Mohua Mukherjee, Debt; Helena Ribe, Poverty; Fernando Saldanha, Fiscal; Martin Schrenk, Trade; Andres Solimano, Macro-Framework; Shamsher Singh, Finance; Helena Vitanov, Secretary.

Volume I of the study was prepared by Costas Michalopoulos and John Wilton based on contributions from mission members. The authors of the individual chapters of Volume II are noted in that volume. Assistance to the mission's work in Washington was provided by Anita Brassart. Yolanda Litan Gedse and Karin Gill with the assistance of Mary McCormack were responsible for document preparation.

BULGARIA: CRISIS AND TRANSITION TO A MARKET ECONOMY

(in two volumes)

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## VOLUME I

### EXECUTIVE SUMMARY

(i) Bulgaria's economy is in the midst of a fundamental transition from a centrally planned system to a market oriented one. It is also engulfed in a major crisis: preliminary estimates indicate that output declined by at least 10 percent in 1990, and the annual rate of inflation may be in excess of 40 percent and is accelerating.

(ii) Bulgaria is one of the smaller countries in Europe in terms of area (43,000 square miles) and population (9.0 million). It emerged from World War II with an economy primarily based on private agriculture, supported by a relatively small industrial sector. The new Communist Government established a strongly centralized economic system that accorded priority to expanding production in the newly nationalized industrial sector. The strategy succeeded in producing high rates of economic growth, which averaged, according to official statistics, 7 to 8 percent per annum over the next two decades, and in transforming Bulgaria into an industrial economy with the share of industry in GDP exceeding 50 percent.

(iii) In the 1970s, however, a number of long term economic problems, common to all centrally planned economies, began to surface and form the backdrop to the current economic crisis: the pace of technological change slowed down; distorted product and factor prices resulted in misallocation of resources and environmental degradation; and the strong trade links with the CMEA countries, while providing a ready market for Bulgaria's growing manufacturing sector, also insulated the economy from international competition. During the 1980s, economic growth slowed markedly, with the official statistics showing the first decline in GDP in 1989. Investment has declined precipitously since 1987. Between 1986 and 1989, the balance of payments was characterized by a current account surplus with the USSR and a persistent and increasing deficit with convertible currency countries. To finance this deficit, convertible currency debt, predominantly to commercial banks, grew from US\$3.2 billion in 1985 to US\$9.2 billion in 1989.

(iv) In November 1989, rapid and momentous political changes started to take place. Todor Zhivkov, who had been in power since 1956, was removed from office; and Petar Mladenov, the former Minister of Foreign Affairs, took control of the State Council. In January 1990, the monopoly position of the Communist Party was abolished; and shortly afterward, its name changed to the Bulgarian Socialist Party. In February, an interim Government was formed with Andrey Loukanov, a Socialist, as Prime Minister. It was charged with running the country until the first free, multi-party general elections could be held in June. Following these elections, the Socialist party and Mr. Loukanov received the mandate to form a new Government, which, after protracted negotiations with the opposition, was announced on September 20, 1990. After failing to get a political consensus to back the Government's reform program and in the midst of a national strike, Mr. Loukanov offered his resignation on November 30, and Mr. Popov became Prime Minister of a new coalition Government, which was approved by the National Assembly on December 20, 1990.

(v) The long term problems of the Bulgarian economy, adverse external developments, and the domestic social and political changes contributed to a severe worsening of the economic situation during 1990. On the domestic side, the fiscal deficit may widen from a planned level of 2.5 percent of GDP to levels in excess of 5 to 6 percent while real interest rates have remained negative by a significant and increasing amount. On the external side, a heavy bunching of scheduled foreign debt payments, significant drawdown in foreign exchange reserves, and a fall in exports have resulted in a drastic cutback in imports with adverse effects on output. The Government announced a moratorium on principal payments of the Foreign Trade Bank on March 29, 1990. Subsequent discussions with the commercial banks led to an extension of the moratorium of principal and the suspension of interest payments until the end of 1990; but in parallel, new commercial bank credits as well as trade lines have been stopped. The Gulf crisis has exacerbated the external problem, as Bulgaria was partially dependent on imports of oil from Iraq. These developments, in particular the severe scarcity of foreign exchange and reductions in the supply of imported inputs, including energy, are the main reasons for the expected decline in GDP by at least 10 percent during 1990.

(vi) The political changes have led to the desire to fundamentally reorient economic policy. A strong consensus in support of reforms aimed at establishing a market economy has emerged: the state orders that guided enterprise operations have been abolished; restrictions on the establishment of enterprises and limits on the number of employees that can be hired have been eliminated; the rights of private ownership have been restored; and the prices of some commodities have been liberalized. In addition, many laws designed to fundamentally change the incentive/regulatory framework have been drafted. The authorities have submitted this body of legislation for consideration by the legislature, and work is in progress on a number of additional laws needed to establish a market framework.

(vii) In response to the worsening external situation, the Government also initiated an exchange rate reform and devaluation in the spring of 1990. But few additional steps have been taken to address the worsening macroeconomic imbalances, and the prolonged political negotiations following the June elections stalled the momentum of market reforms. The new Government will have to face some daunting challenges: it needs to address urgently the worsening macroeconomic imbalances and inflation. In the absence of drastic adjustment in fiscal, monetary and wage policies, the country could easily slip into hyper-inflation. At the same time, the Government needs to pursue vigorously the implementation of massive systemic reforms. At present, there is confusion in the economy as the old, centrally planned system has been abandoned, but the new market institutions are not yet in place. Moreover, all these reforms have to be implemented while the external environment is worsening. In addition to the Gulf crisis and the virtual cessation of commercial bank lending, the CMEA countries, Bulgaria's main trading partners, will institute new trade and payment arrangements in 1991, which will result in significant terms of trade losses for Bulgaria.

(viii) Timely action by the Government can, however, restore macroeconomic balances and prevent run-away inflation. Moreover, systemic



reforms which establish the institutions and incentives for the operation of competitive product and factor markets hold promise for early restoration of output and income growth. Bulgaria has a well trained labor force, and its overall performance in terms of social indicators such as life expectancy at birth, infant mortality, and adult literacy rates is among the highest in Eastern Europe. The potential growth of productivity and exports in some sectors of industry and agriculture is substantial. In addition, the severity of the problems it faces in sectors such as housing and the environment is not as great as in other reforming countries of Eastern Europe. These factors suggest that, while the present situation is very difficult, vigorous reform efforts by the Government combined with support from the international community can restore economic viability and growth.

### Macroeconomic Issues

- (ix) A stable macroeconomic environment is an essential precondition for Bulgaria's successful transition to a market economy. There are two main challenges to restoring and maintaining macroeconomic equilibrium:
- (x) First, how to strengthen the balance of payments position and relieve the foreign exchange constraint that severely limits economic activity. This will be a major challenge because a significant proportion of Bulgaria's existing exports are not likely to be competitive in convertible currency markets in the near-term. Future export prospects to the CMEA markets themselves are highly uncertain, but it is quite likely that, starting in 1991, the establishment of new trade and payments arrangements within the CMEA will result in a significant terms of trade deterioration for Bulgaria. It is estimated by the authorities that the resulting loss will amount to \$2.2 to \$2.5 billion or 11 to 12 percent of 1989 GDP. These problems will be compounded by the lack of financing to buy oil previously obtained through a bilateral agreement from Iraq, partly in repayment of the latter's debt.
- (xi) Second, how to reduce inflation while at the same time liberalizing prices in order to provide appropriate incentives to enterprises in the productive sectors. Such incentives are essential to improve resource allocation, stimulate a supply response, especially for exports, and restore long-term output growth. However, in the present context of an emerging large budget deficit, negative real interest rates, repressed inflation, and considerable liquidity in the hands of the public, price liberalization could easily lead to runaway inflation unless accompanied by significant reforms in Bulgaria's fiscal, monetary, and wage policies.
- (xii) In order to deal with the balance of payments problems, action is needed in three broad areas: First, it is necessary to implement policies which will encourage exports. Second, it is desirable to explore approaches which can ease the adjustment as well as the terms of trade shock that will result from changes in the arrangements governing trade and payments with CMEA countries, and especially with the USSR. Third, it is important to regularize relations with external creditor in order to restore trade financing and other capital inflows. While care needs to be exercised as to how much additional external debt is incurred, it is clear that the pace of the

adjustment required will depend on the amount and terms of the financing that can be secured.

(xiii) To stimulate exports in convertible currency markets and to promote the long-term restructuring of the economy along lines of comparative advantage, it is necessary to modify the existing exchange rate policy. The present system creates inefficiencies and distortions and should be substituted at the earliest possible opportunity with a unified exchange rate, at least for current account transactions, and an exchange rate policy designed to maintain the competitiveness of Bulgarian exports. Such a policy is a necessary but not sufficient condition for strengthening Bulgaria's export performance. It should be supplemented by actions to improve product quality, to reorient production to meet international standards, as well as to improve marketing.

(xiv) Negotiations for new CMEA arrangements are still in progress. It appears, however, certain that, under the new arrangements, trade among these countries would be conducted at international prices and a proportion of the resulting balances (yet to be agreed) will be settled in convertible currencies. Moving to trade arrangements which are based on international prices as well as toward greater currency convertibility is obviously beneficial to the long term improvement of resource allocation and productivity in Bulgaria. To minimize the resulting deterioration in the external account, it would be desirable to reduce the volume of imports payable in hard currency from CMEA markets to essential inputs and raw materials. It also appears essential to try to secure commitments on a volume of manufactured exports which could be retained, on a temporary basis, in bilateral clearing so as to obviate the need for significant payments in convertible currency while at the same time encouraging direct firm to firm contacts in the USSR and other markets.

(xv) At present, foreign commercial banks are unwilling to extend "new money," short term trade credits to the FTB have virtually dried up, and other Bulgarian commercial banks, while continuing to service their external liabilities, have experienced a hardening of terms and conditions extended by foreign commercial creditors. This situation has resulted in severe shortages of foreign exchange as Bulgaria has lost its main source of external financing. An urgent priority is to try to re-open trade credit lines. The development of a well-coordinated finance and debt management strategy is an essential ingredient in an effective balance of payments adjustment and is urgently needed for the normalization of relations with the commercial banks and other creditors. Such a strategy should be linked to a sound, consistent, and comprehensive macroeconomic framework and implemented in a well-coordinated way under the leadership of one of the several institutions now active in the formulation of Bulgaria's debt policy.

(xvi) Restoring macroeconomic stability, especially in light of the need to undertake market reforms and price liberalization, requires drastic action to curtail the fiscal deficit. The original 1990 Consolidated General Government deficit would have amounted to lv. 1076 million, about 2.5 percent of GDP. A revised budget with an estimated deficit of 3.7 percent of GDP was approved by Parliament during December. It is unclear at this juncture what

the actual fiscal outcome for 1990 will be. A number of factors which cannot be readily quantified suggest an even greater deterioration in the deficit than that envisaged in the revised budget. For example, the severe output contraction in 1990 should have a strong adverse impact on Profit and Turnover tax revenues. Furthermore, a new problem is emerging in the form of a large quasi-fiscal budget deficit amounting to between 4 and 5 percent of GDP as a consequence of the provision of credit at negative real rates of interest to the enterprise sector.

(xvii) A variety of measures need to be considered to improve the fiscal situation. The Government has stated its intention to revamp the public revenue system through a tax reform to be initiated in the future. The results of such a reform will take time to materialize. In the meantime, it is necessary to take urgent steps to address the currently deteriorating fiscal situation. A key area that should be targeted for reduction is producer subsidies which in 1990 amounted to over 9 percent of GDP. An effort should also be made to reduce consumer subsidies (1.4 percent of GDP) by the redesign and better targeting of social support programs for the poor.

(xviii) Investment is one area of expenditures where cuts should be moderated. In 1990, the public investment budget was cut to very low levels and amounted to only 6 percent of GDP. Further cuts would undermine future recovery. At the same time, the overall budget stringency requires a careful evaluation of ongoing projects and the reduction of expenditures in activities where the cost benefit ratio is too high.

(xix) Parallel action is needed to tighten monetary policy. The present level of interest rates, both on deposits and credits, is too low and negative in real terms. The authorities had originally intended to increase the basic rate for refinancing the banks by NBB from 4.5 percent to 8 percent. These increases in interest rates may have been appropriate earlier in 1990, but they are too small at present and will leave rates negative in real terms. The NBB should be prepared to make larger adjustments depending on expected inflation levels and developments in the budget and enterprise sectors. At the same time, subsidized credit for specific sectors or activities should be kept to a minimum; to the extent that they exist, for example in order to promote private agriculture, the rates charged should be kept near to rates on non-subsidized credits and should vary with the basic interest rate set by the NBB.

(xx) Under the present circumstances, bank-by-bank credit ceilings are probably the most effective instrument for implementing monetary policy. It should be recognized, however, that credit ceilings tend to create distortions and obstacles to competition in banking. Over the medium-term, the NBB should move to a system of indirect monetary control based on reserve requirements, limits to central bank lending to other banks and to the Government, and interventions in the interbank market.

(xxi) Finally, the Government should consider approaches that would reduce the velocity of the money stock held in liquid balances by the population. This could be promoted through incentives that would induce the public to use liquid balances to, for example, buy housing owned at present by

the municipalities, to obtain shares of enterprises that are privatized, or to purchase longer-term bonds.

(xxii) The Loukanov Government had also agreed with the Trade Unions on measures to offset the impact of price increases on wage earners. A particular wage indexation approach was to have been implemented until the end of 1990 which called for immediate adjustment to individual wage earners, but on a cascading basis (i.e., with full adjustment for only the lowest wages, but with an expected average adjustment of 80 to 90 percent based on the current distribution of wages), once the price level had risen by 10 percent. As the income brackets were not themselves indexed, such a scheme tended to compress further an already compressed wage structure. Were the brackets also to be indexed, this would provide a stimulus for a damaging wage-price spiral. This indexation scheme was implemented briefly, but was suspended by end-December 1990. Indexing is not appropriate, as experience indicates that it can be a difficult precedent to contain or reverse. The Government should not guarantee individual wages through full (or close to full) indexation even at the lowest wage levels as this would impede the process of adjustment significantly. The objective of moving towards market determined prices is to adjust relative prices (including the price of labor) so that prices more accurately reflect the real opportunity cost of resources. Consequently, the greater the continued reliance on subsidies and/or wage indexation, the slower this adjustment will occur. The costs of a slow adjustment in relative prices will be felt in a slower pace of structural change which will delay the required increase in the efficiency and international competitiveness of the Bulgarian economy. This would have negative effects on the creation of new employment in higher productivity jobs as well as undermine the restoration of a sustainable balance of payments position.

### Market Reform

(xxiii) Today, in Bulgaria, there is a wide consensus in support of the radical transformation of the policy framework needed to support the development of a market economy. In pursuit of this commitment, a number of important steps have been implemented. Yet, as 1990 is drawing to a close, Bulgaria's economy is very much an economy in transition. While some important elements and policies of the command system have been abandoned, the legal and institutional framework needed for operating a competitive market economy is not in place. As a consequence, there is confusion in the market, as both producers and consumers are uncertain about which "rules of the game" apply, the old or the new. In this period of uncertainty, decisions about the future, e.g., investment by the private sector, tend to be postponed, and the emphasis is on projects that generate quick returns. Also, when price signals are unclear and exchange rate reform incomplete, opportunities for profiteering abound. When these opportunities are grasped by enterprising individuals, the perception is created that the market system is inequitable, and support for the overall reforms is eroded. It is thus extremely important for the Government to reduce this period of confusion and uncertainty by moving decisively to introduce the reforms needed. Unless the systemic reforms also move forward, the supply response needed to stimulate growth will be delayed, and Bulgaria will face the prospect of a stagnant or declining economy for an indefinite period.

(xxiv) Experience in other countries has shown that the adjustment costs can be significantly reduced and the process of structural change made less disruptive if the Government, in implementing reforms, adheres to two important principles: First, the objectives and overall vision of the reform program should be clarified and widely publicized. Second, the program should be comprehensive, rather than partial, in its design and implementation. The areas in which reforms are needed, the efforts of the Bulgarian Government to date, and the desired next steps are summarized below.

(xxv) Price Liberalization. The Loukanov Government's initial program for 1990 had indicated that the first major phase of price decontrol would take place on July 1, 1990, to be followed by additional liberalization in two additional phases so that the bulk of prices would be freed by mid-1991. The first phase has not occurred yet. Given the urgent need to stimulate a supply response and reduce environmental pollution as well as to reduce budget subsidies, it is recommended that the schedule of price liberalization as well as adjustments in administered prices to international levels be carefully reviewed and accelerated to the extent possible.

(xxvi) Competition. The economic benefits of price deregulation will be substantially reduced in the absence of parallel steps to break down the heavily concentrated, monopolistic structure of production and to promote competition. In a country like Bulgaria with relatively small domestic markets, efficiency can be promoted both through steps that enhance competitive behavior in the domestic market and through actions that promote international trade. On the domestic front, the main task is to introduce and implement anti-monopoly legislation and to actively pursue the breakup of monopolies where this is appropriate. International trade policies are in principle quite liberal. In practice, however, competition through imports is severely restricted, primarily because of the orientation of trade to the CMEA markets and because of the restricted access to foreign exchange. Reforming the CMEA and foreign exchange allocation regime are important tasks facing the Government in the months ahead.

(xxvii) Privatization. While in theory it is conceivable to develop competitive markets even when the ownership of means of production is entirely in the hands of the State, in practice, competitive markets have been developed only in countries where private ownership accounts for the bulk of production. There is no magic number as to what the share of the public sector should be. Different societies have operated with similar market efficiency with somewhat different shares of public and private sectors. The relevant policy issue for Bulgaria is not what share of total output the private sector ultimately accounts for. Rather, whatever that share may be, it will not be reached, except in the very distant future, if expansion of the private sector must rely solely on the establishment of new enterprises. A far reaching privatization program of existing enterprises is needed in order to introduce market discipline. The implementation of such a program should be one of the cornerstones of the reform, together with the liberalization of prices and the establishment of a competitive environment for business activity.

(xxviii) The Government has adopted a two-pronged privatization strategy. On the one hand, it has developed general privatization legislation and a new bill to restore the right to cultivate land to private farmers. On the other hand, it has started actual privatization in sectors characterized by many small units, such as trade, services and tourism.

(xxix) The privatization program has run into difficulties. First, the preparatory work in identifying major units to be privatized has been delayed. Second, the program objectives have not been clear, and the overall approach has not been transparent or well coordinated. Several Ministries have been involved in privatization in different sectors, and the lack of transparency has resulted in allegations of abuse and corruption in the sale of land by Municipal People's Councils and in the sale or lease of trade and tourism units. As a consequence, the National Assembly in August 1990, decided to impose a moratorium on all sales of land and other State or municipal property. In the light of these problems, it is extremely important for the Government to act quickly and decisively to enact the legislation on privatization and to establish the institutions needed to implement a coordinated approach. The Bulgarian authorities need to consider whether they should include, as part of the choices of privatization techniques, a mechanism for distributing equity shares of enterprises to be privatized to the Bulgarian population, as is being considered in some other East European countries. They also need to put in place, as quickly as possible, reforms in land tenure and ownership in order to stimulate increases in agricultural output.

(xxx) Public Enterprise Reform. Even if the most ambitious reform and privatization effort were to be implemented, a significant number of public sector enterprises in Bulgaria will continue to function for some time to come. As a consequence, it is important for the Government to take steps to ensure that these enterprises use resources efficiently and meet market standards. To this end, the two most important issues that need to be addressed are the establishment of strict financial discipline and appropriate arrangements for enterprise governance. In the latter context, it is especially important to ensure that the ownership rights of the State are effectively represented and that the practice of employee self management is regulated, as it can lead to the pursuit of short-term employee interests and insufficient attention to the long-term viability of the enterprises.

(xxx1) Capital Markets. The most important step towards developing an efficient capital market at this stage is the establishment of an efficient financial market. Some of the main issues the Government needs to address in this sector are: divesting the ownership position major borrowers hold in commercial banks; minimizing the amount of directed subsidized credit; diversifying and deepening the payments system; consolidating and improving the performance of the multitude of small domestic banks; bolstering the regulatory environment; and strengthening the human resource base of banks.

(xxxii) Labor Markets. The Government's wage and employment policies were designed to serve the previous system of centralized planning. While a number of changes have been introduced (e.g., with respect to labor mobility, the trade unions, and the establishment of a new unemployment compensation

scheme), the old system basically remains intact. The degree to which the Government can decentralize and decontrol labor market policies depends, however, on the overall rate at which competition is increased in the economy. Without a competitive output market, the Government has to regulate the labor market. This is because, without competitive pressures, firm managers have little incentive to reduce workers' demands for wage increases. The problem becomes even more acute when, as in many cases in Bulgaria, the workers control the management. At the same time, the Government should not regulate employment and compensation in the emerging private sector, which is competitive and typically consists of small units. If, for social reasons, the Government wants to keep a wage floor for unskilled labor, the wage floor should be set as low as possible so as not to discourage employment. But in no case should the minimum wage policy be used as an anti-poverty tool, as this is likely to lead to more unemployment and ultimately more rather than less poverty.

### The Sequencing and Pace of Reforms

(xxxiii) The breadth and scope of the reforms is enormous and unprecedented for Bulgaria. The fact that stabilization and market reforms are both needed more or less at the same time means that "everything" becomes urgent and of high priority. But since there are pragmatic limits, defined by the administrative capacity of Government as well as the capacity of society to shoulder the inevitable costs of adjustment, priorities need to be set on a minimum package of reforms that must be undertaken first, and those that come later. There are, however, several linkages between the various measures aimed at restoring macroeconomic balances and establishing a competitive market structure in Bulgaria, which should be taken into account in the design of reforms. For example, price deregulation and administered price increases can help reduce the budget deficit by permitting a reduction in producer subsidies.

(xxxiv) As to the pace of reform, in some respects, Bulgaria has no choice. A rapid pace of macroeconomic adjustment has been forced upon it by the lack of external finance, the structure and orientation of its international trade, and external events beyond its control. The combination of reduced exports, the cessation of new credits from commercial banks, and the anticipated deterioration in Bulgaria's terms of trade has meant that the external adjustment has had to occur quickly and through a drastic reduction in imports. This is having adverse effects on output and will inevitably lead to increased unemployment. Moreover, a lot of time has been lost in recent months during which the domestic situation has worsened. This means that the subsequent adjustment will have to be sharper and quicker so as to make up for the lost ground.

(xxxv) Regarding market reform, the Government had originally visualized a phased approach. Again, delays have occurred which need to be made up. More importantly, unless measures are taken early on to stimulate supply and enhance the international competitiveness of exports, it would be difficult to visualize circumstances under which Bulgaria would soon regain growth and reestablish creditworthiness. It could also be argued that early implementation of market reforms is needed in order to bolster the

Government's domestic and international credibility as to the seriousness of its commitment. Without substantial implementation of market reforms, needed inflows of capital from abroad will not be forthcoming, and, as a result, the cost of adjustment will be higher and restoration of growth slower.

### Scenarios for Adjustment and Growth

(xxxvi) The future growth of the Bulgarian economy will be constrained by the unfavorable terms of trade developments, the need to reduce domestic spending in order to curtail inflation, and by the short-term dislocation likely to result from the needed restructuring of the Bulgarian economy. Two scenarios have been explored. The main differences between the two lie in the speed of implementation of market reforms and the availability of external finance. In the "low case," a slow pace of reform is assumed. This results in slower restructuring of the economy and slower expansion of exports. It is assumed that, in this case, the international community would not provide extensive support through significant new capital inflows. As a consequence, the Bulgarian economy would continue to decline substantially in 1991 and stagnate in the longer-term. In the "high case," quicker, more comprehensive reforms and greater international support would lead to early resumption of growth after a further decline in output in 1991 of about 6.0 percent.

(xxxvii) It is essential that the Bulgarian economy achieve a rapid supply response to the policy changes contemplated in the "high case." Because of the critical nature of Bulgaria's foreign exchange crisis, it is particularly important to expand production of exportables and import substitutes. It is tempting to try to anticipate the sectors in which the most rapid supply responses might be possible and to focus attention exclusively on these sectors. Yet, it is important not to prejudice where the greatest responses will be because, as the command economy of the past dissolves, decision-makers will expand into new and sometimes surprising markets and activities. There may also be a divergence between short-term possibilities and long-term comparative advantage.

(xxxviii) It is useful nevertheless to identify sectors where the response to reform has the potential to be rapid and significant. Energy is a conspicuous possibility. Bulgaria is a very inefficient user of energy, and many Bulgarian industries are very energy-intensive. Given the present foreign exchange crisis, imported energy has become a binding constraint on supply in most areas of the Bulgarian economy. Improvements in energy efficiency would have important cost-saving implications throughout the economy. In effect, energy conservation can be an extremely valuable import substitute. Provided market reforms are pursued vigorously, agriculture (including agroprocessing) and services such as tourism also have the potential to provide strong economic performance, for several reasons. First, it may be easier to return the assets within these sectors to private ownership, although not without some near-term disruption. The Government has already made considerable progress towards this objective via the draft law on land reform, and foreign investors have expressed some interest in Bulgaria's tourist resort potential on the Black Sea and in other regions. In addition, these sectors have already been subject to price liberalization measures, and further reforms are high on the government agenda. By contrast, the



industrial sector can be expected to continue to experience a decline in output during 1991, due to the short-term negative effects of restructuring production and the expected decline in trade with CMEA members. As domestic effective demand is also expected to decline due to the fall in aggregate spending needed to maintain macroeconomic equilibrium and the significant deterioration in the terms of trade, the growth in industrial output will be primarily dependent on increased exports to convertible currency markets. However, given existing management practices, the age of the capital stock, and the limited prospects for a significant inflow of direct foreign investment into manufacturing in the near-term, an improvement in the competitiveness and restoration of the industrial sector will take time. That does not mean that individual subsectors may not flourish soon. But the distortions in the Bulgarian economy are presently so large that it is impossible to predict which subsectors these will be.

(xxxix) Even in the "high" scenario, however, Bulgaria will continue to face debt servicing difficulties as a consequence of its large debt overhang. Indeed, traditional debt restructuring approaches will not be sufficient in meeting the financing problem even after allowing for significant official capital inflows. The implication of these illustrative scenarios is that a lasting solution to Bulgaria's debt problem, and one that is consistent with resumed growth, will require a more comprehensive solution involving debt or debt service reduction of its external debt.

#### Preserving the Safety Net and Human Resource Development

(xl) Bulgaria can point to substantial accomplishments in terms of the well-being and human resource development of its population. In health and education, service provision has generally been quite effective. Few Bulgarians live in absolute poverty. The institutional base, while providing generous universal benefits, is capable of assisting citizens who cannot fend adequately for themselves (particularly the elderly and children).

(xli) This impressive record, however, conceals serious problems. These include low productivity of the human and physical infrastructure and inadequate incentives. Some of these problems are being exacerbated by the lack of hard currency for the purchase of operating supplies, equipment, and technical expertise. The system of social insurance and welfare suffers from lack of accountability and transparency and is creating serious macroeconomic pressures. Its costs in fiscal terms and inefficient allocation of resources have been high.

(xlii) If a rapid pace of reform and adjustment is pursued, the Bulgarian economy will be subjected to substantial shocks. Key priorities during the transition to a market-oriented economy should be: (a) to preserve and consolidate the substantial social achievements and (b) to initiate reforms of the social insurance and welfare system to improve its efficiency and transparency and to concentrate assistance on the most vulnerable groups on the basis of need. This redirection is important both for fiscal reasons and to ensure that the incentive reform takes hold.

(xliii) To deal with the social costs of adjustment it is necessary to:  
(a) strengthen and redesign the existing system of social welfare benefits;  
(b) eliminate general consumer subsidies via the price system and target food and other supplements to the needy; (c) augment the resources and revamp the recently established unemployment benefit system. The latter is not equipped with the human, physical or fiscal resources needed to cope with the unemployment likely to materialize as a consequence of macroeconomic adjustment and the significant restructuring of the Bulgarian economy.

## CHAPTER 1

### THE EMERGING ECONOMIC CRISIS

#### I. Introduction

##### A. Political and Demographic Development

1.01 The present Bulgarian State gained autonomy in 1878, following the Russo-Turkish War and the Treaty of San Stefano. It is one of the smaller countries of Europe in terms of area (43,000 square miles) and population (9.0 million). The topography is fairly mountainous, which limits the cultivable land to about one half of the total land area. Over 85 percent of the current population is ethnically Bulgarian and speaks the Bulgarian language. The remaining minority groups are comprised of Turks (between 0.6 to 1.0 million), Gypsies, Armenians, and other groups. Ethnic tension increased in the latter part of the 1980s, resulting in an exodus of many Turks during 1989. Approximately two-thirds of the population currently live in urban areas, compared to a quarter in 1946, reflecting the rapid urbanization of the economy over the past fifty years.

1.02 Towards the end of World War II, the communist Fatherland Front led by Georgi Dimitrov assumed power, and Bulgaria was declared a People's Republic on September 15, 1946. The new constitution provided for a sole legislative body, the National Assembly, consisting of 400 deputies headed by a Presidium and an executive body, the Council of Ministers. State and cooperative property were to be the primary forms of ownership in the economy. In 1971, a new constitution was adopted which consolidated the monopoly position of the Bulgarian Communist Party and specified "collective property" as the exclusive form of productive property. Under the new constitution, the National Assembly was required to meet three times a year when it would consider, and usually endorse, the legislation put forward by the State Council and the Council of Ministers. Given the monopoly position of the Communist Party under the 1971 Constitution, government policy was effectively formulated by the party Politburo, channeled through the Council of Ministers, and implemented by individual ministries and state agencies. Local Government was comprised of District and Municipal People's Councils, which were elected by popular vote for a three-year term. Council members elected an executive committee to supervise day to day management. In the past, "Party Groups" from the Communist Party worked with the local executive committees to ensure that the Party's agenda was followed.

1.03 In November 1989, rapid and momentous political changes started to take place. Todor Zhivkov, who had been in power since 1956, was removed from office and Peter Mladenov, the former Minister of Foreign Affairs, took control of the State Council. In January 1990, the monopoly position of the Communist Party was abolished; and shortly afterward, its name changed to the Bulgarian Socialist Party. In February, an interim Government was formed with Andrey Loukanov, a Socialist, as Prime Minister and was charged with running the country until the first free, multi-party general elections could be held in June. Following these elections, the Socialist party and Mr. Loukanov received the mandate to form a new Government, which, after protracted negotiations with the opposition, was announced on September 20, 1990. After

failing to get a political consensus to back the Government's reform program and in the midst of a national strike, Mr. Loukanov offered his resignation on November 30, 1990. Mr. Popov was nominated as Prime Minister Designate, and he secured the National Assembly's approval for a new coalition Government on December 20, 1990.

## B. Economic Developments

1.04 Bulgaria emerged from World War II with an economy primarily based on private agriculture, supported by a relatively small industrial sector. In 1947, the new Communist Government nationalized private industry as the first step in a strategy designed to achieve rapid industrialization. To facilitate central planning and to capture perceived economies of scale, production was increasingly organized around large and more consolidated forms of ownership. Certain branches of industry were also chosen for specialized development within the context of the Council of Mutual Economic Assistance (CMEA). Private farmers were coerced into joining cooperatives, which were subsequently reorganized into larger agro-industrial complexes.

1.05 As a result of this strategy, a strong centralized economic system was developed that accorded priority to increased production in the industrial sector. The Government produced a detailed annual plan specifying input and output levels, marketing arrangements and wholesale/retail prices. Domestic prices were increasingly insulated from international trends through centrally administered taxes, subsidies, and an administratively determined exchange rate. Traditional economic policy instruments, such as money, credit and budget policy were of secondary importance, as was the financial performance of enterprises and farms. Initially, this strategy produced high rates of economic growth. Official statistics indicate that the economy grew by an average 7 to 8 percent p.a. over the next two decades, with the share of industry in Net Material Product (NMP) increasing from 26 percent in 1948 to 49 percent in 1970. This rapid pace of industrialization was strongly supported by the USSR through supplies of cheap raw materials, markets for Bulgarian goods, and, on two occasions, assistance in overcoming external debt difficulties.

1.06 The structural changes that took place in the Bulgarian economy during this initial period created many of the deep-seated problems which began to surface during the 1970s and have contributed to the current economic crisis. These problems are associated with the longer term decline in the rate of productivity growth due to weak producer incentives, the slow pace of technological change, and the misallocation of resources under a centrally planned system. Overambitious investment plans were imposed without sufficient regard to efficiency or quality, and a disproportionate share of resources was directed into producer goods industries at the expense of higher return activities in the consumer goods and agricultural sectors. Distorted prices and wages also encouraged a rapid migration of the labor force out of the rural areas, which worsened the problems associated with under-investment in agriculture. The strong orientation of trade towards CMEA countries and the USSR was also a mixed blessing. While it did provide a ready market for Bulgaria's growing manufacturing sector, it also insulated large parts of the economy from international competition. With over 45 percent of total exports

being sold to the USSR during the 1980s, Bulgaria became increasingly vulnerable to economic developments in the USSR and less competitive in Western markets.

1.07 During the 1980s, economic growth slowed markedly, with the official statistics showing the first decline in NMP in 1989. This reflects the negative growth in agriculture throughout the 1980s, coupled with a more broad-based deterioration during the second part of the 1980s, including manufacturing. There has also been a precipitous fall in fixed investment, net of unfinished construction. It is estimated that Bulgarian GNP per capita was US\$2,320 in 1989 using the World Bank's Atlas Methodology. This is, however, believed to be an overestimation due to significant distortions in both official domestic prices and the exchange rate. Incorporation of data for 1990 will result in a significant downward revision of the GNP per capita estimate.<sup>1/</sup> This downward trend will likely continue in 1991 due to a continued decline in output and the movement of the exchange rate towards equilibrium level. In the period 1985-1989, the balance of payments has been characterized by a current account surplus with the USSR and a persistent and increasing deficit with convertible currency countries. In the first part of the decade, the Government's strategy was to bridge the gap in the convertible currency balance of payments via exports to the Middle East and Africa. Following the decline in the real price of oil, the import capacity of these economies declined and some delayed or stopped servicing their trade credits. This, coupled with the lack of competitiveness of Bulgaria's manufacturing sector, resulted in a rapid deterioration of the current account with convertible currency countries. To finance the resulting external deficit, Bulgaria's authorities resorted to increased borrowing from foreign commercial banks largely in the form of short term credits. Consequently, convertible currency debt grew from US\$3.2 billion in 1985 to US\$9.2 billion in 1989.

1.08 Structural imbalances within the Bulgarian economy, adverse external developments, and the domestic social and political changes that have occurred over the past year have resulted in a further worsening of the situation in 1990. Bulgaria today is experiencing a major economic crisis. Preliminary estimates indicate that output will decline by at least 10 percent in 1990, and the annual rate of inflation may be as high as 40 percent and accelerating. And, although the budget deficit was initially planned to decline, current data indicate that the consolidated budget deficit could reach 5 to 6 percent of GDP. On the external side, a heavy bunching of scheduled repayments and a fall in exports are leading to a drastic cutback in imports and a significant drawdown of foreign exchange reserves. As a result, the Government announced a moratorium on principal payments of the Foreign Trade Bank (FTB) on March 29, 1990. Subsequent discussions with the commercial banks and a further deterioration in the overall economic situation

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1/ The estimate for 1989 is derived by using a 3-year average exchange rate for the conversion of the 1989 GNP in leva into US dollars. It is estimated that the Bulgarian GNP per capita will decline significantly in 1990 because the 3-year average base period will incorporate recent adjustments made in the exchange rate and aggregate GNP is expected to decline by at least 10% in real terms.

led to an extension of the moratorium of principal and the suspension of full interest payments until the end of 1990.

1.09 In response to the worsening economic situation, the authorities have begun to initiate macroeconomic adjustments in parallel with reforms aimed at establishing a market economy. The exchange rate was devalued; the state orders that guided enterprise operations have been abolished; restrictions on the establishment of enterprises and limits on the number of employees that can be hired by private firms have been eliminated; the rights of private ownership have been restored; and the prices of some commodities have been liberalized. In addition, a wide range of laws designed to change the incentive/regulatory framework have been drafted. The authorities have submitted this body of legislation for consideration by parliament, and work is in progress on a number of additional laws needed to establish a market framework.

1.10 The remainder of this chapter reviews the main developments in the Bulgarian economy since World War II. Chapter 2 analyzes the main macroeconomic issues facing the Government at present. Chapter 3 discusses the efforts of the Government to introduce reforms aimed at establishing a market economy. Chapter 4 explores issues related to the sequencing and pace of the reform effort as well as the implications of two alternative policy scenarios for economic growth, the balance of payments, and domestic unemployment.

## II. Historical Evolution of the Economy

1.11 An assessment of past economic trends in Bulgaria is made difficult by several significant statistical problems. First, as in other centrally-planned economies, the national accounts are based on a system of material balances. Under this system, the only productive activities are those that change the form or location of material objects. Thus, most services, such as education or health, are excluded. Second, and of more importance, the official historical data have been subject to a number of revisions to align recorded performance more closely with planned targets. Aside from directly distorting recorded performance, this has also resulted in a number of discontinuities in the data which make time-series analysis difficult. Third, official price indices tend to focus on a basket of goods with unrepresentatively stable prices and to attribute a large part of any price increase to quality improvements. Both the tendency to adjust performance to mirror pre-set targets and the understatement of inflation result in real economic growth being overestimated. In recognition of these problems, the Central Statistical Office (CSO) has made available data that were previously restricted, and has developed more representative alternative "unofficial" price indices for recent years. These important caveats need to be borne in mind when interpreting the trends discussed below.

## A. Developments from 1947 to 1980<sup>1/</sup>

1.12 Following the nationalization of private industry on December 23, 1947, economic activity became increasingly determined by the objectives laid out in the various Five-Year Plans. The first three plans focused on the rapid development of industry and increased integration with CMEA members, particularly the USSR. During the first Plan (1949-52), investment jumped to an estimated 28 percent of NMP, twice the Western European average and about two and a half times Bulgaria's rate during the 1930s. Most of this investment was channeled to industry, which resulted in a doubling of industrial output during the first plan period, according to official statistics. During the period covered by the first three plans, agricultural output rose by only 11 percent, reflecting reduced investment and the disruption caused by forced collectivization. Private land ownership was legally restricted to 20 hectares (30 hectares in hilly areas); farmers were forced to sell their machinery to the state; and a large part of their output had to be sold to government owned marketing companies at low prices. As a positive inducement towards collectivization, members of cooperatives were allowed to retain up to 0.5 hectares for private use and continue to hold their land rights and receive a rent (until 1958) on the land they surrendered to the cooperative. Consequently, the share of arable land under cooperatives increased from 11 percent in 1949 to 61 percent by 1952.

1.13 This pattern of development was further consolidated during the Second (1953-57) and Third (1958-60) Five-Year Plans.<sup>2/</sup> The industrial sector continued to grow by over 10 percent per annum, partly as a result of more resources being directed into those activities designated as Bulgaria's area of specialization under the CMEA system (namely, chemical fertilizer, food-processing and electrical equipment). As a consequence, external trade grew significantly, with Bulgaria's trade becoming increasingly geared towards supplying the CMEA bloc with food and manufactured goods in exchange for energy and other raw material inputs. In agriculture, the move towards cooperatives continued, with about 92 percent of the arable land coming under their control by the end of the Second Plan. The degree of central control of agriculture was increased markedly during the Third Year plan, when the existing 3,200 collective farms averaging 1,000 hectares were merged into less than 1,000 farming units averaging about 4,500 hectares.

1.14 By 1960, the Bulgarian economy had undergone major structural change. The share of agriculture in NMP had fallen from 59 percent in 1948 to 27 percent, and industrial employment had increased from below 0.5 million to 1.2 million, which was the highest rate of increase in post-war Europe. While this had supported rapid growth, it became increasingly difficult to sustain this pace of growth and the underlying strategy. Many of the gains from encouraging resources to shift from agriculture to modern industry had been captured, as had economies of scale within industry. Labor and raw material

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1/ This and several of the following sections draw on the IMF's Bulgaria Membership Paper, dated August 6, 1990.

2/ Both the First and Third Five Year Plans were declared fulfilled ahead of time, and were therefore superseded by next plan.

shortages had also began to hamper industrial growth. In response, the Government implemented several reforms during subsequent Plans designed primarily to increase efficiency. Thus, during the Fourth Five-Year Plan (1961-65), about 2000 enterprises were combined into 120 State Trusts, which were granted some of the planning functions of the branch Ministries. These changes were supported by the introduction of the New Management System, which tied wages, bonuses, and funds for new investment to plant profits. Enterprises were also encouraged to obtain their financing needs from the banking system rather than through the budget. The banking system, however, did not perform the usual functions of assessing the financial viability of projects or enterprises. Instead, it was merely a conduit for the implementation of the financial plan (see below Section E).

1.15 These reforms were partly reversed during the Fifth Five-Year Plan (1966-70), due to abuse of the system and the growing importance of encouraging enterprises to export to convertible currency areas. Official statistics show that industry grew at an average of 11 percent per annum during the 1960s and that foreign trade turnover quadrupled. But part of this expansion was financed by Western credits, which were used to finance imported inputs into products that were exported primarily to the CMEA countries. The resulting imbalance in Bulgaria's external account with convertible currency countries that developed by the end of the 1960s was resolved by a hard currency loan from the USSR to be repaid with future exports.

Table 1.1: NET MATERIAL PRODUCT, 1970-89

	Real Growth Rates				Shares		
	(% p.a.)				(at market prices)		
	1970/ 1975	1975/ 1980	1980/ 1985	1985/ 1989	1970	1980	Est. 1989
Net Material Product	7.2	8.0	3.7	3.0	100	100	100
By Sector							
Agriculture	9.5	8.6	-3.9	-0.6	21.9	16.5	12.3
Industry	6.4	7.1	6.7	2.6	49.1	48.5	57.1
Construction	6.5	8.6	5.4	2.6	8.7	9.3	9.3
Trade and Catering	5.4	12.4	-3.2	8.9	9.9	13.7	9.4
Other	8.8	7.6	2.7	5.5	10.4	12.0	11.8
By Use a/							
Personal Consumption	-0.2.	9.3	3.2	2.9	63.2	66.9	68.2
Social Consumption	15.5.	7.2	6.9	5.1	7.2	9.7	12.3
Accumulation b/	11.0	1.0	2.4	0.7	29.1	25.4	19.6

Source: Central Statistics Office.

a/ Percentages do not add due to statistical discrepancy which is not shown.

b/ Accumulation is equal to gross domestic investment less depreciation



1.16 During the 1970s, official statistics show economic growth averaging between 7 and 8 percent p.a. (see Table 1.1). Given uncertainties surrounding the deflators used in official constant price data, it is likely that real growth was lower. The share of investment in NMP peaked at 36 percent in 1975 and then fell to 25 percent by 1980.<sup>1/</sup> This decline in investment probably reflects an attempt to protect consumers from the rising costs of oil and other raw materials via the reallocation of budget expenditures. Within the industrial sector, electronics, machine building, and chemicals received priority as part of the overall CMEA plan for country specialization. The agricultural sector was subject to a further attempt to centralize control when the collective farms and allied industries were amalgamated into large agro-industrial complexes (AICs). By 1975, there were 152 AICs averaging over 5,800 workers and 23,700 hectares of land. These AICs were soon plagued by a host of problems including weak internal communications, inappropriate product selection, and poor soil conservation. The relatively low wages and poor living conditions for farm workers within the AICs gave added impetus for labor to abandon agriculture. To reverse this trend, the cooperatives allowed more farmers to lease small private plots and, towards the end of the decade, the AICs were redivided into smaller organizational units.

1.17 Throughout the 1970s, an effort had been made to improve the productivity and quality of Bulgaria's manufacturing sector through imports of Western capital goods and intermediate inputs. For the most part, the anticipated increase in convertible currency exports did not occur, partly because there was little improvement in the quality or marketing of final goods and partly because firms had ready access to the CMEA market where such improvements were less important. As a result of a deterioration in the external trade balance and of the increased reliance on relatively short-term credits, external debt increased to about US\$3 billion in 1976, with a debt service ratio in terms of convertible currency exports of 44 percent. This second payments crisis was resolved by the provision of oil from the USSR, which Bulgaria resold in the open market to obtain the hard currency needed to reduce its debt obligations.

## B. Developments in the 1980s

1.18 Output and Employment: Official statistics show a steady decline in economic growth throughout the 1980s. The rate of growth of GDP (Table 1.2) fell to 3.3 percent during the Eighth Plan (1980-1985) and to 2.8 percent during the Ninth Plan (1985-1989). GDP declined by an estimated -1.4 percent in 1989, the first officially acknowledged decline since World War II. This deteriorating record reflects the continuing poor performance of the agricultural sector combined with a marked slowdown during the second part of the decade in industry. Another contributing factor has been the increasing share of gross investment absorbed by inventories and unfinished construction. This has resulted in a precipitous decline in net fixed investment in new plant and equipment. Finally, the exodus of ethnic Turks during 1989,

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<sup>1/</sup> Investment is defined here according to the NMP method of national accounts, See Table 1.1.

together with the labor unrest and turmoil associated with the November 1989 change in the Government, contributed to the fall in output.

1.19 The real growth in gross agricultural output averaged about 0.8 percent p.a. during the 1980s, with value added declining by an estimated -2.2 percent p.a. These opposite trends are due to the increasing input intensity of Bulgarian agriculture which reflects efforts to reverse declining yields in almost all crops (see Volume II, Chapter 3).<sup>1/</sup> As a result of this relatively weak performance, the share of agriculture in GDP has declined from 16.5 percent in 1980 to 11.3 percent in 1989, and its share of total CMEA export earnings declined from 4.0 percent to 1.1 percent. Employment in the sector has also continued to fall at an accelerating rate, reaching an average decline of -3.6 percent p.a. since 1985. These negative trends are common to both major sub-sectors within agriculture--crops (which accounted for 43 percent of total output in 1989) and livestock (51 percent).<sup>2/</sup>

Table 1.2: GROSS DOMESTIC PRODUCT, 1980-89  
(By Origin and Use)

	Current Prices (Million Leva)			Real Growth Rates (% p.a.)				
	1980	1985	(Est) 1989	1980/ 1985	1985/ 1989	1987	1988	1989
<u>GDP (Market prices)</u>	<u>25791</u>	<u>32595</u>	<u>39475</u>	<u>3.3</u>	<u>2.8</u>	<u>6.1</u>	<u>2.6</u>	<u>-1.4</u>
<u>By Sector</u>								
Agriculture	3719	3869	4457	-3.9	0.1	-14.6	-1.7	-1.9
Industry	13869	20382	23432	6.7	3.2	5.4	2.4	0.2
Services	8203	8344	11586	0.1	2.9	20.4	4.9	-5.0
<u>By Use</u>								
<u>Total Consumption</u>	<u>17506</u>	<u>22788</u>	<u>27999</u>	<u>3.6</u>	<u>2.6</u>	<u>4.5</u>	<u>2.2</u>	<u>2.5</u>
Private	16049	20031	25129	3.2	2.3	4.0	2.4	2.6
General Government	1457	2757	2870	6.9	4.8	7.5	1.0	2.5
<u>Gross Domestic</u>								
<u>Investment</u>	<u>8768</u>	<u>10495</u>	<u>12701</u>	<u>3.3</u>	<u>4.5</u>	<u>-2.5</u>	<u>10.0</u>	<u>-4.5</u>
Fixed Investment	7289	8613	10285	3.4	4.5	5.7	4.5	0.2
Change in Stocks	1479	1882	2416	3.0	4.5	-28.4	35.8	-21.6

Source: C.S.O. and staff estimates.

1/ The opposite trend in input usage and crop yields may reflect a number of factors including the diversion of inputs and outputs to private plots and the poor quality and application of inputs.

2/ The remaining 5 percent is generated by agricultural services.

1.20 Although severe weather conditions caused a major decline in output in 1985, the sector has continued to be plagued by systemic problems deriving from weak producer incentives and the inability of the centralized control system to operate farms efficiently at the micro-level. In response to this situation, the Government did implement a number of partial reforms during the decade. The AICs were gradually phased out in an attempt to restore control to smaller, and hopefully more responsive, cooperatives. The cooperatives have also leased more land to private farmers, allowing them to determine which crops are grown, while continuing to provide them with machinery and marketing. As a result, it is estimated that about 22 percent of the value added in agriculture is generated by private farmers on about 12 percent of the land.

1.21 Despite several attempts to decentralize the management of manufacturing enterprises and thereby stimulate efficiency and growth, there was a marked slowdown in the industrial sector during the second half of the decade. Growth in value added declined from an estimated 6.7 percent during 1980-85 to 3.2 percent during 1985-89. This slowdown occurred across all branches of industry, except for electricity due to the commissioning of new production capacity. The industrial sector has continued to absorb the largest share of investment, increasing its share of total investment from about 59 percent in 1980 to 63 percent in 1989. Almost a third of this investment has been allocated to the engineering sector, with electric energy and the chemical industry receiving large and increasing shares over the past 10 years.<sup>1/</sup> This pattern of investment has resulted in a continuation of the past structural changes in the industrial sector. The engineering and chemical industries have increased their shares of sectoral NMP from 37 percent in 1980 to 57 percent in 1988, while light industry and food processing have declined from a combined share of 40 percent to 30 percent over the same period. These trends reflect the objectives of the various Five-Year Plans, which emphasized the production of energy, machinery (particularly fork lift trucks), electro-mechanical products, electronic equipment (including computers), and chemicals. During the 1980s, the industrial sector accounted for over 95 percent of exports to the CMEA market and around 80 percent of exports to the non-CMEA market.<sup>2/</sup>

1.22 Although there were several attempts at institutional reform, the State continued to dominate the ownership of the industrial sector throughout the 1980s. In 1988, the State accounted for 97.9 percent of industrial output, with the cooperative and private sectors accounting for 2.0 and 0.1 percent respectively. In terms of industrial employment, the State accounts for 93.5 percent, the cooperatives for 5.7 percent, and the private sector for only 0.8 percent. In an effort to improve the efficiency of state

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<sup>1/</sup> See Volume II, Chapter 1, for more detailed discussion of the industrial sector.

<sup>2/</sup> Data on total exports is complicated by the wide and changing divergence of exchange rates used for CMEA and Non-CMEA trade. For a discussion of the methodology underlying these estimates see Appendix 1.

enterprises, the Ninth Plan (1986-1989) reduced the number and scope of compulsory indicators and abolished the formal control of the branch ministries, allowing the overall planning of industrial development to be handled by 65 large "associations." These associations were themselves partially replaced in late 1987 by nominally voluntary unions of affiliated enterprises called "combines" or "firms." In an effort to increase the independence of enterprises, the national plan was to be seen only as indicative, and the detailed management of enterprises was to revert to the firm or plant level. However, the Government reintroduced mandatory purchase orders for certain industrial products to meet export commitments to CMEA markets and to secure the supply of goods considered essential for the economy. Furthermore, most of the export transactions continued to be carried out by state owned Foreign Trade Companies at pre-arranged prices, with individual firms having little contact with buyers. As firms within "combines" could have their profits reallocated to other loss-making or priority firms, there was little incentive to exceed targets or increase exports to the more demanding convertible currency markets.

1.23 This organization prevailed until 1989, when a number of more far reaching reforms were announced, the most important of which was Decree 56. These reforms formally abolished "associations" and mandatory state orders; provided all firms, including private enterprises, with the same legal status as state firms; laid out procedures for the formation of companies under different forms of ownership, including foreign ownership; provided for wage/price autonomy; established bankruptcy procedures; and reasserted the requirement that the owners of the firms appoint the majority of the board, instead of the common practice of allowing management to be chosen by workers. Many of the legal underpinnings and institutional changes needed to implement these reforms are yet to be put into place. A more detailed discussion of the current situation and the possible direction of reforms is presented in Chapter 3.

1.24 Development of the energy sector has been driven mainly by the need to supply inputs to a large and generally inefficient industrial sector and to a poorly insulated housing stock. The energy intensity and fuel-use patterns of industry and households are described in Volume II, Chapter 2. In the industrial sector, central planning has led to excessive use of inputs (materials, energy, labor) in relation to industrial output. Bulgaria's domestic energy resource base is very limited, consisting almost entirely of low-grade lignite. Lignite and other solid fuels accounted for around 60 percent of domestic primary energy production throughout the 1980s. At the margin, therefore, energy consumption depends on imports, either of energy itself or of energy equipment (notably nuclear power plant). The level of energy imports has been largely determined by Bulgaria's ability to obtain imports of oil, gas, and nuclear equipment under bilateral clearing arrangements, both inside and outside the CMEA. The remaining unsatisfied energy demand has been suppressed through various types of central allocation (both explicit and de facto).

1.25 Despite the poor energy resource base, Bulgaria has made a major effort to reduce its dependence on energy imports over the last decade. Domestic energy production grew by 24 percent over the period 1980-88, then

declined slightly in 1989. The share of imports declined from 82 percent of total energy supply in 1980 to 76 percent in 1989. As a result, total primary energy consumption grew by a lesser amount (16 percent) than production over the same period (1980-88).

1.26 The increase in domestic energy production was obtained at a substantial cost to the economy. Energy investment doubled between 1980 and 1985 while increasing its share of total industrial investment from 22 percent to nearly 35 percent.<sup>1/</sup> This effort has been maintained since 1985. The increase in energy investment mainly reflects increased investment in electricity supply and nuclear power. Electricity investment increased from 59 percent of energy investment in 1980 to 78 percent in 1985 and thereafter. Total resources committed to electricity supply are even greater since much of the lignite investment is also for electricity generation. By 1988, this investment effort had succeeded in raising the contribution of nuclear generation from 18 to 36 percent of total electricity generation, with a corresponding decrease in the thermal contribution from 72 to 59 percent. At the same time, electricity consumption did not grow from about 1984.

1.27 Liquid fuels (crude oil and products) have maintained a steady share of around 61 percent of energy imports since the early 1980s. The 1989 pattern of oil imports and re-exports is typical of the last five years: 11.4 million metric tons (mmt) of crude oil and 1.4 mmt of refined products from the Soviet Union plus 1.5 mmt of crude and 0.1 mmt of products from other sources, such as Iraq and Libya, with re-exports of about 3.5 mmt of products to countries such as Lebanon. However, in 1990, Bulgaria began to experience disruptions in oil deliveries from the Soviet Union.<sup>2/</sup> The main structural change in energy imports over the last decade has been the growth of the share of natural gas--all from the Soviet Union--from a 15 percent share of energy imports in 1980 to 24 percent in 1989. This shift is reflected in the pattern of primary energy consumption: while oil and gas maintained a total share of 56 percent of primary energy consumption over the 1980s, the individual fuel shares had shifted from 44 percent/12 percent to 38 percent/18 percent by the end of the period.

1.28 Recent developments in the construction sector, including housing, largely mirror the performance of the industrial sector. After growing at 6 to 8 percent during the 1960s and 70s, growth in value added declined to 5.4 percent during 1980-85 and 2.8 percent from 1985-89. During the last decade, over 90 percent of investment in construction has been undertaken by the state, primarily geared towards creating new industrial capacity. A disturbing trend in recent years has been the rise in unfinished construction, the value of which now amounts to about one half of total NMP. In 1989 alone, the increase in unfinished construction is estimated to be lv. 2.2 billion

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1/ These estimates do not include the oil refining part of the petrochemical industry.

2/ In 1990 some of the USSR commitments (2.5 million tons) to supply oil were to be implemented through deliveries from Iraq as part of a triangular arrangement among the three countries.

(almost as much as net investment in new plant and equipment), with industry and forestry accounting for 73 percent of this increase. These developments reflect a system which encourages construction companies to lobby the Government for funds to start new projects while the penalties for unfinished work are weak. Construction companies receive up to 90 percent of the agreed price against filed reports, with the remainder paid by a bank to be repaid when final payment is received from the customer. This build-up also reflects the past rapid rate of growth of the industrial sector, with many factory shells being built in anticipation of further expansion. The unexpectedly rapid decline in growth has resulted in many of these buildings remaining empty. More recently, construction companies have also experienced difficulty obtaining the necessary inputs to complete projects.

1.29 Most of the construction activity that occurs in the private sector is for housing, particularly detached houses in rural areas. At the time of the last census in 1985, 84.4 percent of the national housing stock was individually owned, the highest share in Eastern Europe. In urban areas, most housing consists of state or cooperative built multistory apartments, which are eventually sold to individuals using low-cost, long-term state credit. In 1988, about 53,000 dwellings were built in urban areas, with the state accounting for about 50 percent, cooperatives 25 percent, state enterprises 8 percent, and individuals the remainder. A further 10,000 dwellings were built in the countryside, primarily by private individuals. It is estimated that the number of houses completed during 1989 declined by 39 percent compared to 1988, largely due to a drastic cut back in state expenditures.

1.30 Income, expenditure, savings and investment: During the 1980s, wages accounted for an average 54 percent of total household income. As in many socialist economies, social benefits accounted for a significant share of total income (17 percent), with non-wage income from economic activity, interest income, loans, and insurance a relatively small share (13 percent). A rather large residual (16 percent) is classified in the official statistics as "other" and includes income from prizes, scholarships and secret or classified activities. The share of social benefits rose 3 percent over the period. On the expenditure side, retail purchases account for 70 percent of total money expenditure, with services a relatively small 11 percent. The remainder is accounted for by taxes and levies (7 percent), loan repayments (4 percent), insurance (2 percent), and housing purchases (3 percent). These proportions remained fairly constant throughout the 1980s. The relatively low level of expenditure on housing and loan payments reflects the state policy of selling housing at below market prices combined with the very low rates of interest that prevailed during the decade.

1.31 The rate of growth in both private and government consumption slowed markedly during the 1980s (see Table 1.2). The official statistics show private consumption increasing by 2.6 percent in 1989, as consumers began to adjust to the slower rate of economic growth. If inflation was understated due to the use of the official price index, private consumption probably declined in real terms in 1989 and has continued to do so in the first part of 1990.

1.32 The ratio of household savings to total money income net of loans averaged 5 percent over the 1980s. The highest rate of saving was in 1985 (10.6 percent) and the lowest in 1989 (3.2 percent). The marked decline in the saving ratio in 1989 below the period average is further evidence that the economic slowdown is beginning to affect real incomes. As in some other socialist economies, the population has amassed a large amount of "forced" savings, partly due to the absence of consumer goods and attractive investment opportunities.

Table 1.3: BULGARIA - GROSS DOMESTIC INVESTMENT

	1980	Current Prices				1988	1989	Growth Rates				
		1985	1986	1987	1988			1980/ 1985	1985/ 1989	1987	1988	1989
<u>GDI</u>	<u>8768</u>	<u>10495</u>	<u>12350</u>	<u>12020</u>	<u>13197</u>	<u>12701</u>	<u>3.3</u>	<u>4.5</u>	<u>-2.5</u>	<u>10.0</u>	<u>-4.5</u>	
<u>Fixed Investment</u>	<u>7289</u>	<u>8613</u>	<u>9291</u>	<u>9817</u>	<u>10260</u>	<u>10285</u>	<u>3.4</u>	<u>4.5</u>	<u>5.7</u>	<u>4.5</u>	<u>0.2</u>	
<u>Net Fixed Invest.</u>	<u>3111</u>	<u>3011</u>	<u>2816</u>	<u>4946</u>	<u>2843</u>	<u>2525</u>	<u>-0.7</u>	<u>-5.1</u>	<u>75.6</u>	<u>-42.5</u>	<u>-11.2</u>	
<u>Unfinished Const.</u>	<u>619</u>	<u>1137</u>	<u>1714</u>	<u>-384</u>	<u>1525</u>	<u>2214</u>	<u>12.9</u>	<u>18.1</u>	<u>N/A</u>	<u>N/A</u>	<u>45.2</u>	
<u>Depreciation</u>	<u>3559</u>	<u>4465</u>	<u>4761</u>	<u>5255</u>	<u>5892</u>	<u>5546</u>	<u>4.6</u>	<u>5.6</u>	<u>10.3</u>	<u>12.1</u>	<u>-5.8</u>	
<u>Change in Stocks</u>	<u>1479</u>	<u>1882</u>	<u>3059</u>	<u>2203</u>	<u>2937</u>	<u>2416</u>	<u>3.0</u>	<u>4.5</u>	<u>-28.4</u>	<u>35.8</u>	<u>-21.6</u>	

Source: Central Statistics Office and Staff Estimates.

1.33 Using the GDP method of National Accounts, gross domestic investment (GDI) increased by an average 3.3 percent p.a. between 1980-85 and 4.5 percent p.a. between 1985-89, but the growth was uneven (see Table 1.3). In 1988, industry and mining accounted for the bulk of this investment (about 50 percent), with housing accounting for 12 percent and agriculture for 10 percent. The share of industry and mining increased by about 10 percentage points during the 1980s, reflecting the priorities laid out in the Five-Year Plans.

1.34 A striking feature is the unusually high share of total GDI accounted for by unfinished construction and changes in stocks (excluding 1987). A realistic assessment of the commercial value of these properties would, however, probably result in a significant downward revision in the stock of unfinished construction and hence in GDI.<sup>1/</sup>

1/ The high value of changes in stocks reflects at least three factors. First, the stock of inventories are depreciated, if at all, at a very slow rate. This results in a large carry over from year to year, with any additions to stocks showing up as a net increase in the total stock of inventories. Second, the increase is calculated by subtracting beginning-year inventories at beginning-year prices from end-year inventories at end-year prices, when in principle both inventories should be measured at average-year prices. Intra-year inflation therefore increases the value of the large volume of carried over stocks. Third, the inventory increase includes military goods, which should be excluded under the system of national accounts.

1.35 Another striking feature of the data is the precipitous drop in net fixed investment that has occurred over the period 1987 to 1989. If these preliminary estimates are correct, this would represent a significant cutback by the Government in investment in new plant and machinery. This may represent an attempt by the authorities to sustain consumption at a time of declining growth while moderating the resulting fiscal deficit. If sustained, such a low level of net fixed investment would have severe repercussions on long-term growth prospects. On the other hand, many of the investment decisions that were made under a system where prices were highly distorted did not reflect an efficient use of resources. Although the detailed central allocation of investment funds was relaxed during the 1980s, project appraisal techniques were underdeveloped, and creditor banks were often closely aligned with industrial combines. In addition, the Government created the State Credit Investment Fund in 1987 to make investments in designated "priority" industries, some of which could not attract capital from other sources.

### III. Balance of Payments

1.36 Bulgaria's foreign trade and payments system consists of two distinct "regimes": the CMEA countries, which account for about 65 percent of total trade; and the non-CMEA countries, which include trade with the OECD block (about 25 percent of total trade) and developing countries (about 10 percent).<sup>1/</sup> Trade with the CMEA countries has been primarily in transferable rubles (TR), whereas trade with non-CMEA countries has been primarily in convertible currencies. As discussed below, trends in the overall level and composition of trade differ markedly between these two regimes. At the aggregate level, the external account had been characterized until 1990 by a growing surplus with CMEA countries, which has been more than offset by a growing deficit with non-CMEA countries. The latter deficit has come to dominate the balance of payments picture, partly because it has curtailed Bulgaria's capacity to service its foreign debt and partly because the current shortage of foreign exchange has become the binding constraint on

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<sup>1/</sup> There are some serious statistical problems to overcome in gaining an accurate picture of Bulgaria's balance of payments (BOP). First, BOP data are collected on a payments basis according to whether the transaction is in convertible or non-convertible currency whereas the trade data are in terms of whether a country is socialist or non-socialist. While these definitions overlap, there are some important differences. Second, and of more importance, the trade data are denominated in currency leva, which (because of the implied exchange rates to dollars and transferable rubles) leads to a gross undervaluation of trade with non-CMEA countries. Finally, as in all CMEA countries, the prices for CMEA trade are distorted relative to prevailing world prices at any exchange rate. As the overall bias of CMEA trade prices is to undervalue raw materials relative to manufactured products, Bulgaria's CMEA trade position appears stronger than it actually is. A method to address these problems is discussed in Appendix 1 to this Volume.



domestic economic activity. By the end of 1989, external debt had reached the equivalent of 2.3 times convertible currency exports, and the debt service ratio amounted to about 70 percent. The situation deteriorated further in the first quarter of 1990 and ultimately led to a suspension of servicing most of Bulgaria's external debt obligations (see below and Chapter 2).

#### A. Trends in CMEA Trade

1.37 In general, imbalances in the current account with the CMEA countries have been kept to a minimum through the bilateral clearing arrangements and pricing system employed. During the first part of the 1980s, Bulgaria ran a deficit in its CMEA trade (see Table 1.4), partly due to the increase in the price of oil as a result of prices under the "Bucharest" formula being gradually realigned to prevailing world levels. In the period 1986-1989, Bulgaria recorded a growing surplus due to a decline in the volume of imports, sustained export volumes, and improving terms of trade. The resulting trade surpluses of TR.696 million in 1988 and TR.933 million in 1989 (equivalent to about 1.9 percent and 2.6 percent of GDP respectively) were used to retire Bulgaria's outstanding liabilities with the clearing bank of the CMEA, the International Bank for Economic Cooperation (IBEC). Throughout the 1980s, the USSR maintained its dominant share of Bulgaria's CMEA trade, accounting for 76 percent of CMEA exports and 71 percent of CMEA imports in 1989. Bulgaria is estimated to be the third largest trading partner of the USSR.

1.38 The composition of Bulgaria's CMEA trade has continued to change in response to the priorities established in the Five-Year Plans. On the export side, the share of capital goods grew consistently during the decade, from 53 percent in 1980 to 65 percent in 1989. Major structural changes occurred within this category: most notably, the rapid growth in the share of electronics goods. By contrast, the share of food and agricultural products declined from 25 percent at the beginning of the decade to about 13 percent. This reflects both the poor performance of agriculture and the diversion of some of Bulgaria's more competitive products to Western markets (e.g., wine). On the import side, the share of capital goods increased from 39 percent of total imports in 1980 to 48 percent by 1989. This may, in part, be due to the growing difficulty that the economy faced in earning the foreign exchange required to purchase its capital goods from non-CMEA countries. The share of fuels, minerals, and metals rose to a peak of 50 percent in 1985 before declining to 36 percent in 1989. This reflects a gradual reduction in the real price of Soviet oil since the mid-1980s and a marked fall in volume in 1988 and 1989. This has been partly compensated for by increased oil imports from the Middle East, some of which were in payment for earlier trade credits extended by Bulgaria.

Table 1.4: BULGARIA - BALANCE OF PAYMENTS IN NON-CONVERTIBLE CURRENCY  
(in millions of transferable rubles)

	1980	1985	1986	1987	1988	1989
<u>1. Current Account</u>	<u>46.0</u>	<u>-62.0</u>	<u>-320.0</u>	<u>62.0</u>	<u>696.0</u>	<u>933.0</u>
Exports of Goods, fob	4706.0	8338.0	8393.0	8692.0	9135.0	8892.0
Imports of Goods, fob	4864.0	8478.0	8868.0	8762.0	8553.0	8013.0
Services, net	204.4	74.0	147.0	105.0	74.0	29.0
Receipts	490.0	567.0	602.0	625.0	664.0	767.0
Payments	286.0	492.0	455.0	518.0	590.0	738.0
Non-interest cur. acct.	64.0	19.0	-274.0	141.0	801.0	998.0
Interest, net	-18.0	-81.0	-46.0	-79.0	-105.0	-65.0
Transfers net	0.0	4.0	8.0	27.0	40.0	25.0
Receipts	5.0	10.0	12.0	30.0	44.0	31.0
Payments	5.0	6.0	4.0	3.0	4.0	6.0
<u>2. Capital Account</u>	<u>-113.0</u>	<u>-88.0</u>	<u>248.0</u>	<u>43.0</u>	<u>-619.0</u>	<u>-874.0</u>
Med. & LT loans drawn, net	-112.0	17.0	531.0	-205.0	-293.0	-327.0
Disbursement	29.0	513.0	665.0	170.0	98.0	121.0
Amortization	141.0	496.0	134.0	375.0	391.0	448.0
Loans extended to						
Developing countries, net	-1.0	-22.0	-33.0	-17.0	-12.0	-110.0
Disbursement	37.0	33.0	38.0	22.0	20.0	118.0
Amortization paid	36.0	11.0	5.0	5.0	8.0	8.0
Short-term capital, net	0.0	-83.0	-250.0	265.0	-314.0	-437.0
<u>3. Errors &amp; omissions</u>	<u>68.0</u>	<u>150.0</u>	<u>73.0</u>	<u>-105.0</u>	<u>-77.0</u>	<u>-60.0</u>
Overall balance (1+2+3)	1.0	0.0	1.0	0.0	0.0	-1.0

Source: Foreign Trade Bank and IMF/World Bank staff estimates.

## B. Trends in Non-CMEA Trade

1.39 During the first part of the 1980s, Bulgaria ran positive, and sometimes large, current account surpluses with non-CMEA countries. This partly reflected a strategy of promoting exports of manufactured goods to developing countries via bilateral trade protocols, financed at concessional terms by Bulgaria. These surpluses were also due to the re-export of refined Soviet oil. Thus in 1980, fuels, minerals, and metals accounted for 41 percent of Bulgaria's total exports to non-CMEA countries. From 1985 on, the situation deteriorated rapidly, with the current account deficit increasing

from US\$85.0 million in 1985 to US\$1,306 million by 1989 (see Table 1.5). Nominal export earnings by the end of the decade were below the level achieved in 1980, whereas imports were 71 percent higher. This turnaround reflected a number of factors including: the steady deterioration in the competitiveness of Bulgaria's manufacturing sector, the increased reliance on imported inputs from non-CMEA countries to produce products exported to the CMEA, the negative effect that the lower real price of oil had on the import capacity of some important Middle-East markets, the declining volume and value of oil re-exports, and the declining capacity of developing countries to service their past trade credits. It is noteworthy that the share of total convertible currency (CC) exports sold in developing countries declined from a peak level of two-thirds in 1985 and 1986 to less than half by 1989. Given that total convertible currency export volumes fell by a third over the same period, this represents a very significant decline.

1.40           The changes in the composition of convertible currency trade during the 1980s are less clear than for the CMEA market. In 1989, the primary sources of export earnings were from fuels, minerals, and metals (about 30 percent of total CC trade), and investment goods (about 25 percent). As the supply of Soviet oil declined in the second half of the decade, the share derived from fuels, metals, and minerals declined from 41 percent of total CC trade in the early 1980s to 22 percent by 1988 before partially rebounding in 1989. This latter increase is reportedly due to increased supply from Middle-East countries as payment against past shipments of goods, including armaments. Investment goods went through a different cycle, with their share increasing from 24 percent of total CC exports in 1980 to 41 percent in 1986 before declining back to 24 percent by the end of the decade. Most of these exports were directed to developing countries, which have experienced a decline in their own import capacity. The remaining exports are derived from a wide range of goods, comprising foodstuffs, raw materials, consumer and agricultural goods, and chemicals--each of which account for between 7 and 10 percent of total non-CMEA export earnings.

Table 1.5: BULGARIA - BALANCE OF PAYMENTS IN CONVERTIBLE CURRENCY  
(in millions of US\$)

	1980	1985	1986	1987	1988	1989
<b>1. Current account</b>	<b>907.0</b>	<b>-85.0</b>	<b>-715.0</b>	<b>-773.0</b>	<b>-840.0</b>	<b>-1306.0</b>
Merchandise exports fob	3338.0	3307.0	2656.0	3277.0	3539.0	3138.0
Merchandise imports fob	2532.0	3694.0	3488.0	4232.0	4511.0	4337.0
Services, net	43.0	232.0	56.0	96.0	54.0	-170.0
Receipts	857.0	730.0	651.0	768.0	849.0	908.0
Payments	814.0	498.0	595.0	672.0	795.0	1078.0
Non-interest curr. acct.	1301.0	-56.0	-587.0	-523.0	-477.0	-751.0
Interest, net	-394.0	-29.0	-128.0	-250.0	-363.0	-555.0
Transfers net	58.0	70.0	61.0	86.0	78.0	63.0
Receipts	75.0	90.0	80.0	137.0	155.0	125.0
Payments	17.0	20.0	19.0	51.0	77.0	62.0
<b>2. Capital Account</b>	<b>-756.0</b>	<b>-90.0</b>	<b>228.0</b>	<b>440.0</b>	<b>1882.0</b>	<b>596.0</b>
Med. & LT loans drawn, net	-280.0	495.0	664.0	553.0	2139.0	712.0
Disbursement	1172.0	1961.0	3131.0	2796.0	4225.0	3042.0
Amortization	1452.0	1466.0	2467.0	2243.0	2086.0	2330.0
Loans extended to						
Developing countries, net	-129.0	-305.0	-436.0	-442.0	-445.0	-167.0
Disbursement	194.0	457.0	556.0	633.0	551.0	217.0
Amortization paid	65.0	152.0	120.0	191.0	106.0	50.0
2b. Short-term debt, net	-347.0	-280.0	0.0	329.0	188.0	51.0
Change in foreign assets		-25.0	-18.0	14.0	-96.0	-74.0
<b>3. Errors &amp; omissions</b>	<b>84.0</b>	<b>473.0</b>	<b>-398.0</b>	<b>-164.0</b>	<b>-385.0</b>	<b>276.0</b>
Overall balance (1+2+3)	235.0	298.0	-885.0	-497.0	657.0	-434.0
<b>Financing</b>	<b>-235.0</b>	<b>-298.0</b>	<b>865.0</b>	<b>497.0</b>	<b>-657.0</b>	<b>434.0</b>
Reserve Valuation adjust.		125.0	257.0	165.0	-62.0	4.0
Change in reser. (- inc.)	-235.0	-423.0	628.0	332.0	-595.0	430.0

Source: Foreign Trade Bank and IMF/World Bank staff estimates.

1.41 The composition of convertible currency imports has remained fairly constant throughout the 1980s. Fuels, metals, and minerals account for about a third of total CC imports and investment goods for about a quarter. There has been a slight increase in the share of agricultural and consumer goods, partly reflecting the poor performance of the domestic agricultural sector and under-investment in consumer good industries.

1.42 Services and Transfers: Bulgaria ran a small surplus in both its CMEA and non-CMEA external service accounts from 1980 to 1988. This situation was reversed in 1989 when a rapid increase in interest payments (up from US\$186 million in 1985 to US\$680 million in 1989) resulted in the convertible currency service account recording a deficit of US\$170 million.

1.43 In the CMEA area, receipts from tourism have more than doubled during the decade--primarily due to Soviet and East German visitors to the facilities on the Black Sea. Net interest payments were negative, reflecting the medium- and long-term credit extended by CMEA during the first part of the decade. These should decline to zero or turn positive in 1990 due to the large surpluses generated in 1988 and 1989. Net transport earnings were also negative owing to the cost of transit trade through socialist countries, in particular Romania.

1.44 In the non-CMEA accounts, both tourism and transport provided positive foreign earnings during the decade. Net tourism receipts have remained at about US\$150 million, whereas net transportation receipts have declined from a peak of about US\$200 million in the early 1980s to about half this level. As most of Bulgaria's transportation earnings derive from the transportation of goods between Western Europe and the Middle East by its large trucking fleet, the current regional crisis is likely to have a negative effect on earnings. Another source of income has been earnings on engineering and construction projects, primarily in developing countries. In 1989, however, these positive flows were more than offset by the aforementioned increase in interest payments. These interest payments reflected the accumulation of external debt and higher interest rates on loans denominated in Deutsche Marks and Swiss Francs. In contrast, interest receipts declined as a percentage of debt outstanding due to the concessional terms provided by Bulgaria and, more importantly, non-payment by some developing countries.

### C. Capital Account

1.45 Convertible Currencies: In the first part of the 1980s, Bulgaria was a net exporter of capital, reflecting the Government's policy of reducing the stock of debt that had built up due to the balance of payments crisis in 1978. The trend was reversed in 1985, and capital inflows were positive with disbursements averaging over US\$3.0 billion in 1986-89. Medium- and long-term loans have been used to finance imports of equipment; trade credits have been used to finance raw material imports; and short-term deposits have been used to improve the external liquidity position. Direct investment either in Bulgaria or by Bulgarian firms in other countries has been minimal--mostly limited to tourism projects within Bulgaria.

1.46 Capital outflows have derived from two sources. First, Bulgaria extended unusually large export credits to developing countries (relative to its own access to international capital markets) under bilateral trade protocols to stimulate exports. Disbursements for this purpose increased from US\$457 million in 1985 to a peak of US\$633 million in 1987. Amortization repayments on this credit from recipients have not kept pace with this increase, falling to a low of US\$50 million in 1989. Second, amortization payments on Bulgaria's medium- and long-term debt increased from US\$1.4 billion in 1985 to US\$2.3 billion in 1989, which was equivalent to 58 percent of exports of goods and services in convertible currencies.

1.47 Non-convertible Currencies: Capital flows in non-convertible currencies reflect developments in the current account balance with socialist countries. Thus, positive net capital inflows during the first part of the 1980s were reversed between 1986 and 1989, reflecting Bulgaria's growing trade surplus with CMEA countries. Most of these financial flows have been channeled through the CMEA's international banking framework.

#### D. External Debt

1.48 The Bulgarian Foreign Trade Bank (FTB) until recently had the exclusive responsibility for settling all external payments and receipts as well as carrying out external borrowing, debt servicing, and management of the official international reserves. The institutional arrangements of the foreign trade system were characterized by centralized decision-making for most imports and exports, and nearly all external financial transactions reflected decisions made under the foreign currency plan. The FTB is legally a commercial banking entity, although 72 percent of its equity is held by the National Bank of Bulgaria (NBB), which is the central bank. The NBB and the FTB jointly hold equity in most commercial banks.

1.49 Bulgaria maintained spontaneous access to capital markets until 1989 and was consequently able to increase gross official borrowing significantly since 1985; recourse to short-term financial credits and rollover of loans also increased significantly. As shown in Table 1.6, total debt outstanding and disbursed has almost tripled since 1985, increasing from US\$3.2 billion to US\$9.2 billion by end-1989. About half of this debt was comprised of trade and short-term financial credits and the remainder of medium- and long-term obligations. Most loans were raised through syndicated credits. Bulgaria also floated bonds in limited amounts on the Japanese and German capital market in June 1989. Only about US\$1.2 billion of Bulgaria's debt were officially supported export credits, according to creditors reports to the BIS and OECD reporting system. Bulgaria has obtained few bilateral government loans and has not received multilateral credits, except for a few loans in convertible currencies from CMEA institutions.

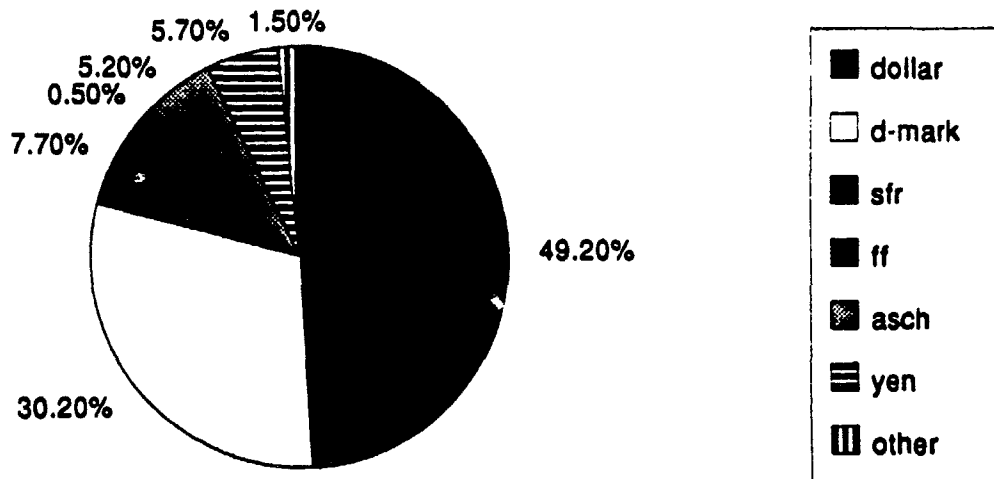
Table 1.6: EXTERNAL DEBT POSITION IN CONVERTIBLE CURRENCIES, 1980-1989  
(in millions of US\$)

	1980	1985	1986	1987	1988	1989
<u>Total DOD</u>	<u>4152</u>	<u>3240</u>	<u>4671</u>	<u>6139</u>	<u>8186</u>	<u>9201</u>
Medium- & Long-term loans	2294	1670	2739	3617	4880	5220
L/Cs and Trade Financing	1446	1525	1875	2170	2677	3127
Short-term Deposits	413	45	58	351	629	854
<u>Total Debt Service Payments</u>	<u>1983</u>	<u>1652</u>	<u>2731</u>	<u>2605</u>	<u>2526</u>	<u>3010</u>
Principal	1452	1466	2467	2243	2086	2330
Interest	531	186	264	362	442	680
<u>Memo Items</u>						
Ratio of Debt to Export GNFS	99	80	141	152	187	227
Debt Service Ratio	47.3	40.9	82.9	64.4	57.6	74.4
International Reserves	1396	2136	1522	1199	1801	1381

Source: IMF and World Bank staff estimates.

1.50 About half of the debt is denominated in US dollars, nearly one-third in Deutsche mark, and the rest in Western European currencies and Japanese yen (see Figure 1.1). A part of the increase in external liabilities stems from exchange rate valuation adjustments related to the appreciation of the DM, Yen and Swiss francs vis-à-vis the US\$. Roughly 45 percent of Bulgaria's external debt was contracted in the former three currencies. The substantial share of strong currencies has translated into an average external rate of interest of the order of 6.9 percent in 1989, compared with a US LIBOR of 9 percent. About two-thirds of FTB's external debt is held by four creditor countries (see Figure 1.2). The combination of rapidly increasing external liabilities and falling hard currency export revenues has increased the Debt/Exports ratio from 80 percent in 1985 to 227 percent in 1989.

Figure 1.1: BULGARIA - CURRENCY COMPOSITION OF FOREIGN TRADE BANK'S EXTERNAL DEBT AS OF END 1989

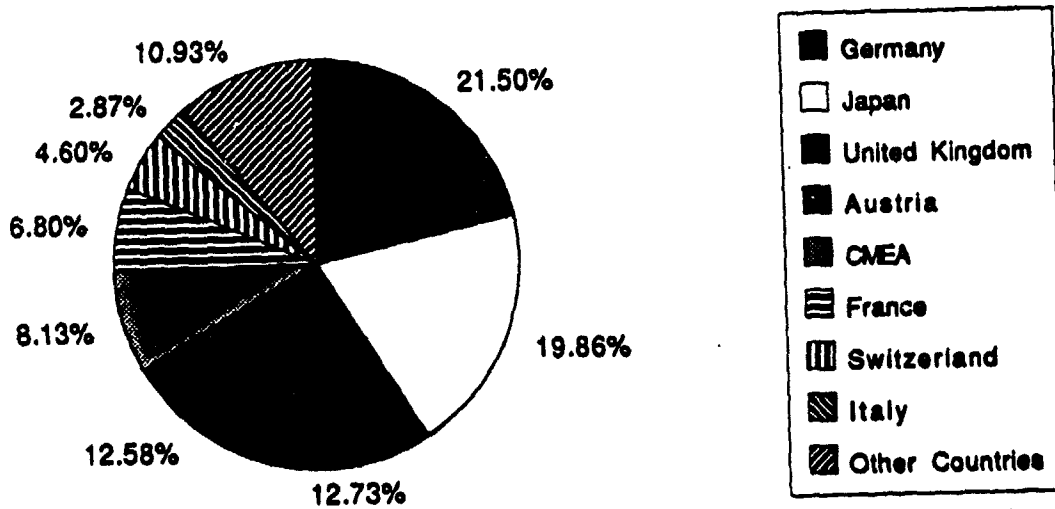


Source: FTB and staff estimates.

1.51 During the first quarter of 1990, commercial bank creditors became reluctant to provide new medium- and long-term credits and to roll over short-term financial obligations. Owing to its lack of international reserves in addition to a liquidity crunch from no longer having direct access to exporters' foreign exchange earnings and a bunching in the debt service profile, on March 29, 1990, FTB announced to its bank creditors that it was suspending all amortization payments on external liabilities falling due between April and June 1990. It continued to service interest obligations, however, until the meeting with London Club creditors in late June 1990. The moratorium was then broadened to cover both interest and principal and was extended by the London Club creditors, first to the end of September 1990 and later to December 31, 1990. Since the FTB has acted as the major channel for Bulgaria's external borrowing, it is the obligor of almost the entire debt; foreign liabilities of the commercial banks with international licenses are estimated to amount to only US\$740 million.



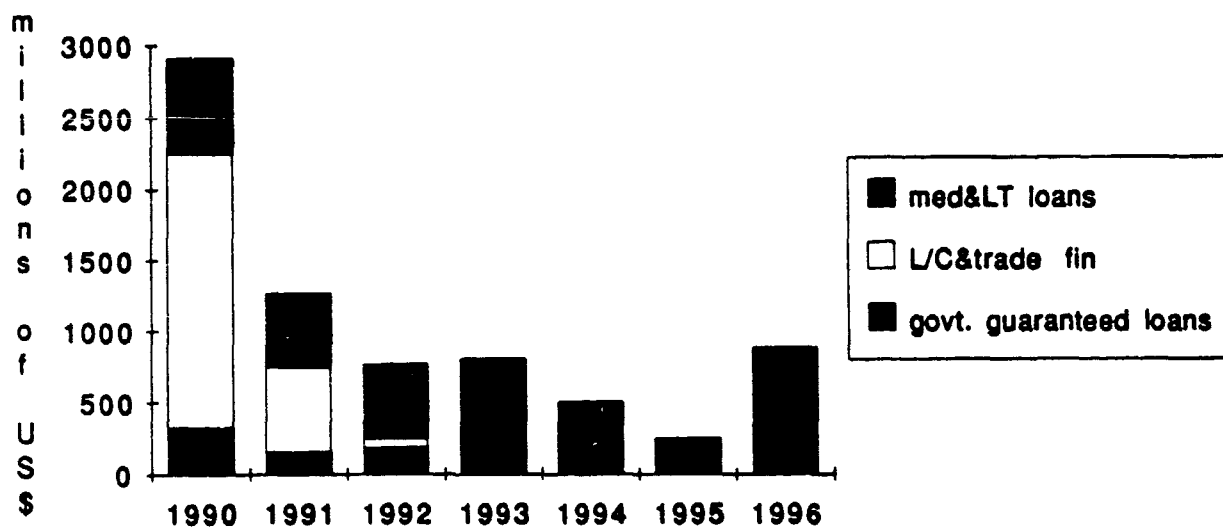
Figure 1.2: EXTERNAL DEBT OF FOREIGN TRADE BANK IN CONVERTIBLE CURRENCY BY CREDITOR COUNTRIES AS OF END 1989



1.52 Bulgaria's debt service difficulties reflect primarily a poor maturity profile as well as a marked decline in convertible currency export earnings. The absolute size of debt relative to current account receipts in convertible currencies is lower than that of Poland and Hungary<sup>1/</sup>. A large proportion of loans was contracted on a short-term basis, and principal maturities equivalent to 40 percent of FTB's external liabilities were scheduled to fall due in 1990. The severe bunching of maturities is reflected in Figure 1.3.

<sup>1/</sup> The debt stock of Bulgaria at end-1989 was estimated as 227% of goods and services in convertible currencies which is less than for Hungary (319%) and Poland (486%).

Figure 1.3: BREAKDOWN OF BULGARIAN FOREIGN TRADE BANK'S DEBT SERVICE PROFILE



Source: FTB and staff estimates.

1.53 Finally, Bulgaria's foreign debt position has been made worse by the arrears built-up on the credit Bulgaria extended to other developing countries. It is estimated that, between 1980 and March 1990, outstanding credits extended by Bulgaria to developing countries increased from US\$0.3 billion to US\$2.4 billion. In particular, large loans were granted to Iraq and Libya. To extend export credits, Bulgaria had to tap the international capital markets and increase its own debt burden. Consequently, when some countries incurred arrears on their debt service payments to Bulgaria, the maintenance of prompt debt servicing by Bulgaria became more difficult. Collection problems have mounted rapidly, and accumulated arrears due to Bulgaria were US\$749 million at end-March 1990. Repayments of loans have been made partly in crude oil at negotiated prices. The authorities have entered negotiations with a view to obtaining at least partial payments on their claims. Bilateral agreements are being implemented with oil-exporting countries for debt-for-commodity swaps. A five-year arrangement was concluded with Iraq in mid-1990 for oil imports equivalent to US\$120 million per annum. Obviously, the recent crisis in the Middle East will have negative implications for Bulgaria's capacity to realize these payments.<sup>1/</sup>

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<sup>1/</sup> See Chapter 4, for a discussion of the impact of the recent Gulf crisis on Bulgaria.

#### IV. Fiscal and Monetary Policy

##### A. The Government Budget

1.54 As in other socialist economies, Bulgaria's government budget revenues and expenditures account for a large share of economic activity, exceeding an average 60 percent of GDP in recent years. The structure of Bulgaria's budget is explained in Box I. The accompanying Tables 1.7 and 1.8 provide a summary of the state and consolidated general government budgets, respectively.

1.55 The most important item on the revenue side of the State Budget (see Box 1) has been Profit Taxes, representing some 40 percent of total tax revenues. These taxes are based on the concept of "balance sheet profits" as defined in the Bulgarian accounting system. The main tax on profits is a State tax, generally at the rate of 50 percent (10 percent for agricultural organizations since 1990). With the addition of other taxes on profits, the overall rate generally exceeds 60 percent. In the past, the Bulgarian concept of balance sheet profits differed significantly from the one used in market economies. Interest on short-term and investment credit, insurance, management salaries, and bonuses to workers were not included in costs. On the other hand, most subsidies were included in revenues. It follows that profits were severely overstated. Given the relatively high tax rate, revenues from profit taxes have remained large.

1.56 The Turnover Tax is the second largest source of government tax revenues and corresponds to most of the difference between wholesale and retail prices. In the case of a subsidy to retail prices, the tax rate is negative. The Turnover Tax is based on final sales; hence material inputs, tools, machinery, and exports are exempted.

1.57 Other taxes include excises on alcohol, tobacco, etc., the individual income tax, property taxes, the tax on excess wage and salary increases, and customs duties. The income tax accounts for less than 10 percent of revenues. The top marginal rate on wage and salary incomes is only 14 percent. On the other hand, other forms of income, including income from private business activities and liberal professions, are subject to highly progressive taxation. Custom duties revenues have been fairly small, since (i) imports from CMEA countries (almost 2/3 of total imports) come in duty free, and (ii) when the import cost, including the turnover tax and the import duty, exceeds the domestic (fixed) price, the import duty paid is reimbursed to enterprises. The tax on excess wage and salary increases was introduced in 1988 and is characterized by highly progressive tax rates. Social Security contributions are directly paid into the Social Security budget by employers and represent about 20 percent of total tax revenues.

**BOX 1****The Structure of Bulgaria's Budget**

The formulation and implementation of the Bulgarian annual State Budget (see Table 1.7) are the responsibility of the Ministry of Finance in collaboration with other key economic ministries. The accounts of several constituent budgets are consolidated in the State Budget. These are the Republican budget, the budget of Organs of State Management (ministries, courts, etc.), the Social Security budget, and the budgets of Municipal People's Councils.

The first three constituent budgets comprise the central Government. The Republican budget, which is the largest component of the State Budget, finances outlays on subsidies, culture and higher education, national defense, and investments in the productive sectors. The budget of Organs of State Management depends on transfers from the Republican budget, from which it was separated in 1982. It finances the running costs of Government. The Social Security budget, funded by earmarked payroll taxes, functions on a pay-as-you-go basis. Virtually all Bulgarian employees and workers receive benefits from these programs. The budgets of Municipal People's Councils (MPC) correspond to local Government and constitute the second largest constituent of the State Budget. They receive all the proceeds from the individual income and property taxes and about 20 percent of receipts from profit taxes. The MPCs provide primary and secondary education, public health and welfare services, and transport infrastructure.

There are important transfers across the constituent budgets. Ultimately, all financing needs or excess revenues are channelled to the Republican budget with the other budgets being in approximate balance by year's end.

A number of extrabudgetary funds, ranging from 10 to 15, have operated in Bulgaria to implement specific policy objectives. Most of these funds were fairly small. An exception is the State Investment Council Fund (SICF) created in 1987. Its purpose is to finance investments in priority sectors for which commercial financing was not available. The SICF has been financed by loans from the National Bank of Bulgaria (NBB), the State Savings Bank, and the State Insurance Institute. Its only revenues are small interest payments on past loans. When the accounts of the extrabudgetary funds are consolidated with those of the State budget, the Consolidated General Government Budget is obtained (see Table 1.8). Its revenues are identical to those of the Consolidated State Budget, and so are the expenditures until 1986. From 1987 on, the expenditures of the SICF are also included. Figure 1.4 shows the revenues and expenditures of the Consolidated General Government Budget as percentage of GDP.

1.58 One important and unusual source of revenues for the State has stemmed from the application of "coefficient differences." These were related to the concept of currency coefficients (essentially, multiple exchange rates), and arose from foreign exchange transactions between FTB or other commercial banks on one side and importers or exporters on the other. All entries in these banks' balance sheets were made at official rates while their customers' accounts were credited or debited at commercial rates. The resulting "profits" or "losses" due to the use of different exchange rates would then be passed on by the banks to the Budget.<sup>1/</sup> The original 1990 budget included substantial revenues (lv. 0.8 billion) from this source (see Table 1.7).

1.59 Net budgetary receipts also result from price differences on imports. These occur when the domestic wholesale price is different from the import costs at the prevailing commercial exchange rate. If the wholesale price is above import costs, the importer pays the difference to the budget. In the opposite case, the budget pays the difference to the importer.

1.60 Among current expenditures, wages and salaries (excluding defense expenditures) and maintenance and operating expenditures accounted for 8 and 25 percent of overall outlays in 1989, respectively. About 12 percent of the labor force (excluding military and security personnel) is paid by the Budget. Social Security payments have been large, reflecting demographic factors and a generous social policy, and accounted for about 20 percent of total expenditures.

1.61 There are seven broad categories of subsidies: (i) to agriculture, (ii) for "production stimulation" (i.e. to assist chronic loss-makers), (iii) for exports to the CMEA and convertible currency areas, (iv) for input prices (to facilitate low retail prices), (v) to retail prices (so that retail prices can be lower than wholesale prices), (v) to imports (when the retail price is lower than the import price), (vii) "other subsidies" to enterprises performing functions that would otherwise be the Government's responsibility and transfers to enterprises suffering unexpected losses. In recent years, the total share of subsidies in total expenditures has remained above 25 percent.

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<sup>1/</sup> The system of coefficient differences is such that when the commercial rate exceeds the official exchange rate, trade deficits result in revenues for the State, and vice-versa. Bulgaria has been running trade deficits in the convertible area, where the commercial rate has remained above the official rate, and surpluses in the non-convertible area, where the commercial rate has been lower than the official rate. Thus in past years, revenues arising from trade with both areas have been positive.

Table 1.7: BULGARIA - CONSOLIDATED STATE BUDGET, 1980-90 a/  
(in leva million)

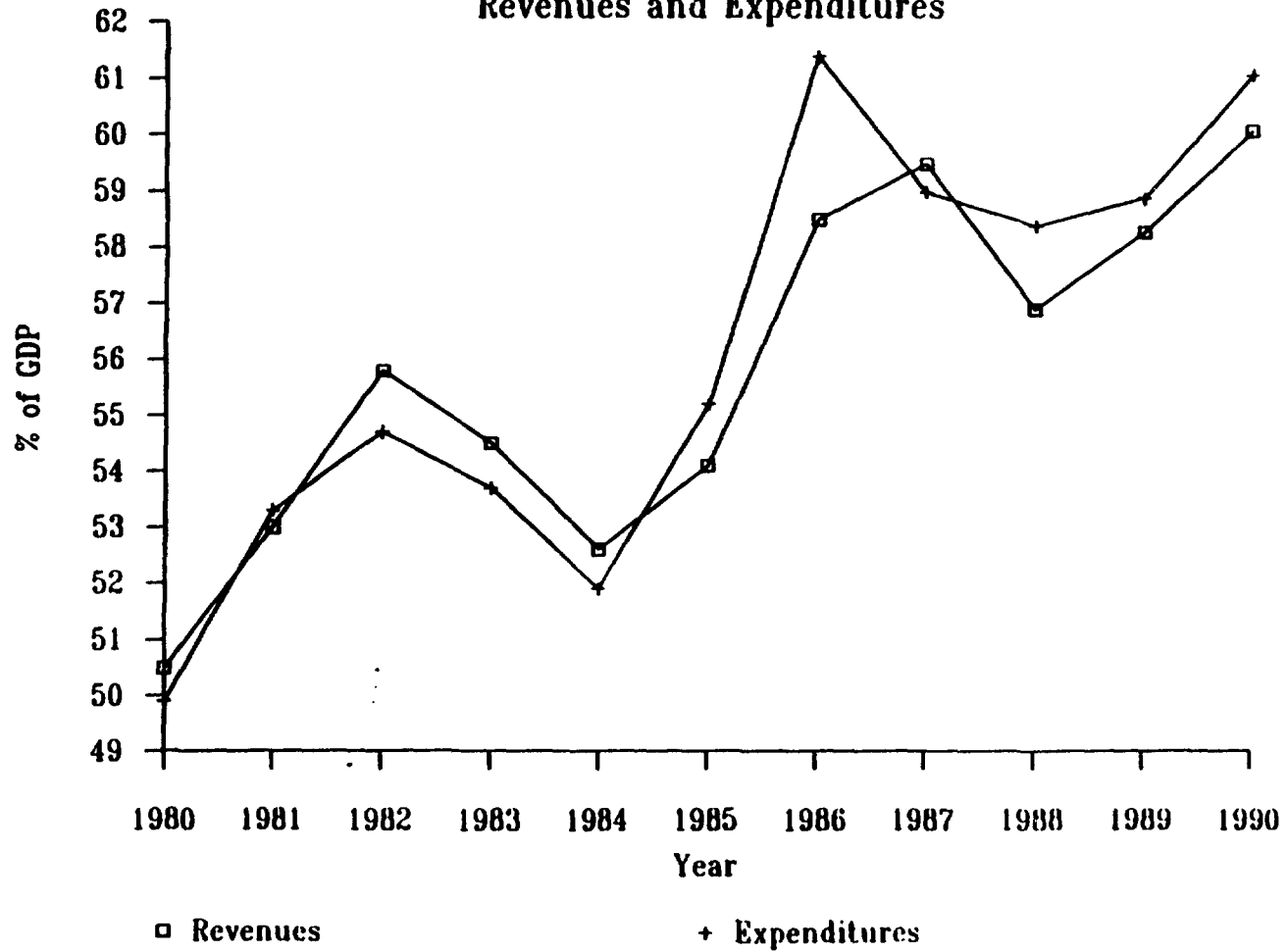
	1980	1985	1986	1987	1988	Preliminary	
						1989	1990
<b>Total revenue</b>	13016	17638	20141	21725	21804	22912	24048
Tax revenue	9467	15021	17024	16910	18162	19527	20528
Profit taxes	2302	6252	6440	6910	8110	9186	9734
Income tax	945	1292	1372	1460	1538	1633	1721
Turnover tax and excises	3431	4119	5572	4841	4442	4450	4565
Customs duties	-	140	159	156	310	330	355
Social security contributions b/	2753	3166	3325	3484	3628	3806	4027
Other	36	52	56	5 <sup>a</sup>	133	123	126
Nontax revenue	3549	2617	3117	4815	3642	3385	3520
Trade related c/	1975	673	920	2282	1551	1684	1510
Other	1574	1945	2197	2534	2092	1701	2010
<b>Total expenditure</b>	12882	18002	21143	21545	22393	23137	24443
Current expenditure	11645	15458	17696	19247	20332	20973	22955
Wages and salaries	1162	1501	1729	1699	1778	1850	2316
Maintenance and operating	3403	4715	4756	5154	5167	5748	5904
Defense/security	1139	1528	1914	1883	1929	1944	2114
Subsidies d/	3128	4160	5301	6268	6767	6119	6050
Interest	422	277	369	519	795	1208	2125
Social security payment	2392	3277	3627	3723	3895	4104	4446
Capital expenditure investment	1237	2543	3447	2299	2062	2164	1488
Surplus/deficit (-)	134	-364	-1002	180	-589	-225	-395
<b>Financing</b>	-133	364	1002	-180	589	225	395
Foreign (net)	-45	359	586	-420	-455	-544	-616
Repayment from foreign states	43	63	53	38	119	33	32
Loans to foreign states	-160	-17	-79	-86	-59	-63	-29
Disbursement of foreign loans	250	577	890	235	201	177	171
Repayment of foreign loans	-178	-264	-279	-607	-716	-690	-790
Domestic (net)	-88	5	416	240	1044	770	1011
Bank financing	-88	5	416	240	1044	770	1011
of which:							
NBB loans	-	-	400	-	869	880	-
<b>MEMORANDUM ITEMS</b>							
(as % of GDP)							
Total revenue	50.5	54.1	58.5	59.5	56.9	58.3	60.1
Tax revenue	36.7	46.1	49.5	46.3	47.4	49.7	51.3
Nontax revenue	13.8	8.0	9.1	13.2	9.5	8.6	8.8
Total expenditure	49.9	55.2	61.4	59.0	58.4	58.9	61.1
Current	45.2	47.4	52.4	52.7	53.0	53.4	57.4
Capital	4.8	7.8	10.0	6.3	5.4	5.5	3.7
Surplus/deficit (-)	0.5	-1.1	-2.9	0.5	-1.5	-0.6	-1.0
GDP	25791	32595	34424	36531	38345	39285	40000

Source: IMF

- a/ Includes Republican budget, budgets of Organs of Management, of Regional and Municipal People's Councils, and of the Social Security.
- b/ Net of contributions of the State as employer, which are not recorded as expenditure either.
- c/ Data are on a Net basis for revenues from import price differences.
- d/ Including extra-budget expenditure of lv. 409 million for agro-industries in 1988 financed by loan from NBB.

Figure 1.4

### BULGARIA: CONSOLIDATED STATE BUDGET Revenues and Expenditures



1.62 The Budget is also used to finance all interest payments on both external and internal government debt. This includes external debt of the Foreign Trade Bank (see para 1.50), but not amortization of this debt.

1.63 The credits extended by the SICF must be counted as expenditures in the Consolidated General Government Budget. This is because the SICF provides concessional financing for investments which would not have access to commercial financing. These credits were in excess of 5 percent of GDP in 1987 and 1988, but fell substantially in 1989 (see Table 1.8).

Table 1.8: BULGARIA - CONSOLIDATED GENERAL GOVERNMENT BUDGET, 1980-90  
(in leva million)

	1980	1985	1986	1987	1988	1989	Preliminary Budget 1990
<b>STATE BUDGET</b>							
Total revenue	13016	17638	20141	21725	21804	22912	24048
Total Expenditure	12882	18002	21143	21545	22393	23137	24443
Current expenditure	11645	15458	17696	18247	20332	20973	22955
Capital expenditure	1237	2543	3447	2299	2062	2164	1488
Surplus/deficit (-)	134	-364	-1002	180	-589	-225	-395
<b>STATE INVESTMENT CREDIT FUND</b>							
Total revenue	-	-	-	159	43	63	160
Total expenditure	-	-	-	2082	2024	1166	841
Net lending	-	-	-	2082	2024	1166	841
Surplus/deficit (-)	-	-	-	-1923	-1981	-1103	-681
<b>GENERAL GOVERNMENT</b>							
Total Revenue	13016	17638	20141	21884	21846	22975	24208
Total expenditure	12882	18002	21143	23627	24417	24304	25824
Current expenditure	11645	15458	17696	18247	20332	20973	22955
Capital expenditure	1237	2543	3447	4381	4085	3330	2329
Surplus/deficit (-)	134	-364	-1002	-1743	-2570	-1328	-1076
<b>Financing</b>							
Foreign (net)	-133	364	1002	1743	2570	1328	1076
Domestic (net)	-45	359	586	-420	-455	-544	-616
Bank (excluding to SICF)	-88	5	416	2163	3025	1673	1692
Of which:							
NBB loans	-88	5	416	240	1044	770	1011
Bank (to SICF)	-	-	-	1382	1500	1080	650
Of which:							
NBB loans	-	-	-	700	900	580	-
Variation in unused SICF resources	-	-	-	-359	281	23	31
Nonbank (to SIFC)	-	-	-	900	200	-	-
<b>MEMORANDUM ITEMS</b> (as % of GDP)							
<b>General Government</b>							
Total revenue	50.5	54.1	58.5	59.9	57.0	58.5	60.5
Total expenditure	49.9	55.2	61.4	64.7	63.7	61.9	63.2
Current expenditures	45.2	47.4	51.4	52.7	53.0	53.4	57.4
Capital expenditure	4.8	7.8	10.0	12.0	10.7	8.5	5.8
Surplus/deficit (-)	0.5	-1.1	-2.9	-4.8	-6.7	-3.4	-2.7

Source: IMF and World Bank staff estimates.



## B. Fiscal Developments in the Eighties

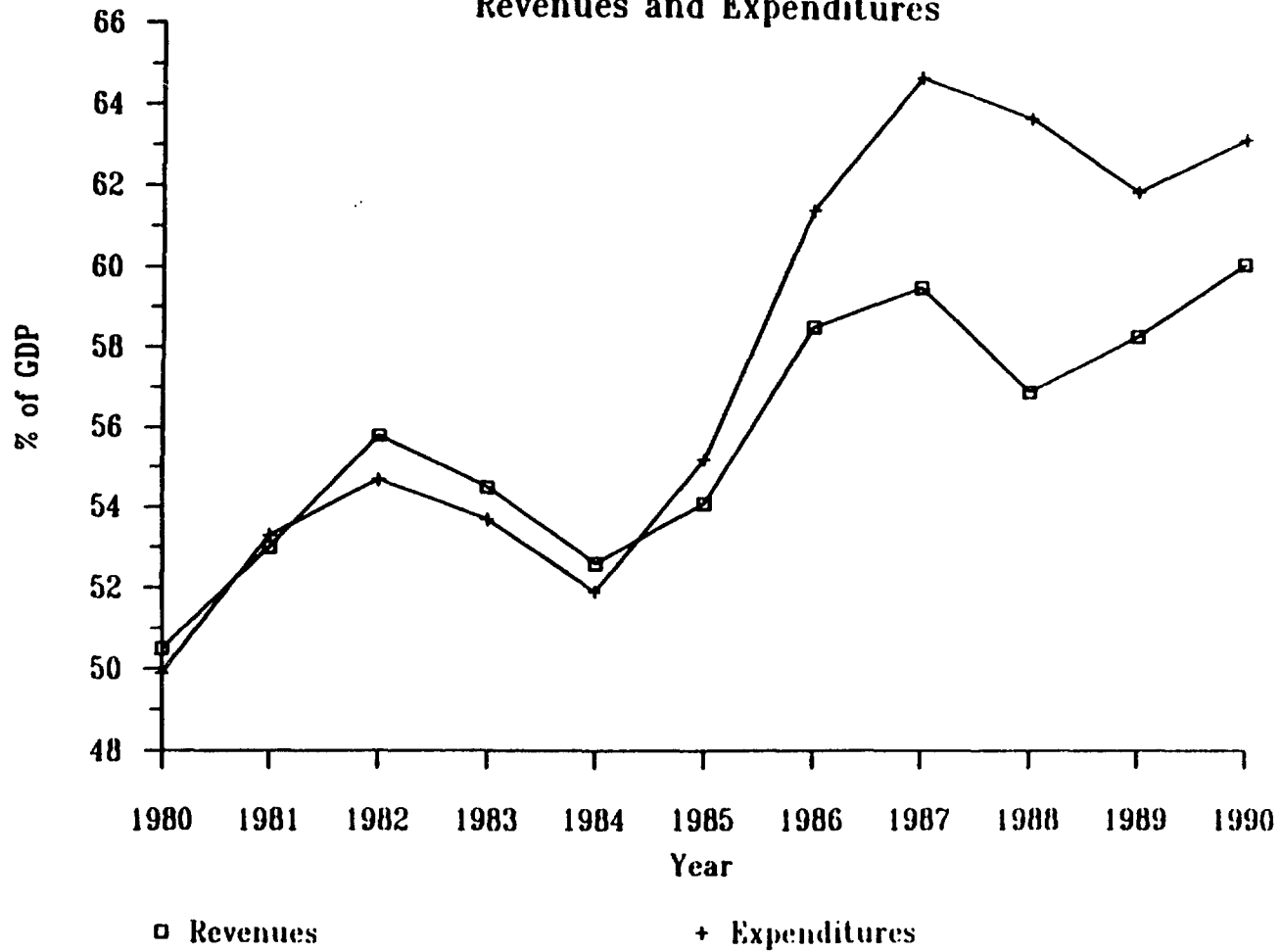
1.64 The period 1980-89 can be subdivided into two subperiods: 1980-85 and 1986-89. From 1980 to 1985, the Consolidated General Government Budget was in approximate balance, with both revenues and expenditures fluctuating around 53 percent of GDP. The period 1986-89 shows a sharp departure from this stable trend, with revenues and expenditures increasing sharply and fluctuating around 58 percent and 63 percent of GDP, respectively. As a result, deficits in 1986-89 were substantial, equivalent to 3 percent to 7 percent of GDP (see Figure 1.5).

1.65 The main factor behind the higher expenditure level in 1986-89 was a substantial rise in current expenditures. Increased subsidies were needed to support unprofitable industrial production. Domestic prices were not adjusted in line with the increase in prices charged within the CMEA, as these were adjusted according to the CMEA practice of averaging price changes over a five-year period. Consequently, oil and gas imports had to be subsidized. Capital expenditures also rose, but to a smaller extent.

1.66 Tax revenues were substantially higher during 1986-89, as compared to 1980-85, except for a dip in 1988. The increase in revenues was not the outcome of increases in a single item, but rather followed from a variety of developments. Both profit and turnover tax revenues increased sharply in 1986. In 1987, trade related nontax revenues associated with price differences on imports were high, as domestic petroleum prices were increased and the turnover tax on petroleum eliminated. Trade related nontax revenues were also boosted in that year by the temporary introduction of import fees and by growing receipts from coefficient differences. The dip of 1988 was associated with developments in nontax receipts. The temporary import fees introduced in 1987 were eliminated, and price differences on imports narrowed. The recovery of 1989 was mostly due to the buoyancy of tax revenues and the main profit tax rate was increased from 40 percent to 50 percent.

1.67 The State Budget was in deficit from 1986 to 1989, except for a small surplus in 1987 (see Table 1.7). Foreign financing for these deficits was not available, except in 1986. On the contrary, foreign financing was negative, around lv. 470 million in 1987-89. Domestic financing, mostly in the form of NBB loans, was therefore required even in 1986, when foreign financing was not enough to cover the peak deficit of lv. 1.0 billion. Additional bank finance was needed for the extrabudgetary funds (essentially the SICF). The domestic financing needs of the Consolidated General Government were substantial in the period 1987-89, remaining above 4.5 percent of GDP. This represented a substantial pressure towards monetization.

Figure 1.5  
**BULGARIA: CONSOLID. GENERAL GOVT.**  
Revenues and Expenditures



1.68 In addition to fiscal deficits, domestic credit expansion and increases in net foreign assets also contributed to monetization. During the 1980s, both Socialist Sector Credit and Foreign Liabilities increased substantially in real terms. Thus, the expansionary influence of increasing credits to the socialist sector was (partially) counteracted by the contractionary influence of increased foreign liabilities. A breakdown of the latter shows a rapid accumulation of hard currency liabilities while nonconvertible currency liabilities were being retired (see Table 1.9). The availability of foreign finance during the second half of the eighties helped decrease the rate of growth of the money supply.

Table 1.9: REAL INCREASES IN SOCIAL SECTOR CREDIT AND FOREIGN LIABILITIES  
(as percentages of GDP)

	1983	1984	1985	1986	1987	1988	1989
Social Sector	3.0	5.9	2.2	4.2	3.6	7.6	0.2
Foreign Liabil.:	-0.2	0.0	1.4	1.9	2.6	3.3	0.3
Convertible	-1.4	-1.2	3.3	2.7	1.1	3.9	2.6
Nonconvertible	1.2	1.2	-1.9	-0.8	1.5	-0.7	-2.3

Source: Estimates based on IMF data.

1.69 Unfortunately, these trends were substantially reversed in 1990. The budget deficit widened while the availability of external financing decreased sharply, giving rise to the need for significant adjustment.

### C. Money and Finance

1.70 Structure of the Banking Sector: The current financial system of Bulgaria consists of the National Bank (NBB), the Foreign Trade Bank (FTB), the Savings Bank (SSB), eight older commercial banks (one of which was established in 1981 and the remainder in 1987), and 59 newer commercial banks that until January 1990 were branches of the National Bank. In addition, there are four newly licensed banks and two older insurance companies (see Volume II, Chapter 5).

1.71 Further important reforms were introduced at the end of 1989 in the banking system. These reforms included eliminating the specializations that had been imposed on the domestic banks. Under the new system all banks, including SSB, FTB, the eight older specialized banks and the 59 new commercial banks, will be permitted to act as universal banks, making operating and investment credits to any industry, receiving deposits from individuals, and granting housing and consumer credits to individuals. However, at present, only the older eight specialized banks and the FTB are licensed to deal in foreign exchange.

1.72 Competition in the banking sector is just beginning to develop. Some of the older banks purchased or opened a few branches in different

regions. However, in most smaller cities, there is still only one bank or one branch of a bank. Consequently, there is practically no competition at the local level except in the largest urban centers. The former specialized banks are diversifying their activities by shifting their lending to new economic sectors and extending working capital credits, but this change is only beginning and portfolios remain concentrated in terms of lending to a few firms in the designated industries in the case of older banks and in terms of region for the newer banks. The newer commercial banks have not fully developed their independence from the NBB. At the same time, the SSB is considering offering credits to enterprises, thus moving away from its exclusive concentration on the household sector. The Foreign Trade Bank, on the other hand, is encumbered by the stock of foreign debt and its role, half way between Central and commercial bank, is ill-defined.

1.73 In addition to the issues noted above, the banking sector currently faces a number of institutional and structural problems related, inter alia, to the need to deepen and diversify the payments system, improve the quality of bank assets, strengthen capital adequacy, modify the structure of ownership, and improve prudential bank supervision and staff training. These issues are discussed in detail in Volume II, Chapter 5.

1.74 Money and Credit: Monetary policy played little role in the management of Bulgaria's economy until this year. Under the system of central planning, a consolidated financial plan was developed that would permit the realization of the material targets of the State Plan. A credit plan set out indicative credit and deposit money targets for the whole economy and comprised the working capital and investment credit needed to fulfill the material targets. No plan was adopted for 1990. However, in April 1990, the NBB (under the authority given to it in the 1989 banking reform) froze investment credit to enterprises at the 1989 level and required that each company's working credits by the end of 1990 be limited to 95 percent of the end-1989 level.

1.75 In the past, virtually no monetary policy instruments other than credit allocation were used by the Bulgarian authorities. In January 1990, a reserve requirement of 5 percent on banks' deposit liabilities was introduced. Interest rates have been determined administratively by the Council of Ministers and have not been employed to allocate capital among uses. The basic rate set by NBB had remained constant at 4 percent for the period 1980-88 and was raised to 4.5 percent in 1989. Lending rates varied from 2 to 6.5 percent, with housing rates at the lower end and working capital loans at the higher end of the spectrum.

## V. Prices, Wages and Benefits

1.76 Prices: Despite reform efforts throughout the 1980s, the price system in Bulgaria continued to insulate domestic wholesale and retail prices from each other and from international prices. Most wholesale prices were adjusted infrequently, e.g., from 1982 to 1987 official wholesale prices inflation rates averaged less than 1 percent. Retail prices were set with two objectives in mind: first, to balance the aggregate supply of goods with the

aggregate purchasing power of households; and second, to maintain a minimum living standard for all. As a consequence, prices of certain goods and services such as food, utilities, and housing were priced below wholesale prices or production costs; others were set high to absorb consumer purchasing power. Retail prices also did not change much from year to year, with official retail prices increasing by an average 1.6 percent per annum in the period 1986-88. Even the unofficial statistics of the CSO, which are based on a more representative basket of goods, showed a growth of only 2.6 percent per annum during the period 1986-88 and a rise of 6.2 percent in 1989. Despite a number of reform efforts in the early 1980s, import and export prices diverged significantly and haphazardly from international prices, and the exchange rates used bore little relationship to equilibrium rates.

1.77 Employment, Wages and Social Welfare: Labor force participation rates are high in Bulgaria, as most people below the legal retirement age of 60 are employed and many pensioners continue to work. Compared with other upper-middle income developing countries, Bulgaria has a well-educated labor force with almost half having had more than primary education in 1988, and 8 percent having completed university training (Table 1.10).

Table 1.10: BULGARIA - COMPARATIVE LABOR FORCE INDICATORS

	Per Capita Income	Share of Labor Force Employed in		Work Force with More than Primary Education
		Agriculture	Industry	
Bulgaria, 1970		35	38	n.a
Bulgaria, 1988	2,320 a/	19	46	48
Algeria	2,760	31	27	27
Argentina	2,370	13	34	51 b/
Brazil	2,020	26	24	22
Malaysia	1,810	42	19	23
Uruguay	2,160	16	29	33
Upper Middle Income Countries	2,510	30	30	n.a.

Source: Social Indicators or Development, 1988 and staff estimates.

a/ 1989

b/ 1989 Metropolitan areas only.

1.78 The bulk of the labor force (82 percent) is employed in the "material" or productive sectors (inclusive of transport and "productive" services), with industry accounting for a much larger share than agriculture (Table 1.11). Employment in social service delivery (education, health, and

municipal services) has increased by 45 percent since 1970, but employment in the service sector in Bulgaria still lags behind that of comparator countries.

1.79 Historically, unemployment has not been a problem in Bulgaria, with almost everyone that is able to work being employed. Over the last decade, employment has grown more rapidly than the labor force. Since 1980, the size of the population between 16 and the legal retirement age shrunk 2 percent while employment grew by 2 percent. This caused firms to report labor shortages at times, and even at present the state employment service reports more vacancies listed than registered unemployed. During the first week of July 1990, less than 25,000 people (0.5 percent of total employment) were registered at the state employment agencies. The total monthly unemployment rate is, however, probably higher, as not all job seekers are likely to be registered at state employment offices.

Table 1.11: BULGARIA: POPULATION AND EMPLOYMENT  
(in thousands or percent)

	1970	1980	1985	1986	1987	1988	1989 a/	1990
Total Population	8489.6	8861.5	8960.4	8971.3	8981.4	8981.4	8870.7	8992.3
Males	50.0	49.8	49.7	49.5	49.4			49.4
Females	50.0	50.2	50.3	50.3	50.5	50.6		50.6
Urban	53.0	62.5	64.9	65.6	66.4	67.0		67.6
Rural	47.0	37.5	35.1	34.4	33.6	33.0		32.4
Under 16	2073.4	2082.5	2057.2	2013.5	2036.7	2024.4		
Active Age	4930.2	5094.0	5034.2	5027.6	5006.6	5000.7		6578.0
Over Active Age	1486.0	1695.0	1869.0	1916.5	1928.0	1956.3		1699.0
Employed-Total	4150.7	4363.9	4459.5	4473.3	4486.9	4457.8	4396.5	
Employed-Socialist Sector	2748.7	4024.8	4094.7	4076.5	4108.4	4077.6	4085.2	
Males	56.4	51.5	50.5	50.5	50.3	50.1		
	43.6	48.5	49.5	49.5	49.7	49.9		
In Industry & Construction	38.7	43.4	45.7	46.0	46.4	46.3	46.9	
In Agriculture	35.2	23.8	20.4	19.9	19.1	18.7	17.2	
Other Sectors	26.0	32.8	33.9	34.1	34.4	35.0	36.0	
of which:								
Education	4.3	5.6	6.0	6.1	6.1	6.2	6.7	
Health	2.7	4.3	4.5	4.5	4.7	4.8	5.2	
Central Government	1.5	1.5	1.3	1.3	1.4	1.4	1.3	
Retired (Receiving Pension)	1720.0	2042.0	2212.0	2249.0	2293.0	2326.0		
As Percent of Employed	41.4	46.8	49.6	50.3	51.1	52.1		

Source: CSO is the source for all 1970-1988 figures except Urban/Rural breakdown which are based on the Health Statistics booklet.

a/ 1989 figures are from special preliminary estimates of CSO.

1.80 Wage and salary payments, benefits provided to employees in cash and kind, and pension payments accounted for roughly 80 percent of total incomes of the population in 1989. Until 1989, nominal wage increases were moderate. Allowing for inflation, real wages increased by an average 2.6 percent per annum between 1980 and 1988. However, since shortages were pervasive throughout the period, price indexes cannot accurately measure changes in the standard of living. Substantial wage increases were granted in the later half of 1989 and the first months of 1990, such that average wages for the first quarter of 1990 were 19 percent above the average for the first

quarter of 1989. The largest increases were in the non-material sectors, especially health and education, partly to permit employees in these sectors to catch up, as their wage increases had lagged behind the economy-wide average during the latter half of the 1980s.

1.81 Social benefits in the form of cash transfers and the provision of virtually free social services with almost universal coverage represent an important addition to wage incomes and to the overall welfare of individuals and families. In 1989, almost 20 percent of household disposable income consisted of cash transfers from the social security system. Yet the system is not designed to target assistance to the needy. Bulgaria can also point to substantial accomplishments in the social sectors, where service provision has generally been quite effective. Few, if any, Bulgarians live in absolute poverty. The institutional basis is well developed to assist those citizens who cannot fend adequately for themselves (particularly the elderly and children). The performance of Bulgaria in terms of social indicators such as life expectancy at birth, infant mortality, access to and completion of general education, and adult literacy rates is among the highest in Eastern Europe. While this performance is still somewhat below OECD standards and conceals some serious remaining problems, Bulgaria's achievements in the social sectors are nevertheless impressive.

1.82 Bulgaria's cash benefits system has three main elements: social security benefits financed by the Social Security Budget, social welfare benefits administered by the Local Municipal People's Councils, and, since December 1989, unemployment compensation and job search-related programs funded under the Professional Training and Retraining Fund. Additional elements of social assistance include specific programs of the social sector ministries and price subsidies for essential commodities.

1.83 As is characteristic of centrally planned economies, government cash transfers have been mostly administered through the employer. Virtually all benefits have been funded under the social security budget and have been awarded primarily for retirement, illness and disability, and maternity and child support. Coverage is essentially universal, and regulations have been strengthened in recent years to ensure that this is the case. Benefits are quite generous: for example, maternity leave is provided for three years for each child up to three children; close to 60 percent of social security old age pensions are paid to people 60 years old and younger.

1.84 During 1981-90, social assistance expenditures have accounted for about 20 percent of total expenditures in the consolidated state budget. The structure of expenditures in social assistance has remained remarkably stable throughout the period. Social security outlays have accounted for around 96 percent of total expenditures in social assistance. Social welfare expenditures (by the Local Councils) have been negligible, accounting for the remaining 4 percent of expenditures in social assistance. The social welfare system has been set up for two main purposes. First, to provide social insurance benefits (mostly illness and family-related benefits) to persons that are not covered through their employment. The other is to provide additional social welfare benefits (mostly for drugs and housing, and lump-sum payments in cases of distress) to particularly needy groups such as the

elderly, families of soldiers, the handicapped and large families, and to families with very low incomes (defined as "socially weak"; for details see Volume II, Chapter 6).

1.85 In December 1989, the Council of Ministers approved the establishment of a specialized fund (Professional Training and Retraining Fund--PTRF) to provide unemployment compensation, labor market information, and training to the unemployed. All workers dismissed for economic and technological reasons who register with the Labor Offices are eligible to receive compensation. Voluntary departures are not covered. There are no minimum service requirements. The Labor Offices are administered by the Local Municipal Councils.

1.86 There are two types of unemployment benefits: unemployment allowance and unemployment assistance. The basis for the unemployment allowance is the gross wage in the month prior to unemployment. The replacement rate amounts to 100 percent for the first month (paid by the employer, hence constituting a termination payment), decreasing by 10 percentage points per month to 50 percent in the 6th month (paid by the PTRF). The minimum amount paid is the minimum wage. The maximum length of unemployment allowance receipt is six months. After the six months, and for three additional months, the unemployed are entitled to unemployment assistance provided as a flat-rate benefit equal to the minimum wage.

1.87 The PTRF is financed by two main sources: unemployment contributions and transfers from the state budget. The unemployment contribution is set at 0.5 percent of the wage bill of (socialized) enterprises and organizations with economic activity as well as private enterprises.<sup>1/</sup>

1.88 Finally, in order to protect consumption levels during the process of economic reform, the Government has maintained price subsidies for "essential" groups of commodities. It is estimated that such subsidies will amount to about 1.2-1.3 billion leva or 3.2 percent of GDP during 1990. For reference, the budget cost of the price subsidies is more than five times estimated outlays for social welfare in 1990. Note that the above amount does not include implicit subsidies such as those for utilities or housing. The Government's stated intention is to maintain these subsidies only temporarily--or at least reduce the number of commodities covered. Most of the estimated subsidy expenditure (98 percent) is for food products, including the following commodity groups: meat and meat products, milk and dairy products, flour, bread, potatoes, eggs, cooking oil, all types of baby food, and sugar ("special" foodstuffs such as high grade delicatessen meats or cheeses are not included). Subsidies have also been maintained for baby and children's clothing and shoes. Food commodities covered by the subsidy amount to about

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<sup>1/</sup> This contribution is not a new burden on enterprises, but was previously allocated to the Development and Technological Renovation Fund. Due to the exclusion of all budgetary institutions from the contribution base, the base is much narrower than for the contributions to the SSB.



60 to 65 percent of the total food consumption in the basket consumed by the "typical" family (four persons with two working parents and two young children).

1.89 The overall impression of Bulgaria's programs of health and education is of a sufficiently developed physical infrastructure, often generously staffed with personnel of adequate basic qualifications. Furthermore, there is a full range of institutions of public administration in the sectors. By contrast, the productivity of this physical and human infrastructure is much lower than what might be expected. A major part of the problem appears to be a general lack of the equipment and supplies needed to maximize output of people and physical plant and the reputedly low motivation of people working in the sector.

1.90 The central challenge for Bulgarian social policy is how to preserve, consolidate, and subsequently extend the substantial social sector achievements of the past decades during a period of fundamental transition to democratic pluralism and an open market economy. Since that transition will entail much greater pressures on heretofore relatively generous public financial provision for the social sectors, this will be a very difficult task and will require a substantial reorientation of the social assistance programs (see below Chapter 4, and Volume II, Chapter 6).

## VI. Concluding Remarks

1.91 As we enter the 1990s, the Bulgarian economy confronts a serious economic crisis. The estimated decline in GDP of 1.4 percent in 1989 is likely to be followed by a fall of at least 10 percent in 1990. This is partly because the current moratorium on foreign debt payments has severely curtailed access to external capital at a time when export earnings in convertible currency markets have already declined markedly. Given the low level of foreign exchange reserves, the current account in the balance of payments is being equilibrated via a sharp cut in imports. Shortages of imported inputs are, in turn, exacerbating the difficulty of maintaining export and output levels and are beginning to impose burdens on consumers.

1.92 On the domestic side, inflation has accelerated as the effects of the realignment of the exchange rate and limited price adjustments and liberalization filter through to domestic prices. More worryingly, the large liquidity in the hands of the public, negative real interest rates, and the growing possibility of a significant increase in the budget deficit are increasing underlying inflationary pressures. Coupled with a failure to curtail real wages, the necessary adjustment in the domestic price level could result in a wage-price spiral.

1.93 These economic difficulties are occurring at the same time as the country is grappling with difficult internal and external issues. On the internal side, Bulgaria is confronted with the social and political issues related to restoring democracy and establishing a market economy. The newly formed Government will have to face an economic situation which has become worse, partly because of delay, but also partly because the change in CMEA

trade and payments arrangements combined with the current Middle East crisis will result in a significant deterioration in Bulgaria's terms of trade. This combination of domestic and external economic conditions will present a major challenge to Bulgaria's population and decision makers.

**CHAPTER 2****MACROECONOMIC ISSUES****I. Introduction**

2.01 A stable macroeconomic environment is an essential precondition for Bulgaria's successful transition to a market economy. At present, however, large macroeconomic imbalances have emerged in the form of an unsustainable budget, a current account deficit, and rising inflation. Failure to tackle these imbalances early on will undermine the program of systemic reform to which the Government is committed and make it more difficult to attract the foreign capital needed to stimulate future economic growth.

2.02 There are two main challenges to restoring and maintaining macroeconomic equilibrium: First, how to strengthen the balance of payments position and relieve the foreign exchange constraint that severely limits economic activity. This will be a major challenge because a significant proportion of Bulgarian manufactured exports are unlikely to be competitive in convertible currency markets in the near-term. Future export prospects to the CMEA markets themselves are highly uncertain, and it is quite likely that, starting in 1991, the establishment of new trade and payments arrangements within the CMEA will result in a significant terms of trade loss for Bulgaria. These problems will be compounded by a further deterioration in Bulgaria's terms of trade and lack of financing to buy oil previously obtained from Iraq.

2.03 Second, how to reduce inflation while at the same time liberalize prices in order to provide appropriate incentives to productive enterprises in industry and agriculture. Such improved incentives are essential to improve resource allocation, stimulate a supply response (especially for exports), and restore long term output growth. However, in the present context of an emerging large budget deficit, negative real interest rates, repressed inflation, and considerable liquidity in the hands of the public, price liberalization could easily lead to runaway inflation unless accompanied by significant reforms in Bulgaria's fiscal, monetary, and wage policies.

2.04 The sections below analyze in detail the major challenges faced by the Bulgarian authorities and present a number of recommendations about macroeconomic and other policies that might enable the authorities to cope with a very difficult and complex set of problems.

**II. The Balance of Payments****A. The Situation in 1990**

2.05 Bulgaria's balance of payments situation deteriorated severely in the first quarter of 1990 as a consequence of several factors: the gradual real long-term decline in exports to convertible currency markets accelerated and, notwithstanding a significant reduction in imports, the deficit in the

trade account continued. It is estimated that in the first six months of 1990, exports to convertible currency markets fell by 15 percent to \$1.3 billion compared to the first six months of 1989. Exports to both the OECD and the developing countries fell. The decline in the latter markets was due to a reduction in Bulgaria's provision of export financing and general sluggish growth in these countries. The decline in the OECD markets resulted from the disruption of production caused by the social and political turmoil and the drastic cut back in imported inputs (including spare parts and energy) following the closure of external lines of trade credit.

2.06 At the same time there was a significant bunching of repayment obligations in convertible currencies, as well as continuing large arrears in the repayments of Bulgaria's own credits to developing countries. One government estimate is that these arrears will amount to \$800 million for 1990 alone. The Government continued to service its foreign debt obligations fully through the first quarter of 1990, essentially by using its foreign exchange reserves. After these reserves fell to a level of about \$200 million at the end of the first quarter, the Government announced a moratorium in servicing the debt of the Foreign Trade Bank (FTB). The moratorium has been extended to the end of 1990 (see above Chapter 1) but has led to a severe cutback in the availability of foreign financing including the cutting off of trade credit lines.

2.07 As a result of the reduction in the availability of external finance and the decline in exports, imports were cut back sharply. It is estimated that, in the first six months of 1990, imports in convertible currencies declined by over 20 percent to \$1.7 billion compared with the same period last year. These adverse trends continued during the last half of the year due to a further breakdown in CMEA trade relationships, continued domestic uncertainty, and virtually no access to external trade credit.

2.08 CMEA trade is affected by two sets of factors: there is stagnation in the export markets of most CMEA partners, as growth in several of these economies appears to have been negative during 1990 and prospects for the near term are poor. More fundamentally, however, prospects are uncertain because the traditional CMEA trade and payments arrangements are in the process of being dissolved, but a new set of arrangements has not been put in place. The CMEA Council meeting in Sofia, in January 1990, announced that fundamental changes will take place in the CMEA arrangements starting with 1991 but that, while negotiations for such new arrangements are in progress, existing contractual obligations and established procedures will be honored for 1990. In practice, Bulgarian authorities report that, while Bulgaria is meeting its export commitments, several CMEA countries have not met their deliveries to Bulgaria in full, giving rise to shortages of some raw material inputs and fuel. Trade flows with the CMEA partners are expected to decline by about 25 percent in real terms during 1990.

2.09 These developments in international trade and payments will require significant adjustments for Bulgaria. It is clear that the trade deficit in convertible currencies incurred in 1989 was unsustainable and had to be reduced. The effects of reducing this deficit on real output would have been less if the bulk of the adjustment had occurred through increases in

exports rather than through decreases in imports. This is unlikely to occur in 1990. We estimate that the adjustment will occur through declines in imports (see Table 2.1). However, it is important to take steps to ease the impact of the needed balance of adjustment on incomes and output in 1991 and beyond.

2.10 Action is needed in three broad areas: First, it is necessary to take steps to expand exports to all markets in 1991 and beyond. Second, it is desirable to explore approaches which can ease the adjustment as well the terms of trade shock that will result from changes in the arrangements governing trade and payments with CMEA countries--especially with the USSR. Third, it is important to regularize relations with external creditors in order restore trade financing and other capital inflows. While care needs to be exercised as to how much additional external debt is incurred, it is clear that the pace of the adjustment required will depend on the amount and terms of the financing that can be secured.

Table 2.1: BULGARIA - CONSOLIDATED BALANCE OF PAYMENTS, 1989 AND 1990  
(in millions of US\$) a/

	1989	1990 (Est.)
<u>Current Account Balance</u>	<u>-767</u>	<u>-895</u>
Trade balance	<u>-691</u>	<u>-861</u>
Exports of goods (FOB)	8278	5998
CMEA	(5140)	(3444)
Non-CMEA	(3138)	(2554)
Imports of goods (FOB)	8969	6859
CMEA	(4632)	(3900)
Non-CMEA	(4337)	(2959)
Non-factor services	<u>440</u>	<u>230</u>
Receipts	1255	834
Expenditures	-785	-604
Net-factor income	<u>-593</u>	<u>-376</u>
Receipts	127	135
Expenditures	719	511
(interest payments conv. currency) <u>b/</u>	(680)	(490)
Net transfers	<u>77</u>	<u>112</u>
<u>Capital Account</u>	<u>333</u>	<u>-62</u>
Medium- and long-term debt <u>b/</u>	<u>523</u>	<u>-590</u>
Disbursements	3112	180
Repayments	2589	770
Extended M&LT loans, net	<u>-231</u>	<u>250</u>
Direct foreign investment	<u>0</u>	<u>12</u>
Short-term capital	<u>-202</u>	<u>0</u>
Capital flows N.E.I. <u>c/</u>	<u>0</u>	<u>266</u>
Errors and omissions	<u>243</u>	<u>0</u>
<u>Change in Reserves</u> (- indicates increase)	<u>434</u>	<u>957</u>
<u>Memo Items</u>		
Unpaid interest	0	302
Unpaid principal	0	2319

Source: Staff estimates

a/ CMEA trade converted to US\$ at the prevailing commercial cross exchange rate with the lev.

b/ On a cash basis, arrears shown as memo item.

c/ This is an approximation of the trade deficit with CMEA (expressed in US\$), which is being partly financed by running down surpluses accumulated since 1987.

## B. Convertible Currency Markets

2.11 In response to the emerging balance of payments difficulties, the Government took a number of steps in May 1990; these changes essentially affected trade and payments with the convertible currency markets:

- It established a system of three exchange rates: the basic rate set at 3 leva to the US\$, which would apply only to repayments of foreign debt and transactions involving a limited number of basic goods and invisibles<sup>1/</sup>; the market rate which would be determined by a series of monthly foreign exchange auctions and which would apply for most remaining transactions until the next monthly auction (the last auction, in June 1990, produced a market rate of 7 leva/US\$);<sup>2/</sup> the cash rate, which was set at 7.2 leva/US\$ and which would apply to a limited number of transactions primarily involving purchases of foreign exchange by Bulgarians to travel abroad.
- Firms earning foreign exchange are permitted to retain 50 percent of their net foreign exchange earnings (after taking account of imported inputs and other foreign exchange cost of operations) and surrender the remainder to the Government (the FTB); but 24 large exporting firms, accounting for about half of total exports to OECD markets, are subject to mandatory targets for surrender of foreign exchange, which involve a lower net retention percentage; in addition, firms can obtain foreign exchange at a "company auction" where firms could offer foreign exchange to the highest bidder.

2.12 The system has been in place only for a short time, and thus only preliminary judgements about its impact are possible. It is clear, however, that the changes created a system of multiple exchange rates for both exports and imports which, overall, resulted in a significant devaluation of the lev relative to its previous rate. World Bank Economic Mission interviews with Foreign Trade Organizations (FTO) and firms in June-July 1990 strongly support

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<sup>1/</sup> Fertilizers and pesticides; feed stock and vitamins; raw materials for baby food; medicines; components for production of medicines; veterinarian patent medicines; bread yeast.

<sup>2/</sup> This is the average realized rate of the monthly currency auctions which are organized jointly by the National Bank of Bulgaria (NBB) and the Foreign Trade Bank (FTB). All public and private firms are free to submit bids in the auctions up to a total of \$300,000 per firm, provided that the purchased foreign exchange was used in a monitored procedure for the purchase of approved raw materials and other inputs. Bids are rewarded by going down the ordered (by offer price) list of bids until the total is exhausted. Each successful bidder receives his requested amounts at his offer price; the "market price" is then set as the weighted average realized offer price, and kept valid until the next auction.

the conclusion that at the prevailing prices, the market rate of about 7 leva/\$ made exports to convertible currency markets profitable and no longer needed support via price equalization.<sup>1/</sup> But this increased profitability, because of supply rigidities and time lags, does not appear to have yet had the effect of increased supply response or significant switching of production from domestic to the foreign markets. The main result in the short term has probably been the generation of additional profits.

2.13 The changes described above have liberalized access to foreign exchange by individual firms; but the benefits devolve primarily to the exporters from the right to retain foreign exchange earnings, rather than to those wishing to obtain foreign exchange through the auctions. Because of the overall scarcity of foreign exchange, the amounts available through the first two auctions have been limited to \$30 million each.<sup>2/</sup> The "company auction" in May resulted in sales of only \$1.5 million. Firms holding foreign exchange earnings from their retention quotas prefer holding them in high-yielding deposits denominated in foreign currency. If they need domestic currency, they can always sell foreign currency at the market rate to the NBB without the trouble of having to go through the auction.

2.14 The multiple nominal exchange rates combined with different retention rates and different degrees of dependence on imported inputs imply that, in practice, there is large variation in the effective real exchange rate applicable to various transactions. While no detailed empirical study of the issue in Bulgaria is available, these multiple rate practices result in a non-transparent system and imply inefficiencies since incentives to exports and the degree of protection afforded to imports would vary substantially for different economic activities.<sup>3/</sup>

2.15 Since the auctions involve a small portion of the total foreign exchange supplied or demanded, the resulting market rate in this thin market is presently far from a genuine "market clearing rate." The authorities have a great deal of latitude to manage the rate up or down by releasing greater or smaller amounts of foreign exchange for the monthly auctions. Also, there are a variety of restrictions on the use of foreign exchange obtained through the auctions as well as in the opening of letters of credit using retained earnings (see below Chapter 3).

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1/ For an explanation of the price equalization mechanism see below Appendix 2. This should not be interpreted to imply that the market rate is an "equilibrium" rate. There is a lot of repressed inflation still in the economy and prices and wages do not reflect market conditions.

2/ No auctions have been held since June 1990, due to the extreme scarcity of foreign exchange.

3/ Vinod Thomas, Kazi Matin and John Nash, "Lessons in Trade Policy Reform", Washington, DC, World Bank Policy and Research Series, Paper 10, 1990.



2.16 To stimulate exports in convertible currency markets and to promote the long term restructuring of the economy along lines of comparative advantage, it is necessary to modify the existing exchange rate policy. The present multiple exchange rate system creates inefficiencies and distortions and should be substituted at the earliest possible time with a unified exchange rate, at least for current account transactions, and a flexible exchange rate policy that maintains the competitiveness of Bulgarian exports. Bulgarian authorities are aware of the shortcomings of the present system which they have viewed as a transitional one to be replaced by a unified system of exchange rates, perhaps in 1991.<sup>1/</sup>

2.17 While an improved exchange rate system and policies would be important to better resource allocation and more effective macroeconomic management as well as to strengthen Bulgaria's export performance, the latter would require additional actions. Recent interviews with trading organizations and firms suggest that a great deal of the output of manufacturing industries is not competitive in OECD markets due to inferior design or quality (see Volume II, Chapter 1). For high- and medium-technology lines of production, price reductions, as a consequence of devaluation, are presumed not to improve competitiveness measurably since demand is considered to be highly responsive to quality rather than to price differentials. It is almost irrelevant whether this perception is accurate, as it effectively deters firms from serious efforts to break aggressively into OECD markets. Furthermore, it is evident that in many important production lines of Bulgarian industry the FTOs, and even more so producing firms, lack an even rudimentary marketing infrastructure in OECD countries. To address these problems, a sustained effort is needed to reorient production to meet international standards and demand as well as to improve marketing. Detailed recommendations on such a program are contained in Volume II.

### C. The CMEA Markets

2.18 Negotiations for new CMEA arrangements are still in progress. A loose arrangement patterned after the OECD and supplemented by bilateral agreements between countries seems to be gaining favor. While the details are not yet decided, it appears certain that the new arrangements will contain features that could have significantly adverse-short term effects on Bulgaria. An important change under the new system, starting in 1991, would be that trade among these countries would be conducted at international prices and a proportion of the resulting balances (yet to be agreed) would be settled in convertible currencies. Moving to trade arrangements which are based on international prices as well as toward greater currency convertibility is obviously beneficial to the long term improvement of resource allocation and productivity in Bulgaria. A discussion of the proposed new arrangements and

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<sup>1/</sup> It is unclear at this point as to whether the authorities are considering the establishment of a freely floating exchange rate, or a crawling peg or another variant. These issues are beyond the scope of this study and no specific recommendations as to a particular exchange rate regime should be inferred from this discussion.

their impact on efficiency is contained in Chapter 3. For the short-term, however, these changes will have adverse terms of trade effects on Bulgaria. This is because, in broad terms, Bulgaria to date has benefited from the purchasing of raw materials and especially oil from the Soviet Union at lower than international prices while exporting to the Soviet Union and other CMEA countries manufactures at higher than international prices. If the movement of CMEA trade to international prices were to take place at once, the impact on Bulgaria would likely be quite severe. The terms-of-trade loss has been estimated by Bulgarian authorities to be of the order of \$2.5 billion (i.e. 12.8 percent of 1989 GDP--see below Chapter 4).

2.19 The above projections were made before the Gulf Crisis. If the crisis continues, it could well result in higher oil prices and larger terms of trade losses. A preliminary estimate suggests that the additional terms of trade loss in 1991 will be of the order of 2.0 percent of 1989 GDP. But an even more serious concern is access to oil supplies since Iraq had recently agreed to provide sizable oil deliveries as repayments of outstanding debt. It is unlikely that the USSR will be able to make up the difference, as it was itself facing difficulties in maintaining raw material deliveries due to stagnating output and diversion of deliveries to Western markets; and access to supplies of oil in the open market will require payment in very scarce hard currencies.

2.20 Finally, rising quality requirements of USSR customers and heightened competition in the wake of the liberalization of USSR imports may adversely affect Bulgaria's exports. This, in turn, may force some hard choices on whether or not to divert a portion of Bulgaria's limited supply of internationally competitive exportables from OECD markets to the USSR in order to finance the level of imports of raw materials deemed essential to maintain output.

2.21 The Bulgarian authorities have been actively considering steps to deal with the emerging problems in the CMEA markets. There are four basic concerns regarding CMEA trade from Bulgaria's perspective:

- (a) Security of supplies, especially oil;
- (b) Security of markets in light of the increasing competition in CMEA markets;
- (c) Minimizing the adverse terms of trade effect of having transactions denominated at international prices;
- (d) Minimizing the amount of settlements to be made in hard currency, in light of the overall scarcity of foreign exchange availability.

2.22 All these concerns have tended to make Bulgarian authorities seek to reduce the pace of change in the CMEA arrangements. The danger in slowing down change is that resources continue to be locked in inefficient production. On the other hand, the dependence on CMEA trade and especially the USSR market is so large and the scarcity of foreign exchange so severe that spreading the period of adjustment over some time would be desirable to reduce the costs of

adjustment. The key is to use the period of transition to actively prepare the Bulgarian economy for a total integration into the international market.

2.23 Unfortunately, it would appear at present that formal arrangements which would lengthen the period of adjustment, to say three years, as the Bulgarian authorities had hoped, are not feasible. Instead, the adjustment process is likely to be compressed substantially.

2.24 To contain the potential trade deficit, the authorities intend to reduce drastically the volume of transactions, and in particular the volume of imports from CMEA markets in 1991, so that they are limited only to essential inputs and raw materials. At the same time, Bulgarian authorities are seeking understandings with the Soviet Union on deliveries of minimum supplies of oil and other raw materials such as cotton, in exchange for an indicative list of Bulgarian export products. In the current circumstances, such arrangements are difficult to implement because of uncertainties regarding the capacity of various authorities in the Soviet Union at the level of Union or Republic to undertake meaningful commitments with respect to supply or marketing of particular products. To supplement these efforts, and to deal with heightened competition in the wake of the liberalization and decentralization of decisions on Soviet imports, Bulgaria's authorities have also encouraged direct firm to firm contacts in the USSR market. Hopefully, such contacts will reduce the uncertainty about the absorption of the Soviet market which is currently inhibiting production planning for 1991. For many export activities, most clearly in agriculture and some branches of engineering, lead times or production cycles are such that some of the existing export potential are likely to be lost, unless contractual arrangements are confirmed soon.

2.25 Despite all these efforts, however, it is quite clear that the net effect of the terms of trade deterioration, combined with the reduction in the volume of CMEA imports, will be quite substantial in the short-term and will add to the problems encountered by Bulgaria in other markets. Combined with difficulties of breaking into convertible currency markets, these developments imply that the bulk of the balance of payments adjustments in 1991 will continue to be through reductions of imports which are likely to constrain output and income growth (see below Chapter 4).

#### D. Finance and Debt

2.26 The development of a well coordinated finance and debt management strategy is an essential ingredient to effective balance of payments adjustment. Such a strategy needs to take into account the future availability of financing from all sources, both official and private, as well as the possibilities of debt relief.

2.27 At present, foreign commercial banks appear unwilling to extend "new money," and short term trade credits to the FTB have virtually dried up. In addition, other Bulgarian commercial banks (which are also state owned) have suffered a contamination effect from FTB's difficulties in that, while they continue to service their external liabilities, they have experienced a hardening of terms and conditions extended by foreign commercial creditors. This situation has resulted in severe shortages of foreign exchange as

Bulgaria has lost its main source of external financing. A number of bilateral donors have been approached to obtain new official or officially guaranteed credits, but currently, commitments fall far short of financing requirements (see below chapter 4). An immediate need is the re-opening of trade credit lines.

2.28 The moratorium on principal and part payment of interest to creditors of the Foreign Trade Bank may have a lasting negative impact on the country's future access to the private capital markets. Normalization of relations with the commercial banks and other creditors is urgently needed and requires a careful preparation of a financing and debt strategy. This strategy should be linked to a sound, consistent, and comprehensive macroeconomic framework, and it must contain a variety of options for debt restructuring which take into account both the interests of the Bulgarian Government to promote the development of a market economy and the varied interests of the commercial bank creditors. A preliminary set of scenarios exploring alternative macroeconomic developments and availability of financing and debt relief is presented in Chapter 4 for purposes of illustration. However, the government authorities need to internalize the analytical process of developing a consistent macroeconomic framework and use it to elaborate a comprehensive finance and debt strategy.

2.29 At present, several government institutions (FTB, NBB, the Ministries for Foreign Economic Relations and Economy and Planning) as well as the commercial banks are involved in various ways in decisions on borrowing and management of foreign exchange resources. Stronger coordination of these entities under the leadership of one institution is needed in order to develop an integrated strategy for foreign borrowing, debt restructuring, and management of scarce foreign resources. Development of such a strategy also requires strengthening the Government's capability to analyze and assess alternative borrowing and restructuring scenarios as well as improvements in the debt data base.

### III. Fiscal Policy

2.30 The original 1990 State Budget projected a deficit of lv. 395 million. Taking into account the SICF's projected deficit of lv. 681 million, the Consolidated General Government deficit would have amounted to 1076 million leva. An increase in the State Budget deficit from 0.6 percent in 1989 to 1.0 percent of GDP was therefore projected, but a larger cutback in SICF outlays was intended to result in a reduction of the Consolidated General Government deficit, from 3.4 to 2.7 percent of GDP (Table 1.8). The increase in the State Budget deficit was to occur despite a projected 5 percent increase in revenues, as expenditures were expected to grow at the faster rate of 5.6 percent. This was entirely due to a sharp increase in current expenditures, as capital expenditures were to be reduced to 1.49 billion leva, after they had already been severely curtailed in 1987.

2.31 The 9.4 percent increase in current expenditures was intended mostly for wage and salary increases granted to teachers and doctors as well as much higher external interest payments. Total subsidies were projected to

remain approximately constant at 6.1 billion leva, or 15.3 percent of GDP. Subsidies to agriculture were to increase by 23 percent, from 1.45 to 1.79 billion leva. Similarly, subsidies to exports to the CMEA area were to increase from 0.86 to 1.16 billion leva. On the other hand, subsidies to exports to the convertible currency area, to inputs, to prices, and to "other subsidies" were projected to decrease (See Table 2.2).

2.32 These estimates of the 1990 budget deficit have become outdated by more recent events. During the World Bank Economic mission, the Bulgarian authorities indicated that, on the basis of decisions already taken, the budget deficit in 1990 will increase, both as a result of increased expenditures and decreased revenues, unless additional measures are taken.

2.33 On the expenditures side, increases in the following items were expected:

- Pensions and Welfare: lv. 345 million.
- Wages: lv. 197 million.
- Interest payments on the domestic debt: lv. 218 million.
- Exchange rate difference on imports of fodder and medicine: lv. 648 million.
- Interest payments on the foreign debt: lv. 517 million.

2.34 On the revenue side, the main items for which decreases were expected are:

- Taxes from the population: lv. 110 million.
- Profit Taxes (from Banks): lv. 201 million.
- Import price differences: lv. 200 million.
- Improvement in Contract Prices from the ruble area: lv. 210 million.

2.35 Some of the above changes (increases in pensions and welfare payments, rises in wages, and reductions in taxes) were introduced in order not to go back on commitments made by the previous Government; others (changes in import prices) reflect a more realistic assessment of the situation likely to prevail. Still others reflect the impact of exchange rate and interest rate changes on the budget. Adding up all the above changes and some other minor items, a deterioration of about lv. 2.7 billion, or 6.7 percent of GDP, is estimated from the original budget. Given that Bulgaria will not fully service its foreign debt in 1990, an alternative calculation that partially excludes interest payments on the foreign debt would yield a deficit estimate of lv. 2.2 billion, or 5.5 percent of GDP.

2.36 In late November 1990, the Government proposed and the Parliament approved a revised 1990 State budget. While it has not been possible to fully evaluate this budget, the following points are worth noting. First, the estimated deficit has been raised to Lv. 1.6 billion. Second, the budget continues to include lv. 900 million in revenues from so-called "coefficient differences". These are essentially fictitious, as they involve transfers from the banking system which result in the decapitalization of banks (see Chapter 1), and which were supposed to have been terminated in May 1990.

Third, the increased deficit was to have been financed through the public offering of Government bonds starting with December 1, 1990.

2.37 In the past, the budget deficit was financed to a significant extent by foreign borrowing, which dampened its inflationary impact on the economy. The lack of foreign financing in 1990 means that the fiscal deficit would have to be financed primarily by money creation, especially since there is no significant domestic capital market. The effect would add to the inflationary pressures in the economy (for a simple quantitative analysis of the impact of the budget deficit on inflation see Appendix 3).

2.38 At this juncture, it is unclear what the actual outcome of the 1990 budget will be. The key issues, however, relate to the future. A variety of measures need to be considered to improve the fiscal situation. The Government has stated its intention to revamp the whole public revenue system through a tax reform to be initiated in the future. The results of such a reform will take some time to materialize. In the meantime, it is necessary to take urgent steps to address the currently deteriorating fiscal situation.

2.39 A key expenditure category that should be targeted for reduction is subsidies. Table 2.2 shows that, at present, the budget contains a variety of direct subsidies for various purposes, including subsidies for uneconomic enterprises, agriculture, and exports. As noted earlier, the devaluation of the lev should reduce the need to subsidize exports. The Government is considering steps to liberalize prices as well as raise a number of administered prices which it plans to retain. It had been planning to implement a price liberalization of 40 percent of total production by volume before the end of 1990. Price liberalization is an important element of the Government's overall reform of the Government. It needs to be implemented in order to promote the proper supply response and encourage the reallocation of resources to productive sectors (see below Chapter 3). But it also needs to proceed urgently because of the effects that it would have in reducing producer subsidies and the budget deficit.

Table 2.2: BULGARIA - BUDGET SUBSIDIES  
(in leva million)

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990*
Subsidies	2776	3128	3947	3867	3921	3960	4160	5301	6268	6767	6119	6050
Agriculture	-	-	-	87	98	-	-	248	-	1760	1453	1708
Industry	527	1261	859	448	544	531	691	1073	1552	1790	1696	1394
Input Prices	891	386	1707	608	623	646	545	521	530	597	665	404
Exports	1181	1090	728	1764	1804	1933	1778	1974	3127	1583	1201	1345
CMEA	1181	876	551	1032	1013	1025	979	1670	1032	1116	857	1152
Convertible Area	-	214	178	731	791	908	799	304	2095	466	344	193
Imports	-	-	-	-	-	48	363	520	-	-	-	-
Retail Prices	177	392	472	621	587	523	487	560	579	630	630	558
Others	-	0	180	339	265	278	297	406	480	407	474	642

Source: IMF  
\* Preliminary

2.40 At the same time, price liberalization will increase pressure for bigger subsidies at the retail level, which would need to be resisted. Indeed, it would be desirable to reduce rather than raise such subsidies. While price liberalization could lead to lower real wages, an effort should be made to redesign the social support programs for the poor through better targeting rather than use the price system as a means of providing general consumer subsidies (see Chapter 4).

2.41 Investment is one area of expenditure where cuts should be moderated. At present, budgetary capital expenditure (including the SICF) has been reduced to very low levels and amounts to only 6.0 percent of GDP. Further cuts would undermine future recovery. At the same time, the overall budget stringency should force a careful evaluation of projects and the postponement or cancellation of activities where the cost-benefit ratio appears to be high, e.g., the Sofia Metro (see Volume II).

#### IV. Monetary Policy

2.42 Bulgaria's monetary and credit policy needs to focus on two major objectives: (a) the support of macroeconomic adjustment and elimination of major imbalances in the economy, and (b) the channelling of credit into productive uses in support of the long-term reforms and restructuring of the economy. A number of issues arise in the pursuit of these objectives. Achievement of macroeconomic adjustment and maintenance of a low rate of inflation will be complicated by the need to raise a substantial number of administered prices (see below) and liberalize others early in the adjustment program. A key concern is that, in the presence of suppressed demand and substantial liquidity, price reform and liberalization will lead to strong inflation pressures which will need to be addressed with appropriate monetary and fiscal policy. Two sets of issues arise in this context: (a) what, if anything, needs to be done to reduce the likelihood that the high stocks of liquid assets in the hands of the public will fuel an inflationary spiral; and (b) what is the appropriate policy regarding interest and credit policy, which would affect the future supply of money. In addition, questions arise about the desirability and method of channelling credit to particular areas in the

aftermath of the recent reforms of the banking sector--especially via preferential interest rates. A number of proposals for preferential treatment to specific sectors, e.g., agriculture, exports, and energy, have been voiced in recent periods on which the Government has not taken a definitive position.

#### A. Monetary Aggregates

2.43 At the end of 1989, the stock of financial instruments held by households and enterprises amounted to 45 billion leva. Of this, 7 billion leva was in currency, 29 billion in demand deposits and 8 billion of quasi-money. The gross domestic product of Bulgaria in 1989 was of the order of 40 billion leva. The ratio of the stock of financial instruments held by domestic residents and enterprises to GDP thus exceeds 100 percent. This ratio is very high in comparison with similar ratios in other economies at approximately the same level of development, as shown in the Table 2.3.

Table 2.3: INTERNATIONAL COMPARISON OF MONETARY AGGREGATES  
(percentage of GDP - 1988)

	Currency	M1	M2
<b>Developing Countries</b>			
Algeria	32	74	86
Korea	4	9	36
Malaysia	9	19	64
Morocco	12	32	45
Turkey	3	10	23
Uruguay	4	6	36
<b>Eastern European Countries:</b>			
<u>Bulgaria</u>	<u>16</u>	<u>86</u>	<u>106</u>
Hungary	11	22	43
Poland	6	16	33
Yugoslavia	3	11	44
<b>Developed Countries:</b>			
Belgium	7	20	47
France	4	26	69
Germany	6	18	59
Italy	5	35	64
Norway	5	29	63
Spain	8	25	65

Source: IMF, International Financial Statistics and Staff estimates.

2.44 These large liquid balances appear to be the result of the monetization of past fiscal deficits combined with the absence of investment opportunities, the system of controlled prices, and ensuing shortages of consumer goods. Whether they constitute a monetary "overhang" and how large it is is impossible to calculate with accuracy. Black markets, in which a



premium over the official price is paid, are rapidly expanding in Bulgaria at present. This implies that the nominal value of output at market prices is greater than at official prices, which in turn implies that the monetary overhang in Bulgaria is less than it might appear. Queues and shortages in an economy imply quantity rationing with a monetary overhang; black markets on the other hand imply price rationing and an "apparent" but not "real" monetary overhang. In fact, both effects can, and in the case of Bulgaria do, exist simultaneously, for the existence of black markets does not assure full equilibrium. For example, the poor might queue for goods and pay the official price while more wealthy people might pay a black market premium to secure what they want. Too little is known to judge the degree to which existing premia above the official prices eliminate the monetary overhang. The impression is that the size of the liquid holdings is so large as to suggest some monetary overhang even after taking black market prices into account.

2.45 After a liberalization of prices, such as that being considered by the Government, households will spend their excess cash balances pushing prices up and the monetary "overhang" will diminish. Prices will rise until the ratio of the stock of monetary assets to GDP falls to the level the population is willing to hold. The question is whether the price increases will lead to an inflationary spiral by a process involving inflationary expectations, which accelerate the velocity of monetary circulation, the large budget deficit, and increases in nominal wages. Given the present situation, the key policy issues are: (a) how to reduce/eliminate the money overhang; i.e. how to deal with the existing stock of liquidity; and (b) what interest and credit policy should be followed (i.e. policies that affect the new money supply) to ensure that, in combination with other macroeconomic policies, the needed price liberalization does not lead to hyperinflation.

#### B. Measures to Reduce Existing Liquidity

2.46 Reduction of the monetary overhang can occur simply by an acceleration of the inflationary process which could quickly reduce the real value of monetary assets. However, such an approach penalizes savers (mostly households) and benefits debtors (mostly enterprises), and it can be costly to contain inflation once it has developed. Alternatively, a more orderly approach could be employed which could consist of a combination of the following elements:

- A reduction of the existing stock of currency and deposits can be achieved if these funds are used to buy housing owned by the public sector or to buy shares of enterprises that are privatized. In the privatization of housing owned by the public sector, the authorities could give priority to purchasers who pay a high proportion of the sales price with their own funds and who consequently need less credit. On the other hand, there should be restrictions on providing credits to buy houses from the public sector and especially to buy shares of firms to be privatized.
- In addition, the Government is considering the issuance of government bonds. Such bonds would have many attractive features; besides absorbing liquidity, government bonds could be issued to

finance the projected deficit in a less inflationary manner. They would also provide an indication of a market interest rate and would offer NBB a medium to be used in the indirect control of the financial aggregates.

- The reduction of the liquidity of the existing large volume of savings deposits could be achieved by conversion of a substantial part of more liquid deposits into medium-term financial instruments. To manage such conversion, the Government has directed the banks to pay higher rates on less liquid, longer term deposits.

### C. Interest Rates

2.47 The present level of interest rates on both deposits and credits is too low. The deposit rates are only 1 percent for demand deposits of enterprises and for saving deposits of households and 3.5 percent for time deposits of enterprises. The lending rates are only 5.4 percent on working capital credits to enterprises and 3.7 percent on investment credits. Comparison with the annual rates of inflation in recent months (which may have exceeded 40 percent) shows that the present level of interest rates is significantly negative in real terms. The existing interest rates do not encourage people to hold a substantial amount of financial assets and stimulate enterprises to finance excessive stocks and fixed capital investments with low returns.

2.48 The authorities had intended to increase the level of interest rates. The basic rate for refinancing by NBB was to be raised from 4.5 percent to 8 percent. The commercial banks would have had the possibility of increasing their lending rates up to a limit of 10 percent (basic rate plus 2 percent) for normal credits and 11 percent for overdue credits. Interest rates were to rise not only on new loans but also on most of the stock of existing credits for which the interest charge is tied to the NBB discount rate. The interest rates on the deposits of households were to be increased from the present level of 1 percent to 3 percent on demand deposits, 5 percent on three-year deposits and 6 percent on five-year deposits.

2.49 These increases in interest rates may have been appropriate earlier in 1990, but they are too small in light of the developments in the economy during the year. Given the current inflation rate, real interest rates would be highly negative. This would result in continued large implicit subsidies to enterprises. The increase in rates should be reviewed, and the NBB should be prepared to raise rates further, depending on expected inflation levels, and developments in the budget and the enterprise sector.<sup>1/</sup>

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<sup>1/</sup> Changes in the system of setting interest rates also need to be considered. On the deposit side, instead of using a separate system for setting deposit rates, it would be preferable that deposit interest rates be linked to the basic NBB discount rate as with credits. That would mean that in the future, deposit rates would rise and fall with the basic rate. Regarding lending rates,

2.50 In the future, once a more stable situation is reached in regard to inflation, the authorities should pursue a flexible interest rate policy providing for real positive returns on financial savings and involving real positive costs for borrowers. Until such a situation is reached, it is not possible to rely on interest rate policy alone to avoid the inflationary pressures from the existing monetary overhang and from the public sector deficit. The authorities must have recourse to other approaches in order to manage the inflationary pressures.

#### D. Credit Policy

2.51 In 1990, the NBB introduced a restrictive credit policy to contain inflation. Control of the money supply is achieved primarily by means of a system of credit ceilings. Under the present plan, the nominal stock of investment credits from each bank in 1990 is not to exceed the level reached at the end of 1989; under such conditions, new investment credits can be granted by each bank only up to the amount of the repayment of investment credits received during the year. As regards working capital loans, the nominal stock granted by each bank must be reduced over the year to 95 percent of its value at the end of 1989.

2.52 In the present circumstances, bank-by-bank credit ceilings are probably the most effective instrument for implementing monetary policy. It should be recognized, however, that in the short-term, when inflation is rising, these ceilings are quite restrictive and could impose a significant burden on enterprises. Moreover, as a monetary instrument, credit ceilings tend to create distortions and obstacles to competition in banking. Over the next several years, the NBB should move to a system of indirect monetary control based on reserve requirements, limits to central bank lending to other banks and to the Government, and interventions in the interbank market.

2.53 There seem to be two risks regarding the control of the money supply: the risk of excessive borrowing by the Ministry of Finance to finance the expanding deficit and the risk of difficulties in the productive sector resulting from the tight credit policy. If the borrowing needs of the Government are too large, NBB will be forced to increase the money supply, thereby increasing the prospects of high inflation. Alternatively, a large deficit may force the NBB to introduce even tighter restrictions on lending to

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unlike at present, when some loans are made at below the basic rate, the discount rate should become the minimum on-lending interest rate. NBB should not specify which loans should be charged more than the basic rate, but should leave that to the banks, which would then set the margin above or below the basic rate in terms of the risk, maturity and costs of administering the credit. Also, raising deposit rates will increase bank costs and raising the lending rate will increase bank income. However, the changes that had been envisaged were not precisely parallel and would have affected bank profitability. Thus, the impact of the suggested changes on the income of the financial institutions must also be carefully analyzed.

productive enterprises which will reduce expansion opportunities for the currently very small private sector. This would be undesirable at a time when the economy is undergoing major structural changes and the allocation of credit to new enterprises should rise.

2.54 A somewhat less restrictive credit policy would be possible if the authorities succeeded in reducing the substantial liquidity of the existing stock of deposits by adopting some of the solutions discussed in the next section. That reduction of liquidity would be reflected in a decline in velocity of broad money, and this would allow for a higher level of money stock consistent with a given target for inflation.

#### E. Selective Credit Policies

2.55 The Bulgarian authorities' policy to provide explicit subsidized interest rates on credits to a number of sectors is, at this writing, unclear. The Government has stated its intention to subsidize credits to the private agriculture sector and to pay for the difference between the subsidized interest rates and that for normal credits from the State budget. It is unclear whether the policy is intended to cover all credit to agriculture. Energy, housing, and exports are other sectors/activities mentioned as possible candidates for subsidized interest rates.

2.56 Selective credit policies may be justified by social reasons, but they create serious problems for the budget, whose deficit must be substantially reduced. In addition, there is the problem of rationing selective credits. Since there are not enough resources to satisfy entirely the demand for such credits, there will be large inequalities of treatment between those who get loans at low rates and those who have to pay normal rates or who are not even able to borrow at all.

2.57 For reasons of equity and of budgetary constraints, subsidies should be kept to the absolute minimum, and interest rates on subsidized loan contracts should be linked to the basic interest rate of the NBB even if the rate is below the basic rate by a few percentage points. Given the prospects for inflation in the years ahead, if housing loans are granted at low fixed interest rates (say 2 percent) for long periods (10 to 30 years), amortization and interest payments will fall both in real terms and relative to wages and other income. If the subsidized rates are funded by the budget, a high percentage of the real value of the loan will be repaid by the budget rather than by the borrowers.

#### V. The Quasi-Fiscal Deficit and the Banking System

2.58 A new problem is also emerging from recent developments in the quasi-fiscal budget which incorporates the deficits of the central bank and de facto subsidization of enterprises through the banking system. In some countries, such as Poland and Yugoslavia, severe inflationary processes have developed in the absence of large fiscal deficits because of very large quasi-fiscal deficits of both the central bank and the state owned banking system.

2.59 Two sets of factors can and have resulted in such large quasi-fiscal deficits in these countries: First, large valuation losses in the banking system; second, the provision of massive implicit subsidies to public sector enterprises through the extension of credit at negative real interest rates. The latter do not refer to the usual subsidies on selective credits discussed above but are a generalized phenomenon which occurs when all lending rates are below the inflation rate.

2.60 The valuation losses can appear as a consequence of past sales of foreign exchange to importers at overvalued rates. These sales create a mismatch in the balance sheets of banks: foreign currency denominated liabilities against domestic currency denominated assets yielding relatively low interest rates. Every time there is a devaluation, the banks suffered large losses, which were not compensated by high yields on assets.<sup>1/</sup> These valuation losses can remain unrealized and not contribute towards monetization and inflation until debt service payments have to be made. It is only when the banks have to purchase foreign exchange at the new devalued rates to service old debts acquired at overvalued rates that they feel the impact. The losses may take place in the Central Bank and offset normal Central Bank profits (as in Yugoslavia) or in other banks (as in Poland). In any case, when they occur, they have to be monetized by the central bank.

2.61 The quasi-fiscal balance in Bulgaria was actually positive throughout most of the period 1984-89. Table 2.4 shows the State Budget, the Consolidated General Government, and the quasi-fiscal balances. The general pattern is the same as the one observed for the Consolidated General Government Budget: relative equilibrium until 1985 and deficits thereafter.

2.62 Quasi-fiscal deficits did not arise earlier for three reasons. First, even though the state owned banks had huge mismatches in their balance sheets, there were no significant devaluations that could cause valuation losses. Second, inflation rates were very low, precluding significant interest rate subsidies. Real interest payments from the enterprise sector to the banking system were positive until 1988. Third, in Bulgaria, the exchange rates used for bank transactions differ from those used in the valuations of banks' foreign currency denominated assets and liabilities (which were used in the calculation of quasi-fiscal deficits). Due to this peculiarity, quasi-fiscal deficits did not include bank losses due to transfers to the budget arising from "coefficient differences" (see above Section III).

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<sup>1/</sup> To deal in accounting terms with these losses, fictitious assets called "Foreign Currency Valuation Adjustments" were used by governments to increase assets by the extent of the losses.

Table 2.4: FISCAL AND QUASI-FISCAL BALANCES, 1984-90  
(as percentage of GDP)

	1984	1985	1986	1987	1988	1989	1990
Consolidated State Budget	0.6	-1.1	-2.9	0.5	-1.5	-0.6	-3.8*
Consolidated General Government	0.6	-1.1	-2.9	-4.8	-6.7	-3.4	-5.5*
Quasi-Fiscal: (In real terms, above the line method)	3.3	3.8	-2.4	4.1	2.7	1.2	-3.9/ -5.5**

Source: IMF and staff estimates based on IMF data.

\* Staff estimate of July 1990.

\*\* The lower estimate assumes an annual inflation rate for 1990 of 10 percent, while the higher assumes a 20 percent rate; it does not include valuation losses.

2.63 Unfortunately, in 1990, the situation changed drastically for the worse. The devaluation of May 1990 caused valuation losses to FTB that surpassed 50 percent of GDP. Moreover, inflation has significantly accelerated, and the price liberalization and administrative price increases planned are certainly going to have an inflationary impact. If interest rates are not raised, net debtors will receive large, albeit implicit, interest rate subsidies from the banking system. Table 2.4 shows estimates for the interest rate subsidy to be received by the enterprise sector in 1990. Alternative estimates correspond to different assumptions about lending interest rates and inflation rates. It is also assumed that credit to the sector remains constant at the end of 1989 level in real value throughout the year. At an inflation rate of 20 percent for the year, the quasi-fiscal deficit of the public sector would amount to almost 5.5 percent of GDP.

2.64 The impact of FTB's huge valuation losses on monetization is uncertain, as it depends on the extent and terms of foreign debt rescheduling which at present are unknown. As discussed above, valuation losses only require monetization when they are realized. It is clear, however, that at some time in the near future the Bulgarian authorities will need to address the financial status and functions of the FTB; and they need to establish a transparent system for allocating the foreign exchange risk of future foreign borrowing.

2.65 The accelerating inflation poses problems for the Government in attempting to reduce the quasi-fiscal deficit arising from the subsidized interest rates in 1990. If the Government tried to maintain positive real

interest rates constant during a period of accelerating inflation, this may cause widespread bankruptcies in the enterprise sector. Many banks would follow the same path since the quality of their portfolio would deteriorate as enterprises started to default on their loans. On the other hand, letting real rates become significantly negative would result in net debtors receiving interest rate subsidies that will be earned by both profitable and unprofitable enterprises. This means that enterprise profits and/or wage bills may end up being abnormally high, as the acceleration of inflation has, by itself, no significant impact on enterprise profitability, while at the same time inflation would be fueled.

2.66 On balance, it would appear that in order to curb inflation--which is likely to be fueled by a needed price liberalization--it is desirable to raise the structure of interest rates by more than the Government had originally planned as early as possible so as to keep the implicit subsidization of the enterprise sector to the minimum. Once this initial adjustment is made, interest rate policy would need to be flexible and take into account both the requirements for maintaining macroeconomic equilibrium and the implications of the interest rate policy for the enterprise sector. Note, however, that, in a period of accelerating inflation, interest rates need to be adjusted so that they are positive in real terms relative to the expected rate of inflation following the stabilization effort and not at the rate that prevails before the stabilization measures are in place. It should also be clear that if such a policy results in massive enterprise failures, the Government may need to maintain some budgetary subsidies to efficient enterprises, which would need to be funded through an additional fiscal effort in order to maintain overall macroeconomic balance.

## VI. Prices and Wages in the Context of Stabilization

2.67 The stabilization program will also require a decline in real wages to increase the competitiveness of the economy and restore internal equilibrium. The authorities intend to achieve this through a combination of price increases and the moderation of nominal wage raises.

### A. Prices

2.68 With respect to prices, the Government is considering a dual approach of gradually liberalizing most prices while significantly increasing the prices of those products that remain under administrative control. Price controls on about 10 to 12 percent of products by total sales value, including fruit and vegetables and 19 industrial products, have already been removed. The prices of some administratively controlled products have also been allowed to increase via the introduction of "new" products. These measures contributed to an acceleration in the rate of inflation in the 1st quarter of 1990 to 9.4 percent over the 1st quarter of 1989, compared to an average annual rate of 6.2 percent for 1989. Current data show price increases of 36 percent over the period May to October 1990, an average monthly rate of increase of about 7.0 percent. In the near future, the Government intends to liberalize at least 40 percent of prices and has set a target of liberalizing 75 percent of total prices by July 1991. This will be accompanied by the removal of most producer subsidies, with retail prices for a basket of

administratively controlled products being adjusted upwards. In this connection, in mid-summer 1990, gasoline prices were raised by 100 percent. However, the increased cost of imported inputs resulting from the devaluation of the leva in the spring of 1990, estimated to amount to 15 percent of total costs, had not been reflected in price adjustments as of this writing. Also, the proposed changes in CMEA arrangements, starting in 1991, will exert additional pressure on the domestic price level, as prices of imported goods from these countries are raised. If, on average, these prices rose by 20 percent as a consequence of the new trade arrangements (see above section A), the first order effect (i.e., without further adjustment in wages) would be to raise the consumer price index by another 5 percent.<sup>1/</sup>

## B. Wages

2.69 With respect to wages, the Government's current wage policy for the socialist sector has two elements: (a) a set of rules and regulations which specify basic wages and incentive pay for all workers, contained in the labor code; and (b) an excess wage bill tax to control the overall wage bill at the firm level. A wage indexation approach has also been agreed between the Government and the Trade Unions, for the last quarter of 1990.

2.70 A comprehensive price/wage policy is needed both to maintain macroeconomic equilibrium and promote efficiency in the allocation of labor resources. Two sets of issues arise in this connection: First, how are the wage policy issues related to macroeconomic stabilization; and second, how to develop efficient labor markets in the long term. While there are linkages between the two issues, stabilization related issues are discussed here, and those related to long term market development are discussed in Chapter 4.

2.71 As prices move upward in response to the devaluation and the planned adjustment of relative prices, wage earners will naturally seek to maintain real incomes and will demand an adjustment in nominal wages. At least in the short run, this maintenance of real incomes for everyone is inconsistent with macroeconomic stability, and average real wages will need to fall, either through hyper-inflation or through a more managed process.

2.72 When inflation occurs, forms of indexation tend to be sought by economic actors (employees, firms, suppliers, etc.) in order to lower uncertainty, thus facilitating long term contracting. But the level of certainty an indexation scheme provides is directly and negatively correlated to the speed of adjustment. If all prices and wages are instantaneously indexed, relative prices are thus frozen and no adjustment can take place. With an accommodating monetary policy, the system progresses rapidly into hyper-inflation. Herein lies the difficulty of any indexation policy. The more frequently adjustments are made in all contracts, and the more completely those adjustments correct for past inflation (e.g., the higher the indexation coefficient), the higher the level of inflation which will ensue, and the longer the adjustment process will take. In addition, if overall wages in the economy need to fall in real terms, an indexation scheme which provides full

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<sup>1/</sup> These estimates have been developed by Bank staff, using a 1988 input-output table of Bulgaria.



pass-through of price increases to wages will need an accelerating inflation in order to reduce real wages--a very costly process.

2.73 On the whole, the indexation experience of most high inflation economies over the last 20 years suggests that, while some countries have managed to grow despite high inflation which necessitated and was fed by indexation, it is better to avoid both high inflation and indexation. A government policy of indexation of major medium- and long-term contracts (bank accounts, wages and salaries, tax obligations etc.) can temporarily improve the day-to-day functioning of the economy during a period of rapid inflation. However, wage indexation is especially inappropriate when it is desirable to change relative prices and reduce real wages in order to promote macroeconomic adjustment. Moreover, many inflation schemes employed over the last twenty years (including the type being considered by the authorities) have actually contributed to an acceleration of inflation, making the task of stabilization more difficult. Government mandated indexation also reduces the political will to correct the original imbalance which triggered the inflation. Economies with a formal indexation structure have typically been victimized by high and increasing levels of inflation, which, over a period of years, has caused serious long-term damage to the economic structure.

2.74 In light of this international experience, the indexation scheme recently agreed to by the Government appears particularly unfortunate. The scheme provides for adjustment of individual wages once the price level has risen by 10 percent. Adjustment is made on a cascading basis for three wage levels. Full adjustment is provided only for the lowest wage level and partial and progressively lower adjustment for wages at the two higher wage levels. Even so, the expected average adjustment would be an estimated 80-90 percent based on the current distribution of wages. The combination of cascading adjustment with a trigger mechanism is undesirable because it has none of the benefits of indexation (lowering uncertainty) with all the costs. A trigger mechanism actually adds to the uncertainty in the planning process, as enterprises (and the Government) have no idea when wages will increase and thus will find it very difficult to project the wage bill for budgeting purposes. Since the thresholds of the different wage categories are not themselves indexed, the scheme further compresses an already compressed wage structure, eroding worker incentives. If on the other hand, the thresholds themselves were to become indexed as inflation rises, this would tend to lead to an acceleration of the inflationary process.

2.75 To avoid a damaging wage-price spiral, the Government should not guarantee individual wages through full (or close to full) price increase pass-through, as this would impede the process of adjustment significantly. Even full pass-through at the lowest levels should be avoided. This principle is especially important over the next 12 months both in order not to set a precedent for full indexation and in order for a necessary portion of the relative price adjustment to take place as quickly and efficiently as possible, allowing the Government the freedom it needs to resolve macroeconomic imbalances.

2.76 The Government should avoid completely the problem of indexing individual wages and instead set rules on the allowable nominal increase in the overall wage bill using the excess wage bill tax. The tax schedule should

be adjusted to allow for some penalty-free pass-through to wages of the price increases in the economy, but far from complete pass-through. Enterprises would then adjust individual wages consistent with the enterprise compensation plan and the level of profits in the firm. Successful implementation of this policy would require tight controls on borrowing so that firms are not able to borrow to pay the excess wage bill tax.

2.77           Whatever specific approach to the adjustment of wages and prices is adopted, two major issues need to be addressed: (1) The change in domestic prices that will occur in the near future can usefully be broken down into two components. First, there is likely to be a one-time adjustment of the price level due to the removal of administrative controls and adjustment in the price of tradeable goods as a result of the recent devaluation of the exchange rate. Second, there will be an underlying rate of inflation which will be related to the Government's fiscal and monetary policy as well as wage settlements. In considering any scheme for wage adjustment, it is important that wage earners not be fully compensated for the initial adjustment in the price level, as this is needed to correct the real wage and exchange rate. If they were compensated, relative prices would not change and the underlying rate of inflation would be fed. Once the underlying rate of inflation begins to accelerate, it can be difficult and costly to contain via fiscal and monetary policies. (2) The underlying objective of moving towards market determined prices is to adjust relative prices (including the price of labor) so that prices more accurately reflect the real opportunity cost of resources. Consequently, the greater the continued reliance on subsidies and/or wage indexation, the slower this adjustment will occur. The costs of a slow adjustment in relative prices will be felt in a slower pace of structural change which will delay the required increase in the efficiency and international competitiveness of the Bulgarian economy. This would have negative effects on the creation of new employment in higher productivity jobs as well as undermine the restoration of a sustainable balance of payments position.

**CHAPTER 3****MARKET REFORMS****I. Introduction**

3.01 Bulgaria is committed to a radical transformation of the economic system and the introduction of the type of legal, institutional, and policy framework needed to support the development of a market economy. In pursuit of this commitment, the Government has taken a number of steps to introduce a market system. Yet, in the winter of 1990, as this report is being written, Bulgaria's economy is very much an economy in transition. While some important elements and policies of the command system have been abandoned, the legal and institutional framework needed for operating a competitive market economy is not in place. As a consequence, there is confusion in the market, as both producers and consumers are uncertain about which "rules of the game" apply, the old or the new. In this period of uncertainty, decisions about the future, e.g., investment by the private sector, tend to be postponed, and the emphasis is on activities that generate quick returns. Also, in this period of transition, when price signals are unclear and exchange rate reform incomplete, opportunities for profiteering abound. When these opportunities are grasped by enterprising individuals, the perception is created that the market system is inequitable, and support for the overall reforms is eroded.

3.02 It is thus extremely important for the Government to reduce this period of confusion and uncertainty by moving decisively to introduce the reforms needed. There is some concern that the need to stabilize the economy should take precedence and that some of the systemic reforms might themselves be destabilizing. The linkages between macroeconomic stabilization and systemic reform and the issues of pace and sequencing of reforms are addressed in detail in Chapter 4. Suffice it to say here that, unless the systemic reforms also move forward, the supply response needed to stimulate growth will be delayed, and Bulgaria will face the prospect of a stagnant or declining economy for an indefinite period.

3.03 The list of institutional and policy reforms needed for the proper functioning of a competitive market economy in Bulgaria is long and their scope staggering. Reforms are needed in the following six main areas in order to: (a) decontrol prices; (b) introduce competition through the break-up of existing monopolies, liberalization of foreign trade, and the enactment and implementation of antitrust and regulatory legislation; (c) expand the private sector through the establishment of new companies and the privatization of existing state enterprises; (d) provide the proper incentives to and controls on management of the remaining public sector enterprises; (e) establish properly functioning labor and capital markets; and (f) establish a safety net for the poor which provides proper support against the hazards and disruption caused by the transition to a market economy.

3.04 Experience in other countries has shown that the adjustment costs can be significantly reduced and the process of structural change made less disruptive if the Government, in implementing reforms, adheres to two important principles: First, the objectives and overall vision of the reform

program and its various components should be clarified and announced well in advance so that consumers and producers can make more informed decisions; second, in both design and implementation, the program should be comprehensive rather than partial. Significant progress in implementation of reforms in all of the above areas is necessary if the reform program is to succeed. The sections below analyze and make recommendations on reforms in five of the six main areas outlined above: pricing, competition, ownership, public enterprise management, and factor market development. The sixth area, the development of an appropriate safety net, is discussed in Chapter 4. The analysis focuses on these reforms by drawing examples and illustrations of what needs to be done in various sectors of the economy. The more detailed sectoral analyses and recommendations are presented in Volume II.

## II. The Legal and Regulatory Framework for Business Activity

3.05 At present, Decree 56 of January 1989 continues to provide the main legal and regulatory basis for conducting business activity in Bulgaria. The Decree covers economic activity in general, public as well as private, and introduces a rather comprehensive legal framework for business activity, including provisions for the establishment and liquidation of public and private enterprises, corporate taxation, import and export regimes, foreign investment, foreign exchange holdings, accounting, pricing, State subsidies, labor regulations, privatization of public enterprises or assets, etc. The Decree was considered rather revolutionary when it was enacted under the Zhivkov regime. But, while it contains a number of important changes, e.g., with regard to the establishment of private enterprise and joint stock companies as well as privatization, it also contains a number of provisions designed to make it compatible with a planned economy. For example, the decree stipulates (Article 83) that the competent State authorities will coordinate, jointly with the firms concerned, their participation in the fulfillment of the State plan on the basis of mutual agreements and government contracts.

3.06 In practice, almost two years after Decree 56 was enacted, many of its provisions have not been implemented. For example, Article 24 of Decree 56 provides that the owners of a public enterprise, namely the bodies and organizations that have provided the enterprise's capital, i.e., the State for State-owned enterprises (SOEs), appoint up to half of the board members. In practice, it is the general assembly of employees that still appoints all board members in most public enterprises. With the exception of some sectors (such as tourism, where the Chairman of the Committee for Tourism has been empowered by the Council of Ministers to appoint government representatives in tourism SOEs), the Government (Minister of Economy and Planning in coordination with the sector minister concerned) continues to experience grave difficulties in filling the number of board slots allocated to it.

3.07 It is clear that Decree 56 cannot form the basis for the operation of a market economy in Bulgaria in the future. A number of changes have de facto already been made through changes in the Constitution which provide for narrower limits for the role of the public sector in the economy than those envisaged initially under Decree 56 (see below para. 3.34) and a basic framework for property rights. The Government plans to replace Decree 56 with

specific laws dealing respectively with companies, securities, taxation, import and export, pricing, labor and wages, privatization, competition, etc. Some of these reforms are discussed in further detail below.

### III. Price Reform

3.08 A major obstacle to improving economic performance has been the complex system of price administration and related subsidies which has led to major price distortions and provided very little transparency in assessing producer performance. This in turn has undermined the incentive for producers to improve efficiency. The system resulted in the prices of energy and some basic raw materials and end products (e.g., steel, fertilizers) to be maintained at very low levels, contributing to the difficult financial performance of producers in these branches. On the other hand, prices of many finished engineering products, particularly those for export to CMEA markets, are probably on the high side by international standards, taking into account considerations of product quality and specifications. Exports of these products to Western markets often could be achieved only with major price discounts. The financial losses incurred by producers as a result of the price system are, in turn, compensated for by various types of subsidies, which would appear to be highest in branches where price distortions are the most severe. Moreover, cross-subsidization from efficient producers to inefficient producers within each sector creates additional intra-industry disincentives to improve competitiveness or profits.

3.09 An illustrative set of prevailing prices for industrial inputs and intermediate products is shown in Table 3.1, together with comparable international prices. The price data shown are based on information provided by the Bulgarian authorities and staff estimates and should be treated with caution due to the difficulties in establishing meaningful international product and price comparisons resulting from quality differences and other factors. The available information indicates that, for most of these inputs and products, domestic prices are relatively low by international standards, as reflected by the implied Leva/US\$ conversion rates which are often below the commercial exchange rate of Leva 2.4/US\$ which prevailed at end-1989. These low levels do not imply that Bulgarian industrial products are cost competitive in international markets, however, given the high degree of subsidies they obtain both explicitly and implicitly through pricing of inputs and energy far below international levels. The wide variation of the implied conversion rates provides a further indication of the prevailing price distortions in Bulgarian industry.

Table 3.1: INDUSTRY - ILLUSTRATIVE PRICES FOR  
INDUSTRIAL INPUTS AND PRODUCTS  
(per December 31, 1989)

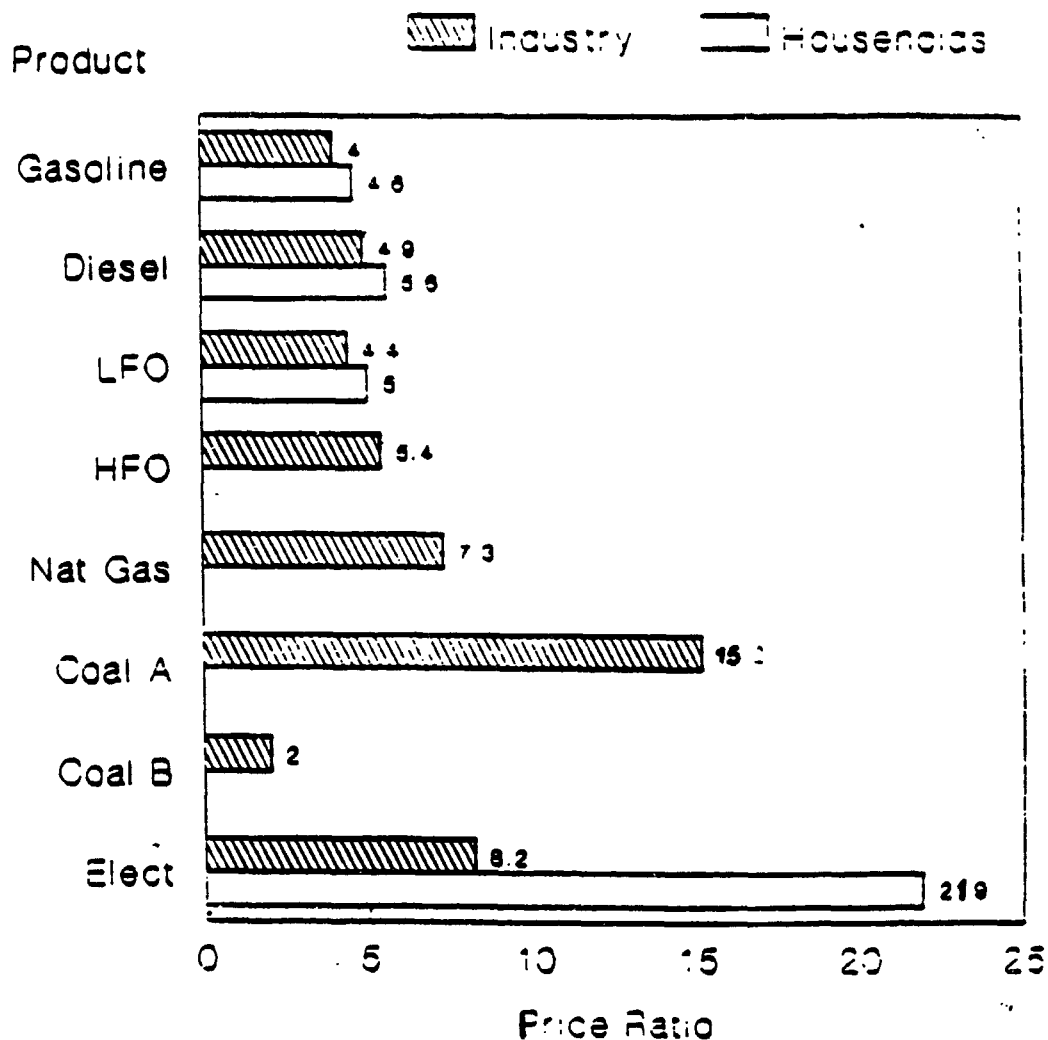
	Unit	Domestic Price (Lv./unit)	Estimated International Price (US\$/unit)	Implied Conversion Rate (Lv./US\$)
Electricity	'000kwh	52	50-83 <sup>a/</sup>	0.6-1.0
Natural Gas	'000m <sup>3</sup>	112	64	1.7
Diesel Oil	mt	400	160	2.5
Fuel Oil	mt	158	78	2.0
Coking Coal	mt	45-50	50-70	0.6-1.0
Iron Ore (57% Fe)	mt	41	27	1.5
Synthetic rubber	mt	1670	980	1.7
PVC	mt	1200	750	1.6
Polyethylene	mt	1157	1123	1.0
Steel Scrap	mt	85	105	0.8
Steel Reinforcing bar	mt	350	315	1.1
Sheet Steel	mt	352	400	0.9
Aluminum Sheet & Strip	mt	3143	2400	1.3
Super phosphate fertilizer	mt of N	1150	348	3.3
Nitrogen fertilizer	mt of N	175	102	1.7
Cement (M350)	mt	79	60	1.3
Cotton yarn	kg	5.09	2.50	2.0
Wool yarn	kg	8.20	3.95	2.1

<sup>a/</sup> Based on electricity prices to industrial users in a number of European countries.

Sources: State Committee for Prices and staff estimates.

3.10 Energy prices in Bulgaria, as in most centrally planned economies, are also very low relative to their level in market economies. This has been masked by the over-valuation of the official exchange rate of the leva relative to the dollar and other hard currencies. In the first half of 1990, border prices for petroleum products and natural gas were between 2.8 and 3.9 times as high as domestic prices, while the border price for steam coal was over 12 times the domestic price when using the commercial rate of exchange of 7 leva to the US\$. The border price ratios actually understate the extent of the difference between domestic prices for energy and those for the market economies of Western Europe because they take no account of domestic distribution costs or the taxes which are imposed on some fuels in most countries. If those costs are taken into account, the Western European prices for petroleum products were between 4 and 5.6 times those paid by similar Bulgarian consumers, while for industrial consumers of natural gas and electricity the ratios were 7.3 and 8.2 respectively. The most extreme cases were again steam coal with a European-Bulgarian price ratio of 15.2 and electricity consumed by households for which the ratio is 21.9 (see Figure 3.1 and Volume II, Chapter 2).

**FIGURE 3.1: COMPARISON OF DOMESTIC ENERGY PRICES**  
 (Ratios of European domestic prices to  
 prices paid by Bulgarian users)



Based on assumed market exchange rate of  
 \$1 = 7 leva. Coal A = Steam Coal;  
 Coal B = Hard Coal for Coking.

Source: Mission estimate, based primarily on information from the Committee  
 on Energy and Taxes, 1989 and OECD/IAE Energy Prices.

3.11 Moreover, the structure of distribution costs and taxes in Western Europe usually means that industrial (wholesale) prices for energy are significantly lower than the (retail) prices paid by households. This pattern is reversed in Bulgaria, where industrial users typically pay higher prices for fuel than do households. This is particularly important for electricity. Because of distribution costs, European households, on average, pay 70 percent more per kilowatt hour than industrial consumers. By contrast, Bulgarian households pay a 30 percent lower average price for their electricity than industry, so that there are large cross-subsidies within the electricity sector from the industrial sector to households.

3.12 More broadly, the distorted system of prices and compensating subsidies neither provides a real indication of the economic scarcity of inputs and outputs nor reflects social costs (externalities). This by itself causes overuse of natural resources, and stimulates environmental degradation by the energy, extraction, industrial, and agricultural sectors. In an overwhelming majority of cases, no provision is made for cost recovery for environmental resource utilization (e.g., water use and sewage treatment).

3.13 In recognition of the inefficiencies created by the present pricing system and the central place that pricing reform must play in the transition to a market system, the Government has stressed its commitment to price liberalization but has indicated a preference for a phased approach. Prices to be liberalized would be set on the basis of negotiations between buyers and sellers with no involvement by the State. As a first step, about 10 to 12 percent of retail prices (measured as percent of total sales revenues) were liberalized in the first half of 1990 (about 19 percent of wholesale--essentially ex-factory--prices). The bulk of the products liberalized were agricultural goods, but there was a list of 19 manufactured products which were primarily non-staple consumer articles for which shortages had started to appear on the domestic market. At the same time, agricultural product prices were divided into three groups: (a) Products with fixed maximum prices, which include the major domestic food staples and account for about 60 percent of domestic agricultural output. No basic change in the system of fixing these prices was introduced, and these products continue to be subsidized at the consumer level. (b) Products with fixed minimum prices, which included a number of vegetables and meat products accounting for some 25 to 30 percent of total production. For these products, retail prices were liberalized, but minimum prices were set in order to secure a minimum production incentive for farmers, especially in light of the continued presence of monopolistic structures in the distribution and marketing of farm products. (c) Products with free market prices, which include all remaining farm products and account for 10 to 15 percent of total agricultural output.

3.14 The Loukanov Government had originally proposed to move toward further liberalization of prices through a phased approach. A number of prices would be liberalized by January 1, 1991, accounting for some 66 percent of wholesale prices and 40 percent of retail prices. Then, by July 1, 1991, up to 75 percent of wholesale prices (over 50 percent of retail prices) would be liberalized. The above-mentioned shares of liberalized prices reflect prices economy-wide. No information is available on the sectoral distribution of prices which would be liberalized within the overall package.



3.15 As part of the price reform, the system of controls on those prices which would not be liberalized would also change: administered prices would be divided into those that are "fixed" by the State and those that need "registration." Registered prices of products which are similar to products which have fixed prices (e.g., various qualities of cement) would need prior approval. Prices of other registered goods would not be subject to such a requirement.

3.16 A preliminary review of the Loukanov government proposals indicated that prices of most final industrial goods would be fully liberalized by July 1, 1991, or would need registration without prior approval (e.g., machine building, some building materials). Prices of most energy resources and some basic industrial materials (e.g., some building materials, industrial gases, pharmaceuticals) would remain fixed by the State. Prices of industrial raw materials, fuels (for which prices are not fixed), and intermediate products would require registration without prior approval. Also, as part of the price reform, trade margins would be liberalized for the uncontrolled products. Together with the liberalization of prices, the levels of administered prices would be raised in order to move toward international price levels. It is understood that this would not be a one-time increase to international price levels, but that a gradual approach would be used. It is not clear at present how large the initial increase of administered prices would be and over what period international price levels would be reached. Government officials indicated a possible period of 1 to 2 years.

3.17 Establishment of international prices for energy and raw materials will decrease their use. Such action combined with the application of the polluter-pays/user-pays principle will signal the necessary adjustments for economic units to use resources more efficiently. It may also encourage enterprises to use resources which are less damaging to the environment. Price reform could therefore assist in the attainment of Bulgaria's objectives on pollution abatement and control (See Vol II, Chapter 4).

3.18 The Loukanov Government's initial program for 1990 indicated that the first phase of price liberalization would take place on July 1, 1990. This was substantially delayed. At present, the Government's price liberalization program, including the scope and implementation timetable, is still uncertain. Given the urgent need to introduce efficiency enhancing measures as well as reduce budget subsidies, it is recommended that the schedule of price liberalization be carefully reviewed and accelerated to the extent possible. It is also recommended that detailed justification should be provided for goods that remain administered by the State; and measures should be taken to ensure that their prices be established as soon as possible at international levels to provide clear signals for resource allocation and incentives for efficiency improvement. For the price reform to be meaningful, administrative controls should be kept to a minimum and be concentrated on products and services where monopolies can be expected to persist, e.g., utilities and where competition cannot be enhanced through trade. To the extent that output and input prices for various branches are liberalized at different points in time, distortions may persist. As much as possible, therefore, it is recommended that such output and input prices be liberalized simultaneously.

#### IV. Competition

3.19 In the present circumstances, the economic benefits associated with price deregulation are likely to be reduced because of the concentrated structure of production and the absence of a policy, institutional, and legal framework supporting competition. Indeed, in the absence of parallel steps to promote competition, price liberalization might simply result in inflationary pressures due to monopolistic structures and in increased income inequality with little improvement in economic efficiency.

3.20 In a small country like Bulgaria, with relatively small domestic markets, efficiency can be promoted both through steps that enhance competitive behavior in the domestic market and through actions that promote international trade. Therefore, the analysis below is separated in two main parts, one dealing with the domestic markets and the other with trade policy.

##### A. The Domestic Market

3.21 One legacy of Bulgaria's centrally planned command economy is a heavily concentrated structure of production in all aspects of economic activity. Some 600 state firms now account for the bulk of the state enterprise sector. It is estimated that the majority of these operate in the industrial sector. In continuation of past practice, these firms are organized along branch lines and are integrated both horizontally and vertically. As such, they tend to be fairly self-sufficient in their operations, and in many cases they include their own R&D institutes, construction activities, elaborate maintenance facilities, etc. The concentration of firms is also reflected by the relatively high share of workers (72 percent in 1989) in firms employing over 500 persons each. These firms tend to coordinate the activities of a number of subsidiary enterprises. The autonomy of these subsidiaries is restricted by the coordinating role of the firm, which also prevents intra-firm competition. While explicit planning through the system of State orders and material balances has been abolished, nothing has happened to affect the structure and practices of these firms. In theory, enterprises within the State firm structure can compete against each other. In practice this rarely happens. It is simply not in the interest of firms to see the earnings of their subsidiaries (and therefore their own) diminished on account of internal competition. The pyramidal structure of state firms also reduces the autonomy of operating enterprises and thereby the incentive for efficiency improvement.

3.22 Key elements in the creation of competition are the provisions for entry and exit into the market. When the rigidly enforced planning system was in place, the question of competition through entry of new firms was irrelevant. The number of firms in the state sector (including municipal enterprises and co-operatives) was very stable at around 2,100 from the mid-1970s to 1989, when the passage of Decree 56 led to an increase of about 200 firms. In industry, the private sector has been virtually absent and is therefore not a source of competition. In agriculture, small private plots coexisted with large state farms and collectives, but their relationship was complementary rather than competitive.

3.23 With the liberalization of the framework for private sector activities under Decree 56, including the abolition of employment limits, the number of small private firms has started to grow. The number of registered firms reached some 33,500 in July 1990, of which 14,400 are in operation, mostly one-person firms (79 percent). Most of these new firms are in service activities and a few in manufacturing where they account for a very small share of total output. Thus, no significant change in terms of competitive behavior in manufacturing can be observed yet.

3.24 Regarding exit, Decree 56 includes a chapter on bankruptcy which has never been applied. The key question regarding bankruptcy is what will happen to firms when there is price liberalization and, at the same time, the Government implements its policy of enforcing a hard budget constraint by limiting access to bank credit and reducing budget subsidies. Despite considerable hardship during the first half of 1990, none of the firms visited during the Economic Mission appeared to be concerned about the possibility of failure. It also remains to be seen how such bankruptcies will affect creditors of insolvent public enterprises: this will depend on the extent to which the State gave explicit or implicit guarantees for state enterprise debts. Decree 56 states (Article 7) that "the State shall bear no responsibility for the obligations of firms." The Government must not only develop its thinking on a number of issues related to enterprise reform, it should also focus on issues of enterprise restructuring and dissolution. On the other hand, in agriculture, the tendency has been to try to make cooperatives viable by partly cancelling their debts (See Volume II, Chapter 3).

3.25 Even if new entry is not constrained and exits through bankruptcies occur, it is likely that monopolistic structures and practices will be maintained because of the prevalence of monopolies. Thus, it is important for the authorities to consider the legal and other steps that are necessary to protect against the monopolistic behavior of firms, including possible steps designed to break them up.

3.26 Article 95 of Decree 56 requires "the State authorities [to] create the appropriate conditions for fostering competition among firms and for preventing monopolistic activities and unfair competition on the home and international markets" and announces a procedure whereby aggrieved Bulgarian companies may obtain redress against unfair competition by foreign or national firms. However, this text has not yet been implemented. Instead, the Bulgarian authorities have prepared new competition legislation (See Volume II, Chapter 1). The draft law protects "against the creation, maintenance and abuse of a monopoly position, unfair competition and other actions that might lead to a restriction of competition in the country" (Article 1). It also regulates unfair trade practices and covers monopsony, oligopolies, and dominant positions as well as monopoly situations. This law is an essential component of the overall economic reform program and should be adopted urgently. The draft effectively addresses the main legal issues related to competition. It needs, however, to be strengthened in two areas: (i) it is necessary to devise means of enforcement against monopolistic state enterprises; (ii) the commission on the protection of competition, which is to be established pursuant to the draft law, needs to be independent of the Council of Ministers and other elements of the executive because the monopoly

problems it is going to deal with are likely to arise primarily as a consequence of activities of public sector firms and agencies.

3.27 It is also recommended that, in the implementation of this legislation, measures be developed to realize the early break-up of industrial firms, including by privatization of these firms or portions thereof. In this respect, the conversion of state firms into joint-stock holding companies would perpetuate the current concentrated structure of industry and would therefore not realize the desired competition in the enterprise sector. The break-up of state firms would also improve incentives for enterprises to increase their management autonomy. It is our understanding that steps aimed at breaking up food distribution monopolies have been undertaken; but no significant action has been taken yet, in other sectors.

#### B. Enhancing Competition Through Trade

3.28 Bulgaria's economy has not been exposed to competitive pressures through international trade which, in market economies, provides a strong incentive to improve efficiency. The lack of competition in Bulgaria results from a number of factors. First, there has been virtually a total absence of import competition for domestic industry. Import licenses were issued only when domestic demand could not be met by domestic sources of supply. Second, the specialization of production among the CMEA countries led to the development of large monopolistic production facilities that were given the virtual sole right to produce certain products to take advantage of perceived regional level economies of scale in production.

3.29 In principle, the situation has changed fundamentally in recent months. Formally, trade policies are supposed to be quite liberal in comparison both with the past and with other countries facing severe balance of payments problems. Firms are no longer subjected to central export targets. Instead, they have an unrestricted right to initiate and contract for their own exports and imports or to use the services of competing Foreign Trading Organizations (FTO) of their choice, either on a negotiated commission basis or trade on their own account. With regard to imports, tariff rates are not high on average but there is considerable dispersion with rates exceeding 100 percent in some cases. It is unclear however, what is the effective rate of protection implied by the existing tariff structure. Also, there is presently no formal rationing of import rights nor an import quota system, nor a formal procedure for the allocation of foreign exchange for imports. In principle, every firm can import (with few restrictions, see below) if it has the necessary convertible currency resources at its disposal. The only formal exception to these principles pertains to a limited volume of centrally financed "essential imports" (such as pharmaceuticals and insecticides) financed out of foreign exchange allocated by the Government and imported at the "basic" rate (see above Chapter 2).

3.30 In practice, however, competition through imports is severely restricted. First, trade with the CMEA continues to be extensively regulated. The new CMEA rules can be expected to provide scope for some bilateral commodity convertibility (for instance in the form of the right to unrestricted purchasing within the partner country from proceeds of exports to that country) with or without broad quotas for aggregate clearing or for

bilateral convertibility of national currencies. Such a change would substantially reduce the rigidity dictated by the present system of compartmentalization under the detailed bilateral protocols, and it would provide opportunities for firms to actively search for microeconomic efficiency, which is presently lacking except for "barter" deals outside the programmed exchange. At the same time, such a change would leave future CMEA trade and imports considerably managed in the aggregate.

3.31 Second, and perhaps most important, the volume of, access to, and use of foreign exchange resources is severely restricted. The scarcity of foreign exchange has led to informal ad hoc rationing as the main means of protection. While the basic reason for these controls is the severe balance of payments crisis, the effect is also to protect domestic production; and the means of implementing the policy is not transparent, leading to inequities and inefficiencies. The FTB is the main agency administering these informal controls on an ad hoc basis: foreign exchange available through the auctions is supposed to be used only for imports of raw materials and essential inputs; and the issue of letters-of-credit in foreign exchange from firms "own resources" is subject to screening by the Foreign Trade Bank. Thus, access to foreign exchange does not guarantee freedom of its use to import anything at will.

3.32 In addition to implicit foreign exchange controls, there is a universal requirement for registration of foreign transactions. Normally, this is for the purpose of monitoring. In practice, however, monitoring is connected with extensive control functions. The Regulations for the Application of Decree 56 stipulate that "firms shall execute their foreign economic activity freely, without the obligation to obtain a licence from the respective State body, except in the cases envisaged under articles 18 and 19 of Decree 56." Ordinance 52 of May 1990, taken in application of Decree 56, provides for such exceptions, namely: (1) exports to countries with bilateral clearing agreement for shipments over and above volumes agreed in the bilateral agreement; (2) imports under bilateral clearing agreements; (3) imports of "complete projects" from any country; (4) exports, imports, and re-exports under barter arrangements; (5) exports and imports of precious metals; (6) imports against payment in leva; (7) imports of "retailing goods"; and (8) exports within categories for which export quotas exist. The first two items constitute the implicit quota system which is required by the rules of bilateral clearing. Item (3) is apparently intended to control investment through control of import of equipment. Item (4) is in support of CMEA trade, where firms have the right to engage in barter and counter-trade contracts once the requirements of bilateral agreements have been met; although we know of no statistical reporting, anecdotal evidence suggests that such trade is not insignificant, within both CMEA and convertible currency countries as well as through "triangular" contracts extending to countries under both regimes. The coverage of item (7) is apparently subject to discretionary interpretation, but reportedly it is of minor practical importance. Item (8) sets limits to exports in order to secure the supply of strategic commodities for the domestic market. Ordinance 32 of Decree 56 specifies a total of 57 specific goods with either quantity or value ceilings; in 15 cases, all exports are prohibited. While the majority of commodities are raw materials or intermediates, a number of consumer goods (e.g. woolen fabrics, cereals, meat and poultry) are also included.

33 It is clear that the Bulgarian economy must be opened to foreign competition if efficiency in production is to be stimulated. The domestic market is often so small that only one or a few firms of optimum size can survive. In the absence of international competition, these firms will become the de facto monopolies in the domestic market. The problem is how to increase foreign competition when there are severe shortages of foreign exchange. This is a common problem in developing countries. There are several elements to the solution:

- First, balance of payments equilibrium needs to be achieved and maintained by the use of demand management measures which include appropriate fiscal, monetary, and exchange rate policies, not via exchange controls.
- Second, it is necessary to unify the exchange rate, at least for current account transactions, and maintain it at levels that ensure export competitiveness.
- Third, if it is perceived that particular sectors would require some protection, it should be provided exclusively or primarily by tariffs set at as low and uniform a level as possible; this would require a review and possible revision of the existing tariff schedule.
- Fourth, it is important to dismantle the current "system" of ad hoc allocations of foreign exchange and licensing. If some quantitative controls are used on a temporary basis, they should be transparent (e.g., quotas based on an auction are transparent-arbitrary exchange allocations are not) and phased out over time. In most countries that have undertaken successful liberalization in recent periods, it has been possible to eliminate quantitative controls or limit them to a very small portion of production within a period of two to three years.
- Fifth, it is important that the emerging transitional trade and payment arrangements with previous CMEA partners facilitate the exchange of goods and services and promote competition. Specifically, if a bilateral agreement is concluded with the USSR or other countries specifying an aggregate value of trade in hard currencies, Bulgarian importing or exporting enterprises should be free to deal directly with agents or companies buying from or selling to Bulgaria. Similarly, if, to implement such a bilateral arrangement, "indicative" lists continue to be used, products on such lists should be automatically licensed and freely imported or exported.

Such an approach is possible in Bulgaria. But it will take time to design and implement; and work on it should start at the earliest possible.

## V. Ownership and Privatization

3.34 While it is conceivable to develop competitive markets even when the ownership of means of production is in the hands of the State, competitive markets have been developed only in countries where private ownership accounts for the bulk of production. There is no magic number as to what the share of the public sector should be. Different societies have operated with similar market efficiency with somewhat different shares of public and private sectors. The Bulgarian Constitution (Art. 16, as amended in April 1990) reserves some spheres of economic activity for the State, namely: "Mineral resources, natural sources of energy, nuclear energy, railroads, posts, telegraphs, telephones, radio, television, forests, waters, roads of national importance may only be State property." Prior to the April 1990 amendments, the Constitution also declared that plants and factories, banks, pastures, and air transport were State monopolies. Although these activities are no longer constitutionally protected monopolies, some of them may still be protected by laws or regulations. In addition, other laws are said to establish State monopolies for the production and trade of cigarettes, the trade in pharmaceuticals, the production and distribution of electricity, etc. To provide a sound and consistent basis for the operation of private enterprises, it would be necessary to scrutinize carefully all these laws and regulations to ensure that there is an economic justification for retaining public ownership.

3.35 But the relevant policy issue for Bulgaria is not for what share of total output the private sector ultimately accounts. Rather, whatever that share may be, it will not be reached, except in the very distant future, if expansion of the private sector must rely solely on the establishment of new enterprises. A far reaching privatization program of existing enterprises is needed in order to introduce market discipline. The implementation of such a program should be, together with the liberalization of prices and the establishment of a competitive environment for business activity, one of the cornerstones of the reform. The Government had been considering a two-pronged privatization strategy. On the one hand, it was working on general privatization legislation and regulations and setting up the institutions responsible for the implementation of the overall privatization program. On the other hand, it has promoted actual privatization through leasing arrangements in the trade, services, and tourism sectors, characterized by many small, easily privatizable units. Unfortunately, the Loukanov Government's priorities and objectives in this privatization program had not been entirely clear, nor does there seem to be a broad consensus on what should be done, how, when, and by whom. It is not clear, for instance, whether the first priority of the privatization program is to reduce the public sector's share in the economy and create a dynamic private sector, or to raise revenues for the State budget in the short run, or even to broaden access to ownership of assets to the largest part of the population. The absence of clear objectives (perhaps because of the lack of a political consensus) has, in turn, added a number of issues to the already complex problem of designing a new legal and institutional framework for asset ownership and privatization in various sectors of the economy.

## A. The Ownership Issue

3.36 Private ownership gives rise to different issues in various sectors. It has been most pervasive in the housing sector, where approximately 85 percent of housing is privately owned. A law dealing with the transfer to the private sector of non-arable land and construction has already been passed. Nationals may acquire immovable property with full ownership rights; however, restrictions remain on foreign ownership of real estate.

3.37 Reforms of the banking system in early 1990 gave rise to a structure of ownership from which the public at large was effectively excluded, although a private bank was recently established. Commercial banks essentially are owned by other banks, the NBB, and public enterprises or entities. This structure gives rise to some particular concerns regarding the resulting allocation of credit. When major borrowers have substantial ownership positions in banks, insider lending is likely to lead to poor credit decisions. Experience from Yugoslavia and elsewhere suggests that when this pattern of ownership exists, it is very difficult to implement a hard budget constraint, as enterprises in difficulty are able to borrow from banks whose credit decisions they can influence. A way needs to be found for reducing the ownership and control of the banks by the major borrower (see also Volume II, Chapter 5).

3.38 Beyond these concerns with banking, the main ownership issues which remain unsettled relate to agricultural land and state enterprises (See also volume II, Chapters 1 and 3). Regarding agricultural land, a bill has been drafted whereby former owners would be able to get the land back that they had contributed to collective farms or cooperatives (with a maximum of 20 ha, except in mountainous areas where the maximum would be increased to 30 ha). To be granted this land, farmers have to demonstrate that they intend to cultivate it. If not, they would receive a monetary compensation in the form of long-term government bonds. Farmers could also choose to stay in cooperatives.

3.39 A variety of legal issues arise with respect to the implementation of the provisions of this law (see below Volume II, Chapter 3). Other things equal, however, the proposed land tenure arrangements are likely to result in improved economic incentives for farmers relative to the current situation. The key substantive question is whether to provide for full ownership of land. Under the provisions of the draft bill, agricultural land sales would be prohibited. This constraint to full land ownership has been introduced for a variety of reasons including concerns about concentration of land holdings by absentee landlords and because authorities fear that the existing liquidity in the hands of the public may lead to speculative land buying as a hedge against inflation. Although such a constraint may be justified during the present period of transition, the Bulgarian authorities may wish to review the situation to determine whether a restriction on land sales--which effectively makes it impossible to create an integrated market that permits the allocation of land to its most economic uses--continues to be justified.

3.40 The question of ownership is central to the reform of public sector enterprises in industry and services as well as to their future



privatization. Although the State (or municipality) is clearly the legal owner of enterprises, it has, in many instances, given up its ownership responsibilities to employees of the firms (see above Section II). While the so-called worker ownership of public enterprises does not seem to have a legal base, it has popular appeal. At the same time, experience with worker ownership as the dominant ownership pattern has shown that it gives rise to inefficiencies, especially in connection with the question of separation of payments for wages from returns to capital. As a result, the issue of the true ownership of public enterprises might need to be clarified both from a legal and, more importantly, from a political and social point of view. Similarly, there have been reports of "spontaneous privatization," where State enterprise boards have decided to transform their company into a joint stock company. Such transformations would be illegal under existing law unless decided by a competent authority, i.e., the Council of Ministers or a minister or head of an agency designated by the Council of Ministers (Regulations of Decree 56, Art. 26).

3.41 Determining who the legal owners of an enterprise are should be a matter for the law to settle in the various contexts described above. Once this is done, one still needs to be able to prove ownership of a specific asset. Proper systems of land titling and registration of property will need to be established.

#### B. The Draft Privatization Law

3.42 In order to address the ownership issue and to provide a basis for privatization, the Government has prepared a draft privatization law. The draft is an enabling law setting forth the basic legal parameters of the privatization program. The lack of clear government views on the priorities and objectives of this privatization effort is reflected in the provisions of the draft. A detailed discussion of the law is contained in Volume II, Chapter 1. The key issues can be summarized as follows:

3.43 The draft law covers only two types of privatization techniques, namely: (i) the outright sale of a public enterprise or part thereof (e.g., a division), and (ii) its transformation into a joint stock or limited liability company followed by the sale of shares or equity. This may be inadequate to cover the diversity of situations that will need to be addressed in the context of the privatization program. One example is the sale of enterprise assets without any accompanying debts or obligations.

3.44 In addition to the narrow range of techniques provided for by the law, the specified techniques are defined too restrictively. The draft provides that all enterprise sales (the first technique) are to be done at public auction; the same holds for "tenders for transformation or investment," a special variety of the second technique (transformation into joint stock companies) in which the buyer provides fresh equity to the company. The auction procedure, however, would not be suitable for many sales, in particular in complex situations where all conditions and specifications of the sale cannot be defined in the bidding documents. This may prove to be the case for most enterprises of a significant size sold as going concerns. Other competitive procedures should thus be allowed as well, including bidding with

pre-qualification, evaluation of bids based on quality of proposal as well as price, etc.

3.45 More thought also needs to go into the determination of whom the Government is willing to transfer its enterprises to. This is to some extent a function of the ultimate objective of the privatization program. Most types of restrictions would have negative effects for the pace and success of the program and could result in lower prices, less qualified buyers, and reduced competition. At the same time, the Government has legitimate concerns to ensure that sales are not made to a privileged few and that ways are found to broaden ownership.

3.46 Workers will most likely be given the opportunity to acquire shares at a deep discount under a preferential scheme and to bid for the company as a collective in competition with other bidders.<sup>1/</sup> Preferential share purchasing schemes for employees, however, should not be the general rule, as they would exclude the sale of 100 percent of an enterprise to a bidder and impose the presence of voting employee members on the boards of all privatized companies. Moreover, such arrangements may make it difficult to shed surplus workers or restructure companies.

3.47 Another major question relates to the extent to which foreigners will be able to compete to buy these enterprises. The general answer should be that limitations on foreign ownership of privatized enterprises would need to be justified on specific grounds. In this context, it is worth noting that it may be difficult to enforce discriminatory rules, as ways can be found to circumvent the laws, for example by using a Bulgarian "front man" or by establishing a company registered in Bulgaria that would purchase shares or enterprises as a Bulgarian company. Moreover, there may be a contradiction between trying to attract foreign investment as a vehicle of promoting the private sector and simultaneously preventing foreigners from acquiring privatized enterprises.

3.48 Finally, the draft law provides that the proceeds of the sales or transformations, as well as dividends from shares held by the State or Municipalities in joint ventures, will be allocated to the State Investment Fund for SOEs and to the Municipal Investment Fund for MEs. The future of these funds is, however, at present unclear. In addition, privatization proceeds should probably not be allocated to funds for new investments. Two other approaches should be carefully considered, namely the establishment of a privatization fund and the automatic transfer of privatization proceeds to the general budget.

### C. Institutional Framework for Privatization

3.49 The Government's original privatization strategy as expressed in the economic reform program of April 1990 envisaged that, in parallel with the establishment of a legal framework fostering competition and privatization, steps would be initiated to privatize smaller enterprises in tourism, trade, and services in order to gain experience and improve the privatization

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<sup>1/</sup> See Volume II, Chapter I.

methodology. Moreover, the Government indicated that the major economic ministries would announce by the end of May 1990 a list of State enterprises that were to be privatized and initiate efforts to value their assets. Experience with the implementation of this program in the course of 1990 has, however, been unsatisfactory.

3.50 Delays have been encountered in the designation of enterprises to be privatized. According to the Bulgarian authorities, the main problem causing the delay is that of fair valuation of enterprises and real estate assets. Particular concern is expressed about selling enterprises to the nomenklatura or to foreign investors. But any valuation exercise undertaken in the present context (i.e., in the absence of functioning labor and capital markets, with controlled prices and limited import competition) would be highly speculative at best.

3.51 The Bulgarian authorities need to consider whether the very process which they have started to implement needs to be rethought. In particular, they need to consider whether, in order to address both the valuation and beneficiaries issue, they should include as part of the choices of privatization techniques (para 3.42 above) a mechanism for partial distribution of shares to the Bulgarian population, as is being considered in some other East European countries.<sup>1/</sup> Indeed, if privatization is to proceed at a fast pace, some type of distribution of shares scheme will need to be examined, as the ability of any agency set up for privatization to organize and negotiate many privatization arrangements in a short time frame will be limited. In such distribution of shares, careful consideration should be given to the future exercise of ownership rights in enterprises in light of the need to ensure efficiency and, in some cases, restructuring.

3.52 Moreover, the process of privatization of tourism and the small enterprise sector seems to have resulted in widespread irregularities. According to Ordinances 35 and 36 of April 10, 1990, the State or municipalities can sell or lease to private parties (individuals or companies) stores, service companies, warehouses, bakeries, hotels, restaurants, and the like. Employees of the concerned facility are given the preference in cases of leasing; if no staff is interested, the facility may be offered for lease to outside parties. The procedures used for the transformation of these companies, however, were not transparent, and competitive procedures were leading to allegations of favoritism and corruption (See Volume II, Chapter 1).

3.53 Finally, the institutional framework for privatization is fragmented. Privatization in the tourism sector is managed by the Committee for Tourism, those in trade and services by the Ministry of Trade and

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1/ These schemes usually include the creation of a number of holding companies, which together would hold all the shares of the enterprises to be privatized. Shares in the holding companies could then be distributed to the population and would be tradeable. These holding companies would be the equivalent of mutual funds in terms of risk diversification for their shareholders.

Services, and those in other sectors by the minister or body concerned or even by the public enterprise's management itself! This is leading to very diverse approaches and possibly abuses. The establishment of an overall framework for privatization is becoming very urgent.

3.54 The dangers of an uncoordinated approach and the concern about abuse were recently recognized by the National Assembly itself. On August 17, 1990, the National Assembly decided to suspend all sales of land and other State or municipal property (with some exceptions related to housing) in view of allegations of wide-spread abuse and corruption both in the sale of land by municipal people's councils and in the sale or lease of trade and tourism units. All public bodies have been asked to submit reports to the National Assembly accounting for their property and the way they have disposed of it. We understand that the National Assembly lifted the moratorium on privatization in late November 1990. In the light of these problems, however, it is extremely important for the Government and the National Assembly to act quickly and decisively to enact the legislation on privatization and to establish the institutions needed to implement a coordinated approach. In this regard, and keeping in mind the possibility that an altogether different approach to privatization involving at least in substantial part the distribution of shares to the public should be considered, it is imperative to take early steps to establish the State Property Agency (SPA) called for by the draft privatization law. The law appears to give broad powers to the SPA to manage the full privatization process with little political or other interference. The regulations governing the status and operations of the SPA have not yet been drafted. This should now be considered as an urgent task.

3.55 The success of the privatization program will, to a large extent, depend on the competence and qualifications of the SPA. The establishment and initial staffing of the SPA are thus a high priority, which should not await the enactment of the privatization law; if need be, a provisional agency could be set up in anticipation of its formal establishment by law. A functional core SPA is needed to pursue the preparation of the law, to draft the critical guidelines for privatization, to prepare or review the list of enterprises to be privatized, and to suggest a timetable for all privatization activities as well as to ensure that good management practices are present during the privatization process. This requires full-time attention of highly qualified professionals with the assistance of outside experts and advisors.

## VI. Public Enterprise Reform

3.56 Even if the most ambitious reform and privatization effort were to be implemented, a significant number of enterprises in Bulgaria will remain in the public sector for some time to come. As a consequence, it is important for the Government to take steps to ensure that these enterprises use resources efficiently and meet market standards even though they continue to operate in the public sector. To promote enterprise efficiency, three important issues need to be addressed:

3.57 First, appropriate arrangements for the governance of public enterprises should be put in place. Central in these arrangements is the clear representation and implementation of ownership interests at the firm

level. At present, the interests of the owner (the State), management, and employees are not clearly separated in Bulgarian public enterprises. In most of the enterprises visited by the World Bank Economic Mission, the majority of the boards of directors was appointed by the employees, rather than the State. This practice negates the role of the owner and leads essentially to self-management of enterprises, which in other countries has been shown to be an undesirable practice leading to the pursuit of short-term interests (including excessive wage increases) and insufficient attention to the long-term viability of enterprises. The exercise of ownership rights in State enterprises needs to be clearly defined and implemented.

3.58 Second, together with the reform of prices, enterprises should be exposed to a strict financial discipline to limit scarce public resources being absorbed by inefficient firms. To this end, the first prerequisite is that the Government should phase out producer subsidies to enterprises at the earliest possible opportunity. Another prerequisite is the establishment of an independent, well functioning financial sector (see Volume II, Chapter 5). At the same time, enterprises should not be made to bear the financial consequences of measures to support either consumers or suppliers of inputs, and their prices should reflect market levels. Enterprises that continue to be in financial difficulties following the reform of prices and elimination of subsidies should be restructured or phased-out.

3.59 Third, in order to facilitate the process of restructuring, an analysis should be undertaken of major Bulgarian enterprises to assess whether they are likely to be viable under market conditions, including an assessment of their potential for improving operations with very limited investments. For those enterprises that have potential for viable operations restructuring and/or privatization programs should be developed. Those that would clearly remain in difficulties should be phased out (or, if possible, sold). In this connection, attention should also be given to the establishment of the necessary institutional arrangements for the initiation and guidance of the preparation and implementation of such enterprise restructuring studies and programs. Consideration should, in this regard, be given to linking work on restructuring with work on privatization by vesting the proposed State Property Agency with the authority to perform restructuring functions.

## VII. Factor Markets

3.60 Establishment of well functioning factor markets is another important requirement for reform. Without such markets, factors will not move to their most productive uses, and productivity growth, an important objective of the reforms, will not be realized. The centrally planned system introduced rigidities in all factor markets; but the social ownership of capital and the low mobility of labor created special problems which need particular attention.

## A. Capital Markets

3.61 It has been argued that it is impossible to have a well functioning capital market without extensive private ownership of capital.<sup>1/</sup> Private ownership of capital is a necessary--but not sufficient--condition for the establishment of an equities market, which itself is an important but not altogether indispensable condition for the establishment of a capital market.

3.62 An equities market can not be established in Bulgaria without a resolution of the ownership problem which gives the Bulgarian population at large a substantial share of the equity in the Bulgarian industry and agriculture. If, as discussed earlier in Section D, the land ownership issue is resolved along the lines suggested in the draft legislation on agriculture, a genuine land market will not be created. If shares of enterprises are not distributed to the public, it would take a very long time to create a genuine equities market also.

3.63 The absence of an institutionalized equities market is not an insuperable problem, as many developing countries have discovered. A fully functioning equities market is present only in a few countries in the world. Under these circumstances, the Loukanov Government's initiative to develop a draft law authorizing the establishment of stock or commodities exchanges in Bulgaria would appear premature. Setting up stock or commodities exchanges should not be a priority at this stage of Bulgaria's development. It might be more important in a first stage to enact securities legislation protecting investors at large than to set up formal exchanges. Trading of securities could initially be done on an "over-the-counter basis."

3.64 By far the most important efforts towards establishing an efficient capital market at this stage should be focused on the establishment of an efficient financial market. A detailed discussion of the financial sector is contained in Volume II, Chapter 5. The concerns about the efficiency with which the banking sector allocates resources can be summarized as follows:

- First, as noted earlier, major borrowers hold substantial ownership positions in banks. This is likely to lead to considerable insider lending, which, in turn, could lead to poor credit decisions and inefficient use of capital besides imperiling the portfolio of the banks and undermining depositors' confidence.
- Second, consideration is being given to providing directed subsidized credit to a number of sectors, including private agricultural activities, exports etc. Provision of such credits tends to segment the market and introduces inefficiencies in the allocation of scarce capital resources; moreover, it is questionable as to whether it yields the expected results.

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<sup>1/</sup> Manuel Hinds, "Issues in the Introduction of Market Forces in Eastern European Socialist Economies", EMENA Discussion Paper No. IDP-0057, World Bank, April 1990.

- Third, the banking sector appears to have too many banks rather than too few. Thus, while there is some concern that competition may be restrained through lack of independent ownership, several of the banks which have been created essentially by splitting off branches from the NBB, are too small to be efficient. NBB is proposing to increase the minimum capital requirements of banks from 7 to 20 million leva, forcing the smaller banks to merge. NBB might wish to keep this issue under review, to determine what additional steps it might undertake in order to encourage faster consolidation in case the above measure proves inadequate.

## B. Labor

3.65 The organization of the Bulgarian labor market, (i.e., wage and employment policies) was designed to serve the previous system of centralized planning. While a number of changes have been introduced since the beginning of the year, e.g., with respect to labor mobility, the old system basically remains intact. Demand for labor at the firm level in the public sector is regulated by a set of "norms" or production coefficients. It is on the basis of these norms that firm planning was done in the past, so these norms for the most part determine the size and structure of employment today. During recent interviews of firm managers, most indicated that they probably could produce the same volume of production with less labor (even those operating at near capacity). All firms also indicated that they had vacancies, almost universally at the lowest skill level (service workers). Some reported that these jobs were "permanently" vacant as the jobs were highly undesirable. This is consistent with the unemployment statistics.

3.66 Historically, unemployment has not been a problem in Bulgaria.<sup>1/</sup> Over the last decade, employment has grown more rapidly than the labor force. Since 1980, the size of the population between 16 and the legal retirement age shrunk 2 percent, while employment grew by 2 percent. This caused firms to periodically report labor shortages; and even in mid-1990, the State employment service reported more vacancies listed than registered unemployed. During the first week of July, 1990, less than 25,000 people (0.5 percent of total employment) were registered at the State employment agencies. The total monthly unemployment rate is probably higher, as not all job seekers are likely to be registered at State employment offices, but no survey data of the type used to estimate this rate in OECD countries are available for Bulgaria. A breakdown of the registered unemployment by reason is unavailable, but it is estimated that roughly 15,000 employees were retrenched in the first half 1990.<sup>2/</sup> Of those registered, roughly two-thirds were female and half were

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<sup>1/</sup> There is no employment guarantee under the system. Employees can be retrenched based on enterprise plans agreed to by the trade unions. In practice however, such retrenchments have been rare partly because of labor control of enterprise management, and have not resulted in job losses, as efforts were made to place retrenched employees in other jobs.

<sup>2/</sup> Not all of the retrenched would be registered unemployed, as those eligible may have chosen early retirement instead.

between the ages of 30 and 50. There is a mismatch, however, between the unemployed and the vacancies listed, as the majority of the unemployed have at least secondary education while most of the vacancies are less well-paid, unskilled positions.

3.67 Employee compensation in the socialist sector is regulated by the labor code. The primary government agency in charge of assuring that the labor code is followed is the Committee on Labor and Social Safety (COLSS). While the labor code has been modified over the past two years to introduce more firm level flexibility in pay, on the whole, pay is very tightly and inflexibly regulated, which is one of the main reasons for the small dispersion in earnings in Bulgaria today. During the month of December 1989 (the latest date for which the information is available), the median wage was about 263 leva and the average wage was 303 leva, about twice the prevailing minimum wage (140 leva, raised to 160 leva as of July 1, 1990). Most wages are clustered about the mean, as 50 percent of the population received wages between 200 and 350 leva. Average wages among sectors differ very little (average wages in health and social security, the lowest paid sector, are only about 20 percent below average wages in construction, the highest paid sector) and have been narrowing over time.

3.68 The structure of earnings by sector is poorly related to the structure of education by sector, indicating that monetary returns to education are quite low. For example, in two of the lowest paid sectors, health and finance, 17 percent of employees have completed higher education, and in finance under 10 percent have less than secondary education. In industry and construction, the two highest paid sectors, over 50 percent of the workforce has no secondary education. Wage differentials between managers, specialists, and workers vary by sector, but are on average low as well. Specialists earn about 11 percent more than workers, on average, and managers (5 percent of jobs in the socialist sector) earn about 50 percent more than workers.

3.69 Labor turnover, as recorded under the Bulgarian statistical system, is high (average 20 percent of the labor force per year), but most of these movements are either new entrants to the labor force, movements to new positions within the same firm, or exits for maternity leave or for retirement. Only about 3 percent of the labor force actually changed firms (voluntarily or involuntarily) in any given year during the last decade. The rate of quits and dismissals has been increasing in the last few years and reached a high of 8.7 percent in 1989, as over 400,000 Bulgarians of Turkish descent moved to Turkey after the Government announced new "national unification" policies. The Government estimates that the majority of these migrants re-entered in 1990.

3.70 In the planned economy, one could not talk about labor mobility: Where the population lived and worked was controlled by about 70 separate decrees. Workers from areas outside of the five largest municipalities required permission of the municipal government before they could be employed or have access to state-owned housing. The easiest method to emigrate to one of these cities was to marry a resident; permission was also easily obtained for specialists whose potential employer was a powerful company. For Sofia, the Council of Ministers could also grant residence/employment permission,



ensuring the central government control over its own hiring decisions. The new Bulgarian constitution guarantees the population the freedom to work or live where they please, but neither the Council of Ministers nor the National Assembly have actually abolished these decrees. In mid-1990, the airports operated as if the decrees were still in force by checking residency permits for domestic travelers.

3.71 This system of centralized planning has contributed to an inefficient allocation of resources and perverse economic behavior in all sectors of the economy, and the labor market is no exception. Many firms report overstaffing, while, at the same time, unskilled jobs in major cities go begging. Under the system of worker management, firm incentives to raise employee compensation at the expense of all other expenditures are high. Major rigidities with respect to labor mobility prevent employees from moving to the best job given their skills and preferences, thus lowering their productivity. At the same time, the system of universal employment, the rigid pay scales, and, where the flexibility exists, the reluctance of firms to truly base wages on performance and value to the firm reduce individual incentives. Reform of labor market policies needs to proceed pari passu with the removal of the distortions, rigidities, and perverse incentives in other sectors of the economy.

3.72 In addition to providing support to economic stabilization (see above Chapter 2), the Government's labor market policies should have two major goals: support of the process of economic restructuring by encouraging the efficient allocation of labor within the economy and, as competition increases in the goods market, decentralization of compensation policy in the state enterprise sector.

3.73 The pace at which the Government can decentralize and decontrol labor market policies depends on the overall rate at which competition is increased in the economy. Without a competitive output market, the Government has to regulate the labor market. This is because, without competitive pressures, firm managers have little incentive to reduce workers' demands for wage increases. The problem becomes even more acute when, as in many cases in Bulgaria, workers control management. In these circumstances, wage increases will tend to stimulate a general increase in the price level, and workers will again seek wage increases, setting off a new round of inflation. In the very near-term, not only will the Government have to regulate the overall wage bill of state enterprises, but it will also have to continue to set relative wages in the public sector, as without a competitive labor market, firms will have no basis for judging the relative scarcities of various skills in the economy.

3.74 Once competition is introduced in the goods markets, the Government can begin to decontrol the labor market. The expansion of the private sector will automatically reduce Government's overall control of the labor market, as this sector already enjoys significant autonomy in employment and compensation practices. Labor mobility should increase as new firms offer new employment opportunities, providing some signals about relative supply and demand for different skills. Salary scales in the public sector can begin to be based on these market signals. If enough competition develops under an overall state enterprise management framework which assures the protection of long term capital ownership interests (e.g., maximizing the return to capital),

public firms in competitive sectors could be given more autonomy in negotiating wages. Such negotiations would have to take place within an economy-wide legal framework for collective bargaining covering such issues as bargaining rights and responsibilities of all parties, the right to strike (including what limitations would apply to the rights of public workers to strike), dispute resolution, election and certification of unions, etc. The breadth of the issues which need to be legislated and administered points to the need for restructuring the institutions for labor market policy as well.

3.75 Bulgaria's low level of unemployment is not likely to remain in the near future. Even with the best possible supply side response to privatization and restructuring plans, some frictional and structural unemployment is inevitable. The objective of employment policy during this period should be to keep these spells of unemployment as short as possible, as unemployment represents a deadweight loss to the economy. This can be done by (a) removing obstacles to labor mobility, including the residency restrictions and prohibitions against or regulations discouraging part time employment, flexible hours, and short term contracting; (b) keeping unemployment benefits at or below the minimum wage to encourage job search; (c) reducing the costs of job search to the applicants by providing as much information about employment opportunities (current and future) and retraining possibilities as possible; and (d) keeping minimum wages low to encourage firms to hire workers.

3.76 The Government has already taken some actions toward these objectives, including establishing an unemployment compensation scheme and beginning a program to enhance its own employment agencies. Basic wages (minimum wages) in the economy are currently fairly low, so they do not appear to be a constraint on employment expansion. The Government should complement these actions with further steps to improve labor mobility, and revising public sector employment rules to facilitate more flexible employment contracts. It should also replace its current system of earnings related unemployment benefits by a flat-rate benefit to encourage a more rapid job search (see below Chapter 4).

3.77 In the medium term, to encourage price stability, the Government should seek to keep the growth of average wages from growing faster, in real terms, than the average growth of productivity. In an economy with low levels of public ownership of productive assets and very competitive input and output markets (such as the United States), the tools of fiscal and monetary policy may be enough to ensure this result. In Bulgaria, even with a very rapid pace of restructuring and privatization, the economy may still have important sectors characterized by monopolistic or oligopolistic structures and significant public ownership for some time. A public role in wage policy is likely to be necessary during this period to prevent inflation and high unemployment. The Government may wish to keep the excess wage bill tax as a means of controlling wage settlements. However, this tax, if applied rigorously (as it must be in order to be effective), is a disincentive to employment expansion. In the short run, employment expansion in the public sector is not likely to be necessary, but in the medium-term, some industries may be able to expand employment and produce efficiently. The Government may therefore wish to consider modifying the tax to limit the growth of average wages in the firms instead of the overall wage bill.

3.78 Currently, the private sector is not subject to excessive government control with respect to employment and compensation policy. The minimum wage and other compensation requirements do not appear to be binding on these enterprises as most of their employees are more highly skilled, where government minimums are low relative to the supply. Most private firms are small, predominantly in commerce and services, where competition is typically keenest in a market economy.

3.79 As much as possible, the Government should let the forces of competition regulate employment and compensation in the private sector. While the current non-binding minimum wages should not pose a problem for the growth of private sector employment, if, in future, these wages become binding, they certainly will. This would limit the ability of the private sector to absorb employment from the public sector, slowing down the restructuring process and increasing the level of unemployment. If, for social reasons, the Government wants to keep a wage floor for unskilled labor in the economy, it should be set as low as possible so as not to discourage employment. But in no case should the minimum wage policy be used as an anti-poverty tool, as this is likely to lead to much more unemployment and ultimately more rather than less poverty. Finally, depending on the growth of the private sector and the amount of competition in the economy, in the medium-term, the Government may wish to regulate average wage increases in large private and joint ownership firms along with the public sector, or at least in sectors where there are fewer competitive pressures to prevent these firms from contributing to cost push inflation. This could be done by extending the excess wage tax to these firms. In this case, the tax should be on average wages and not on the wage bill in order not to discourage employment.

CHAPTER 4THE PACE AND SEQUENCE OF REFORMS: SCENARIOS  
FOR THE FUTURE AND THE COST OF ADJUSTMENTI. Introduction

4.01 The breadth and scope of the reforms described in the previous chapters is enormous and unprecedented for Bulgaria. This is particularly so if account is taken of the anticipated terms of trade shock that Bulgaria is likely to confront in 1991. The fact that stabilization and market reforms are both needed more or less at the same time means that "everything" becomes urgent and of high priority. But it is clear that, since there are pragmatic limits defined by the administrative capacity of Government as well as the capacity of society to shoulder the inevitable costs of adjustment, priorities need to be set on a minimum package of reforms that must be undertaken first and those that come later.

4.02 There are several linkages between the various measures aimed at restoring macroeconomic balances and establishing a competitive market structure in Bulgaria which should be taken into account in the design of the reforms. In addition, the eventual costs of adjustment will be shaped by the specific nature of the reform program adopted. Consequently, issues related to the sequencing and pacing of reforms need to be considered at the outset of the reform effort. However, because of the complexity and scale of the policy changes that are required, there is limited experience to draw upon; and, as this experience is frequently based on a limited sample of other centrally planned economies which have embarked on a similar path of liberalization, this experience is too recent to be definitive. As a consequence, perhaps the most important characteristic of the strategy should be that it is as broad as possible and that it is responsive to specific issues or "crisis points" as they develop.

4.03 This chapter has several objectives: First, to examine the main linkages between the various issues discussed in Chapters 2 and 3 so as to identify reform packages which are mutually supportive; second, to review whatever lessons of experience are available with regard to sequencing, with a focus on possible problem areas that need to be avoided or approaches that could help mitigate the social costs of the reform program; third, to develop alternative scenarios about the future path of the Bulgarian economy under different assumptions about the pace and scope of the reform effort and different debt scenarios; fourth, to examine the existing social safety net and determine the extent to which it can bear the likely social costs generated by the reform process as well as suggest ways by which the safety net can be strengthened.

II. Reform Interaction and Sequencing

4.04 In a situation of substantial macroeconomic disequilibrium, such as that in Bulgaria at present, it is often suggested that first priority should be given to stabilization measures and that it is only after these have

been implemented that one moves on to address the longer-term measures required to create a market economy. This is the sequence that was, broadly speaking, attempted in Poland. An alternative viewpoint is that inflation and macroeconomic disequilibrium in centrally planned economies in transition are themselves caused by the inappropriate ownership and incentive structure of the public enterprise sector (including agriculture) and that, unless that structure is changed, traditional macroeconomic stabilization policies will not be effective.<sup>1/</sup>

4.05 There is little doubt that, if an economy is in the process of hyperinflation, the greatest priority needs to be placed on arresting inflation so that meaningful price signals can be established which are essential for the longer-term efficient allocation of resources. Although the situation in Bulgaria is deteriorating rapidly, hyperinflation is not present yet. But precisely in order to avoid this situation, urgent measures are needed to restrain demand by both curtailing the budget deficit and adopting appropriate monetary targets and wage policy.

4.06 The manner in which the budget deficit is reduced will affect the path of adjustment. An important linkage with market reform is the need to drastically reduce producer subsidies. But if producer subsidies are cut, firms will become unviable unless they are able to raise their output prices. This logically leads to the requirement that product prices are also liberalized.<sup>2/</sup> This latter reform is itself a requirement for stimulating greater efficiency and a long-term reallocation of resources to productive uses. Thus, budget deficit reduction and price liberalization should be considered as complementary and mutually supportive actions.

4.07 A reduced budget deficit will also be a necessary component of an appropriate overall monetary policy. The Government will need to establish monetary targets that are supported by its fiscal stance and consistent with the objective of containing inflation. Another key component of monetary policy is the structure of interest rates and how they are determined. Raising interest rates from their current levels is important both for allocating scarce capital to its most productive uses and as a means of restraining aggregate demand. As noted in Chapter 2, if interest rates are negative, a quasi-fiscal deficit can arise via the workings of the banking system which, in turn, fuels inflation. This can occur even in the absence of a deficit in the central government budget. Note, however, that in a period of accelerating inflation, interest rates need to be adjusted so that they are positive in real terms relative to the expected rate of inflation as a consequence of the stabilization effort, not at the rate that prevails before the stabilization measures take effect. Given the current uncertainties in Bulgaria's situation, this means an early adjustment of the interest rate, to

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1/ Manuel Hinds "Issues in the Introduction of Market Forces in Eastern European Socialist Economies", EMENA Discussion Paper, #IDP-0057, World Bank, April 1990.

2/ The need to link price liberalization with a consideration of market structure (i.e. monopoly/monopsony) and competition via international trade is considered in paragraphs 4.10 to 4.12.

levels higher than those decided some months ago. This needs to be accompanied by a commitment to continue to adjust interest rates to fully reflect the expected rate of inflation over the medium term.

4.08 Addressing the sharply deteriorating external account calls for a package of measures, some of which would contribute to short-term stabilization and some of which are needed to address structural problems; neither would be effective without the other. Reducing the budget deficit and maintaining tight credit ceilings would reduce domestic spending and help maintain equilibrium in the external balance; but, if adopted in isolation, such measures typically achieve equilibrium at a large cost in terms of reduced output and employment. Experience in other countries indicates that external account improvements can occur at a lower economic cost if they result from shifts in production and spending which are stimulated by a flexible exchange rate policy. Such a policy maintains the competitiveness of exports and encourages efficient import substitution. However, in the case of Bulgaria, exchange rate policy alone, while necessary, will not be sufficient to stimulate export expansion. Additional efforts including investment from abroad and technical assistance are needed to improve quality, marketing, and the distribution of products which had been previously heavily oriented towards the less competitive CMEA market.

4.09 Bulgaria can not afford to simply concentrate on one set of measures--either stabilization or market reform aimed at increasing efficiency and stimulating a supply response. Both need to be pursued simultaneously, recognizing that, while some measures will yield results only in the longer term, they must be initiated early on.

4.10 Regarding the package of reforms designed to promote the development of a market economy and a much needed increase in efficiency and supply, there are obvious linkages between price liberalization, increased competition, and privatization. Price liberalization in the absence of competition may not result in increased output. Similarly, it is difficult to visualize the establishment of competitive markets when state owned monopolies characterize the bulk of the enterprise sector. Thus, progress in all three areas is needed to obtain the desired response. At the same time, resources will not move to more efficient uses if there is no labor mobility and no effective capital market.

4.11 Not everything needs to be done at once. Increasing competition via introducing greater freedom of trade appears difficult to contemplate in the early stages of reform, especially in situations of extreme scarcity of foreign exchange such as that facing Bulgaria. On the other hand, if trade is not liberalized, increased competition would need to result from the break-up of existing state enterprises. This is particularly important in the Bulgarian context because the private sector is so small. However, de-monopolization may be a long and time consuming process, especially if it is linked to a privatization process in which each enterprise is privatized individually. In practice, trade liberalization needs to be introduced early on, particularly in areas where domestic competition is unlikely to materialize due to scale economies. The focus of the reform effort should be on non-tariff barriers, particularly removing import license restrictions; but the tariff structure should also be reviewed. At the same time, liberalizing

trade does not necessarily mean liberalizing the capital account. Typically, such liberalization can await the fuller integration of the Bulgarian economy into the trading system and the development of the domestic capital market.

4.12 Similar linkages and sequencing issues arise in other areas. At the early stages of the reform, the focus may need to be on the development of the financial markets rather than the equities market, unless it is decided to privatize the public sector via the distribution of shares to the public--in which case an effective equities market is important. If, on the other hand, it is decided not to privatize via the distribution of shares, it must be expected that privatization via other means will take some time. In either case, as public enterprises will continue to play a very important role in the economy, early attention needs to be devoted to their restructuring as well as to measures that will improve their management and performance. Finally, liberalization of wages may need to await the development of relatively competitive market structures; or else it may result in cost push effects on prices.

### III. The Pace of Reform

4.13 As to the pace of the introduction of reforms, there is much experience which suggests that governments rarely opt for dramatic changes and a fast pace of reforms unless they have permitted such large disequilibria to develop that this is the only approach that will be effective in reversing trends and expectations in the economy. Essentially, if there is no crisis, governments like to make changes at the margin and slowly. But at present, Bulgaria is in a crisis. Unless a comprehensive reform program is adopted soon, the situation will rapidly deteriorate, requiring even more drastic adjustments in the future.

4.14 In some respects, Bulgaria has no choice. A rapid pace of adjustment has been forced upon it by the lack of external finance, the structure and orientation of its international trade, and external events beyond its control. The combination of reduced exports, the cessation of new credits from commercial banks, and the anticipated deterioration in Bulgaria's terms of trade (as a consequence of the demise of the CMEA and events in the Middle-East) has meant that the adjustment in the current account deficit has to occur through a drastic reduction in imports. This will have adverse effects on output and will inevitably lead to increased unemployment in the near future. Moreover, unless additional steps to curtail domestic demand are taken, inflation, whether open or suppressed, will rise.

4.15 At the same time, unless measures are taken to stimulate supply and enhance the international competitiveness of exports via market reforms, it would be difficult to visualize circumstances under which Bulgaria would regain the lost growth momentum and reestablish creditworthiness. It could also be argued that, without such reform, needed inflows of capital from abroad will not be forthcoming, and, as a result, Bulgaria will face a long period of stagnation and decline.

4.16 Questions about the specific pace of particular reforms will continue to arise. For example, a key question has been how fast prices

should be liberalized in the light of the existing monetary overhang and the potentially large budget deficit. The natural inclination is to suggest that price liberalization should be phased in over time so that its impact on the price level would be muted and spread out; perhaps over a period of one year or even longer. Similarly, it is argued that, since privatization and the breakdown of monopolies is inevitably a long process, price liberalization should not precede it significantly. There are several problems with retarding price reform to match the slow pace of other market reforms: First, price reform must precede privatization in order to help address the issue of asset valuation. Second, there is a danger that in retarding price reform to match the pace of the other slower processes, the needed impetus for at least some resource reallocation is lost. Moreover, in practical terms, the phasing of price liberalization is difficult. Once an initial price liberalization occurs, forces are set in motion which may make the original schedule difficult to adhere to: price liberalization in one sector means rising costs and bankruptcies in another--unless the price package is carefully designed; and price liberalization of any significance changes inflationary expectations, raises the velocity of money, and increases wage demands. Unless these pressures and changes are effectively addressed through the type of policy measures discussed earlier, there will be pressure to liberalize all prices, or, alternatively, black markets will become more widespread and goods will disappear from the formal market. Thus, a phased price liberalization approach is very demanding in terms of its design and implementation if one is to avoid the initial partial price liberalization from becoming unsustainable and/or leading to hyperinflation. The implication of this argument is that, while the size of the once and for all shock of liberalizing prices (and hence phasing and pace) is of importance, perhaps even more important for the long-term rate of inflation is the underlying macroeconomic balance in the economy.

#### IV. Medium-Term Prospects

4.17 This section explores a number of medium-term macroeconomic scenarios for Bulgaria, under alternative assumptions concerning domestic policies and the availability of external finance. We begin by discussing the external conditions that Bulgaria is likely to face in the early 1990s. This is followed by an analysis of Bulgaria's medium-term growth prospects under different assumptions regarding the scope and pace of domestic policy reform. The last part of this section focuses on the compatibility of these macroeconomic scenarios with the availability of external finance and debt relief.

4.18 The External Environment: In the near term, Bulgaria's external environment is dominated by the break-up of CMEA trade and payment arrangements and the Middle East crisis. Other important factors are the possible increase in global interest rates, the economic performance of Bulgaria's trading partners, and Bulgaria's access to foreign markets, especially in Europe.

4.19 In Chapter 2, we noted that, starting in 1991, changes in CMEA trade relationships will result in a significant terms of trade loss for Bulgaria. Prior to the Middle-East crisis, the authorities estimated that



this loss would amount to about US\$2.5 billion or about 12 percent of GDP in 1991.<sup>1/</sup> As Bulgaria is heavily dependent on imported energy, the continuation of the Middle East crisis will have a large negative effect on the economy, which is additional to the above terms of trade effect. Aside from nuclear energy, and limited supplies of coal, Bulgaria has no other source of domestic energy supply. And, given its external debt position, it has little capacity to borrow in order to finance the additional costs imposed by higher oil prices. For example, if oil prices were to average US\$24.0 during 1991 and Bulgaria lowered its net imports to 8.0 to 9.0 mmts from the level of about 11.0 to 12.0 mmts during 1989, the additional cost of oil imports would be about US\$400 to US\$500 million or another 2.0 percent of GDP.

4.20 The combined terms of trade effect of both the change in CMEA arrangements and an increase in oil prices is illustrated in Table 4.1. These estimates assume that the effect of the Middle East crisis on oil prices will be relatively short lived. Under these assumptions, Bulgaria's terms of trade are expected to worsen by about 25 percent in 1991. This would result in a significant loss in national income, which would be in addition to the decline resulting from the current contraction in output.

Table 4.1: BULGARIA'S TERMS OF TRADE, 1990-2000  
(1989 = 100)

	1990	1991	1992	1995	2000
<u>Terms of Trade</u>	<u>97.4</u>	<u>74.5</u>	<u>74.2</u>	<u>74.2</u>	<u>71.6</u>
Export price index	99.1	90.4	89.5	100.9	115.5
Import price index	101.8	121.4	120.6	136.0	161.4
<u>Oil Price</u>	<u>132.5</u>	<u>125.0</u>	<u>106.1</u>	<u>128.2</u>	<u>176.1</u>

Source: Staff estimates.

<sup>1/</sup> Using disaggregated trade data and international price comparisons, the Bulgarian authorities have derived an estimate of the terms of trade effect of moving to international prices for CMEA trade. This estimate is broken-down into two components: (i) the cost of maintaining the current volume of trade for "hard" goods; and (ii) the cost of maintaining the current volume of "hard" plus "soft" goods. "Hard" goods are defined as those that are essential and which could most easily be sold on international markets, particularly oil. "Soft" goods are the least competitive goods and therefore subject to the largest price discount. The implicit oil price used in these calculations was about US\$17.8 per barrel, compared to the actual price paid to the Soviet Union in 1989 and 1990 of about US\$8.0 per barrel.

4.21 The current Middle East crisis will also directly reduce Bulgaria's foreign exchange earnings from its large trucking fleet. During the 1980s, Bulgaria earned foreign exchange by transporting goods from Western Europe to the Middle East--including Iraq and Kuwait. Total earnings from transport were about US\$310 million in 1989 but could fall significantly in the latter half of 1990 due to the trade embargo with Iraq.<sup>1/</sup>

4.22 These shocks to the Bulgarian economy will occur at a time when the economy is already experiencing a major contraction in imports to restore external macroeconomic balances. They will also occur at a time when the country is undergoing the difficult initial stages of transition to a market economy. This combination of external and domestic events further strengthens the need for the Government to adopt a comprehensive reform program--and to do so as quickly as possible.

4.23 Domestic Policy and Economic Growth Scenarios: Restoration of economic growth in Bulgaria depends in the first instance on the implementation of a comprehensive reform program over a short period of time. Such a program would include the package of stabilization and market reform measures outlined earlier. In the medium-term, Bulgaria has considerable potential for growth in both the agricultural and manufacturing sectors. However, this potential will have to be realized within the context of a severe resource constraint. Both the overhang of external debt and the continuing deterioration in the terms of trade will limit access to foreign savings and hence restrict the level of domestic investment. This further underlines the importance of quickly adopting measures designed to increase the efficiency of resource use and improve the competitiveness of the economy.

4.24 Based on the external assumptions regarding the CMEA and oil prices discussed above, two alternative scenarios are presented which reflect different assumptions about the pace and scope of domestic policy reform. The "high" growth case assumes the Government is able to design a comprehensive reform program to be put in place in early 1991 with priority reform measures implemented immediately (e.g., limiting the budget deficit, adjusting interest rates, establishing a realistic exchange rate and allowing substantial price liberalization). The "low" growth case reflects more of a "reactive" strategy, i.e., the Government's action is limited to responding to external events. Illustrative projections of the key indicators of Bulgaria's

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<sup>1/</sup> The external environment may impose another burden on the Bulgarian economy via higher interest rates. The future course of interest rates is uncertain. But, since about 85 percent Bulgaria's debt is with commercial banks at variable interest rates, any increase in global interest rates will impose an additional financial burden. Although the effect over the next year would be negligible on a cash basis (due to the current moratorium on debt repayments), it would increase Bulgaria's arrears on an accrual basis. If we assume that interest rates increase over previous levels by about 1.3 percentage points, the interest rate effect would be of the order of US\$100.0 million per year, or equivalent to an additional loss of 0.6 percent of GDP.

medium-term prospects for the high and low case are shown in Table 4.2 and Table 4.3 respectively.

4.25 Both the high and low case start from the same initial macroeconomic conditions that are likely to develop during 1990. Export volumes are expected to decline by over 28 percent in 1990 due to the combination of factors discussed in Chapter 2. As a consequence of this rapid drop in export earnings and Bulgaria's lack of access to foreign borrowing, imports are expected to decline by about 25 percent. This drastic cut in imports (which follows a 22 percent decline in 1989) combined with other domestic factors implies that GDP will fall by at least 10 percent in 1990. The manufacturing sector will be the most affected, as it will experience significant shortfalls in vital imported inputs and a marked decline (about 33 percent) in exports to CMEA markets. These developments in external trade are expected to result in a deficit in the non-interest current account of about US\$0.4 billion, equivalent to about 1.9 percent of GDP. The deficit in the current account is expected to increase from 3.9 percent of GDP in 1989 to 4.4 percent in 1990. In addition to the trade imbalance, this reflects payment of all debt obligations during the first quarter of 1990 (prior to the debt moratorium) plus continued servicing of that portion of the debt owed by the Bulgarian domestic commercial banks (about 8 percent). The payment of both interest and amortization (estimated to be about US\$490 and US\$770 million respectively by end-1990) has been met primarily through a drawdown in foreign exchange reserves plus the small surplus from non-factor services and transfers. It is estimated that foreign exchange reserves declined from US\$1.3 billion at end-1989 to about US\$0.2 billion during 1990, equivalent to just 2 weeks of imports.

4.26 High Case: Recovery from the position reached in 1990 will depend primarily on domestic policies supported by external financial assistance. The high case scenario assumes that such policies will be put in place and will result in a rapid supply response. Because of the critical nature of Bulgaria's foreign exchange crisis, it is particularly important to expand the production of exportables and import substitutes. It is tempting to try to anticipate the sectors in which the most rapid supply responses might be possible and to focus attention exclusively on these sectors. Yet it is important not to prejudge where the greatest responses will be because, as the command economy of the past dissolves, decision-makers will expand into new and sometimes surprising markets and activities. There may also be a divergence between short-term possibilities and long-term comparative advantage. It is useful nevertheless to identify sectors where the response to reform has the potential to be rapid and significant.

4.27 Energy is a conspicuous possibility. Bulgaria is a very inefficient user of energy, and many Bulgarian industries are very energy intensive. Given the present foreign exchange crisis, imported energy has become a binding constraint on supply in most areas of the Bulgarian economy. Improvements in energy efficiency would have important cost-saving implications throughout the economy. In effect, energy conservation can be an extremely valuable import substitute.

4.28 Agriculture (including agroprocessing) and services, such as tourism, also have the potential to provide strong economic performance, for

several reasons. First, it may be easier to return the assets within these sectors to private ownership, although not without some near-term disruption. The Government has already made considerable progress towards this objective via the draft law on land reform, and foreign investors have expressed some interest in Bulgaria's tourist resort potential on the Black Sea and other regions. In addition, these sectors have already been subject to a degree of price liberalization (e.g. fruits and vegetables), and further price reforms are high on the government agenda. Second, Bulgaria seems to have the potential to compete in international agricultural markets and tourism without substantial new investment in plant or equipment. Third, apart from the potential to generate foreign exchange quickly, domestic demand for food and new/improved services is likely to be strong during the economic recovery. Given the underdeveloped nature of the service sector in Bulgaria (e.g., financial services) and the relative labor intensity of some agricultural activities, growth in employment opportunities within these sectors may be strong.

Table 4.2: HIGH CASE - SELECTED ECONOMIC INDICATORS (1990-2000)  
(Real growth rates)

	1990	1991	1992	1993	1990-95	1995-2000
<b>GDP</b>	<u>-10.8</u>	<u>-5.9</u>	<u>2.8</u>	<u>3.6</u>	<u>-1.0</u>	<u>3.8</u>
Agriculture	-5.6	2.0	4.0	4.0	2.0	3.0
Industry	-12.0	-10.0	2.0	3.0	-2.5	3.9
Services	-10.0	1.0	4.0	5.0	1.6	4.0
Exports GNFS	-28.1	-5.0	10.1	8.8	-0.4	5.7
Imports GNFS	-25.0	-13.7	2.9	3.2	-5.5	3.2
<b>Expenditure</b>	<u>-10.0</u>	<u>-8.0</u>	<u>1.0</u>	<u>2.2</u>	<u>-2.3</u>	<u>3.1</u>
Total Consumption	-3.0	-3.7	-0.3	1.1	-0.9	2.7
Gross Domestic Investment	-24.8	-18.5	5.4	5.4	-5.5	4.1
Gross Domestic Savings	-28.9	-30.4	12.8	10.5	-6.3	5.6
<b>GNY a/</b>	<u>-10.8</u>	<u>-12.7</u>	<u>-14.7</u>	<u>-0.4</u>	<u>-7.9</u>	<u>4.4</u>
<b>Memo Items:</b>						
Non-interest current account/GDP	-1.9	-6.9	-4.6	-3.2	-3.8	0.2
Current Account/GDP b/	-4.4	-8.2	-9.1	-7.9	-6.9	-4.3

Source: Staff estimates.

a/ The relatively moderate rate of decline in GNY in 1991 reflects the fact that the gains from the moratorium on debt payments offsets part of the loss due to the deterioration in the terms of trade.

b/ As explained below, this projection reflects a current account deficit which is unlikely to be financed (see paras. 4.42 to 4.48).

4.29 In the industrial sector, it is premature to judge where prospects are best. In the very short run, it may be possible for existing heavy industry to achieve apparent gains by aggressively pricing its output, even if long-run comparative advantage inhibits sustainable progress. There may also be possibilities in light manufacturing, but the distortions in the Bulgarian economy are so great at present that it is impossible to predict just where these possibilities are strongest. In general, the industrial sector is expected to continue to experience a decline in output during 1991 (-10.0 percent), due to the short-term negative effects of restructuring production and the expected decline in trade with CMEA members--primarily USSR. As domestic effective demand is also expected to decline due to the fall in aggregate spending needed to maintain macroeconomic equilibrium and the

significant deterioration in the terms of trade, the growth in industrial output will be primarily dependant on increased exports to convertible currency markets. However, given existing management practices, the age of the capital stock, and the limited prospects for a significant inflow of direct foreign investment into manufacturing in the near-term, an improvement in the competitiveness of Bulgaria's manufacturing sector will take time.

4.30 These trends in sectoral growth rates imply a further decline in GDP of about 6.0 percent in 1991. In the longer term, as the industrial sector responds to the assumed new incentive and regulatory framework and the growth in agriculture and services is consolidated, GDP growth could be restored in 1992 and stabilize around a long-run rate of about 4.0 percent p.a. by the end of the decade. The impact of the deterioration in Bulgaria's terms of trade is reflected in the negative trend in gross national income (GNY) shown in table 4.2. Even in the high case, GNY is expected to decline by an average 7.9 percent p.a. over the period 1990-95, compared with a 1.0 p.a. average decline in GDP. This implies a significant drop in real purchasing power with the consequence that the reform program will have to be backed by a strong political mandate to avoid short-term policy reversals.

4.31 With reference to the external accounts, both exports and imports can be expected to continue to decline through 1991, due primarily to the breakdown of the CMEA. Although export growth to non-CMEA countries could be an offsetting factor, the slow rehabilitation of manufacturing competitiveness will restrain the potential expansion of aggregate exports. As a result of both declining exports to CMEA countries and the continued worsening of Bulgaria's terms of trade, imports will need to be further compressed (beyond the low level reached in 1990) despite significant net foreign capital inflows. It is not until 1992 that export growth may be sufficiently robust to fully offset the negative terms of trade effect and thereby to allow import volumes to expand.

4.32 These trends in external trade imply that the non-interest current account deficit will widen to about 6.9 percent of GDP in 1991. This reflects both the terms of trade shock (equivalent to 12 to 15 percent of GDP) and the near-term non-competitiveness of much of the industrial sector. It is not until 1995/96 that the non-interest current account is expected to turn positive, with exports growing by an average 8 percent p.a. between 1992 and 1996. The positive non-interest current account during the latter half of the decade reflects the position that, notwithstanding any plausible debt strategy, the restoration of Bulgaria's creditworthiness will require an improvement in its medium debt indicators to a sustainable level. The current account deficit is projected to increase to about 8.0 percent of GDP in 1991 from 6.8 percent in 1990, assuming that the current moratorium on most of BFT's debt applies throughout 1991. It is assumed that some payment is made on short-term official credit, to free up suppliers credits, and that the domestic commercial banks continue to fully service their debt. It is also assumed that, given an appropriate domestic policy reform program, the external deficit in 1991 could be financed primarily from official bilateral or multilateral sources and the reopening of the short-term lines of trade credit. Debt relief is assumed to be provided via an "extended" debt rescheduling arrangement which is concluded during 1991 and applied from the start of 1992 (for details see below). Nevertheless, access to these sources

of finance plus the extended debt rescheduling would result in a substantial current account deficit from 1992 on, which may not be financeable and/or which it may not be advisable for Bulgaria to seek to finance. The implications of this for Bulgaria's capital account and debt strategy are discussed below.

4.33 In the near-term, consumption could not be squeezed much more than has happened already. Hence, much of the decline in total expenditures (10 percent in 1990 and 8 percent in 1991) can be expected to fall on public investment--hence the estimated 25 percent and 20 percent fall in gross domestic investment in 1990 and 1991 respectively. But, given that a large part of this investment was directed towards inefficient economic activities, this decline may not be as detrimental to medium-growth prospects as it may appear. The high case assumes that the level of GDI falls from its historical levels of over 30 percent of GDP to about 20 percent by 1991, before gradually increasing to a sustainable level of 25 percent. It is also assumed that there is a significant change in the composition of investment, both in terms of an increased share of private investment and a reduction in the share of GDI accounted for by unfinished construction and changes in stocks. The recovery of investment from 1992 on also reflects an assumed major improvement in the business environment for the private sector--including foreign private investment. Finally, the projected positive balance in the non-interest current account after 1995, will require an increase in domestic savings relative to domestic investment. However, even allowing for efficiency improvements due to policy reform, almost all sectors of the economy will require major new investments to improve competitiveness. These trends imply that investment and saving will have to grow faster than output and consumption, during the rest of the decade.<sup>1/</sup>

4.34 Low Case: In this scenario, we assume that domestic policy reforms are limited to those measures that are needed to keep the external accounts in balance, excluding repayment of foreign debt. Basically, the economy is brought into equilibrium at a lower level of GDP than in the high case and continues on a slower average growth path due to the absence of efficiency enhancing structural reform and a lower level of investment. It is also assumed that, in the absence of a strong domestic reform effort, the international community does not provide additional external assistance. In this case, GDP would decline by about 10.0 percent in 1991, and a further 3.0 percent in 1992 before stabilizing at a longer growth rate of just over 1.0 percent for the remainder of the decade (see Table 4.3).

4.35 On the external side, export earnings in 1991 would decline at twice the rate of the high case, primarily because there would be no increase in exports to non-CMEA markets to offset the anticipated decline in CMEA exports. With little access to commercial lending and much lower levels of official assistance, imports would have to be cut by a further 28 percent in 1991. This would inevitably lead to catastrophic energy and raw material shortages, resulting in a further decline in economic activity--particularly

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<sup>1/</sup> This performance implicitly assumes the pursuit of broadly appropriate exchange rate, fiscal and monetary policies. But the scenario does not make any explicit assumptions on these matters except for keeping the real exchange rate constant beyond 1991.

in industry. It is anticipated that the Government would try to protect consumption levels, allowing public investment to fall significantly below the already low level reached in 1990. Coupled with reduced access to imported machinery, this will further lower medium-term growth prospects.

Table 4.3: LOW CASE - SELECTED ECONOMIC INDICATORS (1990 - 2000)  
(Real growth rate)

	1990	1991	1992	1993	1990-95	1995-2000
<u>GDP</u>	-10.8	-10.0	-3.2	1.0	-4.4	1.0
Agriculture	-5.6	0.0	1.0	1.0	-0.2	1.0
Industry	-12.0	-15.0	-5.0	1.0	-6.3	1.0
Services	-10.0	-2.0	-1.0	1.0	-1.8	1.0
Exports GNFS	-28.1	-10.5	2.9	2.3	-5.5	2.3
Imports GNFS	-25.0	-27.6	-3.0	0.7	-11.3	0.7
<u>Expenditure</u>	-10.0	-14.3	-4.6	0.6	-5.8	0.6
Total Consumption	-3.0	-6.2	-4.9	0.5	-3.0	0.4
Gross Domestic Investment	-24.8	-36.1	-3.2	1.0	-13.7	1.0
Gross Domestic Savings	-28.9	-40.2	3.4	2.5	-13.8	1.7
<u>GNV</u>	-10.8	-17.1	-19.5	-3.9	-11.8	1.0
<u>Memo Items:</u>						
Non-interest current account/GDP	-1.9	-3.5	-1.3	-0.9	-1.3	0.5
Current Account/GDP	-4.4	-4.9	-6.0	-6.0	-5.4	-5.3

Source: Staff estimates.

4.36 On the internal side, we assume that, as the Government's plan to liberalize prices moves slowly, increased consumer subsidies would drive the fiscal deficit beyond a level which is consistent with its monetary targets. Given limited access to savings, the authorities would be forced to increase the money supply which would exacerbate inflationary pressures. In an environment of supply shortages and price controls, the "black" or "curb" market would flourish, which, in turn, would encourage higher wage claims. It is also assumed that the low "official" rate of inflation would allow the authorities to keep interest rates low. Negative real interest rates would discourage saving, causing people to convert their money incomes into real assets as quickly as possible, further increasing inflation pressures.

4.37 In the medium-term, macroeconomic balances could be restored (excluding debt payments), but only at a relatively low rate of economic growth, if any. On the one hand, economic growth will be constrained by the level of resource availability. The implied inability of the economy to service its debts will continue to deny access to commercial bank lending, and the absence of a credible domestic policy program will severely limit bilateral/ multilateral aid flows. On the other hand, the narrower scope and slower pace of reform will hamper the process of efficiency enhancing structural change. This will slow the rate of growth at any level of investment.

4.38 External Financing: While a stagnation scenario is plausible, it is avoidable, if the Government moves vigorously to implement policy reforms. But, as noted above, even if corrective domestic policy reforms are implemented, the external financing needs arising from the terms of trade shock and the debt overhang may make the "high" growth scenario unattainable.

A viable solution to Bulgaria's external financing requirements is essential if economic growth and creditworthiness are to be restored over the medium-term. It is clear that the schedule of debt repayments as of end-1989, with over US\$3.0 billion in amortization due in 1990 and US\$1.5 billion in 1991, could not be financed from expected export earnings. And a further compression in imports, after declines of 22 percent in 1989 and an estimated 25 percent in 1990, would impose unacceptable political and social costs. It would also imply a level of capital and intermediate goods imports which is inconsistent with the restoration of economic growth.

4.39 To explore the implications of Bulgaria's debt problem, a number of alternative debt scenarios were explored--including a "standard" rescheduling of Bulgaria's London and Paris Club debt and an "extended" rescheduling which includes short-term credits<sup>1/</sup> and a longer maturity structure for London Club debt than standard terms.<sup>2/</sup> Each of these debt options were explored in the context of the "high" growth scenario, as it is assumed that the "low" growth scenario will result in an unwillingness of the international financial institutions to provide financial support because creditworthiness cannot be restored. It is also assumed that the current moratorium on the Foreign Trade Bank's debt obligations (interest and principal) will continue until end-1991. Actual cash debt payments during 1991 are therefore limited to estimates of the external debt service payments made by Bulgaria's domestic commercial banks and payment of arrears on official trade credits of less than one year maturity.<sup>3/</sup> Domestic commercial banks held about 15 percent of Bulgaria's total stock of external debt at end-1989 (about US\$0.7 billion) and are assumed to continue to fully meet their obligations.

4.40 The analysis shows that a "standard" rescheduling arrangement--i.e., one which excludes short-term credit--is not viable. Because of the composition of Bulgaria's external debt,<sup>4/</sup> resumption of principal repayments

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- 1/ Short-term credit refers to credit with a maturity of more than one year but less than 3 years.
- 2/ It should be stressed that these alternatives are purely illustrative. They are intended to demonstrate the magnitude of Bulgaria's debt problem and explore possible options within the context of a consistent macroeconomic framework. The figures shown in Table 5.4 should not be interpreted as "actual" estimates or taken to imply any commitment from lenders to provide finance.
- 3/ This implies that Bulgaria is accumulating interest on that portion of its external debt obligations (i.e. deferred principal and interest) owed by FTB. Our projections assume that this interest will be about US\$450 to US\$500 million by end-1991 and that it is capitalized as part of a rescheduling agreement.
- 4/ See Chapter 1. In brief, it is estimated that as of end-1989 about 46% of total DOD is private MLT commercial bank debt (London club), 38% is shorter-term suppliers credits and Letters of Credit, and 17% is official or officially guaranteed credits



a short-term credit results in an additional total capital requirement of over US\$2.0 billion in 1992. Even if a credible domestic reform program is implemented, Bulgaria will not be able to access this level of net capital inflow and, more importantly, it would not be advisable for Bulgaria to accumulate this much additional debt.

41 The financing implications of an "extended" debt rescheduling arrangement and the current account deficit shown in Table 4.2 are presented in Table 4.4. The key underlying assumptions are as follows:<sup>1/</sup>

- Private MLT debt: At the end of the moratorium in 1991, an agreement is reached to reschedule the stock of debt plus interest payment arrears over a 20 year period with a grace period of 10 years on principal repayments. Interest payments would begin when the rescheduling agreement is effective, i.e., in 1992.
- Short-term suppliers credits and L.C.s: It is agreed to maintain lines of credit roughly at the existing level. The total principal and interest payments owed by end-1991 are consolidated into a new loan with a maturity of 15 years and 8 years grace.
- Official credits: It is agreed to reschedule the existing stock of debt and interest rate arrears over a 20 year period with 10 years grace. Full interest payments are assumed to resume in 1992, partly in response to Bulgaria's obtaining substantial debt relief from the commercial banks.

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(Paris club).

<sup>1/</sup> These key assumptions reflect the terms recently agreed upon by both official and commercial creditors for some debtor countries that are implementing a credible and comprehensive reform program.

Table 4.4: EXTERNAL FINANCING REQUIREMENTS AND SOURCES  
(US\$ million)

	1990	1991	1992	1993	1994
<u>Requirements</u>	<u>708</u>	<u>1990</u>	<u>2295</u>	<u>2160</u>	<u>2285</u>
Current account deficit	895	1624	1877	1685	1513
Of which: interest payments	(490)	(264)	(943)	(1032)	(1107)
Principal repayments	770	176	218	265	562
Increase in net foreign assets	-957	190	200	210	210
<u>Sources</u>	<u>708</u>	<u>1540</u>	<u>1565</u>	<u>1560</u>	<u>1670</u>
Disbursements of private MLT	170	170	180	190	200
Disbursements of public MLT	10	1040	980	930	990
Direct Foreign Investment	12	30	75	100	130
CMEA <u>a/</u>	266	100	120	120	120
Net Short term <u>b/</u>	0	50	60	70	80
Other <u>c/</u>	250	150	150	150	150
<u>Unfinanced Gap/</u>					
<u>Additional Debt Relief</u>	<u>0</u>	<u>450</u>	<u>730</u>	<u>600</u>	<u>615</u>
<u>Memo items</u>					
Interest deferred	302	623	0	0	0
Principal deferred	2319	1300	0	0	0

Source: Staff estimate.

- a/ 1990 figure is estimated current account deficit with CMEA, converted to US dollars at prevailing commercial cross rate. Data from 1991 on is an estimate of debt relief or financing that could be negotiated on Bulgaria's US dollar debt with CMEA countries, primarily USSR.
- b/ Short-term is defined here primarily as trade credits. It is assumed that the authorities clear their arrears on these obligations and are, in return, granted access to "new" money.
- c/ Largely reflects repayment of past loans extended by Bulgaria to other developing countries.

4.42 In this scenario, capital requirements in 1991 would be met primarily from bilateral and multilateral sources in support of the Government's domestic reform program. As part of this program, foreign exchange reserves need to rise in order to underwrite the move towards a more market determined foreign exchange system. Domestic policy reform is also assumed to create conditions that are sufficiently favorable to attract limited direct foreign investment. We also assume continued servicing of the debt obligations of Bulgaria's domestic commercial banks (other than the FTB) and a small positive new inflow from reopening short-term (less than 1 year) lines of trade credit. Despite these capital flows and a rescheduling agreement, which takes effect in 1992, capital requirements exceed the likely

level of net inflows from any of these sources. It is conceivable that the financing gap in 1991 can be met via special assistance from multilateral sources including the G-24 Group and European Community. Continuation of such a high level of assistance seems unlikely, particularly as the resumption of interest payments on the total stock of debt during 1992 results in a much larger unfinanced gap. This implies that any comprehensive debt strategy would need to include debt reduction measures in addition to a rescheduling of maturities. Closing the financing gap via further internal adjustment (i.e., compressing imports) is not consistent with the resumption of growth over the medium-term. And a stronger performance of exports beyond that assumed in the high case would imply a supply response from the industrial sector which is unlikely under present circumstances.<sup>1/</sup>

4.43 The implications of either fully financing the financing gap or obtaining additional debt relief are explored in Table 4.5, which provides a comparison of projected debt indicators "with" and "without" additional debt relief. In the "with additional debt relief" scenario, we assume that a comprehensive debt strategy is developed by end-1991, which incorporates a debt reduction component designed to reduce debt service payments by an annual average of about US\$600 million in 1992-99. This could be achieved via a combination of debt or debt service reduction. Under this scenario, where gross capital inflows are maintained at about US\$1.5 billion per year, the debt indicators would stabilize in the medium-term. Total debt outstanding would increase to about US\$16.9 billion by the end of the decade (48 percent of GDP down from 57 percent in 1992), and the debt service ratio would be maintained at around 24 percent. The implied debt burden should not prevent the economy from returning to a sustainable medium-term growth path and hence to a restoration of creditworthiness--provided appropriate domestic policies are maintained.

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<sup>1/</sup> See Chapter 1, in Volume II.

Table 4.5: PROJECTED DEBT INDICATORS  
(1990-99)

	1990	1991	1992	1993	1994	1999
<u>With Additional Debt Relief</u>						
Total DOD (US\$ bil)	8.9	11.0	12.1	13.1	13.8	16.9
DOD/XGNFS	130.4	181.8	182.5	175.8	166.3	130.0
DOD/GDP	43.5	54.3	57.3	60.0	57.6	48.1
Debt Service/XGNFS	18.7	7.2	17.5	17.5	20.1	23.8
Interest/XGNFS	7.5	4.4	14.2	13.9	13.3	10.7
Interest/GDP	2.5	1.3	4.5	4.7	4.6	4.0
<u>Without Additional Debt Relief</u>						
Total DOD (US\$ bil)			13.0	14.7	16.3	26.4
DOD/XGNFS			195.7	198.0	196.7	202.4
DOD/GDP	As above		61.5	67.6	68.1	74.9
Debt Service/XGNFS			17.6	18.5	22.0	31.9
Interest/XGNFS			14.3	15.0	15.2	16.0
Interest/GDP			4.5	5.1	5.3	5.9

Source: Staff estimates.

4.44 In the "without additional debt relief" scenario, the medium-term debt indicators are not stable. Total debt outstanding increases from US\$13.0 billion in 1992 to US\$26.4 billion in 1999, and debt service payments as a share of export earnings increase from 17.6 percent to 31.9 percent over the same period. Due to the maturity structure of the additional debt, the debt indicators increase further in the early part of the next decade. In short, the situation is not viable in the long-run.

4.45 While these scenarios are only illustrative, they do indicate that a lasting solution to Bulgaria's debt problems, and one that is consistent with a resumption of economic growth, will require a more comprehensive solution than is provided via normal or extended rescheduling arrangements. Improving the maturity structure of the existing debt profile is a priority--but it is unlikely to be sufficient. This will need to be complemented by exploration of the full range of debt options--including debt relief--to reduce the size of the debt burden and thereby provide the resources needed to underwrite the transition to a healthy and sustainable market economy.

## V. Poverty, Social Welfare and Adjustment

4.46 If a rapid pace of reforms and adjustment is pursued, the Bulgarian economy will be subjected to substantial shocks. How these shocks are absorbed will depend in part on the overall public consensus on the reform program; but they would also depend on the social safety net in existence and the extent to which it can cushion the costs of adjustment to those most affected and least able to cope. The first issue that needs to be addressed

in this context is who are the poor in Bulgaria and which groups will be the most affected by the reform process.

4.47 There are no detailed analyses of the pattern of income distribution and poverty in Bulgaria. Preliminary evidence suggests that, while the overall pattern of income distribution is quite similar for different social groups (workers, specialists, farmers), there is a substantial group of people with incomes below the social minimum. In 1989, 27 percent of households had annual incomes below 1900 leva (or below 159 leva per month--about the social minimum for that year). The incidence below the social minimum is slightly higher for the distribution by persons, indicating a slightly larger family size in the lower-income families. Preliminary evidence also suggests that the incidence of lower income families is higher among urban wage earners than among farmers. In 1989, rural incomes were about 20 percent higher than urban incomes, especially the incomes per household per person (about 15 percent), which indicates smaller rural families. The difference is mostly explained by self-employment income which is six times larger in rural areas as farmers are able to supplement their wages by incomes derived from their private plots and pensions. Income from wages and salaries is about 70 percent lower in rural areas while there are 40 percent more people who receive their income from pensions.

4.48 As noted in Chapter 1, Bulgaria's social assistance system has three main elements: social security benefits financed by the Social Security Budget, social welfare benefits administered by the Local Municipal People's Councils, and, since December 1989, unemployment compensation and job search-related programs funded under the Professional Training and Retraining Fund. Additional elements of social assistance include specific programs of the social sector ministries and price subsidies for essential commodities which the Government intends to maintain (at least temporarily) in order to protect consumption levels during the reform process.<sup>1/</sup>

4.49 The social assistance system in Bulgaria has provided extremely generous benefits with essentially universal coverage. The system has served multiple purposes: to complement the egalitarian wage policy, to provide social insurance, to provide a safety net (including income maintenance and benefits in kind) to the most vulnerable groups, and to encourage population growth. While the social security system provides important benefits which supplement incomes for the general population, it is not intended primarily as an instrument for the provision of benefits to the disadvantaged or to groups whose incomes might be affected by dislocation brought about through economic reform or decline in economic activity. Its main features and suggestions for possible improvements are discussed in Volume II, Chapter 6. The main instruments available to the Bulgarian authorities to cushion the costs of adjustment are the social welfare programs, the unemployment compensation system, and consumption subsidies. The question is whether these programs can play the role of providing an efficient and adequate social safety net in the light of the expected adjustment.

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<sup>1/</sup> It is our understanding that the government has also recently taken steps to issue "coupons" which entitle holders to a minimum quantity of basic food items (e.g. sugar, cooking oil).

4.50 Reform Proposals: The Government is keen to ensure minimum standards of living for all those at the bottom of the income scale (adequate according to social minimum criteria) and is also well aware of the need to protect vulnerable groups during the transition process. A reform program is under preparation to address this problem as well as to contain the fiscal costs of the pension system. The Government's approach is to utilize the present system to protect the standard of living of most Bulgarians in the face of unemployment and increases in the cost of living. Some actions the Government has taken over the past year are important, positive steps towards creating a fiscally affordable, non-distortionary, effective social safety net. These include the creation of the unemployment compensation and retraining fund and the measures to tighten the eligibility for pensions benefits to the non-working population. Current proposals include further reform of social security benefit structure and indexation of minimum wages and cash transfers (presumably including indexation of monthly allowances provided to "socially weak" families--the definition of the income benchmark to qualify for these benefits needs to be discussed) and to maintain price subsidies for "essential" commodities. Some of these proposals pertain to the long-term restructuring of the pension and social insurance system and are discussed in detail in Volume II, Chapter 6. The focus of this discussion is on efforts to strengthen the present system and make it better able to protect the poor from increases in the cost of living that are likely to result from price liberalization as well as efforts to cushion the costs of increased unemployment.

4.51 Unfortunately, the reform proposals under consideration are likely to continue (and even exacerbate) the present shortcomings of the social assistance system, as for the most part they do not address fundamental systemic issues. They are also counterproductive to the needed economic reforms because the distortions and perverse incentives of the current system are not addressed. The most vulnerable groups would be best protected if the Government took measures to reduce the universal coverage of social assistance benefits and, simultaneously, strengthens the social welfare system to serve as protection of last resort, providing benefits (in cash and/or in kind) on the basis of need.

4.52 Concentrating Benefits on the Needy: A dual approach to cushioning the effect of inflation on the poor is being considered by the Government: first, to index minimum wages and social assistance benefits (presumably including indexation of monthly allowances provided to "socially weak" families); and second, to maintain price subsidies for "essential" commodities. Given the overall scarcity of budgetary resources and the need to curtail overall expenditures, there is a need to reduce the universal coverage of social assistance benefits and, simultaneously, strengthen the social welfare system to target benefits to the most vulnerable groups on the basis of need. To this end, the universal coverage of family benefits should be reduced immediately, or--if this is not politically feasible--avoid indexation of benefits and instead maintain their nominal value. The Government could consider substituting a need-based system of transfers to low income households with children. Total household income instead of individual wages could be used to define need. The household income tax is probably the most useful vehicle for effecting the transfer to the working poor, as firms cannot be expected to keep track of household income. For those poor without

any income at all or where income is insufficient at a zero tax level, the Government could strengthen the existing system of social welfare benefits for the "socially weak" so that it provides income transfers to those below a minimum income level.

4.53 To a considerable extent, reforms designed to concentrate welfare benefits on low-income groups may not be that demanding to accomplish in institutional terms because Bulgaria already has the basic elements of a social welfare system in place. These elements include: well-accepted criteria to identify the most vulnerable groups on the basis of needs and means testing, well-established programs to provide basic benefits in cash and in kind to these groups, and the basic administrative capacity at the local municipal level to implement the programs, including social welfare offices in the Local Councils and the network of primary-health care centers.

4.54 But the present social welfare organization is not well-suited to meet the changing demands during the process of economic reform. Despite recent reforms, including the creation of the Unemployment Fund and of Local Employment offices, the system does not yet have the staff, the training, nor the financial resources required to assist the large numbers of people that are likely to lose the social protection they have received under the existing system. This issue requires priority attention to determine the specific personnel, training, and financial resources required by the local Governments.

4.55 The system of consumer subsidies absorbs a large share of the resources likely to be available to assist vulnerable groups. Given the tight resource position, it would be desirable to reduce the number of commodities covered by universal food subsidies, maintaining subsidies only for essential commodities (preferably those with low income elasticity); or, alternatively, eliminate all food subsidies and introduce a targeted food coupon program or a targeted program to distribute food supplements to needy groups. Basic food (such as milk) or food coupons could be distributed to selected groups, such as pensioners without other income, families where two members receive unemployment compensation for more than a minimum time, and low-income single mothers with young children. While these targeted programs are not easy to implement successfully, if well-designed, they can be very effective. This may be particularly true in Bulgaria where existing Local Council staff already have a capacity to identify the target groups and have programs in place to provide drugs and other medical supplies to the needy. The existing network of primary health care facilities, which provides good preventive health-care services to mothers and their children, could be utilized to monitor nutrition and distribute milk and food supplements to those who may need them.

4.56 Unemployment Compensation: With respect to the unemployment compensation scheme, two sets of issues arise: first, whether the current unemployment benefit structure is appropriate, and second, whether the physical and budgetary resources available to the system are adequate to meet the size of unemployment likely to emerge as a consequence of the adjustment program.

4.57 The current unemployment benefit structure would create problems in several respects. The high initial replacement rates provide little incentive to return to work during the early months of unemployment. Furthermore, although the monitoring system requires the unemployed to visit the Labor Office periodically in order to qualify for unemployment benefits, enforcement is loose and violations seem only minimally penalized. Thus, the system may not sufficiently discourage parallel employment elsewhere. Consequently, the current system is likely to encourage higher, and lengthier, registered "unemployment" than would otherwise occur. This will have substantial fiscal implications, particularly if unemployment increases sharply, as is likely to occur. Another problem with the present unemployment compensation scheme is the lack of provision for the long-term unemployed.

4.58 A preferable system would consist of a flat-rate unemployment benefit complemented with strengthened monitoring procedures. The long-term unemployed could be protected by a separate, means-tested, family-oriented social welfare system, with allowances administered by the Local Councils (essentially an expansion of the present system of benefits for the "socially weak"). The eligibility for unemployment compensation benefits should, in principle, be restricted to dismissed workers (i.e., would include new-entrants to the labor force and those who have left their jobs voluntarily). The benefit level should be low enough to provide the right work incentives but not so low as to provide an insufficient safety net; the minimum wage, or a figure somewhat below it, might be appropriate. In order to provide incentives for participation in retraining and re-qualification programs, a supplement for those participating these programs as well as coverage of training costs should be built into the system. Such a system would allow better "targeting" of benefits, would strengthen the incentives for job search, and would reduce the fiscal burden.

4.59 Bulgaria is likely to experience two types of acute unemployment during the transition period. First, the terms of trade shock, the internal price realignment, and the contraction in demand required to control inflationary pressures will reduce the level of real effective demand and thereby the rate at which the economy absorbs labor. Second, many firms, especially in the industrial sector, are overstaffed or have an inappropriate skill mix. Improving the efficiency of these firms in a more competitive environment will require retrenchment of workers, causing an increase in unemployment. This unemployment is likely to persist for some time, both because of sluggish domestic demand conditions and because it will take time for new firms to become established.

4.60 In the medium term, as the economy moves out of the recession towards a sustainable growth path, unemployment will decline. As Bulgaria's labor force is not growing significantly, the prospects for Bulgaria to reduce unemployment to a manageable level in the longer term are good. However, the same policies which lead to a quick resumption of growth--for example internal price realignment, increased competition within the economy, and other incentive policies which encourage efficient resource use--are also likely to lead to a more rapid short-run contraction of demand for labor. On the other hand, experience from other countries would indicate that it is easy to underestimate the supply response that may be generated from new or restructured enterprises, given an appropriate and credible reform program.



4.61 There is considerable uncertainty as to the amount of labor that will be displaced as a consequence of any stabilization and reform program. It is widely expected that the bulk of the excess employment at present is in industry and to a certain extent in government administration. Interviews in various industrial sub-sectors suggested that up to 20 percent of industrial employment may be excess; but conceivably a higher (30 percent) retrenchment may be required as a consequence of the adjustment of the Bulgarian industry to the international economy. It is also not clear how fast this retrenchment will be undertaken; a great deal will depend on the pace of liberalization, privatization and restructuring of the industrial sector. Thus, three alternative unemployment scenarios were explored: A fast (18 month) adjustment scenario involving 20 percent of the industrial labor force and two slower scenarios each lasting for 36 months but involving 20 percent and 30 percent of the labor force respectively (see Table 4.6). It was also assumed that the total labor force during this period would not grow, as new entrants exactly offset retirees. The latter assumption reflects the actual situation in Bulgaria in recent periods, but it may result in an overestimation of the size of the future labor force because, during periods of slack economic activity, it may be expected that more people will retire or not enter the labor force (see below).

Table 4.6: UNEMPLOYMENT SCENARIOS  
Unemployment rates in percent of Labor Force

	1991	1992	1993
Scenario 1 (fast, 20% industrial retrenchment)	6.7	6.5	4.4
Scenario 2 (slow, 20% industrial retrenchment)	1.7	6.0	7.3
Scenario 3 (slow, 30% industrial retrenchment)	1.7	7.8	10.9

Source: Staff estimates.

4.62 In order to gauge the fiscal implications of the current system, a preliminary analysis was undertaken based on assumptions about the pace of the reforms undertaken and the ultimate numbers of displaced workers that would need to be covered by the unemployment scheme as it currently stands. Details of this analysis are presented in Appendix 4. In summary, the main assumptions and findings of the analysis are presented below and in Table 4.7.

4.63 In the first scenario, it is assumed that Bulgaria would move rapidly to restructure the economy, especially the industrial sector. As a result, employment in the industrial sector would retrench rapidly, generating significant unemployment in 1991. Net employment in other sectors is assumed to be roughly constant, although in reality, there could be some frictional unemployment in these sectors as well, especially as restructuring occurs in the tertiary sectors. The Government is assumed to continue with its reform

program, and during 1992, the economy is expected to recover. The economy would gradually move towards a sustainable growth path and unemployment would decline. By 1993, unemployment could be reduced to roughly 4 percent, a "normal" level for a market economy. In the second scenario, Bulgaria is assumed to move more slowly towards restructuring, and as a result, the increase in unemployment is lower in 1991. But as competitive pressures increase and the fiscal/monetary burden grows, the industrial sector is assumed to be forced to restructure in 1992, resulting in mass layoffs. Unfortunately, in the absence of growth, the other sectors of the economy would not be able to absorb these workers, and the aggregate level of unemployment would accelerate. While some growth may return to the economy in 1993, it would not be sufficient to lower unemployment.

4.64 The third scenario essentially assumes the same policy framework as the second scenario but also assumes that the total number of industrial workers that need to be laid off in order to restore competitiveness in the economy is 30 percent instead of 20 percent. In these circumstances, a slow adjustment would leave Bulgaria with a large and growing aggregate unemployment rate and stagnant growth.

Table 4.7: DIRECT BUDGET IMPACT OF UNEMPLOYMENT SCENARIOS  
(in million leva)

	1991	1992	1993
Scenario 1	647	630	428
Scenario 2	163	585	710
Scenario 3	163	759	1057

Source: Staff estimates.

4.65 The budgetary cost of the adjustment would depend on the length of unemployment and the benefit package. Assuming that the current benefit package is paid and that every retrenched worker was earning the average industrial wage and would be unemployed for at least 9 months, but no more than a year, the budgetary cost would be 1.5 million leva per 1000 workers per year (or 1488 per worker). The total cost for the fast adjustment scenario would be in the range of 600 million leva per annum and decline over time. For the slow scenarios, the cost would start modestly at around 160 million but increase rapidly to 700-1000 million.

4.66 These amounts need to be adjusted for several factors to estimate the overall budgetary impact of unemployment: first, the unemployed workers would not be making any contributions to the pension system, leading to reductions in aggregate revenues of the system; on the other hand, some of the retrenched workers are likely to be workers that would be ineligible for unemployment benefits because they are eligible for a pension; also some of the firms that laid off workers may as a consequence increase their profits and, to that extent, increase government revenues from profit or other equivalent taxes. If we assume that these effects, which can not be fully

quantified, largely offset each other, we would still be left with budgetary requirements much higher than those envisaged in the 1990 budget. It should be noted also that the fact that the slow adjustment scenario implies smaller budget costs over the projection period does not make that scenario desirable. This is because workers that are not laid off under this scenario continue to be a burden to the enterprise sector. In addition, the economy as a whole loses because of the slower output growth and persisting inefficiencies. It should also be noted that, if the alternative structure of benefits suggested above is implemented (see para. 4.63), the budgetary cost per retrenched worker would be lower for all possible scenarios by about 15 percent.

# **APPENDICES**

Trade Data

1. There are two important statistical problems pertaining to Bulgaria's official trade data. First, the disaggregated data for imports and exports (which are collected on the basis of actual shipments of goods) show a lower value for trade than the estimates in the balance of payments. This problem is common in many countries and can be dealt with relatively easily. Second, and more important, the disaggregated trade data are published only in "currency leva. The problem is that the "currency lev" is an administratively determined exchange rate which is totally non-transparent. The "currency lev" is not the same as the official exchange rate (which is itself administratively determined) and it deviates from published exchange rates by different amounts for different currencies. The overall effect of using the "currency lev" is to significantly undervalue trade denominated in US dollars and to overvalue trade denominated in transferable rubles (i.e. trade with the CMEA block).

2. In an attempt to correct for these problems, alternative estimates of disaggregated import and export trade values were computed as follows: (i) the disaggregated data supplied by the Ministry of Foreign Economic Relations (MFER) were converted into percentages within each trading block (e.g., machine exports to CMEA countries as a percent of total exports to CMEA countries); (ii) these percentages were then reconverted into US dollar values using the US dollar value for total trade shown in the balance of payments. Note that in order to derive a US dollar value for total CMEA trade we used the aggregate transferable ruble estimate in the CMEA balance of payments, converted into US dollars at the commercial rate.

3. The attraction of this approach is that:

- o It maintains the relative shares within CMEA and non-CMEA blocks as per the disaggregated trade data.
- o It maintains consistency between the disaggregated trade data and the balance of payments.

4. The results are shown in the statistical appendix Tables 3.6a and b. While these estimates do not change the relative shares of commodity groups within the two trading blocks (CMEA and non-CMEA), they do significantly change the relative value of trade from the two blocks as well as commodity shares of consolidated total trade.

5. While this approach represents an improvement over the unadjusted data it has several shortcomings. First, it implies that the commercial transferable ruble to US dollar rate is "correct". Second, it has been suggested that the "currency lev" rate may vary between transactions for the same currency. If this is correct one needs a trade weighted breakdown of all transactions at the different exchange rates. Apparently, the authorities do have an "average realized exchange rate" which may provide a more accurate picture of trade values. Unfortunately, the mission was unable to obtain this for imports. This is obviously an area which requires further work.

Price Equalization

1. As in all member countries of the CMEA, domestic relative prices differ significantly from international relative prices. In large part the differences reflect systemic and political reasons. But as each CMEA country follows its own pricing policies, the relative prices differ between each pair of CMEA countries as well. If these price differences were fully passed through to exporters and importers, they would lead to major random gains and losses, which are only to a very minor extent a reflection of comparative advantage.

2. These "political" gains and losses are undesirable for both CMEA trade and convertible currency trade. For the former, gains and losses would constitute an incentive for firms to contract exports and imports different from those agreed on in the annual bilateral trade protocols between the countries. For the latter, they could encourage export and discourage imports of goods for which the country has no comparative advantage, and they could discourage exports and encourage imports in the obverse case. Thus, as long as these "protocol" differences in relative price exist, they have to be neutralized. The institution of "price equalization" serves that purpose.

3. In the Bulgarian case, imports for many commodities are under both currency regimes subject to levies if their leva price -- computed from the respective import prices and exchange rates -- is below domestic prices. In obverse case, firms are entitled to compensation. For exports, compensation is similarly paid in cases where the domestic price is above the realized price in the recipient markets after conversion into domestic currency. However, if price differences are in favor of exporters, no special levies are being charged on the assumption that these windfall profits are captured by profit taxation. Price equalization fees and compensations are settled through the budget. Administratively, inclusion of commodities and actual rates are adjusted annually.

4. It should be noted that the designation of these financial transactions as "taxes" and "subsidies" may be a convenient shorthand, but it is likely to be misleading, for two reasons. First, their purpose is exactly the reverse of the purpose of use of trade taxes and subsidies in market economies: conceptually they are to prevent inefficient transactions by stripping away price differences unrelated to comparative advantage, rather than override comparative advantage. And second, they have no fiscal function. The sign of the net aggregate of all price equalization transactions could be small and be both positive or negative; in fact the net aggregate would be zero in the special case that trade transactions would be in balance in both international currency and domestic currency, regardless of the level of exchange rate. Most importantly, the unqualified designation as "taxes" and "subsidies" invites inappropriate policy assessment and can have obvious trade-policy repercussions in negotiations with market economies.

5. Bulgarian data on price equalization are presented in Annex Table 5, which is summarized below:

Table A-2: AGGREGATE PRICE EQUALIZATION TRANSACTIONS OF THE BUDGET

Year	Exports		Imports		Total
	Soc. Countries	Non-S Cs	Soc. Countries	Non-Cs	
1985	-537	-666	-297	-98	-1,598
1986	-285	-783	-424	-116	-1,608
1987	-405	-828	837	13	-383
1988	-207	-342	587	-400	-362
1989	-272	-80	590	-371	-133

Source: Ministry of Finance.

One has to keep in mind that on the export side many of the "profits" are not separately counted but included in regular profits; thus, the overall budgetary impact is smaller than the total in the table above suggests and may well have turned positive after 1987.

6. The sectoral breakdown of price equalization payments shows that, for exports, by far the largest part of the deficits can be traced back to agriculture and food products, for both trading areas, whereas a sizable surplus is shown for "machines" throughout the whole period. On the import side, price equalization transactions are particularly large for "chemistry, oil and gas" in both trading areas, with some abrupt reversals. For the socialist area, the sector shows a deficit of leva 827m for 1986, which flipped to a surplus of leva 456m and stayed positive since.

7. The devaluation of the lev against convertible currency from 1.82 leva/\$ (end 1989) to around 7 leva/\$ in July 1990 is expected to terminate the need for payment of compensation for export losses, while the higher profits are to be captured through enterprise profit tax. For CMEA trade, the need for some price equalization scheme is likely to continue as long as there is the need to keep bilateral balances and national relative prices differ for other reasons but comparative advantage.

The Fiscal Deficit, the Money Stock, Velocity and Inflation

1. The analysis in Chapter 2 highlighted the risks that inflation in Bulgaria will accelerate as a consequence of the combination of price liberalization, the high liquidity in the system and the emerging large fiscal and quasi-fiscal deficits. This section presents a simple quantitative model that looks at the inflationary process in Bulgaria from the demand side. The analysis links the monetary financing of fiscal deficits, the behavior of money velocity and the rate of inflation.

2. Let us assume first that the fiscal deficit is financed solely by borrowing from the NBB and thus is simply equivalent to creating money. The relationship which links such financing of fiscal deficits, the income velocity of money (which is related to the stock of money) and the rate of inflation is as follows<sup>1</sup>:

$$\text{Rate of inflation} = \exp\left(\frac{\text{Income Velocity of Money} \times \text{Ratio of Fiscal Deficit to nominal GDP}}{\text{nominal GDP}}\right).$$

or

$$\text{INF} = \exp(V \times \text{FD} / \text{nomGDP})$$

where : INF= rate of inflation, V=Income Velocity of Money (Nominal GDP/Stock of Money), FD is the fiscal deficit financed through money creation, nomGDP= nominal GDP, and exp denotes this to be an exponential function.

3. Let us then examine the situation in Bulgaria at present by use of the above equation and Table A-2. Assume initially that the deficit financed by money creation is 10 percent of GDP and that velocity takes different values associated with different average ratios of M1 to GDP. Starting with a value for that ratio of 50 percent (a velocity of 2), similar to the situation prevailing currently in Bulgaria, the rate of inflation would be 22.14 percent per year; a number that seems relatively low, given the assumption of a fiscal deficit of 10% of GDP that is financed by money creation. This combination of parameters can be thought of as characteristic of the situation in Bulgaria prior to substantial liberalization of prices. The extra money that would be pumped into the system through the financing of the fiscal deficit would contribute largely to increases in the money stock and only a fraction of it

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<sup>1</sup>/ This relationship comes from the money quantity equation. Formally we have  $MV=PQ$ , differentiating  $\delta MV = \delta PQ$  dividing both sides by  $P$ , and assuming the fiscal deficit,  $FD$ , is financed by money creation and that both velocity and real output are constant, we get  $\text{INF} = \delta P/P = V \times \text{FD}/PQ = (\text{Velocity}) \times (\text{share of fiscal deficit over nominal GDP})$ . This formulation provides a linear approximation of the following expression:  $\text{INF} = \exp(V \times \text{FD}/PQ)$  or  $\ln \text{INF} = V \times \text{FD}/PQ$ , where  $\ln \text{INF}$  is the natural logarithm of  $\text{INF}$ . This continuous time formulation is more accurate when the rate of inflation reaches higher levels. The assumptions that the fiscal deficit is financed by borrowing from the NBB is not strictly accurate, as a small amount of government bonds has recently been issued.



could be spent in the goods market, driving prices up only to a limited extent. Under these conditions, the increases in money supply have a counterpart in a "forced" increase in the demand for money that would avoid a significant increase in the price level.

4. The situation just described is bound to change once prices start to be deregulated. In that context, the demand for money can be expected to decline as the public is likely to anticipate an increase in open inflation. If velocity goes to a level similar to that present in other countries (see Table A-2), the rate of inflation could easily exceed 60% per annum and could readily reach three digit levels. Conversely, given the increase in velocity and reduced demand for money that can be expected when prices are liberalized, to maintain inflation at "reasonable" rates, much lower fiscal deficits than currently projected are required.

Table A-3: ANNUAL INFLATION RATE UNDER DIFFERENT VELOCITY  
AND FISCAL DEFICIT ASSUMPTIONS

<u>Ratio of base money to GDP in %</u> (velocity in parenthesis)	<u>Rate of Inflation</u> in % per annum	
	FD/GDP =-0.10	FD/GDP =-0.03
50.0 (2.00)	22.14	6.18
40.0 (2.5)	28.40	7.79
20.0 (5.0)	64.87	16.18
10.0	171.83	34.99
5.0 (2.0)	638.91	82.21

5. The results of this analysis should not be considered as projections, but rather as illustrations of alternative outcomes, if no parallel actions are taken by the government. As noted earlier, the budget deficit itself would be affected by the liberalization of prices; its inflationary impact would depend on how it is financed; similarly increases in the velocity of money could be reduced by monetary measures such as those discussed in Chapter 2 above, and of course the impact on the price level of the price liberalization would depend on the pace of the price reform itself. But the scenarios clearly suggest the possibility that the current situation could readily degenerate into hyperinflation without urgent corrective actions by the government.

Budgetary Implications from the Expected Rise in UnemploymentGeneral assumptions

1. No net growth of the labor force.
2. Net labor retrenchment occurs only in industry.
3. Unemployment benefit package : Benefits are provided for a maximum of 9 months. The first month is paid by the employer and is equal to 100 percent of gross wage. The second through ninth months begin at 90 percent of gross wage, decreasing by 10 percentage points each month until the sixth month, where the payment is set at the minimum wage.
4. We assume that every retrenched worker earns the average industrial wage, is unemployed for at least 9 months but not more than one year.
5. Every worker retrenched is eligible for unemployment benefits, and only retrenched are eligible.
6. The industrial employment prior to the restructuring is 1.67 million.

Unemployment amounts

We consider two alternatives: Under the high scenario the reform will have a large impact on the number retrenched from the sector, 30% of the industrial employees will be laid off from the industrial sector adding up to 501,0000 at the end of the 3 years period under study (1991-1993). (Some of them will be absorbed by other sectors). Under the low scenario it is assumed that retrenchment will affect 20% of industrial employment adding up to 334,000 over the period.

Adjustment path of the industrial employment.

We again consider two alternatives: Under the slow scenario the reform towards a market economy is implemented in 3 years. Under the fast scenario the reform takes places over 18 months. In each case we study the impact on employment over the same three years period (1991/1993).

Under the slow scenario Bulgaria is assumed to restructure its economy quite slowly. The first year, in 1991 the decrease in industrial employment is only of 4% as the reform is implemented gradually. The second year industrial employment is assumed to decrease by 12% as Bulgarian firms are forced to restructure to overcome the competition of the international market. The third year the decrease of employment is still of 5% because the

resumption of growth is not sufficient to reverse the downward trend in employment.

Under the fast scenario the impact of the reform on the decrease of employment is stronger the first year (18%) because it is implemented in 18 months and therefore most of the retrenchment is undertaken the first year. But the benefits of the reform are felt earlier and the economy recovers already in 1992, leading to small decrease of employment (5%). In 1993 the economy moves towards a sustainable growth and the employment in the industrial sector remains constant.

TABLE A-4: PROJECTED EMPLOYMENT BY SECTOR  
(Percent change in employment from the previous year)

Case 1: Low Redundancy Rate and Slow Adjustment			
	<u>1991</u>	<u>1992</u>	<u>1993</u>
Industry	-4	-12	-5
Construction	0	0	0
Agriculture	0	0	0
Others	0	0	1
Total Unemployment Rate	1.7	6.5	7.1
Case 2: Low Redundancy Rate and Fast Adjustment			
	<u>1991</u>	<u>1992</u>	<u>1993</u>
Industry	-18	-5	0
Construction	0	5	3
Agriculture	0	0	1
Others	0	4	5
Total Unemployment Rate	6.7	6.5	4.4
Case 3: Large Redundancy Rate and Slow Adjustment			
	<u>1991</u>	<u>1992</u>	<u>1993</u>
Industry	-4	-17	-11
Construction	0	0	0
Agriculture	0	0	0
Others	0	0	1
Total Unemployment Rate	1.7	7.8	10.9

TABLE A-5: SUMMARY TABLE OF BUDGETARY COST  
(in million leva)

	Total Cost Including Revenue Loss		
	<u>1991</u>	<u>1992</u>	<u>1993</u>
Case 1: Small/Fast	647	630	428
Case 2: Small/Slow	163	585	710
Case 3: Large/Slow	163	759	1057
	Unemployment Benefits Only		
	<u>1991</u>	<u>1992</u>	<u>1993</u>
Case 1: Small/Fast	441	429	292
Case 2: Small/Slow	111	399	484
Case 3: Large/Slow	111	517	721

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## 1.1 Population and Employment - Summary Table

(in thousands or percent)

	1970	1980	1985	1986	1987	1988
Total Population	8,489.6	8,861.5	8,960.4	8,957.6	8,971.3	8,981.4
Males	50.0%	49.8%	49.7%	49.7%	49.5%	49.4%
Females	50.0%	50.2%	50.3%	50.3%	50.5%	50.6%
Urban/e	53.0%	62.5%	64.9%	65.6%	66.4%	67.0%
Rural/a	47.0%	37.5%	35.1%	34.4%	33.6%	33.0%
Under 16	2,073.4	2,082.5	2,057.2	2,013.5	2,036.7	2,024.4
Active Age/b	4,930.2	5,094.0	5,034.2	5,027.6	5,006.6	5,000.7
Over Active Age	1,486.0	1,685.0	1,869.0	1,916.5	1,928.0	1,956.3
Employed-Total	4,150.7	4,363.9	4,459.5	4,473.3	4,486.9	4,467.8
Employed-Socialist Sector	2,748.7	4,024.8	4,094.7	4,076.5	4,108.4	4,077.6
Males	56.4%	51.5%	50.3%	50.5%	50.3%	50.1%
Females	43.6%	48.5%	49.5%	49.5%	49.7%	49.9%
In Industry & Construct.	38.7%	43.4%	45.7%	46.0%	46.4%	46.3%
In Agriculture	35.2%	23.8%	20.4%	19.9%	19.1%	18.7%
Other Sectors	26.0%	32.8%	33.9%	34.1%	34.4%	35.0%
of which:						
Education	4.3%	5.6%	6.0%	6.1%	6.1%	6.2%
Health	2.7%	4.3%	4.5%	4.5%	4.7%	4.8%
Central Government	1.5%	1.5%	1.3%	1.3%	1.4%	1.4%
Retired (Receiving Pension)/c	1,720.0	2,042.0	2,212.0	2,249.0	2,293.0	2,326.0
As Percent of Employed	41.4%	46.8%	49.6%	50.3%	51.1%	52.1%

Source: Central Statistical Office

a/ Urban/Rural breakdown is from health statistics booklet.

b/ Includes women aged 16-55 and men aged 16-60.

c/ Number of pensions which does not mean number of retired persons, as one person can receive more than one pension.

1.2.a Employment by Sector in Thousands (yearly average)

	1970	1980	1985	1986	1987	1988	1989
<b>TOTAL</b>	4150.70	4363.90	4459.50	4473.30	4486.90	4467.80	4365.04
<b>SECTOR</b>							
<b>MATERIAL</b>	3606.71	3623.22	3664.89	3669.97	3673.04	3641.04	3531.96
Industry	1258.65	1534.97	1662.17	1682.74	1708.41	1699.08	1645.73
Construction	348.97	356.99	374.65	374.60	374.11	370.36	361.29
Agriculture	1462.44	1039.07	909.96	890.16	858.96	833.89	789.09
Forestry	21.86	17.77	16.33	24.26	25.75	26.73	25.15
Transport	215.62	258.10	254.87	258.23	257.59	257.12	246.69
Communications	30.71	37.23	41.63	42.26	42.89	43.28	43.54
Trade (Retail and Wholesale)	254.14	351.49	372.80	374.49	381.34	386.78	395.18
Other Material Production	14.32	27.60	32.47	23.23	23.99	23.82	25.29
<b>NON-MATERIAL</b>	544.02	740.72	794.64	803.36	813.83	826.75	833.08
Housing & Municipal Services	85.91	92.58	97.30	97.52	98.45	101.43	96.65
Science, Research & Development	46.68	66.15	81.24	82.08	83.75	88.90	97.39
Education	177.13	245.54	267.48	272.25	271.83	276.45	276.93
Culture & Arts	29.63	45.16	47.45	48.07	47.02	45.57	45.57
Health Care, Soc. Sec., Sports	113.14	186.98	202.53	203.31	208.70	212.64	214.48
Banking, Finan., Credit, Ins.	16.18	20.38	22.12	22.30	23.18	25.11	25.51
Government	61.70	65.69	59.01	58.91	62.61	60.58	60.65
Other Non-material	13.64	18.24	17.51	18.93	18.29	16.06	15.90

Source: Central Statistical Office.

1.2.b Employment by Sector in Percent of Total Employment

	1970	1980	1985	1986	1987	1988	1989
<b>TOTAL</b>	<b>4,150,726</b>	<b>4,363,943</b>	<b>4,459,530</b>	<b>4,473,328</b>	<b>4,486,861</b>	<b>4,467,794</b>	<b>4365.034</b>
<b>SECTOR</b>							
<b>MATERIAL</b>	<b>86.89</b>	<b>83.03</b>	<b>82.18</b>	<b>82.04</b>	<b>81.86</b>	<b>81.50</b>	<b>80.91</b>
Industry	30.32	35.17	37.27	37.62	38.08	38.03	37.70
Construction	8.41	8.18	8.40	8.37	8.34	8.29	8.28
Agriculture	35.23	23.81	20.40	19.90	19.14	18.66	18.06
Forestry	0.53	0.41	0.37	0.54	0.57	0.60	0.58
Transport	5.19	5.91	5.72	5.77	5.74	5.75	5.65
Communications	0.74	0.85	0.93	0.94	0.96	0.97	1.00
Trade (Retail and Wholesale)	6.12	8.05	8.36	8.37	8.50	8.66	9.05
Other Material Production	0.35	0.63	0.73	0.52	0.53	0.53	0.58
<b>NON-MATERIAL</b>	<b>13.11</b>	<b>16.97</b>	<b>17.82</b>	<b>17.96</b>	<b>18.14</b>	<b>18.50</b>	<b>19.09</b>
Housing & Municipal Services	2.07	2.12	2.18	2.18	2.19	2.27	2.21
Science, Research & Development	1.12	1.52	1.82	1.83	1.87	1.99	2.23
Education	4.27	5.63	6.00	6.09	6.06	6.19	6.34
Culture & Arts	0.71	1.03	1.06	1.07	1.05	1.02	1.04
Health Care, Soc. Sec., Sports	2.73	4.28	4.54	4.54	4.65	4.76	4.91
Banking, Finan., Credit, Ins.	0.39	0.47	0.50	0.50	0.52	0.56	0.58
Government	1.49	1.51	1.32	1.32	1.40	1.36	1.39
Other Non-material	0.33	0.42	0.39	0.42	0.41	0.36	0.36

Source: Central Statistical Office.

## 1.3 Employment by Enterprise Type - 1988

	Actual	Percent of Total
<b>Total Labor Force</b>	<b>5,209,823</b>	<b>100.0</b>
Of Working Age	4,847,700	93.0
Below Working Age	2,500	0.0
Over Working Age	347,700	6.7
Foreigners	11,923	0.2
<b>Total Employed</b>	<b>4,467,794</b>	<b>85.8</b>
<b>In Material Sector</b>	<b>3,641,041</b>	<b>100.0</b>
Of which:		
State Enterprises	3,227,460	88.6
Cooperatives	226,297	6.2
Private part-time	151,700	4.2
Unregistered forms	700	0.0
Private Enterprises	34,884	1.0
<b>In Non-Material Sector</b>	<b>826,753</b>	<b>100.0</b>
Of which:		
State Enterprises	810,737	98.1
Cooperatives	3,522	0.4
Private Enterprises	12,494	1.5

Source: Central Statistical Office.

Table 1.4 Employees in Socialist Sector by Occupation - 1989

	Total	Workers	Specialists	Management Personnel	Service Staff	Guard
		(percent in sector)				
Industry	1,570,354	85	9	4	1	1
Construction	343,674	76	14	7	2	1
Agriculture	701,893	87	7	2	1	2
Forestry	25,160	81	6	10	1	2
Transport	242,364	88	7	3	1	1
Communications	44,403	88	5	5	1	1
Wale and Retail Trade	346,193	77	14	6	3	1
Other Branches of Material Production	26,030	41	42	9	6	2
Housing and Municipal Services	63,607	80	13	3	2	2
Science and Research	98,338	28	62	6	4	1
Education	274,054	28	62	5	4	0
Culture and Arts	45,316	28	59	3	9	1
Public Health, Social Insurance, Physical Culture and Tourism	211,929	37	55	4	3	0
Finance, Credit, Insurance Administration	53,270	5	60	25	9	1
Other Braches of Non- Productive Sphere	12,867	11	51	27	10	0
<b>Total</b>	<b>4,085,203</b>	<b>74</b>	<b>19</b>	<b>5</b>	<b>2</b>	<b>1</b>

Source: Central Statistical Office

Table 2.1 Gross Domestic Product at Current Prices

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
(in millions of leva)										
<b>ORIGIN OF RESOURCES:</b>										
GDP at market prices	25791.0	27818.0	29013.0	29814.6	31670.9	32595.3	34423.8	36531.3	38345.1	39475.0
Agriculture	3718.7	4624.9	4983.8	4317.0	5008.0	3868.6	4447.4	4309.3	4394.1	4457.0
Industry	13868.7	14448.2	16801.6	17984.1	18987.8	20382.3	22034.6	22453.6	23378.7	23432.0
Services	8203.6	8744.9	7227.6	7513.5	7675.1	8344.4	7941.8	9768.4	10572.3	11586.0
<b>USES OF RESOURCES:</b>										
GDP at market prices	25791.0	27818.0	29013.0	29814.6	31670.9	32595.3	34423.8	36531.3	38345.1	39475.0
Total consumption, etc	17506.0	18946.0	19933.0	20665.5	21581.2	22787.9	24201.3	25372.4	26162.3	27999.0
Private, etc	16049.0	17217.0	17837.0	18309.5	19197.7	20031.4	21247.2	22659.6	23417.8	25129.0
Non-Profit	2076.0	2370.0	2259.0	2264.1	2408.4	2646.3	2880.0	3451.1	3514.9	3692.0
Population	13973.0	14847.0	15578.0	16045.4	16789.3	17385.1	18367.2	19208.5	19902.9	21437.0
General government	1457.0	1729.0	2096.0	2356.0	2383.5	2756.5	2954.1	2712.8	2744.5	2870.0
Gross domestic investment	8768.0	9872.0	9730.5	9806.9	10515.8	10494.8	12350.0	12020.2	13197.4	12701.0
Fixed investment	7289.0	7690.0	7973.0	7974.9	8111.7	8612.8	9290.9	9817.3	10260.0	10285.0
Increase in stocks	1479.0	2182.0	1757.5	1832.0	2404.1	1882.0	3059.1	2202.9	2937.4	2416.0
Resource balance	-197.4	-1165.9	-779.1	-1024.0	-1057.7	-1596.1	-2310.5	-1825.4	-637.2	-943.9
Exports of GNFS	6673.0	7027.7	7945.5	8227.1	8956.9	9119.4	10024.7	10255.3	12482.0	12116.4
Exports of Goods	6503.9	6849.6	7744.2	8018.6	8730.0	8888.3	9770.7	9938.3	12022.3	..
Exports of NFS	169.1	178.1	201.3	208.5	226.9	231.1	254.0	317.0	459.7	..
Imports of GNFS	6870.4	8193.6	8724.6	9251.1	10014.6	10715.5	12335.2	12080.7	13119.2	13060.3
Imports of Goods	6543.5	7752.1	8257.5	8812.7	9561.9	10232.9	11785.1	11580.2	12515.5	12459.3
Imports of NFS	326.9	441.5	467.1	438.4	452.7	482.6	550.1	500.5	603.7	601.0
Statistical Discrepancy	-285.6	165.9	128.6	366.2	631.6	908.7	183.0	964.1	-377.4	-281.1
<b>MEMORANDUM ITEMS:</b>										
Net factor income	-408.1	-271.9	-232.3	-145.5	-60.3	-115.5	-230.2	-407.8	-716.6	-1078.5
Gross national product	25382.9	27546.1	28780.7	29669.1	31610.6	32479.8	34193.6	36123.5	37628.5	38396.5
Gross domestic saving	8285.0	8872.0	9080.0	9149.1	10089.7	9807.4	10222.5	11158.9	12182.8	11476.0

2.2 uss

(in millions of leva)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>ORIGIN OF RESOURCES:</b>										
GDP at market prices	27026.8	28351.1	29013.0	30008.2	31027.5	31860.0	33200.5	35210.7	36131.2	35624.3
Agriculture	4509.4	4710.9	4983.8	4169.6	4656.7	3696.6	4511.5	3851.2	3785.2	3711.7
Industry	14568.8	15365.5	16801.6	18085.0	19193.9	20171.7	21219.2	22359.4	22903.5	22938.0
Services, etc.	7948.6	8274.8	7227.6	7753.6	7176.9	7991.8	7469.9	9000.1	9442.5	8974.6
<b>USES OF RESOURCES:</b>										
GDP at market prices	27026.8	28351.1	29013.0	30008.2	31027.5	31860.0	33200.5	35210.7	36131.2	35624.3
Total consumption, etc	18271.1	19220.6	19933.0	20492.3	21479.5	21790.9	22520.4	23523.4	24050.3	24661.7
Private, etc	16403.0	17216.8	17837.0	18284.4	19129.5	19183.0	19684.5	20474.4	20970.8	21505.8
General government	1868.1	2003.8	2096.0	2207.8	2350.0	2607.8	2835.9	3049.0	3079.4	3155.9
Gross domestic investment	8905.9	9868.4	9730.5	9727.0	10432.9	10487.0	12214.4	11910.9	13103.7	12515.4
Fixed investment	7289.0	7690.0	7973.0	7974.9	8111.7	8612.8	9290.9	9817.3	10260.0	10285.0
Increase in stocks	1616.9	2178.4	1757.5	1752.1	2321.2	1874.2	2923.5	2093.6	2843.7	2230.4
Resource balance	-1068.9	-1732.6	-779.1	-1061.7	-1022.3	-1387.9	-2163.4	-2192.8	-1926.4	-910.6
Exports of GNFS	6752.1	6789.1	7945.5	7953.7	8241.2	8559.4	9464.4	9573.6	11700.9	11688.3
Exports of Goods	6581.0	6617.1	7744.2	7752.2	8032.4	8342.5	9224.6	9277.7	11270.0	..
Exports of NFS	171.1	172.0	201.3	201.5	208.8	216.9	239.8	295.9	430.9	..
Imports of GNFS	7820.9	8521.7	8724.6	9015.4	9263.5	9947.3	11627.8	11766.4	13627.3	12598.9
Statistical Discrepancy	918.7	994.8	128.6	850.7	137.4	970.1	629.1	1969.3	903.6	-642.1
<b>MEMORANDUM ITEMS:</b>										
Net factor income	-464.6	-282.8	-232.3	-141.8	-55.8	-107.2	-217.0	-397.2	-744.4	-968.2
Gross national product	26562.2	28068.4	28780.7	29866.5	30971.7	31752.8	32983.5	34813.5	35386.9	34656.2
Export Capacity to Import	7596.2	7309.1	7945.5	8017.4	8285.2	8465.6	9449.8	9988.5	12965.4	11688.4
Terms of Trade Effect	-844.1	-520.0	0.0	-63.7	-44.0	93.8	14.6	-414.9	-1264.5	-0.1
Gross Domestic Income	26182.7	27831.1	29013.0	29944.5	30983.5	31953.8	33215.1	34795.8	34866.7	35624.2
Gross National Income	25718.1	27548.4	28780.7	29802.7	30927.8	31846.6	32998.1	34398.6	34122.4	34656.1

Source: Central Statistical Office and staff estimates

Table 2.3 Net Material Product (National Methodologie) - Current Prices

(in millions of leva)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Net material product</b>	<b>10527.4</b>	<b>14288.6</b>	<b>20508.6</b>	<b>21933.1</b>	<b>22849.5</b>	<b>23479.0</b>	<b>24907.0</b>	<b>25450.5</b>	<b>26851.4</b>	<b>28338.0</b>	<b>29422.6</b>	<b>30839.7</b>
<b>By Origin</b>												
Agriculture	2309.9	3062.6	3384.0	4185.6	4519.8	3864.3	4511.8	3425.1	3957.2	3712.1	3712.0	3798.2
Industry	5167.5	7291.1	9938.8	10441.2	12237.6	13265.4	14090.7	15169.9	16676.8	16649.7	17088.3	17624.5
Construction	917.2	1256.7	1904.5	2063.0	2207.7	2270.4	2366.8	2489.6	2564.3	2674.7	2780.3	2859.1
Trade and catering	1040.3	1119.9	2820.5	2766.9	1383.6	1528.5	1328.0	1801.0	1227.0	2499.8	2471.2	2910.3
Other	1092.5	1558.3	2460.8	2476.4	2500.8	2550.4	2609.7	2564.9	2426.1	2801.7	3370.8	3647.6
<b>By Final Use</b>												
Personal consumption	6654.8	9074.5	13716.9	14574.5	15140.6	15768.4	16484.2	17054.4	18030.2	18823.2	19473.1	21024.0
Social consumption	761.5	1511.8	1988.1	2143.6	2391.6	2530.4	2663.3	3008.2	3320.4	3577.7	3623.3	3784.5
Accumulation	3059.7	5094.4	5208.7	6139.4	6102.3	5796.0	6155.3	6030.3	7588.9	6765.5	7305.5	6031.2
Net Fixed investment	1947.8	2799.1	3111.3	3143.2	3936.6	3633.0	3096.3	3011.4	2815.6	4946.4	2842.9	2524.6
Change in stocks	766.1	1618.4	1478.6	2181.9	1928.6	1832.0	2404.1	1882.0	3059.1	2202.9	2937.4	2416.3
Unfinished construction	345.8	676.9	618.8	814.4	237.1	331.0	654.9	1136.9	1714.2	-383.8	1525.2	2214.2
Exports minus import, losses unbalanced sum including:	51.4	-1392.1	-405.1	-924.4	-785.0	-615.8	-395.8	-642.4	-2088.1	-828.4	-979.3	-1123.9
Losses:	129.4	198.5	296.9	251.4	224.2	301.2	409.0	401.2	375.9	468.4	369.2	407.1
from abandoned construction	.	.	219.0	175.8	187.1	259.2	378.7	356.2	336.4	435.5	333.9	366.7
from agricultural production stored in producers	.	.	67.6	64.2	27.9	29.7	18.3	32.3	25.0	17.5	18.8	25.2
in trade above determined limit	.	.	10.3	11.4	9.2	12.3	12.0	12.7	14.5	15.4	16.5	14.9
Exports minus import	.	.	-164.1	682.6	340.8	658.0	830.7	1387.9	2163.3	1705.1	499.7	1355.1
Unbalanced sum	.	.	-866.1	-493.2	-668.4	-259.0	25.9	344.3	-300.7	408.3	-848.8	-175.9

Source: Central Statistical Office



Table 2.4 Net material product (National methodology)- constant prices 1/

(in millions of leva)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Net material product	9980.9	14109.2	20815.9	21856.3	22770.1	23453.2	24525.0	24972.6	26306.9	27542.7	28194.2	28122.1
By Origin												
Agriculture	1649.5	2594.7	3920.6	4108.8	4346.8	3636.7	4061.5	3224.1	3934.9	3359.0	3301.4	3141.6
Industry	5516.3	7553.4	10686.7	11216.7	12313.2	13359.7	14221.7	14953.9	15809.3	16676.0	17040.0	16591.4
Construction	915.3	1256.7	1904.5	2063.0	2207.7	2270.4	2366.8	2479.6	2529.5	2648.3	2754.5	2751.6
Trade and catering	871.5	1135.5	2036.3	2056.7	1383.6	1648.0	1296.3	1732.0	1425.6	2061.8	2058.4	2433.5
Other 2/	1028.3	1568.9	2267.8	2411.1	2518.8	2538.4	2578.7	2583.0	2607.6	2797.6	3039.9	3204.0
By Final Use												
Personal consumption	6069.0	8920.5	13909.2	14599.3	15125.2	15504.6	16221.2	16266.6	16691.8	17361.6	17782.6	18288.1
Social consumption	732.9	1507.3	2131.6	2286.4	2391.6	2519.2	2681.4	2975.6	3235.9	3479.0	3513.7	3631.1
Accumulation	3023.8	5093.9	5347.0	6135.9	5931.2	5716.1	6072.4	6022.4	7453.3	6656.2	7211.8	6202.9
Net fixed investment	2248.5	2788.3	3111.3	3143.1	3936.6	3633.0	3096.3	3011.4	2815.6	4946.4	2842.9	2524.6
Change in stocks	766.1	1618.4	1616.9	2178.4	1757.5	1752.1	2321.2	1874.2	2923.5	2093.6	2843.7	2067.6
Unfinished construction	345.8	676.9	618.8	814.4	237.1	331.0	654.9	1136.9	1714.2	-383.8	1525.2	2214.6
Exports minus import, losses, unbalanced including:	155.2	-1412.5	-571.9	-1165.3	-677.9	-286.7	-450.0	-292.0	-1074.1	65.9	-313.9	-603.9
Losses:	127.5	195.8	282.5	251.4	223.6	300.0	407.8	399.5	374.1	466.9	367.8	403.9

Source: Central Statistical Office.

1/By the prices on use during different periods: 1970 by the prices of 1962, 1975 by the prices of 1971, since 1980 by the prices of 1982.

2/ Branches : Transport, communications, forestry and other branches of material production

Table 2.5 Gross Output, Input, and Net Material Product By Sector, at Current Prices, 1980-89

(in millions of leva)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Industry</b>										
Gross output	37034.4	39390.3	44259.2	46592.1	48930.7	51968.9	55965.4	58684.2	60680.3	62226.2
Material input	27095.6	28949.1	32021.6	33326.7	34840.0	36799.0	39288.6	42034.5	43592.0	44601.7
Net product	9938.8	10441.2	12237.6	13265.4	14090.7	15169.9	16676.8	16649.7	17088.3	17624.5
<b>Agriculture</b>										
Gross output	7153.8	8354.5	8963.7	8454.8	9341.9	8279.4	9255.2	9094.4	9296.4	9701.3
Material input	3769.8	4168.9	4443.9	4590.5	4830.1	4854.3	5298.0	5382.3	5584.4	5903.1
Net product	3384.0	4185.6	4519.8	3864.3	4511.8	3425.1	3957.2	3712.1	3712.0	3798.2
<b>Forestry</b>										
Gross output	82.8	85.8	86.1	86.6	90.7	92.6	110.6	113.9	113.8	97.3
Material input	3.4	4.4	4.9	5.7	3.5	5.5	5.7	6.0	5.6	7.0
Net product	79.4	81.4	81.2	80.9	87.2	87.1	104.9	107.9	108.2	90.3
<b>Construction</b>										
Gross output	5311.7	5624.3	5792.8	5971.6	6256.9	6437.9	6658.2	6942.4	6927.3	7075.4
Material input	3407.2	3561.3	3585.1	3701.2	3890.1	3948.3	4093.9	4267.7	4147.0	4216.3
Net product	1904.5	2063.0	2207.7	2270.4	2366.8	2489.6	2564.3	2674.7	2780.3	2859.1
<b>Freight transportation</b>										
<b>Transport</b>										
Gross output	3060.7	3304.1	3334.0	3387.8	3437.3	3453.0	3644.1	3716.6	4195.7	4518.5
Material input	1598.3	1705.0	1759.4	1786.3	1792.8	1936.8	2334.3	2149.0	2126.6	2293.9
Net product	1462.4	1599.1	1574.6	1601.5	1644.5	1516.2	1309.8	1567.6	2069.1	2224.6
<b>Communication</b>										
Gross output	283.5	308.1	326.8	358.4	392.9	423.4	591.4	657.5	696.5	746.3
Material input	86.7	98.7	105.7	114.8	125.7	132.2	149.0	166.9	169.2	175.8
Net product	196.8	209.4	221.1	243.6	267.2	291.2	442.4	490.6	527.3	570.5
<b>Trade and catering</b>										
Gross output	3583.3	3554.2	2247.8	2414.9	2235.3	2765.1	2266.8	3747.2	3922.1	4303.7
Material input	762.8	787.3	864.2	886.4	907.3	964.1	1039.8	1247.4	1450.9	1393.4
Net product	2820.5	2766.9	1383.6	1528.5	1328.0	1801.0	1227.0	2499.8	2471.2	2910.3
<b>Other sectors</b>										
Gross output	1391.8	1473.2	1498.9	1515.9	1574.9	1739.7	1696.5	1717.3	1684.1	1858.9
Material input	669.6	886.7	875.0	891.5	964.1	1069.3	1127.5	1081.7	1017.9	1096.7
Net product	722.2	586.5	623.9	624.4	610.8	670.4	569.0	635.6	666.2	762.2
<b>Total economy<sup>1/</sup></b>										
Gross output	57902.0	62094.5	66509.3	68782.1	72260.6	75160.0	80188.2	84673.5	87516.2	90527.6
Material input	37393.4	40161.4	43659.8	45303.1	47353.6	49709.5	53336.8	56335.5	58093.6	59687.9
Net product <sup>2/</sup>	20508.6	21933.1	22849.5	23479.0	24907.0	25450.5	26851.4	28338.0	29422.6	30839.7

Source: Central Statistical Office

<sup>1/</sup>Material sphere only

<sup>2/</sup>Net Material product (national income)

Table 2.6 COMPONENTS OF NET MATERIAL PRODUCT AND GROSS DOMESTIC PRODUCT  
ON THE BASIS OF VALUE ADDED  
(In millions of leva, current prices)

=====										
A - indicators in the sense										
of M P S										
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
=====										
B - indicators in the sense										
of S M A										
=====										
A. NET MATERIAL PRODUCT (A1+A2)	17666.0	20509.0	21933.0	22849.0	23479.0	24907.0	25450.5	26851.4	28338.0	29422.6
A1. PRIMARY INCOME OF THE POPULATION	9185.0	10363.0	11160.0	11687.0	11955.5	12518.4	12778.0	13545.1	14103.9	14787.4
+a. Wages and salaries of employees in the non-material sphere	1863.0	2273.0	2315.0	2430.0	2378.8	2563.2	2802.8	2979.9	3081.4	3181.3
-b. Income from personal and subsidiary plots of the population	1464.0	1816.0	2015.0	2197.0	2283.2	2448.4	2411.9	2469.1	2501.9	2519.3
+c. Employers contributions to social security	1546.0	2461.0	3035.0	3194.0	3308.1	3362.2	3551.7	3736.0	3918.4	4080.6
material sphere	1465.0	2300.0	2516.0	2612.0	2655.2	2779.1	2851.7	3013.2	3158.3	3355.7
non-material sphere	81.0	161.0	519.0	582.0	652.9	583.1	700.0	722.8	760.1	724.9
-d. Business travel expenses	161.0	187.0	196.0	206.0	214.7	219.7	245.9	267.3	287.3	282.2
material sphere	130.0	147.0	154.0	162.0	168.4	170.4	187.4	204.9	228.1	238.6
non-material sphere	31.0	40.0	42.0	44.0	46.3	49.3	58.5	62.4	59.2	43.6
B1. COMPENSATION OF EMPLOYEES (A1 + a - b + c - d)	10969.0	13094.0	14299.0	14908.0	15144.5	15775.7	16474.7	17524.6	18314.5	19247.8
A2. PRIMARY INCOME OF ENTERPRISES	8481.0	10146.0	10773.0	11162.0	11523.5	12388.6	12672.5	13306.3	14234.1	14635.2
+a. Operating surplus and taxes of non-budgetary units in the non- material sphere	50.0	93.0	129.0	166.0	187.6	176.2	216.3	179.8	220.1	306.7
+b. Income from personal and subsidiary plots of the population	1464.0	1816.0	2015.0	2197.0	2283.2	2448.4	2411.9	2469.1	2501.9	2519.3
-c. Employers contributions to social security in the material sphere	1465.0	2300.0	2516.0	2612.0	2655.2	2779.1	2851.7	3013.2	3158.3	3355.7
-d. Purchase of non-material services in the material sphere	399.0	412.0	436.0	455.0	508.2	521.9	615.4	620.9	650.5	725.8
-e. Expenditure in connection with the provision of cultural etc. facili- ties of industries in the material sphere	131.0	127.0	103.0	115.0	129.7	147.2	132.5	143.5	152.3	139.0
-f. Losses in stocks	83.0	78.0	76.0	37.0	42.0	30.3	45.0	39.5	32.9	35.3
B2. OPERATING SURPLUS INCLUDING NET INDIRECT TAXES (A2 + a + b - c - d - e - f)	7917.0	9138.0	9786.0	10306.0	10659.2	11534.7	11656.1	12138.1	12962.1	13205.4
B3. CONSUMPTION OF FIXED CAPITAL, INCLUDING UNDEPRECIATED VALUE OF SCRAPPED FIXED ASSETS	3095.0	3559.0	3733.0	3799.0	4010.9	4360.5	4464.5	4761.1	5254.7	5891.9
B. GROSS DOMESTIC PRODUCT (B1 + B2 + B3)	21981.0	25791.0	27818.0	29013.0	29814.6	31670.9	32595.3	34423.8	36531.3	38345.1
-----										

Source: Central Statistical Office

Table 2.7 Value composition of national product by branches

(in millions of leva)

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	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Total</b>										
National product	57902.0	62094.5	66509.3	68782.1	72260.6	75160.0	80188.2	84673.5	87516.2	90527.6
Material input	37393.4	40161.4	43659.8	45303.1	47353.6	49709.5	53336.8	56335.5	58093.6	59687.9
of which:										
depreciation	3947.5	4253.1	4573.5	4919.8	5147.0	5441.1	5793.3	6258.4	6728.1	6963.1
National income	20508.6	21933.1	22849.5	23479.0	24907.0	25450.5	26851.4	28338.0	29422.6	30839.7
of which:										
wages and salaries	7370.2	7855.4	8155.7	8263.2	8556.2	8750.3	9189.4	9632.3	10302.8	11558.4
income from subsidiary										
and private plots	1816.2	2015.5	2166.6	2264.8	2420.3	2392.4	2469.1	2501.9	2519.3	2622.6
other	905.5	958.9	987.6	1032.5	1107.5	1112.2	1293.9	1316.5	1294.1	691.5
turnover taxation	4478.4	4509.4	3790.0	3930.3	4111.9	4331.1	5895.5	5088.4	4530.7	4549.6
profit(losses)	4600.0	5367.4	6751.0	6898.1	7421.1	7102.7	7103.6	7137.7	8812.9	9567.6
contributions to social										
security	2299.6	2515.8	2611.6	2655.2	2779.1	2851.7	3013.2	3158.3	3355.7	3554.4
<b>Industry</b>										
National product	37034.4	39390.3	44259.2	46592.1	48930.7	51968.9	55965.4	58684.2	60680.3	62226.2
Material input	27095.6	28949.1	32021.6	33326.7	34840.0	36799.0	39288.6	42034.5	43592.0	44601.7
of which:										
depreciation	2340.2	2540.7	2731.3	2967.5	3202.7	3417.2	3657.6	3963.0	4316.2	4561.9
National income	9938.8	10441.2	12237.6	13265.4	14090.7	15169.9	16676.8	16649.7	17088.3	17624.5
of which:										
wages and salaries	3339.5	3577.0	3720.6	3856.8	3977.0	4135.1	4312.4	4659.8	5006.0	5809.1
income from subsidiary										
and private plots	16.3	16.5	17.6	18.0	18.0	14.7	14.1	15.1	26.6	58.9
other	436.3	499.3	561.9	615.2	691.6	694.6	821.9	833.0	818.0	202.8
turnover taxation	4284.8	4309.9	3598.6	3747.8	3921.5	4085.7	5667.6	4895.7	4351.8	4387.9
profit(losses)	2777.4	3089.0	4229.1	4677.7	5029.0	5734.5	5401.2	5343.1	6428.8	7094.3
contributions to social										
security	1055.4	1165.8	1230.9	1283.9	1356.1	1405.1	1495.4	1604.5	1702.7	1752.1

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Construction</b>										
National product	5311.7	5624.3	5792.8	5971.6	6256.9	6437.9	6658.2	6942.4	6927.3	7075.4
Material input	3407.2	3561.3	3585.1	3701.2	3890.1	3948.3	4093.9	4267.7	4147.0	4216.3
of which:										
depreciation	243.9	262.8	280.6	310.0	312.4	332.8	336.1	391.3	391.3	393.7
National income	1904.5	2063.0	2207.7	2270.4	2366.8	2489.6	2564.3	2674.7	2780.3	2859.1
of which:										
wages and salaries	889.1	964.4	993.0	1017.8	1052.6	1097.4	1155.1	1201.4	1230.1	1385.7
income from subsidiary										
and private plots	108.1	75.5	121.6	140.8	144.3	149.9	154.4	174.0	171.3	158.1
other	212.3	195.3	179.2	182.8	168.6	200.3	209.6	238.5	234.3	233.2
turnover taxation	4.2	4.9	4.6	4.7	5.9	7.6	6.9	7.2	7.9	5.9
profit(losses)	399.1	474.5	568.4	578.1	641.4	637.3	636.5	633.4	704.7	602.9
contributions to social										
security	309.1	330.5	333.5	338.9	349.1	372.3	386.1	406.1	418.2	461.9
<b>Agriculture</b>										
National product	7153.8	8354.5	8963.7	8454.8	9341.9	8279.4	9255.2	9094.4	9296.4	9701.3
Material input	3769.8	4168.9	4443.9	4590.5	4830.1	4854.3	5298.0	5382.3	5584.4	5903.1
of which:										
depreciation	593.6	617.0	671.8	700.4	654.2	647.5	685.9	745.4	807.1	779.8
National income	3384.0	4185.6	4519.8	3864.3	4511.8	3425.1	3957.2	3712.1	3712.0	3798.2
of which:										
wages and salaries	1629.2	1736.6	1814.1	1723.7	1821.9	1773.9	1885.8	1875.1	2032.8	2169.8
income from subsidiary										
and private plots	1153.5	1530.7	1648.5	1716.1	1864.8	1787.8	1871.7	1846.5	1798.4	1800.2
other	95.1	99.5	70.1	49.1	61.4	45.6	73.3	71.9	73.7	87.5
turnover taxation	-	-	-	-	-	-	-	-	-	-
profit(losses)	270.4	514.6	651.1	304.7	334.4	-571.0	-232.3	-587.7	-530.5	-624.9
contributions to social										
security	489.7	533.7	546.8	519.6	548.9	535.0	570.4	566.4	614.3	672.8

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Forestry</b>										
National product	82.8	85.8	86.1	86.6	90.7	92.6	110.6	113.9	113.8	97.3
Material input	3.4	4.4	4.9	5.7	3.5	5.5	5.7	6.0	5.6	7.0
of which:										
depreciation	-	-	-	-	-	-	-	-	-	-
National income	79.4	81.4	81.2	80.9	87.2	87.1	104.9	107.9	108.2	90.3
of which:										
wages and salaries	32.3	32.6	34.1	35.4	36.2	36.4	37.3	37.8	39.9	63.4
income from subsidiary and private plots	-	-	-	-	-	-	20.5	17.0	18.1	6.0
other	1.0	0.8	0.8	0.8	0.9	0.7	1.3	2.2	1.1	0.8
turnover taxation	-	-	-	-	-	-	-	-	-	-
profit(losses)	-	-	-	-	-	-	-	-	-	-
contributions to social security	9.5	9.8	10.2	10.6	10.9	10.9	11.3	11.4	12.1	19.3
<b>Transport</b>										
National product	3060.7	3304.1	3334.0	3387.8	3437.3	3453.0	3644.1	3716.6	4195.7	4518.5
Material input	1598.3	1705.0	1759.4	1786.3	1792.8	1936.8	2334.3	2149.0	2126.6	2293.9
of which:										
depreciation	545.3	579.9	644.7	682.5	701.2	742.8	770.0	803.0	835.3	840.1
National income	1462.4	1599.1	1574.6	1601.5	1644.5	1516.2	1309.8	1567.6	2069.1	2224.6
of which:										
wages and salaries	632.9	695.5	709.2	720.1	736.0	734.2	771.8	785.3	827.8	881.7
income from subsidiary and private plots	-	-	-	-	-	-	-	-	14.2	112.3
other	103.3	107.4	115.2	124.6	119.4	114.2	127.1	117.2	117.4	114.9
turnover taxation	x	x	13.5	15.9	13.8	55.1	14.2	15.3	47.5	45.3
profit(losses)	477.6	567.5	488.9	494.5	502.1	333.4	118.3	352.1	752.7	830.1
contributions to social security	193.5	216.9	220.0	223.5	230.6	229.3	239.4	243.6	254.8	268.8

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Comunication</b>										
National product	283.5	308.1	326.8	358.4	392.9	423.4	591.4	657.5	696.5	746.3
Material input	86.7	98.7	105.7	114.8	125.7	132.2	149.0	166.9	169.2	175.8
of which:										
depreciation	58.3	64.9	69.5	81.2	88.6	96.6	103.1	110.9	113.1	111.8
National income	196.8	209.4	221.1	243.6	267.2	291.2	442.4	490.6	527.3	570.5
of which:										
wages and salaries	74.1	77.4	83.3	90.8	95.9	101.3	105.4	116.8	124.3	139.3
income from subsidiary	-	-	-	-	-	-	-	-	-	-
and private plots	-	-	-	-	-	-	-	-	-	-
other	4.5	4.7	4.2	2.9	5.3	5.1	5.9	2.5	2.6	7.7
turnover taxation	-	-	-	-	-	-	-	-	-	-
profit(losses)	95.6	105.5	104.8	120.6	137.0	160.8	301.4	331.6	366.6	408.3
contributions to social										
security	21.9	23.3	25.0	27.3	28.8	30.5	31.7	35.2	37.5	42.0
<b>Trade and catering</b>										
National product	3583.3	3554.2	2247.8	2414.9	2235.3	2765.1	2266.8	3747.2	3922.1	4303.7
Material input	762.8	787.3	864.2	886.4	907.3	964.1	1039.8	1247.4	1450.9	1393.4
of which:										
depreciation	147.2	164.1	156.3	156.5	160.7	176.1	209.1	211.0	233.6	242.2
National income	2820.5	2766.9	1383.6	1528.5	1328.0	1801.0	1227.0	2499.8	2471.2	2910.3
of which:										
wages and salaries	658.8	697.4	721.9	736.9	752.3	785.3	836.1	865.0	947.5	1008.5
income from subsidiary										
and private plots	0.2	0.2	0.2	0.2	0.2	-	-	-	-	-
other	37.1	38.7	40.8	38.0	40.3	31.6	36.1	40.9	42.3	39.3
turnover taxation	183.7	189.7	168.4	157.4	166.9	177.9	202.4	166.7	119.8	105.8
profit(losses)	546.6	587.0	665.0	690.2	747.2	764.8	829.4	1002.4	1041.7	1141.0
contributions to social										
security	194.8	210.2	217.6	222.2	229.3	237.6	253.1	263.1	287.7	305.7

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Other material sphere</b>										
National product	1391.8	1473.2	1498.9	1515.9	1574.9	1739.7	1696.5	1717.3	1684.1	1858.9
Material input	669.6	886.7	875.0	891.5	964.1	1069.3	1127.5	1081.7	1017.9	1096.7
of which:										
depreciation	25.3	23.7	19.3	21.7	27.2	28.1	31.5	33.8	31.5	33.6
National income	722.2	586.5	623.9	624.4	610.8	670.4	569.0	635.6	666.2	762.2
of which:										
wages and salaries	74.4	74.5	79.5	81.7	84.3	86.7	85.5	91.1	94.4	100.9
income from subsidiary and private plots	538.1	392.6	378.7	389.7	393.0	440.0	408.4	449.3	490.7	487.1
other	15.8	13.2	15.4	19.1	20.0	20.1	18.7	10.3	5.7	5.3
turnover taxation	5.7	4.9	4.9	4.5	3.8	4.8	4.4	3.5	3.7	4.7
profit(losses)	33.3	29.3	43.7	32.3	30.0	42.9	49.1	62.8	48.9	115.9
contributions to social security	25.7	25.6	27.6	29.2	25.4	31.0	25.8	28.0	28.4	31.8

Source: Central Statistical Office



Table 3.1 Balance of Payments in Nonconvertible Currencies, 1970-89 1/

(in millions of transferable rubles)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1. Current Account	146	-129	46	-468	-697	-285	-222	-61	-320	64	696	933
Trade balance	164	-86	-158	-631	-836	-528	-541	-140	-475	-70	582	879
Exports of Goods, fob	1384	2708	4706	4983	5246	6843	7405	8338	8393	8692	9135	8892
Imports of Goods, fob	1220	2794	4864	5614	6082	7371	7946	8478	8868	8762	8553	8013
Services, net	-19	-44	204	155	131	237	311	75	147	107	74	25
Receipts, of which	86	194	490	494	483	615	724	567	602	625	664	767
Shipments	13	26	76	85	77	95	109	115	108	114	122	133
Travel	56	106	183	223	260	291	291	312	334	370	405	470
Interest income	1	-	4	3	3	25	22	3	3	4	4	3
Other	15	60	227	183	143	204	302	137	157	137	133	181
Payments, of which	104	239	286	339	352	378	413	492	455	518	590	728
Shipments	36	109	122	181	186	177	192	229	214	228	267	256
Travel	18	27	38	33	31	29	32	37	44	66	82	101
Interest	15	23	22	25	32	70	66	84	69	83	109	68
Other	35	79	104	100	103	102	123	142	148	141	132	313
Interest, net	-14	-	-18	-22	-29	-45	-44	-81	-46	-79	-105	-65
Transfers net (private)	1	2	0	8	8	6	8	4	8	27	40	25
Transfers, Receipts	1	2	5	9	9	8	10	10	12	30	44	31
Transfers, Payments	-	-	5	1	1	2	2	6	4	3	4	6
2. Capital Account	-154	229	-113	196	360	53	109	-88	248	43	-619	-874
Med. & LT loans drawn, net	-29	-36	-112	-46	-125	-102	335	17	531	-205	-293	-327
Disbursement	69	67	29	88	38	59	494	513	665	170	98	121
Amortization	98	103	141	134	163	161	159	496	134	375	391	448
Loans extended to												
Developing countries, net	-6	-18	-1	-9	-22	-7	-6	-22	-33	-17	-12	-110
Disbursement	10	24	37	17	29	16	24	33	38	22	20	118
Amortization paid	4	6	36	8	7	9	18	11	5	5	8	8
Short-term capital, net	-119	284	-	251	507	162	-220	-83	-250	265	-314	-437
3. Errors & omissions	8	-101	68	274	339	233	115	150	73	-105	-77	-60
Overall balance (1+2+3)	0	-1	1	2	2	1	2	1	1	2	0	-1

Source : Staff compilation based on data provided by the Bulgarian Foreign Trade Bank.

1/ Consist of all transactions in transferable rubles with CMEA countries and in clearing rubles with Albania, China, Democratic Kampuchea, the Democratic People's Republic of Korea, and the Lao People's Democratic Republic. Includes also some imports from Middle-Eastern countries which were settled in transferable rubles.

Table 3.2. Balance of Payments in Convertible Currencies, 1970-89 1/

(in millions of U.S. dollars)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1. Current account	-7	-852	907	562	813	292	727	-85	-715	-773	-840	-1306
Trade balance	19	-772	806	286	473	66	282	-387	-832	-955	-972	-1199
Merchandise exports fob	487	985	3338	3360	3103	2719	3299	3307	2656	3277	3539	3138
Merchandise imports fob	468	1757	2532	3074	2630	2653	3011	3694	3488	4232	4511	4337
Services, net	-39	-102	43	194	265	122	365	232	56	96	54	-170
Receipts, of which	102	331	857	1001	926	671	823	730	651	768	849	908
Shipments	47	156	411	499	435	332	293	237	235	274	340	311
Travel	26	90	163	129	167	155	150	147	127	195	229	224
Interest income 2/	10	28	137	179	157	139	154	157	136	112	79	125
Other	19	57	146	194	167	45	226	189	153	187	201	248
Payments, of which	140	432	814	807	681	549	458	498	595	672	795	1078
Shipments	44	139	190	282	238	211	187	193	199	193	220	203
Travel	3	6	9	11	11	14	16	17	17	16	22	55
Interest	70	242	531	419	343	226	176	186	264	362	442	680
Other	23	45	84	95	89	98	79	102	115	101	111	140
Interest, net	-60	-214	-394	-240	-186	-87	-22	-29	-128	-250	-363	-555
Transfers net (private)	12	21	58	82	95	104	74	70	61	86	78	63
Transfers, Receipts,	13	23	75	97	115	127	100	90	80	137	155	125
Transfers, Payments,	1	2	17	15	20	23	26	20	19	51	77	62
2. Capital Account	...	750	-756	-580	-385	-395	-332	-90	228	440	1882	596
Med. & LT loans drawn, net	...	624	-280	-505	-384	-216	-7	495	664	553	2139	712
Disbursement	...	...	1172	1024	792	983	1224	1961	3131	2796	4225	3042
Amortization	...	...	1452	1529	1176	1199	1231	1466	2467	2243	2086	2330
Loans extended to												
Developing countries, net	-7	-13	-129	-66	-36	-38	-327	-305	-436	-442	-445	-167
Disbursement	7	30	194	101	83	83	388	457	556	633	551	217
Amortization paid 2/	(-)	(17)	65	35	47	45	61	152	120	191	106	50
2b. Short-term debt, net 3/	...	139	-347	-9	35	-141	2	-280	0	329	188	51
3. Errors & omissions	...	125	84	-343	-302	315	22	473	-398	-164	-385	276
Overall balance (1+2+3)	...	23	235	-361	126	212	417	298	-885	-497	657	-434
Financing		-23	-235	361	-126	-212	-417	-278	885	497	-657	434
Reserve Valuation adjustment	...	...	...	-8	-4	-10	-93	125	257	165	-62	4
Change in reserves (- inc)	...	-23	-235	369	-122	-202	-324	-423	628	332	-595	430

Source: Staff compilation based on data provided by the Bulgarian Foreign Trade Bank.

1/ Includes payments in convertible currencies with OMEA countries and transactions under clearing agreements with certain countries, including Brazil, China, Finland, Guinea, Iran, and Peru.

2/ On a cash basis, excludes debt service obligations accrued but not paid to Bulgaria.

3/ Includes change in foreign assets of Bulgarian commercial banks and gold pledged as collateral for loans by the BFTB.

Table 3.3 Foreign trade by market and pricing method, 1980-89

(In millions of leva)

	1980	1985	1986	1987	1988	1989
<b>Exports</b>						
Total exports, foreign	6504	8888	9771	9938	12022	10775
Total exports, domestic	7158	10078	10562	10908	12415	10822
Total export margin	-654	-1190	-791	-970	-393	-47
Socialist exports, foreign	4250	6904	7648	7935	9081	7774
Socialist exports, domestic	4579	7309	7806	7922	9130	7958
Socialist export margin	-329	-405	-158	13	-49	-184
Nonsocialist exports, foreign	2254	1984	2123	2003	2941	3001
Nonsocialist exports, domestic	2579	2769	2756	2986	3285	2864
Nonsocialist export margin	-325	-785	-633	-983	-344	137
<b>Imports</b>						
Total imports, foreign	6870	10716	12335	12081	13119	12990
Including transport costs of:	327	483	550	501	604	667
Total imports, domestic	9031	11070	12488	13692	13985	13816
Total import margin	2161	354	153	1611	866	826
Socialist imports, foreign	4842	7673	8650	8336	7793	7515
Socialist imports, domestic	6939	7752	8562	9586	8702	8495
Socialist import margin	2097	79	-88	1250	909	980
Nonsocialist imports, foreign	2028	3043	3685	3745	5326	5475
Nonsocialist imports, domestic	2092	3318	3926	4106	5283	5321
Nonsocialist import margin	64	275	241	361	-43	-154
<b>Trade balance</b>						
Total balance, foreign	-367	-1827	-2565	-2142	-1097	-2215
Total balance, domestic	-1874	-992	-1926	-2784	-1570	-2994
Total gross output	1507	-835	-639	642	473	779
Socialist balance, foreign	-592	-769	-1002	-401	-1288	259
Socialist balance, domestic	-2360	-443	-755	-1664	428	-537
Socialist gross output	1768	-326	-247	1263	-1716	796
Nonsocialist balance, foreign	225	-1058	-1563	-1741	191	-2474
Nonsocialist balance, domestic	486	-549	-1171	-1120	-1998	-2457
Nonsocialist gross output	-261	-509	-392	-621	2189	-17
<b>Net material product</b>						
Total gross output	1507	-835	-638	642	473	779
Less: Material inputs	278	324	304	293	372	386
Plus: Residual (classified) yields	...	943	...	...	...	...
Net material product	1230	-216	-942	349	101	393

Source: Central Statistical Office.

**Notes:**

Import prices include transport to border

"foreign" = foreign prices converted to leva at commercial exchange rates.

"domestic" = domestic prices in leva.

"trade balance" = exports minus imports

"gross output" = sum of domestic margins on exports and imports

= trade balance at commercial exchange rate minus trade balance at domestic prices.

**TABLE 3.4 Composition of Exports to and Imports from Socialist Countries, 1970-89 1/ 2/**

(In percent of total at current prices: CMEA classification)

	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<b>Exports</b>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Investment goods	33.1	44.0	52.9	60.4	62.0	64.7	64.9	65.4
Foodstuffs	33.2	27.2	20.9	15.9	14.2	12.8	12.1	12.0
Consumer goods	16.6	11.2	10.2	11.2	11.5	11.3	11.2	11.7
Fuels, mineral and metals	5.1	5.2	4.4	4.3	4.1	3.6	4.2	3.4
Chemicals	2.3	4.5	3.3	2.6	2.7	2.4	2.7	2.8
Building materials	1.2	1.1	2.4	2.3	2.3	2.1	2.1	2.2
Agricultural goods	5.8	4.8	4.4	2.2	2.2	2.2	1.7	1.3
Other	2.9	2.0	1.6	1.0	0.9	0.9	1.1	1.2
<b>Imports</b>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Investment goods	45.3	42.7	38.9	36.7	39.8	42.2	47.4	48.5
Fuels, mineral and metals	30.5	37.0	45.1	49.7	47.1	44.1	37.6	36.1
Consumer goods	5.8	5.5	4.7	3.8	4.0	4.3	4.7	4.8
Chemicals	5.9	4.0	3.9	2.7	2.8	2.7	3.4	3.4
Raw materials	6.8	4.5	3.4	2.8	2.7	2.7	3.0	3.0
Agricultural goods	2.6	4.2	2.0	2.3	2.0	2.2	1.9	2.3
Engineering	0.3	0.5	0.4	0.5	0.6	0.5	0.8	0.7
Other	2.7	1.7	1.5	1.5	1.1	1.2	1.3	1.2

Source: Ministry of Foreign Economic Relations

1/ Consists of CMEA member countries, Albania, China, Democratic Kampuchea, the Democratic People's Republic of Korea, the Lao People's Democratic Republic, and Yugoslavia.

2/ Data compiled on the basis of shipments as recorded by the Bulgarian foreign trade organizations, as opposed to the balance of payments data which are recorded on the basis of settlements as recorded by the Bulgarian Foreign Trade Bank.

**TABLE 3.5 Composition of Exports to and Imports from Non-Socialist Countries, 1970-89 1/ 2/**

(In percent of total at current prices; CMEA classification)

	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<b>Exports</b>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Fuels, mineral and metals	19.8	18.0	40.8	29.1	27.2	23.7	22.0	32.9
Investment goods	13.4	27.5	23.7	30.2	37.4	41.2	36.9	24.2
Foodstuffs	23.6	18.5	10.6	6.7	8.1	8.9	9.9	9.6
Raw material	8.1	4.5	2.5	4.1	4.9	5.9	6.4	7.8
Consumer goods	7.5	7.0	5.6	4.7	7.0	7.1	8.0	7.6
Agricultural goods	18.2	10.7	5.9	6.1	3.8	4.2	6.0	7.5
Chemicals	7.8	10.4	6.0	8.4	6.6	6.1	7.4	7.3
Other	1.6	3.4	4.9	10.6	5.0	3.1	3.4	3.0
<b>Imports</b>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.00</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Fuels, mineral and metals	24.5	24.5	34.5	37.7	36.8	25.8	33.5	32.2
Investment goods	25.4	37.8	22.2	21.6	26.8	29.5	22.6	25.2
Raw material	21.4	12.1	12.5	11.2	10.2	13.0	13.3	12.1
Chemicals	13.0	9.6	15.2	11.8	10.2	14.3	12.1	9.8
Agricultural goods	5.2	4.7	6.9	9.8	7.3	5.9	7.2	9.1
Consumer goods	5.3	4.2	3.5	3.6	4.0	6.1	6.4	6.4
Foodstuffs	4.3	4.2	3.3	1.1	1.6	1.9	2.5	3.3
Other	1.0	3.0	1.9	3.1	3.0	3.5	2.4	2.0

Source: Ministry of Foreign Economic Relations.

1/ Consists of all countries except those covered in Table 3.4

2/ Data compiled on the basis of shipments as recorded by the Bulgarian foreign trade organizations, as opposed to the balance of payments data which are recorded on the basis of settlements as recorded by the Bulgarian Foreign Trade Bank.

Table 3.6.a Alternative Estimates of Exports in Millions of U.S.Dollars

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Total</b>	<b>8091.5</b>	<b>8197.9</b>	<b>8005.8</b>	<b>8883.9</b>	<b>9738.1</b>	<b>10313.7</b>	<b>8873.0</b>	<b>10286.7</b>	<b>9284.3</b>	<b>8277.9</b>
<b>CMEA</b>	<b>4753.5</b>	<b>4837.9</b>	<b>4902.8</b>	<b>6164.9</b>	<b>6439.1</b>	<b>7006.7</b>	<b>6217.0</b>	<b>7009.7</b>	<b>5745.3</b>	<b>5139.9</b>
<b>Non-CMEA</b>	<b>3338.0</b>	<b>3360.0</b>	<b>3103.0</b>	<b>2719.0</b>	<b>3299.0</b>	<b>3307.0</b>	<b>2656.0</b>	<b>3277.0</b>	<b>3539.0</b>	<b>3138.0</b>
*****										
<b>1. Machines &amp; Equip for prod.</b>	<b>3304.5</b>	<b>3558.6</b>	<b>3576.2</b>	<b>4114.7</b>	<b>4356.6</b>	<b>5229.5</b>	<b>4845.5</b>	<b>5882.6</b>	<b>5038.9</b>	<b>4120.8</b>
<b>CMEA</b>	<b>2513.5</b>	<b>2566.7</b>	<b>2597.9</b>	<b>3426.0</b>	<b>3574.5</b>	<b>4232.2</b>	<b>3852.0</b>	<b>4532.8</b>	<b>3731.5</b>	<b>3361.7</b>
<b>Non-CMEA</b>	<b>791.0</b>	<b>991.9</b>	<b>978.3</b>	<b>688.7</b>	<b>782.1</b>	<b>997.4</b>	<b>993.6</b>	<b>1349.8</b>	<b>1307.4</b>	<b>759.1</b>
<b>2. Fuel, miner. resources &amp; metals</b>	<b>1568.0</b>	<b>1467.7</b>	<b>1258.2</b>	<b>1201.5</b>	<b>1298.3</b>	<b>1266.0</b>	<b>979.3</b>	<b>1028.6</b>	<b>1017.7</b>	<b>1207.9</b>
<b>CMEA</b>	<b>207.5</b>	<b>227.1</b>	<b>210.5</b>	<b>265.8</b>	<b>264.5</b>	<b>302.9</b>	<b>258.0</b>	<b>252.8</b>	<b>240.8</b>	<b>173.9</b>
<b>Non-CMEA</b>	<b>1360.6</b>	<b>1240.6</b>	<b>1047.7</b>	<b>935.7</b>	<b>1033.8</b>	<b>963.0</b>	<b>721.3</b>	<b>775.8</b>	<b>776.9</b>	<b>1034.1</b>
<b>3. Chemic. fertilisers &amp; rubber</b>	<b>359.8</b>	<b>342.9</b>	<b>374.7</b>	<b>396.0</b>	<b>496.3</b>	<b>462.6</b>	<b>340.1</b>	<b>366.9</b>	<b>413.8</b>	<b>372.7</b>
<b>CMEA</b>	<b>158.4</b>	<b>158.1</b>	<b>153.6</b>	<b>199.9</b>	<b>196.2</b>	<b>184.9</b>	<b>165.8</b>	<b>169.0</b>	<b>153.7</b>	<b>143.4</b>
<b>Non-CMEA</b>	<b>201.3</b>	<b>184.8</b>	<b>221.0</b>	<b>196.1</b>	<b>300.1</b>	<b>277.7</b>	<b>174.4</b>	<b>197.9</b>	<b>260.2</b>	<b>229.3</b>
<b>4. Building mat. &amp; elements</b>	<b>162.5</b>	<b>145.8</b>	<b>128.9</b>	<b>160.2</b>	<b>174.2</b>	<b>171.9</b>	<b>158.1</b>	<b>169.7</b>	<b>147.5</b>	<b>135.5</b>
<b>CMEA</b>	<b>112.8</b>	<b>98.7</b>	<b>100.3</b>	<b>134.5</b>	<b>156.0</b>	<b>160.4</b>	<b>146.1</b>	<b>149.9</b>	<b>121.5</b>	<b>114.3</b>
<b>Non-CMEA</b>	<b>49.7</b>	<b>47.1</b>	<b>28.6</b>	<b>25.7</b>	<b>18.1</b>	<b>11.5</b>	<b>12.0</b>	<b>19.7</b>	<b>26.0</b>	<b>21.2</b>
<b>5. Raw material</b>	<b>142.8</b>	<b>121.3</b>	<b>113.9</b>	<b>153.7</b>	<b>193.3</b>	<b>185.4</b>	<b>170.3</b>	<b>235.7</b>	<b>269.2</b>	<b>284.5</b>
<b>CMEA</b>	<b>58.5</b>	<b>56.0</b>	<b>48.1</b>	<b>62.4</b>	<b>53.1</b>	<b>48.2</b>	<b>40.2</b>	<b>43.1</b>	<b>41.1</b>	<b>40.5</b>
<b>Non-CMEA</b>	<b>84.3</b>	<b>65.3</b>	<b>65.8</b>	<b>91.2</b>	<b>140.3</b>	<b>137.2</b>	<b>130.2</b>	<b>192.6</b>	<b>228.1</b>	<b>244.1</b>
<b>6. Animals (not to be slaughtered)</b>	<b>6.4</b>	<b>5.1</b>	<b>2.5</b>	<b>8.2</b>	<b>10.2</b>	<b>23.3</b>	<b>1.4</b>	<b>2.4</b>	<b>2.7</b>	<b>20.3</b>
<b>CMEA</b>	<b>0.9</b>	<b>1.3</b>	<b>0.7</b>	<b>1.5</b>	<b>0.7</b>	<b>0.7</b>	<b>0.2</b>	<b>0.4</b>	<b>0.4</b>	<b>0.2</b>
<b>Non-CMEA</b>	<b>5.5</b>	<b>3.9</b>	<b>1.8</b>	<b>6.7</b>	<b>9.4</b>	<b>22.6</b>	<b>1.2</b>	<b>2.0</b>	<b>2.3</b>	<b>20.1</b>
<b>7. Raw matls. for food-industry</b>	<b>406.4</b>	<b>341.0</b>	<b>381.9</b>	<b>352.9</b>	<b>334.1</b>	<b>361.3</b>	<b>240.1</b>	<b>288.0</b>	<b>313.0</b>	<b>304.0</b>
<b>CMEA</b>	<b>210.9</b>	<b>167.7</b>	<b>239.5</b>	<b>208.2</b>	<b>152.2</b>	<b>157.7</b>	<b>139.2</b>	<b>151.8</b>	<b>100.4</b>	<b>67.0</b>
<b>Non-CMEA</b>	<b>195.4</b>	<b>173.3</b>	<b>142.4</b>	<b>144.7</b>	<b>181.9</b>	<b>203.6</b>	<b>100.9</b>	<b>136.1</b>	<b>212.6</b>	<b>236.9</b>
<b>8. Foodstuffs</b>	<b>1347.1</b>	<b>1338.5</b>	<b>1256.4</b>	<b>1402.3</b>	<b>1628.3</b>	<b>1338.4</b>	<b>1099.3</b>	<b>1189.4</b>	<b>1042.1</b>	<b>917.7</b>
<b>CMEA</b>	<b>992.3</b>	<b>1002.1</b>	<b>958.8</b>	<b>1130.7</b>	<b>1250.1</b>	<b>1115.8</b>	<b>882.8</b>	<b>898.9</b>	<b>692.9</b>	<b>616.3</b>
<b>Non-CMEA</b>	<b>354.9</b>	<b>336.4</b>	<b>297.6</b>	<b>271.5</b>	<b>378.2</b>	<b>222.6</b>	<b>216.5</b>	<b>290.5</b>	<b>349.2</b>	<b>301.4</b>
<b>9. Ind. consumer goods (non-food)</b>	<b>671.3</b>	<b>705.5</b>	<b>698.4</b>	<b>840.4</b>	<b>919.8</b>	<b>939.9</b>	<b>901.9</b>	<b>1025.0</b>	<b>927.2</b>	<b>840.4</b>
<b>CMEA</b>	<b>482.7</b>	<b>542.1</b>	<b>564.4</b>	<b>711.5</b>	<b>767.1</b>	<b>783.3</b>	<b>714.8</b>	<b>793.8</b>	<b>643.3</b>	<b>600.6</b>
<b>Non-CMEA</b>	<b>188.6</b>	<b>163.3</b>	<b>134.0</b>	<b>128.8</b>	<b>152.7</b>	<b>156.6</b>	<b>187.1</b>	<b>231.2</b>	<b>283.8</b>	<b>239.8</b>
<b>Production operats. (not incl. in commod. divis.)</b>	<b>122.6</b>	<b>171.4</b>	<b>214.8</b>	<b>254.1</b>	<b>327.1</b>	<b>335.4</b>	<b>136.9</b>	<b>98.4</b>	<b>112.2</b>	<b>74.0</b>
<b>CMEA</b>	<b>16.0</b>	<b>18.0</b>	<b>19.0</b>	<b>24.2</b>	<b>24.8</b>	<b>20.5</b>	<b>18.1</b>	<b>17.2</b>	<b>19.7</b>	<b>22.1</b>
<b>Non-CMEA</b>	<b>106.6</b>	<b>153.4</b>	<b>195.8</b>	<b>229.8</b>	<b>302.3</b>	<b>314.9</b>	<b>118.8</b>	<b>81.3</b>	<b>92.4</b>	<b>52.0</b>

Source: Central Statistical Office and staff estimates.

Table 3.6.b Alternative Estimates of Imports in Millions of U.S.Dollars

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Total</b>	7445.1	8526.5	8314.1	9293.5	9920.6	10818.4	10056.9	11298.1	9890.2	8968.8
<b>CMEA</b>	4913.1	5450.5	5684.1	6640.5	6909.6	7124.4	6568.9	7066.1	5379.2	4631.8
<b>Non-CMEA</b>	2532.0	3074.0	2630.0	2653.0	3011.0	3694.0	3488.0	4232.0	4511.0	4337.0
.....										
<b>1. Machines &amp; Equip for prod.</b>	2475.5	2768.6	2741.7	3103.1	3230.0	3413.3	3599.8	4230.6	3568.3	3337.5
<b>CMEA</b>	1912.8	1949.8	2055.5	2410.3	2557.5	2614.4	2665.1	2981.1	2548.6	2266.4
<b>Non-CMEA</b>	562.7	818.8	686.2	692.8	672.5	798.9	934.7	1249.5	1019.7	1071.0
<b>2. Fuel, miner. resources &amp; metals</b>	3091.2	3623.5	3763.3	4173.1	4524.4	4932.4	4309.2	4213.2	3535.8	3069.0
<b>CMEA</b>	2217.4	2643.4	2774.7	3295.2	3422.6	3539.6	3024.8	3119.4	2024.9	1672.0
<b>Non-CMEA</b>	873.8	980.1	988.6	877.9	1101.7	1392.8	1284.4	1093.8	1510.9	1397.0
<b>3. Chemic. fertilisers &amp; rubber</b>	578.0	592.2	529.2	568.0	653.7	624.5	541.6	796.5	728.3	582.6
<b>CMEA</b>	193.9	197.0	189.6	196.0	193.2	190.2	184.7	192.3	182.5	156.9
<b>Non-CMEA</b>	384.1	395.2	339.7	372.0	460.5	434.2	356.9	604.1	545.8	425.8
<b>4. Building mat. &amp; elements</b>	60.4	72.9	68.1	87.2	92.6	121.8	99.5	123.1	100.7	82.7
<b>CMEA</b>	29.3	35.5	36.0	44.8	28.6	52.6	37.3	37.6	30.1	24.3
<b>Non-CMEA</b>	31.1	37.4	32.1	42.4	64.0	69.2	62.3	85.5	70.6	58.4
<b>6. Animals (not to be slaughtered)</b>	4.9	5.8	5.6	6.6	6.2	7.7	7.3	4.8	4.4	5.6
<b>CMEA</b>	3.9	3.6	2.6	3.3	3.2	3.2	2.5	2.7	2.1	1.8
<b>Non-CMEA</b>	1.0	2.1	2.9	3.3	3.0	4.4	4.8	2.1	2.4	3.8
<b>7. Raw matls. for food-industry</b>	273.0	371.5	228.2	265.4	259.4	528.7	392.6	404.8	422.8	499.8
<b>CMEA</b>	97.6	135.3	117.3	131.1	157.8	165.1	137.3	155.7	100.1	106.4
<b>Non-CMEA</b>	175.3	236.2	110.9	134.3	101.6	363.5	255.3	249.2	322.7	393.4
<b>8. Foodstuffs</b>	125.2	131.6	99.5	113.7	94.6	94.6	90.7	126.2	152.1	174.5
<b>CMEA</b>	40.4	39.7	41.0	58.5	53.0	54.4	35.7	44.7	37.9	31.2
<b>Non-CMEA</b>	84.8	91.9	58.4	55.2	41.7	40.1	55.0	81.5	114.2	143.3
<b>9. Ind. consumer goods (non-food)</b>	318.6	399.7	396.7	402.6	412.0	404.5	406.6	562.8	539.8	501.0
<b>CMEA</b>	231.1	266.2	281.4	281.0	275.5	270.0	265.4	304.8	253.4	224.3
<b>Non-CMEA</b>	87.5	133.4	115.3	121.6	136.6	134.5	141.2	258.0	286.4	276.7
<b>Production operats. (not incl. in commod. divis.)</b>	36.3	44.8	46.2	39.6	43.7	78.3	75.6	98.0	77.9	53.9
<b>CMEA</b>	21.4	12.2	24.6	27.0	23.7	36.4	37.9	38.1	40.4	31.6
<b>Non-CMEA</b>	14.9	32.6	21.6	12.6	20.0	42.0	37.7	59.9	37.5	22.4

Source: Central Statistical Office and staff estimates.

TABLE 3.7 Geographic Origin of Imports and Direction of Exports, 1970-89 1/

(In percent of total at current prices) 2/

	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<b>Exports</b>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.01</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Socialist Countries 3/	69.1	70.1	61.9	69.1	72.7	71.8	68.2	68.9
of which:								
CMEA	(67.1)	(67.8)	(60.1)	(68.0)	(71.4)	(70.9)	(66.9)	(67.6)
Nonsocialist countries	30.9	29.9	38.1	30.9	27.3	28.2	31.8	31.1
Industrial countries	21.2	13.8	20.6	11.4	11.3	11.0	12.9	17.3
of which:								
Germany, F.R.	(3.8)	(2.5)	(3.3)	(1.9)	(1.8)	(1.9)	(2.0)	(2.9)
Developing countries	9.7	16.0	17.5	19.5	16.1	17.2	18.9	13.9
of which:								
Libya	(0.5)	(3.3)	(4.7)	(5.8)	(4.6)	(5.5)	(4.6)	(2.9)
Iraq	(1.0)	(2.7)	(1.8)	(4.1)	(3.7)	(4.6)	(5.5)	(2.1)
<b>Imports</b>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Socialist countries 3/	65.2	60.5	71.4	69.1	64.9	68.6	57.1	52.9
of which:								
CMEA	(63.9)	(59.2)	(69.8)	(67.8)	(63.9)	(67.5)	(56.0)	(52.0)
Nonsocialist countries	34.8	39.5	28.6	30.9	35.1	31.4	42.9	47.1
Industrial countries	27.9	33.7	23.3	20.4	23.6	24.3	28.5	32.2
of which:								
Germany, F.R.	(3.9)	(11.2)	(6.5)	(5.2)	(7.5)	(7.8)	(9.1)	(9.3)
Developing countries	6.9	5.9	5.3	10.5	11.4	7.1	14.5	1.49
of which:								
Libya	(-)	(0.3)	(1.4)	(3.8)	(5.4)	(1.5)	(1.2)	(2.7)
Iraq	(0.1)	(0.3)	(0.3)	(0.8)	(0.9)	(0.7)	(5.6)	(5.5)
<b>Memorandum Items:</b>								
Re-exports to nonsocialist countries:								
Share of re-exports in total exports (in percent)	9.7	4.7	6.2	12.7	12.2	10.6	8.3	12.4

Source: Ministry of Foreign Economic Relations.

- 1/ Exports and imports data in this table differ from balance of payments data because they are compiled on the basis of shipments whereas the balance of payments data are compiled on the basis of actual payments.
- 2/ Based on U.S. dollar value data. Trade data with CMEA countries were converted from transferable rubles into U.S. dollar using cross rates derived from the commercial rates of the lev vis-a-vis the transferable ruble and U.S. dollar. For 1970, in order to avoid a break in the series, the 1971 TR/US\$ cross commercial rate was applied.
- 3/ Consists of CMEA countries, Albania, China, Democratic Kampuchea, the Democratic People's Republic of Korea, the Lao People's Democratic Republic, and Yugoslavia.



TABLE 3.8 Changes in Prices and Volumes of Exports and Imports, 1971-89(Annual percentage changes)

	<u>Annual Averages</u>			1986	1987	1988	1989
	<u>1971-75</u>	<u>1976-80</u>	<u>1981-85</u>				
<u>Trade with Socialist Countries</u>							
Exports							
Prices	3.5	1.2	2.1	5.7	2.0	1.8	-3.8
Volume	10.5	10.4	8.6	-0.7	0.6	4.6	0.2
Imports							
Prices	4.6	6.7	6.1	12.0	0.0	-6.8	-3.5
Volume	13.1	4.5	4.3	-8.7	2.2	1.5	-6.9
Terms of Trade	-1.1	-5.2	-3.7	-5.7	2.1	9.3	-0.3
<u>Trade with Non-socialist Countries</u>							
Exports							
Prices	5.2	1.4	-1.7	-5.7	0.0	1.3	-0.8
Volume	7.7	21.6	5.8	-24.5	6.9	-6.2	-12.6
Imports							
Prices	4.6	4.4	-1.0	-13.4	-8.5	4.2	-0.3
Volume	17.9	-0.5	14.2	16.9	-7.5	12.1	-1.1
Terms of Trade	3.0	-2.8	-0.7	8.9	9.4	-2.7	-0.6

Source: Central Statistical Office.

**TABLE 4.1 Past and Projected Servicing of  
Medium and Long-Term Debt in Convertible Currencies, 1980-96**

	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>		
(In millions of U.S. dollars)								
Total Debt Service Payments	<u>1.983</u>	<u>1.652</u>	<u>2.731</u>	<u>2.605</u>	<u>2.528</u>	<u>3.010</u>		
Principal	1,452	1,466	2,467	2,243	2,086	2,330		
Interest	531	186	264	362	442	680		
(In percent of exports of goods and services in convertible currencies)								
Total Debt Service Payments	<u>47.3</u>	<u>40.9</u>	<u>82.6</u>	<u>64.4</u>	<u>57.6</u>	<u>74.4</u>		
Principal	34.6	36.3	74.6	55.5	47.5	57.6		
Interest	12.7	4.6	8.0	8.9	10.1	16.8		
(In millions of U.S. dollars)								
	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	Beyond 1996 and not scheduled
Principal Maturities Scheduled 1/	<u>2.909</u>	<u>1.263</u>	<u>760</u>	<u>799</u>	<u>499</u>	<u>249</u>	<u>880</u>	<u>307</u>
Medium and long-term loans	982	669	696	797	499	249	880	134
L/Cs and trade financing	1,927	594	64	2	-	-	-	173

Source: Bulgarian Foreign Trade Bank

1/ Includes only obligations contracted by the Bulgarian Foreign Trade Bank; excludes obligations contracted by the commercial banks. Maturities scheduled for the period 1990-96 refer to the debt contracted as of end-December 1989.

TABLE 4.2 External Debt, 1970-89

(In millions of U.S. dollars and transferable rubles - end of period)

	1970	1975	1980	1985	1986	1987	1988	1989
In convertible currencies <sup>1/</sup>	1,020	3,038	4,152	3,240	4,671	6,139	8,186	9,201
Medium and long-term loans <sup>2/</sup>	425	1,442	2,294	1,670	2,739	3,617	4,880	5,220
L/Cs and trade financing <sup>3/</sup>	337	907	1,446	1,525	1,875	2,170	2,677	3,127
Short-term deposits <sup>4/</sup>	259	690	413	45	58	351	629	854
In transferable rubles	530	849	823	1,428	1,592	1,454	575	(382) <sup>5/</sup>
Memorandum item								
					(In percent)			
Ratio of debt in currencies to exports of goods and services in convertible currencies	173	231	99	80	141	152	187	227

Source: Bulgarian Foreign Trade Bank.

- <sup>1/</sup> The currency composition of the external debt in convertible currencies contracted by the Bulgarian Foreign Trade Bank was at end-1989 the following: 49.2 percent in U.S. dollars, 30.2 percent in Deutsche marks, 7.7 percent in Swiss francs, 5.7 percent in Japanese yen, 5.2 percent in Australian schillings, and 2 percent in other currencies. Includes guarantees extended.
- <sup>2/</sup> Consists of financial and project loans. Includes loans guaranteed or insured by governments or official export credit agencies.
- <sup>3/</sup> All trade credits have a maturity of more than one year.
- <sup>4/</sup> Credits of up to one-year maturity.
- <sup>5/</sup> Net creditor position of Bulgaria.

TABLE 4.3 External Debt in Convertible Currencies  
by Creditor Countries, 1989 1/

(In millions of U.S. dollars at end of 1989)

Contracted by Bulgarian Foreign Trade Bank	Medium and Long-Term Loans	Letters of Credit and Trade Financing	Deposits	Total
Germany, F.R.	857	873	23	1,753
Japan	1,613	6	--	1,619
United Kingdom	408	420	210	1,038
Austria	522	345	159	1,026
CMEA countries and institutions	530	--	133	663
France	284	197	73	554
Switzerland	96	252	27	375
Italy	43	168	23	234
Belguim	71	67	6	144
Netherlands	45	80	7	132
Luxembourg	74	10	30	114
Finland	108	3	--	111
United States	10	80	--	90
Sweden	26	57	6	89
Spain	18	10	3	31
Denmark	3	6	--	9
Norway	2	6	--	8
Canada	3	--	--	3
Other countries	62	6	92	160
Total	<u>4,775</u>	<u>2,587</u>	<u>793</u>	<u>8,155 2/</u>

Source: Bulgarian Foreign Trade Bank.

1/ Consists only of debt contracted by the Bulgarian Foreign Trade Bank; excludes obligations contracted by the Bulgarian commercial banks.

2/ Excludes US\$307 million in unclassified loans.

TABLE 4.4 Net External Position in Convertible Currencies, 1980-March 1990

(In millions of U.S. dollars)

	1980	1985	1986	1987	1988	1989	March 1990
<b>Foreign Liabilities</b>							
External debt contracted by Bulgaria	4,152	3,247	4,671	6,139	8,186	9,201	9,132
Foreign trade bank	4,152	3,087	4,391	5,758	7,688	8,461	8,420
Commercial banks	-	153	280	380	498	740	712
<b>Foreign Assets</b>							
International Reserves <sup>1/</sup>	1,396	2,136	1,522	1,199	1,801	1,381	546
Other Foreign Assets	318	1,148	1,628	2,064	2,572	2,789	3,014
Bulgarian commercial banks' foreign exchange holdings	-	57	75	61	160	232	198 <sup>2/</sup>
<b>Medium and Long-term loans extended to:</b>							
Developing countries	318	1,091	1,427	1,746	2,005	2,099	2,358
(of which arrears)	(6)	(56)	(243)	(249)	(383)	(445)	(749)
Socialist countries	-	-	126	257	407	458	458
<b>Memorandum item</b>							
International reserves in months of imports of goods in convertible currencies	7.1	6.9	5.2	3.4	4.8	3.8	1.5 <sup>3/</sup>

Source: Bulgarian Foreign Trade Bank.

<sup>1/</sup> Consists of non-pledged gold and foreign exchange in bank deposits and cash; gold was valued at US\$300 per ounce.<sup>2/</sup> April 1990.<sup>3/</sup> In relation to 1989 imports.

TABLE 4.5 Exchange Rates, 1970-89 1/

	1970	1975	1980	1985	1986	1987	1988	1989
<u>Average per period</u>								
Lev per U.S. Dollar								
Official rate 2/	1.17	0.97	0.86	1.03	0.94	0.87	0.83	0.84
Commercial/Premium								
Rate 3/	-	1.65	0.99	1.19	1.42	1.30	1.67	1.32
(Premium) 4/	-	(70.3)	(15.0)	(15.0)	(50.0)	(50.0)	(100.0)	(115.6)
Noncommercial rate 5/	-	1.20	1.29	1.86	1.70	1.28	1.67	1.82
(Premium) 4/	-	(23.9)	(50.0)	(80.0)	(80.0)	(48.0)	(100.0)	(115.6)
Lev per transferable ruble								
Official rate	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Commercial rate 3/	-	-	1.00	1.00	1.05	1.05	1.05	1.05
Noncommercial rate 5/	0.78	0.88	0.88	1.00	1.00	1.00	1.00	1.00
<u>End of period</u>								
Lev per U.S. dollar								
Official rate	1.17	0.96	0.88	1.00	0.90	0.83	0.83	0.81
Commercial rate	-	1.64	1.01	1.15	1.35	1.24	1.64	2.02
(Premium) 4/	-	(70.0)	(15.0)	(15.0)	(50.0)	(50.0)	(100.0)	(150.0)
Noncommercial rate	-	1.19	1.31	1.80	1.62	1.24	1.64	2.02
(Premium) 4/	-	(23.7)	(49.4)	(80.0)	(80.0)	(50.0)	(100.0)	(150.0)
Lev per transferable ruble								
Official rate	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Commercial rate	-	-	1.00	1.00	1.05	1.05	1.05	1.05
Non Commercial rate 5/	0.78	0.88	0.88	1.00	1.00	1.00	1.00	1.00

Sources: National Bank of Bulgaria and Bulgarian Foreign Trade Bank.

1/ The system of exchange rates was substantially reformed on May, 1990 when Decree 32 became effective. As of June 1990, three exchange rates were prevailing: (i) a basis rate (US\$1 = leva 2.97); (ii) a market rate determined at an auction (US\$1 = leva 7.06); and (iii) a rate for cash transaction (US\$1 = leva 7.17).

2/ The official rate is used only for statistical and accounting purposes and for the calculation of the currency leva, an accounting unit; its value is determined on the basis of a currency basket.

3/ The premium rates for commercial transactions were introduced in 1971 for the rate in terms of U.S. dollars and in 1980 for the rate in terms of transferable ruble.

4/ Premium over the official rate in percent.

5/ Lev per Soviet rubles.

Table 5.1 Consolidated General Government, 1975-90 1/

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
	-----Prelim. Budget											
(In millions of Leva)												
State Budget												
Total revenue	9138	13016	14743	16191	16248	16647	17638	20141	21725	21804	22912	24048
Total expenditure	9076	12882	14830	15856	16008	16449	18002	21143	21545	22393	23137	24443
Current expenditure	8051	11645	13127	13732	13868	13991	15458	17696	19247	20332	20973	22955
Capital expenditure	1024	1237	1703	2124	2139	2458	2543	3447	2299	2062	2164	1488
Surplus/deficit (-)	62	134	-87	335	240	198	-364	-1002	180	-589	-225	-395
State Investment Credit Fund												
Total revenue	-	-	-	-	-	-	-	-	159	43	63	64
Total expenditure	-	-	-	-	-	-	-	-	2082	2024	1166	841
Net lending 1/	-	-	-	-	-	-	-	-	2082	2024	1166	841
Surplus/deficit (-)	-	-	-	-	-	-	-	-	-1923	-1981	-1103	-681
General government												
Total revenue	9138	13016	14743	16191	16248	16647	17638	20141	21884	21846	22975	24208
Total expenditure	9076	12882	14830	15856	16008	16449	18002	21143	23627	24417	24304	25284
Current expenditure	8051	11645	13127	13732	13868	13991	15458	17696	19247	20332	20973	22955
Capital expenditure	1024	1237	1703	2124	2139	2458	2543	3447	4381	4085	3330	2329
Surplus/deficit (-)	62	134	-87	335	240	198	-364	-1002	-1743	-2570	-1328	-1076
Financing	-62	-133	87	-335	-240	-198	364	1002	1743	2570	1328	1076
Foreign (net)	36	-45	-151	-174	-91	-76	359	586	-420	-455	-544	-616
Domestic (net)	-98	-88	238	-161	-149	-122	5	416	2163	3025	1873	1692
Bank (excl. to SCIF)	-98	-88	238	-161	-149	-122	5	416	240	1044	770	1011
of which: NBB loans	-98	-88	238	-161	-149	-122	5	416	240	1044	770	1011
Bank (to SCIF; gross)	-	-	-	-	-	-	-	-	1382	1500	1080	650
of which: NBB loans	-	-	-	-	-	-	-	-	700	900	580	-
Variation in unused SCIF resources 2/	-	-	-	-	-	-	-	-	-359	281	23	31
Nonbank (to SCIF) 3/	-	-	-	-	-	-	-	-	900	200	-	-
Memorandum items												
(In percent of GDP)												
General government												
Total revenue	...	50.5%	53.0%	55.8%	54.5%	52.6%	54.1%	58.5%	59.9%	57.0%	58.5%	60.5%
Total expenditure	...	49.9%	53.3%	54.7%	53.7%	51.9%	55.2%	61.4%	64.7%	63.7%	61.9%	63.2%
Current expenditure	...	45.2%	47.2%	47.3%	46.5%	44.2%	47.4%	51.4%	52.7%	53.0%	53.4%	57.4%
Capital expenditure	...	4.8%	6.1%	7.3%	7.2%	7.8%	7.8%	10.0%	12.0%	10.7%	8.5%	5.8%
Surplus/deficit (-)	...	0.5%	-0.3%	1.2%	0.8%	0.6%	-1.1%	-2.9%	-4.8%	-6.7%	-3.4%	-2.7%

Source: Ministry of Finance and IMF Staff estimates.

1/ Equal to flow of investment financing.

2/ Negative sign reflects a build-up of available resources at the Economic Bank.

3/ From the State Insurance Institute.

Table 5.2 Consolidated State Budget, 1975-90 1/

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
											Prelim.	Budget
(In millions of Leva)												
Total revenue	9138	13016	14743	16191	16248	16647	17638	20141	21725	21804	22912	24048
Tax revenue	8200	9467	11604	12506	13217	14218	15021	17024	16910	18162	19527	20528
profit taxes	3749	2302	3276	4712	5151	6004	6252	6640	6910	8110	9186	9734
income tax	594	945	1021	1092	1155	1198	1292	1372	1460	1538	1633	1721
turnover tax and excises	2592	3431	4487	3676	3819	3892	4119	5672	4841	4442	4450	4565
customs duties	-	-	97	128	88	69	140	159	156	310	330	355
soc.sec.contributions 2/	1239	2753	2684	2857	2959	3006	3166	3325	3484	3628	3806	4027
other	25	36	39	42	45	49	52	56	59	133	123	126
Nontax revenue	938	3549	3139	3685	3031	2429	2617	3117	4815	3642	3385	3520
trade related 3/	105	1975	1730	1781	1148	674	673	920	2282	1551	1484	1510
other	833	1574	1409	1904	1883	1755	1945	2197	2534	2092	1701	2010
Total expenditure	9076	12882	14830	15856	16008	16449	18002	21143	21545	22393	23137	24443
Current expenditure	8051	11645	13127	13732	13868	13991	15458	17696	19247	20332	20973	22955
wages and salaries	743	1142	1224	1270	1334	1392	1501	1729	1699	1778	1850	2316
maintenance and operating	2467	3443	3755	4337	4229	4012	4715	4756	5154	5167	5748	5904
defense/security	773	1139	1240	1186	1248	1414	1528	1914	1883	1929	1944	2114
subsidies 4/	2776	3128	3947	3867	3921	3960	4160	5301	6268	6767	6119	6050
interest	183	422	445	362	303	258	277	369	519	795	1208	2125
social security paym.	1109	2392	2516	2710	2834	2955	3277	3627	3723	3895	4104	4446
Capital expenditure	1024	1237	1703	2124	2139	2458	2543	3447	2299	2062	2164	1488
investment	1024	1237	1703	2124	2139	2458	2543	3447	2299	2062	2164	1488
Surplus/deficit (-)	62	134	-87	335	240	198	-364	-1002	180	-589	-225	-395
Financing	-62	-133	87	-335	-240	-198	364	1002	-180	589	225	395
Foreign (net)	36	-45	-151	-174	-91	-76	359	586	-420	-455	-564	-616
repay. from foreign states	-	43	51	66	70	117	63	53	38	119	33	32
loans to foreign states	-70	-160	-110	-127	-96	-314	-17	-79	-86	-59	-63	-29
disburs. of foreign loans	183	250	75	94	144	359	577	890	235	201	177	171
repaym. of foreign loans	-77	-178	-167	-207	-210	-238	-264	-279	-607	-716	-690	-790
Domestic (net)	-98	-88	238	-161	-149	-122	5	416	240	1044	770	1011
Bank	-98	-88	238	-161	-149	-122	5	416	240	1044	770	1011
of which: NBB loans	-	-	300	-	-	-	-	400	-	869	880	-
Memorandum items	(In percent of GDP)											
Total revenue	...	50.5%	53.0%	55.8%	54.5%	52.6%	54.1%	58.5%	59.5%	56.9%	58.3%	60.1%
Tax revenue	...	36.7%	41.7%	43.1%	44.3%	44.9%	46.1%	49.5%	46.3%	47.4%	49.7%	51.3%
Nontax revenue	...	13.8%	11.3%	12.7%	10.2%	7.7%	8.0%	9.1%	13.2%	9.5%	8.6%	8.8%
Total expenditure	...	49.9%	53.3%	54.7%	53.7%	51.9%	55.2%	61.4%	59.0%	58.4%	58.9%	61.1%
Current	...	45.2%	47.2%	47.3%	46.5%	44.2%	47.4%	51.4%	52.7%	53.0%	53.4%	57.4%
Capital expenditure	...	4.8%	6.1%	7.3%	7.2%	7.8%	7.8%	10.0%	6.3%	5.4%	5.5%	3.7%
Surplus/deficit (-)	...	0.5%	-0.3%	1.2%	0.8%	0.6%	-1.1%	-2.9%	0.5%	-1.5%	-0.6%	-1.0%
GDP	...	25791	27818	29013	29815	31671	32595	34424	36531	38345	39285	40000

Sources: Ministry of Finance and IMF staff estimates.

Includes Republican budget, budgets of Organs of State Management, of Regional and Municipal People's Councils, and of the Social Security.

Net of contributions of the State as employer, which are not recorded as expenditure either.

Data are on a net basis for revenues from import price differences.

Including extra-budget expenditure of 409 million leva for agro-industries in 1988 financed by loan from NBB.



Table 5.3 Consolidated Revenues of the State Budget, 1975-90

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
											Prelim.	Budget
(In millions of Leva)												
Total revenue	9158	13008	14743	16191	16248	16647	17638	20137	21725	21804	22912	24048
Tax revenue	8200	9467	11604	12506	13217	14218	15021	17024	16910	18162	19527	20528
profit taxes	3749	2302	3276	4712	5151	6004	6252	6440	6910	8110	9186	9734
profit tax	3749	2302	3276	4712	5151	5641	5863	6034	6459	7559	8655	9197
nonfinancial enterprise	3137	1567	2372	3753	4207	4657	4760	4890	5324	6232	7275	7620
financial enterprises	613	735	904	959	944	984	1103	1144	1135	1327	1380	1578
tax on Develop. fund	-	-	-	-	-	364	389	406	451	551	530	537
income tax	594	945	1021	1092	1155	1198	1292	1372	1460	1538	1633	1721
tax on wages & salaries	645	868	938	1005	1062	1100	1185	1260	1343	1425	1512	1593
other	-51	77	83	88	93	98	107	113	117	113	121	129
turnover tax	2592	3431	4487	3676	3819	3892	4119	5672	4841	2121	1993	2132
excises	...	...	...	...	...	...	...	...	...	2322	2457	2433
customs duties	-	-	97	128	88	69	140	159	156	310	330	355
soc.sec.contributions 1/	1239	2753	2684	2857	2959	3006	3166	3325	3484	3628	3806	4027
Use of land tax	-	-	-	-	-	-	-	-	-	71	59	61
Property taxes	25	36	39	42	45	49	52	56	59	62	63	65
Nontax revenue	938	3541	3139	3685	3031	2429	2617	3113	4815	3642	3385	3520
trade related	105	1967	1730	1781	1148	674	673	916	2282	1551	1684	1510
import price differ. 2/	105	1363	1175	865	437	-	-	-	827	186	150	200
coefficient differences	-	-	-	124	258	61	125	387	621	1026	1221	804
import fees	-	-	-	-	-	-	-	-	633	65	13	-
price differences/barter	-	-	53	42	48	78	60	37	32	7	14	52
USSR compensation	-	575	391	608	360	371	251	180	39	55	63	53
interest	-	-	52	72	45	136	141	290	102	164	171	226
profit on sale currenc.	-	30	59	71	-	28	96	23	26	48	52	175
other	833	1574	1409	1904	1883	1755	1945	2197	2534	2092	1701	2010
fees (on individuals)	83	89	93	93	97	100	102	107	111	116	131	131
State fees	79	78	79	81	78	83	88	88	91	101	217	190
production related	417	881	723	931	1332	1232	1354	1464	1467	1063	1031	1440
current reserves funds	-	54	39	364	91	159	265	405	555	512	40	0
other	254	473	474	435	284	182	136	133	310	300	283	249
(In percent of GDP)												
Total revenue	-	50.4%	53.0%	55.8%	54.5%	52.6%	54.1%	58.5%	59.5%	56.9%	58.3%	60.1%
Tax revenue	-	36.7%	41.7%	43.1%	44.3%	44.9%	46.1%	49.5%	46.3%	47.4%	49.7%	51.3%
profit taxes	-	8.9%	11.8%	16.2%	17.3%	19.0%	19.2%	18.7%	18.9%	21.2%	23.4%	24.3%
turnover tax and excises	-	13.3%	16.1%	12.7%	12.8%	12.3%	12.6%	16.5%	13.3%	11.6%	11.3%	11.4%
income tax	-	3.7%	3.7%	3.8%	3.9%	3.8%	4.0%	4.0%	4.0%	4.0%	4.2%	4.3%
soc.sec.contributions	-	10.7%	9.6%	9.8%	9.9%	9.5%	9.7%	9.7%	9.5%	9.5%	9.7%	10.1%
Nontax revenue	-	13.7%	11.3%	12.7%	10.2%	7.7%	8.0%	9.0%	13.2%	9.5%	8.6%	8.8%
trade related	-	7.6%	6.2%	6.1%	3.9%	2.1%	2.1%	2.7%	6.2%	4.0%	4.3%	3.8%
other	-	6.1%	5.1%	6.6%	6.3%	5.5%	6.0%	6.4%	6.9%	5.5%	4.3%	5.0%
(In percent of total revenue)												
Total revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tax revenue	89.7%	72.8%	78.7%	77.2%	81.3%	85.4%	85.2%	84.5%	77.8%	83.3%	85.2%	85.4%
profit taxes	41.0%	17.7%	22.2%	29.1%	31.7%	36.1%	35.4%	32.0%	31.8%	37.2%	40.1%	40.5%
turnover tax and excises	28.4%	26.4%	30.4%	22.7%	23.5%	23.4%	23.4%	28.2%	22.3%	20.4%	19.4%	19.0%
income tax	6.5%	7.3%	6.9%	6.7%	7.1%	7.2%	7.3%	6.8%	6.7%	7.1%	7.1%	7.2%
soc.sec.contributions	13.6%	21.2%	18.2%	17.6%	18.2%	18.1%	17.9%	16.5%	16.0%	16.6%	16.6%	16.7%
Nontax revenue	10.3%	27.2%	21.3%	22.8%	18.7%	14.6%	14.8%	15.5%	22.2%	16.7%	14.8%	14.6%
trade related	1.2%	15.1%	11.7%	11.0%	7.1%	4.0%	3.8%	4.5%	10.5%	7.1%	7.3%	6.3%
other	9.1%	12.1%	9.6%	11.8%	11.6%	10.5%	11.0%	10.9%	11.7%	9.6%	7.4%	8.4%

Sources: Ministry of Finance and I.F. staff estimates.

1/ Net of contributions of the State as employer.

2/ Data are on the net basis.

Table 5.4 Consolidated Expenditures of the State Budget, 1975-90

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
											Prelim.	Budget
(In millions of Leva)												
Total expenditure	9076	12882	14830	15856	16008	16449	18002	21143	21545	22393	23137	24443
Current expenditure	8051	11645	13127	13732	13868	13991	15458	17696	19247	20332	20973	22955
wages and salaries	743	1162	1224	1270	1334	1392	1501	1729	1699	1778	1850	2316
maintenance and operating	2467	3403	3755	4337	4229	4012	4715	4756	5154	5167	5748	5904
defense/security	773	1139	1240	1186	1248	1414	1528	1914	1883	1929	1944	2114
subsidies	2776	3128	3947	3867	3921	3960	4160	5301	6268	6767	6119	6050
surplus payment to agri.	-	-	-	87	98	-	-	248	-	1760	1453	1708
State sector	-	-	-	-	-	-	-	248	-	1311	993	1211
private sector	-	-	-	87	98	-	-	-	-	230	211	176
mountain regions	-	-	-	-	-	-	-	-	-	219	249	321
unprofitable productions	527	1261	859	448	544	531	691	1073	1552	1790	1696	1394
input prices	891	386	1707	608	623	646	545	521	530	597	665	404
exports	1181	1090	728	1764	1804	1933	1778	1974	3127	1583	1201	1345
CMEA	1181	877	551	1032	1013	1025	979	1670	1032	1116	957	1152
convertible area	-	214	178	731	791	908	799	304	2095	466	344	193
imports	-	-	-	-	-	48	363	520	-	-	-	-
retail prices	177	392	472	621	587	523	487	560	579	630	630	558
others	-	-	180	339	265	278	297	406	480	407	474	642
interest	183	422	445	362	303	258	277	369	519	795	1208	2125
external	183	422	445	362	303	258	277	369	519	795	1208	1903
domestic	-	-	-	-	-	-	-	-	-	-	-	222
social security paym.	1109	2392	2516	2710	2834	2955	3277	3627	3723	3895	4104	4446
pensions	691	1551	1672	1862	1975	2085	2232	2412	2510	2682	2913	3225
assistance payments	418	841	845	848	860	870	1045	1214	1214	1213	1191	1221
Capital expenditure	1024	1237	1703	2124	2139	2458	2543	3447	2299	2062	2164	1488
investment	1024	1237	1703	2124	2139	2458	2543	3447	2299	2062	2164	1488
(In percent of GDP)												
Total expenditure	-	49.9%	53.3%	54.7%	53.7%	51.9%	55.2%	61.4%	59.0%	58.4%	58.9%	61.1%
Current expenditure	-	45.2%	47.2%	47.3%	46.5%	44.2%	47.4%	51.4%	52.7%	53.0%	53.4%	57.4%
wages and salaries	-	4.5%	4.4%	4.4%	4.5%	4.4%	4.6%	5.0%	4.7%	4.6%	4.7%	5.8%
maintenance and operating	-	13.2%	13.5%	14.9%	14.2%	12.7%	14.5%	13.8%	14.1%	13.5%	14.6%	14.8%
defense/security	-	4.4%	4.5%	4.1%	4.2%	4.5%	4.7%	5.6%	5.2%	5.0%	4.9%	5.3%
subsidies	-	12.1%	14.2%	13.3%	13.2%	12.5%	12.8%	15.4%	17.2%	17.6%	15.6%	15.1%
surplus payment to agri.	-	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.7%	0.0%	4.6%	3.7%	4.3%
unprofitable productions	-	4.9%	3.1%	1.5%	1.8%	1.7%	2.1%	3.1%	4.2%	4.7%	4.3%	3.5%
input prices	-	1.5%	6.1%	2.1%	2.1%	2.0%	1.7%	1.5%	1.5%	1.6%	1.7%	1.0%
exports	-	4.2%	2.6%	6.1%	6.0%	6.1%	5.5%	5.7%	8.6%	4.1%	3.1%	3.4%
imports	-	0.0%	0.0%	0.0%	0.0%	0.2%	1.1%	1.5%	0.0%	0.0%	0.0%	0.0%
retail prices	-	1.5%	1.7%	2.1%	2.0%	1.7%	1.5%	1.6%	1.6%	1.6%	1.6%	1.4%
others	-	0.0%	0.6%	1.2%	0.9%	0.9%	0.9%	1.2%	1.3%	1.1%	1.2%	1.6%
interest	-	1.6%	1.6%	1.2%	1.0%	0.9%	0.8%	1.1%	1.4%	2.1%	3.1%	5.3%
social security paym.	-	9.3%	9.0%	9.3%	9.5%	9.3%	10.1%	10.5%	10.2%	10.2%	10.4%	11.1%
pensions	-	6.0%	6.0%	6.4%	6.6%	6.6%	6.8%	7.0%	6.9%	7.0%	7.4%	8.1%
assistance payments	-	3.3%	3.0%	2.9%	2.9%	2.7%	3.2%	3.5%	3.3%	3.2%	3.0%	3.1%
Capital expenditure	-	4.8%	6.1%	7.3%	7.2%	7.8%	7.8%	10.0%	6.3%	5.4%	5.5%	3.7%
investment	-	4.8%	6.1%	7.3%	7.2%	7.8%	7.8%	10.0%	6.3%	5.4%	5.5%	3.7%
(In percent of total expenditure)												
Total expenditure	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Current expenditure	88.7%	90.4%	88.5%	86.6%	86.6%	85.1%	85.9%	83.7%	89.3%	90.8%	90.6%	93.9%
wages and salaries	8.2%	9.0%	8.3%	8.0%	8.3%	8.5%	8.3%	8.2%	7.9%	7.9%	8.0%	9.5%
maintenance and operating	27.2%	26.4%	25.3%	27.4%	26.4%	24.4%	26.2%	22.5%	23.9%	23.1%	24.8%	24.2%
defense/security	8.5%	8.8%	8.4%	7.5%	7.8%	8.6%	8.5%	9.1%	8.7%	8.6%	8.4%	8.6%
subsidies	30.6%	24.3%	26.6%	24.4%	24.5%	24.1%	23.1%	25.1%	29.1%	30.2%	26.4%	24.8%
surplus payment to agri.	0.0%	0.0%	0.0%	0.6%	0.6%	0.0%	0.0%	1.2%	0.0%	7.9%	6.3%	7.0%
unprofitable productions	5.8%	9.8%	5.8%	2.8%	3.4%	3.2%	3.8%	5.1%	7.2%	8.0%	7.3%	5.7%
input prices	9.8%	3.0%	11.5%	3.8%	3.9%	3.9%	3.0%	2.5%	2.5%	2.7%	2.9%	1.7%
exports	13.0%	8.5%	4.9%	11.1%	11.3%	11.8%	9.9%	9.3%	14.5%	7.1%	5.2%	5.5%
imports	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	2.0%	2.5%	0.0%	0.0%	0.0%	0.0%
retail prices	1.9%	3.0%	3.2%	3.9%	3.7%	3.2%	2.7%	2.6%	2.7%	2.8%	2.7%	2.3%
others	0.0%	0.0%	1.2%	2.1%	1.7%	1.7%	1.9%	2.2%	1.8%	2.0%	2.0%	2.6%
interest	2.0%	3.3%	3.0%	2.3%	1.9%	1.6%	1.5%	1.7%	2.4%	3.5%	5.2%	8.7%
social security paym.	12.2%	18.6%	17.0%	17.1%	17.7%	18.0%	18.2%	17.2%	17.3%	17.4%	17.7%	18.2%
pensions	7.6%	12.0%	11.3%	11.7%	12.3%	12.7%	12.4%	11.4%	11.6%	12.0%	12.6%	13.2%
assistance payments	4.6%	6.5%	5.7%	5.4%	5.4%	5.3%	5.8%	5.7%	5.6%	5.4%	5.1%	5.0%
Capital expenditure	11.3%	9.6%	11.5%	13.4%	13.4%	14.9%	14.1%	16.3%	10.7%	9.2%	9.4%	6.1%
investment	11.3%	9.6%	11.5%	13.4%	13.4%	14.9%	14.1%	16.3%	10.7%	9.2%	9.4%	6.1%

Sources: Bulgarian authorities, and IMF staff estimates.  
1/ Data are on a net basis.

Table 6.1 Monetary Survey 1/

(in millions of leva)

	1986	1987	1988	1989	September	
					1989	1990
<b>FOREIGN ASSETS (NET)</b>	-3240	-5184	-5987	-6373	-6482	-27414
Foreign assets	3473	2913	3096	2822	2931	4993
of which:						
in convertible currencies	2566	1627	2245	1883	2040	3703
international reserves 2/	1465	1030	1381	887	1042	794
other assets in convertible currencies	1101	597	864	996	998	2909
in non-convertible currencies	862	1239	798	869	836	1200
Foreign liabilities	-6713	-8097	-9083	-9195	-9413	-32407
in convertible currencies	-5233	-5873	-7700	-8638	-8481	-30530
in non-convertible currencies	-1480	-2224	-1383	-557	-931	-1877
<b>NET DOMESTIC ASSETS</b>	37974	42185	46830	51077	49792	76869
<b>DOMESTIC CREDIT</b>	39867	44863	49707	54480	53310	66251
<b>CLAIMS ON GENERAL GOVERNMENT, NET</b>	1271	2427	4690	5876	5042	12632
Claims on Central Government, net	1026	2209	4482	5587	4952	12201
state budget	1026	1737	1585	1482	1206	7880
in leva	...	...	...	-477	...	1106
in convertible currencies	...	...	...	1959	...	6774
SCIF 3/	0	472	2897	4105	3746	4321
Claims on State and Local Government, net	245	218	208	289	90	431
<b>CLAIMS ON NON-GOVERNMENT SECTORS</b>	38596	42436	45017	48604	48268	53619
<b>NONFINANCIAL PUBLIC ENTERPRISES</b>	34794	38217	40383	43543	43446	47428
in leva	34175	36892	39002	41542	41750	41888
in convertible currencies	619	1325	1381	2001	1696	5540
<b>PRIVATE SECTOR</b>	3802	4219	4634	5061	4822	6191
housing and construction	2937	3252	3564	3836	3687	4400
other	865	967	1070	1223	1135	1791
<b>OTHER ITEMS (NET)</b>	-1893	-2678	-2877	-3403	-3518	10618
capital accounts	-3007	-3414	-3889	-4986	-4238	-9105
valuation adjustments	..	..	..	..	..	19908
other items, net	1114	736	1012	1583	720	-185
<b>BROAD MONEY</b>	34734	37001	40843	44704	43310	49455
<b>MONEY (M1)</b>	27097	29764	33103	36051	35102	39778
Currency outside banks	4738	5143	6074	7015	7006	6683
Demand deposits	22359	24621	27029	29036	28096	33095
in leva	21334	23698	25907	27572	26749	28683
in socialist currencies	239	281	359	469	422	473
in other currencies	586	642	763	995	925	3939
<b>QUASI-MONEY</b>	7313	6838	7373	8245	7860	8725
Time deposits	1250	476	589	973	809	1127
Savings deposits	4371	4673	5018	5282	5141	5433
Car deposits	1227	1352	1501	1618	1579	1640
Other deposits	458	326	208	313	271	259
Foreign currency deposits	7	11	57	59	60	266
<b>IMPORT AND RESTRICTED DEPOSITS</b>	324	399	367	408	348	952
socialist currencies	85	105	104	109	111	104
other currencies	239	294	263	299	237	848

Source: National Bank of Bulgaria; and IMF staff estimates.

1/ Foreign currency denominated items valued at the official exchange rates.

2/ As held by the Bulgarian Foreign Trade Bank.

3/ State Investment Credit Fund.

Table 6.2 Sources of Monetary Expansion, 1987-September 1990 1/

(In percent of broad money at the beginning of the period)

	1987	1988	1989	September 1990 2/
Net credit to general government	3.3%	6.1%	2.9%	12.0%
Credit to non-government sectors	11.1%	7.0%	8.8%	-0.2%
non-financial public enterprises	9.9%	5.9%	7.7%	-2.5%
private sector	1.2%	1.1%	1.0%	2.3%
Net foreign assets	-5.6%	-2.2%	-0.9%	-8.8%
Other items, net	-2.3%	-0.5%	-1.3%	-0.1%
Rate of change of broad money	6.5%	10.4%	9.5%	2.8%

Source: National Bank of Bulgaria; and staff estimates.

1/ Foreign currency denominated items valued at the official exchange rates.

2/ January-September 1990, with December 1989 stocks revalued at the basic

Table 6.3 Destination of Credit, 1980-89

(millions of leva, end of period stocks)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total credit from banks 1/	25,951	27,185	29,603	31,375	33,484	34,512	36,813	39,347	41,216	43,942
By form of organization										
socialist enterprises	21,532	22,519	24,614	26,117	27,725	28,356	30,288	32,475	33,928	36,106
working capital	11,346	12,022	13,817	14,773	15,834	15,889	17,272	18,934	19,924	21,465
investment credit from banks	10,186	10,497	10,797	11,344	11,891	12,467	13,016	13,541	14,004	14,641
cooperatives	2,680	2,713	2,726	2,661	2,772	2,731	2,759	2,690	2,663	2,786
working capital	585	614	842	902	930	934	1,007	989	958	959
investment credit	2,095	2,099	1,884	1,759	1,842	1,797	1,752	1,701	1,705	1,827
nonsocialist entities	--	--	--	--	--	--	--	--	--	4
working capital	--	--	--	--	--	--	--	--	--	2
investment credit	--	--	--	--	--	--	--	--	--	2
households	1,739	1,953	2,263	2,597	2,987	3,425	3,766	4,182	4,625	5,046
mortgages	1,300	1,484	1,739	2,008	2,303	2,645	2,936	3,250	3,563	3,835
other	439	469	524	589	684	780	830	932	1,062	1,211
By type of credit and sector										
Working capital	11,931	12,636	14,659	15,675	16,764	16,853	18,279	19,923	20,882	22,426
mining	81	129	188	201	162	129	114	111	141	189
engineering and electronics	1,054	1,089	1,764	1,872	2,352	2,633	2,811	3,032	4,160	4,801
light industry	293	342	431	507	550	631	696	669	712	716
metallurgy	249	348	327	355	422	589	570	545	559	564
chemicals	335	328	251	281	372	410	389	599	627	831
food processing	1,628	1,720	2,259	2,135	2,218	2,077	2,225	2,107	2,051	2,137
other industries	756	973	757	455	726	543	882	1,003	576	785
nonindustrial activities	7,535	7,707	8,682	9,869	9,962	9,841	10,592	11,857	12,056	12,403
agricultural cooperatives	1,578	1,796	2,281	2,656	3,060	2,744	2,946	3,048	2,679	2,665
other cooperatives	5,957	5,911	6,401	7,213	6,902	7,097	7,646	8,809	9,377	9,738
investment credit from banks	12,281	12,596	12,681	13,103	13,733	14,264	14,768	15,242	15,709	16,470
energy generation	1,669	1,774	1,843	2,137	2,442	2,945	2,915	3,000	2,999	3,201
machine building	2,025	2,024	2,302	2,662	3,005	3,185	3,473	4,013	4,592	4,368
light industry	285	239	206	169	128	124	124	186	240	401
metallurgy	1,382	1,255	1,354	1,514	1,659	1,687	1,701	1,666	1,655	1,720
chemicals	1,212	1,249	1,219	1,136	968	906	1,037	1,098	1,187	1,644
food processing	1,073	987	925	912	846	706	664	683	715	781
other industries	1,154	1,113	1,066	1,003	1,022	933	960	1,039	1,016	1,026
nonindustrial activities	3,481	3,955	3,766	3,570	3,663	3,778	3,894	3,557	3,305	3,329
agricultural cooperatives	2,081	2,088	1,875	1,747	1,831	1,782	1,723	1,660	1,665	1,762
other cooperatives	1,400	1,867	1,891	1,823	1,832	1,996	2,171	1,897	1,640	1,567
mortgages	1,300	1,484	1,739	2,008	2,303	2,645	2,936	3,250	3,563	3,835
consumer credit	439	469	524	589	684	780	830	932	1,062	1,211
investment credit from SICF 2/	--	--	--	--	--	--	--	2,008	4,111	5,278
energy generation	--	--	--	--	--	--	--	1,009	1,967	2,781
metallurgy and mining	--	--	--	--	--	--	--	298	569	744
agricultural construction and irrigation	--	--	--	--	--	--	--	205	305	340
heavy machine building	--	--	--	--	--	--	--	101	320	320
housing, indust.construction	--	--	--	--	--	--	--	72	187	278
other	--	--	--	--	--	--	--	403	763	815

Source: IMF staff compilation based on data provided by the National Bank of Bulgaria.

1/ Total differs from monetary survey due to different sources. Also recent updates of Monetary Survey

Data has not been incorporated into this table.

2/ State Investment Credit Fund.

Table 6.4 Interest Rates on Bank Deposits, 1986-May 1990

	Value of Deposits Deposits in Billions of leva 1989	End of period (in percent per annum)					NOV 1990
		1986	1987	1988	1989		
<b>Deposits with banks 1/</b>							
Socialist sector	13.1						
Demand deposits 2/	12.5	1.0	1.0	1.0	1.0	1.0	
Time deposits	0.6						
1-6 months	...	1.25	1.25	n.a	n.a	n.a	
3 months	...	n.a	n.a	2.5	2.5	2.5	
Over 3 months	...	n.a	n.a	3.5	3.5	3.5	
6-12 months	...	1.5	1.5	n.a	n.a	n.a	
1-2 years	...	2.0	2.0	n.a	n.a	n.a	
2-3 years	...	2.5	2.5	n.a	n.a	n.a	
3-4 years	...	3.0	3.0	n.a	n.a	n.a	
4-5 years	...	3.5	3.5	n.a	n.a	n.a	
5-6 years	...	4.0	4.0	n.a	n.a	n.a	
6-7 years	...	5.0	5.0	n.a	n.a	n.a	
7-8 years	...	6.0	6.0	n.a	n.a	n.a	
Over 8 years	...	7.5	7.5	n.a	n.a	n.a	
<b>Insurance deposits</b>							
mathematical reserve	0.5	4.0	4.0	4.0	4.0	4.0	
other	0.2	7.5	7.5	3.5	3.5	3.5	
<b>Interbank deposits</b>							
with NBB	...						
Demand deposits	...	2.0	2.0	2.0	2.0	2.0	
Three months deposits	...	n.a	n.a	2.75	2.75	2.75	
Deposits over 3 months	...	n.a	n.a	3.75	3.75	3.75	
<b>Foreign currency deposits 3/</b>							
demand deposits	1.9						
time deposits, 1 year	1.5	2.0	2.0	2.0	2.0	2.0	
time deposits, 2 years	...	3.0	3.0	3.0	3.0	3.0	
time deposits, 3 years	...	3.5	3.5	3.5	3.5	3.5	
	...	4.0	4.0	4.0	4.0	4.0	
<b>Government deposits</b>							
State budget	3.9						
Local Governments	3.9	-	-	1.0	1.0	1.0	
	-	-	-	0.5	0.5	0.5	
<b>Deposits with SSB</b>							
demand deposits	22.7						
savings deposits	2.6	1.0	1.0	1.0	1.0	1.0	
general	15.6						
childrens'	13.2	1.0	1.0	1.0	1.0	1.0	
advance deposits for	2.4	2.0	2.0	2.0	2.0	2.0	
car purchases	1.6	-	-	-	-	-	
housing deposits	2.9	2.0	2.0	2.0	2.0	2.0	

Source: National Bank of Bulgaria.

1/ The NBB, BPTB, and commercial banks.

2/ Until June 1988 up to one month, since July 1988 up to three months.

3/ In Currency Leva, rubles or Cuban pesos: Accounts in U.S. dollars and Swiss francs (or Deutsche mark) that were introduced in January 1990 earn 5 3/4 percent (5 5/8 percent) for demand deposits and 6 1/4 percent (6 1/8 percent) for time deposits of at least 1 year.

Table 6.5 Interest Rates on Bank Credit, 1986-Nov 1990

	Value of Credits (in billions of leva)		End of period (in percent per annum)			
	1989	1986	1987	1988	1989	Nov 1990
<b>Credits to socialist sector</b>	43.5	4.6	4.4	4.5	4.7	4.7
Investment credit	...	4.5	3.7	3.8	3.7	3.7
Working capital	...	4.9	4.9	4.9	5.4	5.4
<b>Credits to households</b>	5.1	-	-	-	-	-
Installment purchases of goods and services	1.2	3.5	3.5	3.5	3.5	3.5
Housing	3.8	2.0	2.0	2.0	2.0	2.0
<b>Credits for financing state budget deficit 1/</b>	9.6					
short-term	...					
State budget	...	-	-	1.0	1.0	1.0
Local governments	0.3	-	-	0.5	0.5	0.5
longer term	9.3					
from NBB	5.6					
old loans	...	--	2.5	2.5	2.5	2.5
new loans in 1989	...	--	--	--	3.5	3.5
from BFTB 2/	1.5	--	2.5	2.5	2.5	2.5
from SSB	2.3	2.0	2.0	2.0	2.0	2.0
<b>Basic interest rate 3/</b>	...	4.0	4.0	4.5 /4	4.5	4.5

Source: National Bank of Bulgaria

1/ including lending to State Investment Credit Fund.

2/ On 1987 loan related to coefficient differences a rate of 2 percent applies.

3/ Loans from NBB to other financial institutions.

4/ Until June 1988 4.0 percent.

Table 7.1 Agricultural production  
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 (In millions of leva, current prices)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Total gross agricultural production</b>	<b>7153.8</b>	<b>8354.5</b>	<b>8963.7</b>	<b>8454.8</b>	<b>9341.9</b>	<b>8279.4</b>	<b>9255.2</b>	<b>9094.4</b>	<b>9296.4</b>	<b>9701.3</b>
<b>Crop production</b>	<b>3396.0</b>	<b>4025.2</b>	<b>4407.4</b>	<b>3698.3</b>	<b>4427.8</b>	<b>3475.7</b>	<b>4243.9</b>	<b>3994.4</b>	<b>4071.7</b>	<b>4504.9</b>
of which:										
Grains	1082.8	1212.9	1427.9	1151.2	1385.1	832.0	1265.7	1133.8	1245.3	1534.7
Fodder and root crops	290.5	336.6	367.3	365.7	383.8	319.7	402.5	373.2	395.2	429.6
Potatoes	71.2	86.3	127.2	119.8	124.3	136.3	157.8	100.2	119.6	200.1
Vegetables	450.5	551.2	550.1	500.8	623.0	593.7	643.1	746.6	762.8	700.1
Fruits(without grapes)	247.8	321.5	312.2	330.7	337.9	299.0	325.7	298.3	303.4	388.7
Grapeo-fruit	259.8	348.3	352.7	305.6	351.6	306.1	310.3	304.2	296.9	239.5
Tobacco	488.0	617.7	704.0	501.2	666.1	593.9	612.7	653.3	535.1	403.4
<b>Animal production</b>	<b>3625.7</b>	<b>4122.6</b>	<b>4326.7</b>	<b>4491.9</b>	<b>4617.7</b>	<b>4474.1</b>	<b>4636.1</b>	<b>4599.3</b>	<b>4628.5</b>	<b>4558.9</b>
of which:										
Livestock for slaughter	1776.6	2102.4	2239.3	2333.1	2468.2	2412.1	2499.5	2501.1	2478.7	2476.5
of which:										
Cattle	503.0	539.8	591.2	604.1	628.1	629.7	609.2	617.6	603.1	592.3
Pigs	644.5	782.8	830.3	875.2	899.4	892.9	986.6	979.5	994.9	1038.0
Live stock for slaughter										
from snaller cattle	404.4	511.9	547.9	566.7	618.7	578.6	570.8	569.7	533.8	498.0
from poultry	203.4	250.3	258.5	275.5	310.9	301.2	324.4	325.4	322.1	335.7
Milk	888.6	1092.3	1162.8	1208.3	1220.2	1189.2	1217.6	1206.8	1212.9	1178.2
Eggs	229.8	249.0	252.6	271.2	283.2	311.3	309.0	323.0	322.3	312.8
Agricultural services	132.1	206.7	229.6	264.6	296.4	329.6	375.2	500.7	596.2	637.5
<b>Material inputs</b>	<b>3769.8</b>	<b>4168.9</b>	<b>4443.9</b>	<b>4590.5</b>	<b>4830.1</b>	<b>4854.3</b>	<b>5298.0</b>	<b>5382.3</b>	<b>5584.4</b>	<b>5903.1</b>
of which:										
Crop production	1463.6	1660.8	1791.3	1819.8	1870.6	1848.6	2014.5	1942.7	1966.2	2096.6
Animal production	2156.7	2297.3	2416.7	2519.3	2688.5	2686.5	2903.8	3005.5	3139.3	3308.6
Agricultural services	149.5	210.8	235.9	251.4	271.0	319.2	379.7	434.1	478.9	497.7
<b>Net material product:</b>	<b>3384.0</b>	<b>4185.6</b>	<b>4519.8</b>	<b>3864.3</b>	<b>4511.8</b>	<b>3425.1</b>	<b>3957.2</b>	<b>3712.1</b>	<b>3712.0</b>	<b>3798.4</b>
of which:										
Crop production	1932.4	2364.4	2616.1	1878.5	2557.2	1627.1	2229.4	2051.7	2105.5	2408.3
Animal production	1469.0	1825.3	1910.0	1972.6	1929.2	1787.6	1732.3	1593.8	1489.2	1250.3
Agricultural services	-17.4	-4.1	-6.3	13.2	25.4	10.4	-4.5	66.6	117.3	139.8

Source: Central Statistical Office



Table 7.2 Agricultural production 1/  
(in millions of leva fixed prices)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Total gross agricultural production</b>	<b>3554.5</b>	<b>4982.1</b>	<b>7753.0</b>	<b>8278.8</b>	<b>8721.5</b>	<b>8143.5</b>	<b>8729.0</b>	<b>7693.8</b>	<b>8593.8</b>	<b>8291.7</b>	<b>8366.4</b>	<b>8468.0</b>
<b>Crop production</b>	<b>2274.2</b>	<b>2754.5</b>	<b>3585.1</b>	<b>3949.5</b>	<b>4262.0</b>	<b>3520.9</b>	<b>4026.2</b>	<b>3120.6</b>	<b>3827.7</b>	<b>3491.0</b>	<b>3479.9</b>	<b>3663.2</b>
of which:												
Grains	841.3	904.0	1075.4	1211.3	1435.3	1137.4	1301.7	744.5	1204.4	1036.3	1088.4	1313.2
Fodder and root crops	218.2	239.2	273.7	284.4	287.5	311.7	318.5	277.7	335.5	311.3	297.7	322.0
Potatoes	30.2	38.6	79.9	106.6	124.0	112.9	110.5	116.3	129.9	83.5	94.5	146.3
Vegetables	255.3	289.7	483.7	535.8	524.6	436.9	502.8	456.5	475.4	543.2	545.9	490.2
Fruits(without grapes)	-	176.8	275.5	309.1	279.6	300.6	306.7	278.4	281.6	262.0	268.4	321.2
Grapes-fruit	-	186.8	290.8	352.7	380.3	305.1	341.6	276.2	312.6	287.2	281.0	326.4
Tobacco	-	477.0	562.4	612.0	688.4	511.0	626.2	567.8	582.8	605.0	516.0	366.4
<b>Animal production</b>	<b>1240.2</b>	<b>2106.7</b>	<b>4035.8</b>	<b>4122.6</b>	<b>4229.9</b>	<b>4358.0</b>	<b>4406.4</b>	<b>4277.9</b>	<b>4437.3</b>	<b>4353.6</b>	<b>4372.2</b>	<b>4255.5</b>
of which:												
Livestock for slaughter	589.4	1127.9	2099.7	2154.1	2236.6	2296.3	2369.7	2329.1	2410.1	2387.1	2410.1	2432.0
of which:												
Cattle	141.1	297.2	551.8	538.9	586.3	597.1	602.1	602.5	585.8	584.4	573.5	564.4
Pigs	181.4	429.4	770.2	793.1	792.6	814.8	823.1	818.9	902.4	902.7	955.6	993.0
Live stock for slaughter:												
from smaller cattle	115.6	206.9	509.7	554.7	584.3	599.8	650.8	628.8	629.6	603.8	559.2	534.3
from poultry	148.9	187.3	247.1	249.4	260.6	272.3	281.9	268.6	283.3	286.4	311.1	320.0
Milk	296.3	437.3	1056.1	1092.3	1152.1	1201.7	1221.5	1196.5	1225.2	1214.1	1203.7	1172.2
Eggs	105.1	138.8	248.3	249.0	254.2	270.0	276.7	283.7	292.5	292.4	293.1	278.3
Agricultural services	40.1	120.9	132.1	206.7	229.6	264.6	296.4	295.3	328.8	447.1	514.3	549.3
<b>Material inputs</b>	<b>1905.0</b>	<b>2387.4</b>	<b>3832.4</b>	<b>4170.0</b>	<b>4374.7</b>	<b>4506.8</b>	<b>4667.5</b>	<b>4469.7</b>	<b>4658.9</b>	<b>4932.7</b>	<b>5065.0</b>	<b>5326.4</b>
of which:												
Crop production	925.2	946.9	1477.5	1630.5	1714.9	1804.9	1819.1	1728.6	1765.4	1832.6	1808.5	1936.2
Animal production	940.6	1344.6	2202.7	2328.7	2423.9	2450.5	2577.4	2436.3	2562.8	2678.8	2788.6	2903.5
Agricultural services	39.2	95.9	152.2	210.8	235.9	251.4	271.0	304.8	330.7	421.3	467.9	486.7
<b>Net material product:</b>	<b>1649.5</b>	<b>2594.7</b>	<b>3920.6</b>	<b>4108.8</b>	<b>4346.8</b>	<b>3636.7</b>	<b>4061.5</b>	<b>3224.1</b>	<b>3934.9</b>	<b>3359.0</b>	<b>3301.4</b>	<b>3141.0</b>
of which:												
Crop production	1349.0	1807.6	2107.6	2319.0	2547.1	1716.0	2207.1	1392.0	2062.3	1658.4	1671.4	1727.0
Animal production	299.6	762.1	1833.1	1793.9	1806.0	1907.5	1829.0	1841.6	1874.5	1674.8	1583.6	1352.0
Agricultural services	0.9	25.0	-20.1	-4.1	-6.3	13.2	25.4	-9.5	-1.9	25.8	46.4	62.6

Source: Central Statistical Office  
1/1970 by prices of 1962;1975 by prices of 1971;since 1980 by prices of 1982

Table 7.3 Production and average yield of major agricultural crops

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Production-thousand tons												
Wheat	3031.7	2996.1	3046.6	4442.0	4912.6	3608.4	4835.6	3067.5	4326.3	4148.6	4743.1	5425.0
Rye	27.9	18.2	27.9	34.0	33.9	31.4	37.3	49.0	51.9	48.7	61.3	52.1
Maize	2375.1	2822.5	2255.5	2400.5	3417.7	3114.8	2993.9	1350.4	2848.1	1857.6	1557.2	2265.4
Barley	1167.0	1699.0	1375.5	1406.0	1435.9	1047.2	1279.2	799.6	1144.2	1091.4	1312.7	1572.1
Oats	98.3	56.1	53.5	62.1	50.5	29.9	24.7	40.6	41.5	41.4	53.3	107.3
Soubeans	7.9	80.1	107.4	105.1	116.1	82.5	71.5	36.8	53.8	32.7	17.0	21.5
Sunflower seed	406.9	426.3	380.0	457.2	510.9	454.2	461.6	364.7	488.7	410.3	374.3	458.4
Sugar beets	1714.1	1758.2	1414.3	1136.3	1583.5	746.0	1132.6	823.9	869.5	736.5	626.1	966.4
Tobacco leaves-oriental	111.7	140.8	102.6	111.9	126.3	92.3	112.9	101.5	106.7	108.5	90.0	65.2
Cottonseed	36.0	31.6	11.7	12.7	20.1	17.0	14.5	14.1	18.1	19.8	13.0	12.8
Tomatoes	684.7	568.7	800.8	881.0	821.0	616.5	873.1	750.8	726.8	798.4	775.1	837.3
Pepper-green	227.8	233.4	233.3	257.1	240.7	229.0	236.2	211.6	206.6	224.2	225.9	174.7
Potatoes	373.7	317.8	300.9	403.1	468.8	426.8	417.7	439.3	491.5	315.7	357.7	553.5
Apples	363.1	329.3	394.3	433.1	425.8	467.6	526.0	336.1	563.3	339.2	334.5	457.9
Peaches	166.7	146.5	112.9	106.4	93.9	103.9	82.0	72.7	56.4	58.0	62.5	98.6
Cherries	54.9	52.1	55.1	72.5	49.6	67.6	71.4	75.4	83.8	86.2	72.8	82.9
Grapes	1039.8	885.4	951.5	1126.2	1246.2	1000.2	1119.7	905.4	923.6	942.7	922.3	742.9
in which: wine grapes	620.9	552.8	745.4	876.6	996.9	802.5	892.9	717.4	727.9	749.4	731.5	586.7
Average yield-kg/dka												
Wheat	299.0	328.7	397.3	430.0	463.4	319.4	429.1	287.3	383.8	382.0	401.1	476.5
Rye	125.5	108.7	141.0	126.0	145.4	121.8	140.6	149.2	165.4	166.3	182.9	203.6
Maize	372.7	431.6	384.5	421.5	548.4	519.1	550.4	306.8	493.5	371.8	316.9	399.9
Barley	289.1	295.5	322.9	368.0	407.7	323.6	405.6	307.3	360.1	369.5	379.5	436.3
Oats	137.9	111.7	129.4	135.8	115.5	87.0	104.5	138.8	144.4	147.9	191.5	269.6
Soubeans	81.6	218.4	114.1	111.7	168.8	128.1	99.8	51.7	105.1	91.5	71.6	99.8
Sunflower seed	145.8	179.0	153.4	175.2	201.0	171.5	181.7	136.3	191.1	153.8	156.8	189.7
Sugar beets	3095.1	2395.0	2669.2	2152.7	2726.3	2427.0	2233.9	1679.0	2026.6	1879.2	1607.8	2457.6
Tobacco leaves-oriental	102.9	132.0	111.5	124.5	143.0	100.5	128.9	118.3	123.8	142.2	124.3	108.4
Cottonseed	85.9	119.4	94.7	99.7	157.8	135.0	125.6	97.8	124.6	144.1	108.5	113.9
Tomatoes	2761.6	2039.2	2860.6	3006.7	2941.3	2073.9	2887.6	2461.4	2372.7	2646.8	2541.0	2718.3
Pepper-green	1719.7	1694.9	1538.4	1551.4	1455.5	1390.2	1404.2	1267.5	1214.1	1409.4	1440.5	1243.4
Potatoes	1178.2	1045.7	854.1	1095.6	1151.2	1034.0	1049.0	1088.0	1230.9	854.8	972.5	1368.1
Apples	723.7	894.8	1137.5	1335.8	1261.2	1415.7	1570.2	1001.6	1748.9	1094.3	1119.7	1668.6
Peaches	1009.6	1273.0	1127.8	1087.8	977.3	1110.8	844.9	731.1	714.5	740.4	706.2	1060.9
Cherries	391.8	352.8	235.6	374.0	167.3	323.4	329.3	346.8	417.6	414.1	331.0	391.1
Grapes	521.6	454.4	558.6	683.5	770.1	609.1	686.1	556.2	584.6	596.9	579.6	461.4
in which: wine grapes	503.8	427.0	561.1	660.1	756.9	604.1	675.3	548.9	576.0	595.0	574.1	455.1

Source: Central Statistical Office

**Table 7.4 Net Product of Agriculture**  
 -----  
 (Millions of leva)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Current prices										
<b>Total</b>	<b>3384.0</b>	<b>4185.6</b>	<b>4519.8</b>	<b>3864.3</b>	<b>4511.8</b>	<b>3425.1</b>	<b>3957.2</b>	<b>3712.1</b>	<b>3712.0</b>	<b>3798.2</b>
State enterprises	2167.8	2586.0	2800.2	2123.5	2642.6	1631.7	2078.5	1861.2	1908.3	1994.1
Cooperative enterprises	62.5	68.6	71.0	24.4	4.2	5.3	6.8	4.2	5.3	3.9
Subsidiary and personal plots of population and private enterprises	1153.7	1531.0	1648.6	1716.4	1865.0	1788.1	1871.9	1846.7	1798.4	1800.2
Constant prices - 1982										
<b>Total</b>	<b>3920.6</b>	<b>4108.0</b>	<b>4346.8</b>	<b>3636.7</b>	<b>4071.7</b>	<b>3224.1</b>	<b>3934.9</b>	<b>3359.0</b>	<b>3301.4</b>	<b>3141.6</b>
State enterprises	2402.1	2556.6	2737.8	2049.9	2409.6	1662.7	2305.3	1798.4	1651.1	1506.5
Cooperative enterprises	68.3	61.3	66.9	21.4	6.3	7.4	6.7	3.5	4.3	3.7
Subsidiary and personal plots of population and private enterprises	1450.2	1490.9	1542.1	1565.4	1645.6	1554.0	1622.9	1557.1	1646.0	1631.4

Source: Central Statistical Office

Table 8.1 Industrial production

	1970	1975	1980	1985	1986	1987	1988	1989	1986	1987	1988	1989
	(In millions of leva, fixed prices)						(in millions of leva, current prices)					
Fuel	698.3	980.5	3997.1	4479.7	4607.0	4848.4	4942.8	4944.9	5797.1	5447.6	4925.5	4972.9
Power	379.4	474.6	1081.1	1462.8	1487.6	1975.6	1908.8	1877.2	2112.2	2357.8	2439.3	2329.0
Iron metallurgy	447.9	740.6	1310.5	1454.4	1546.1	1562.3	1582.1	1545.8	1547.5	1562.7	1627.9	1588.5
Nonferrous metals	484.0	.	1008.3	1196.3	1203.0	1186.7	1231.8	1478.0	1205.5	1210.3	1393.9	1688.0
Chemical and rubber	1192.5	1725.8	3098.7	4175.3	4406.4	4467.7	4582.6	5215.6	4378.3	4475.6	4863.3	5265.5
Machinery, electrotechnical and metalworks (including plastics)	3071.6	5501.1	7906.2	12208.4	12537.9	14249.2	15469.7	18892.6	12494.3	14261.5	15425.8	19313.8
Construction parts	533.7	823.2	1657.5	1819.7	1934.7	1866.3	1828.6	1731.3	1961.8	1917.5	1881.7	2043.3
Wood processing	561.7	804.3	1212.3	1413.8	1416.5	1464.3	1506.6	1492.4	1432.2	1474.1	1510.0	1594.9
Paper and cellulose	160.9	305.3	486.3	593.5	585.6	587.0	616.8	589.7	587.1	588.5	667.7	638.6
Glass, ceramics and porcelain	142.2	203.8	344.5	379.0	381.7	400.5	405.5	393.5	385.3	401.9	465.7	471.6
Textile	1565.2	1957.6	2398.1	2703.4	2782.3	2912.3	3047.5	3138.7	2788.7	2908.1	3041.7	3210.1
Clothing	714.5	845.8	893.7	1161.2	1267.4	1239.5	1315.7	1343.6	1272.6	1283.8	1285.6	1388.1
Leather production	316.6	436.4	525.7	712.9	748.4	774.1	840.2	860.1	756.5	786.4	844.1	1022.8
Print	79.5	107.3	208.9	241.0	242.5	243.6	250.6	273.3	242.9	246.7	279.4	318.1
Food, beverages frozen foods, spring water and tobacco products	4475.2	6106.3	10743.4	12535.7	12629.0	12528.9	12670.4	12388.0	12677.4	12808.4	13265.7	13733.2
Other	1510.0	3085.6	3032.4	4924.9	6124.8	6845.1	6766.3	2630.0	6126.0	6953.3	6763.0	2642.8
Total gross output of which:	16333.2	24098.2	39904.7	51462.0	53900.9	57151.5	58966.0	58794.7	55965.4	58684.2	60680.3	62226.2
Intermediate and capital goods												
Consumer goods												
Material inputs	10816.9	16544.8	29218.0	36508.1	38091.6	40475.5	41926.0	42203.4	39288.6	42034.5	43592.0	44601.7
Net material production	5516.3	7553.4	10686.7	14953.9	15809.3	16676.0	17040.0	16591.3	16676.8	16649.7	17088.3	17624.5

Source: Central Statistical Office

1) Including nonferrous metals

Table 8.2 Net Industrial production

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1986	1987	1988	1989
	(in millions of leva, fixed prices)										(in millions of leva, current prices)			
Fuel	1536.1	1574.6	1594.7	1633.4	1670.0	1744.4	1964.5	1507.8	1570.5	1492.5	2985.6	1856.3	1747.5	1746.3
Power	130.7	140.7	152.8	175.4	165.6	106.8	145.3	492.0	372.2	406.7	542.9	506.5	535.0	488.3
Iron metallurgy	124.5	137.5	138.5	163.4	169.4	180.3	163.3	124.2	81.6	14.2	83.7	43.1	39.3	-54.0
Nonferrous metals	175.8	178.8	179.0	178.2	176.8	161.7	111.4	132.4	63.8	105.6	64.9	106.0	128.2	201.2
Chemical and rubber	809.5	851.1	1004.3	1131.8	1275.5	1326.2	1356.4	1264.4	1599.6	2051.8	1279.3	1165.5	1316.8	1393.7
Machinery, electrotechnical and metalworks (including plastics)	2571.2	2801.2	3154.2	3568.4	3835.7	4302.3	4309.1	5083.1	5424.4	6724.9	4106.5	4910.0	5180.8	6486.2
Construction parts	326.0	350.0	380.1	423.1	427.1	367.9	476.1	380.5	385.6	284.6	406.2	321.8	328.8	462.5
Wood processing	456.7	495.5	510.5	518.3	522.0	539.7	540.0	563.1	548.1	502.0	531.7	547.8	525.9	554.2
Paper and cellulose	107.1	109.7	110.7	114.3	112.8	111.1	117.4	112.0	105.9	79.8	92.9	82.4	125.7	97.0
Glass, ceramics and porcelain	110.6	117.9	138.9	135.4	130.7	131.4	130.1	142.1	150.4	155.6	109.7	112.7	160.3	165.7
Textile	632.6	665.5	759.4	789.2	785.8	750.2	815.0	956.3	971.2	995.9	774.4	904.6	913.2	1008.2
Clothing	364.5	373.9	384.3	405.0	450.1	504.7	562.7	525.4	588.0	567.9	557.9	559.7	547.9	599.9
Leather production	262.0	272.4	272.9	284.1	321.7	355.6	385.0	365.2	387.3	290.6	362.1	366.5	380.2	366.8
Print	92.1	97.4	104.1	110.7	106.2	112.5	110.0	110.6	94.4	87.1	108.4	111.7	121.2	129.9
Food, beverages frozen foods, spring water and tobacco products	1869.4	1900.0	1980.2	2116.0	2373.6	2419.6	2371.9	2313.1	2004.0	1503.2	2493.3	2459.5	2464.4	2525.6
Other	1117.9	1150.5	1448.6	1613.0	1698.7	1859.5	2271.1	2603.8	2693.0	1329.1	2177.3	2595.6	2573.1	1253.0
Net material production	10686.7	11216.7	12313.2	13359.7	14221.7	14953.9	15809.3	16676.0	17040.0	16591.5	16676.8	16649.7	17088.3	17624.5

Source: Central Statistical Office

Table 8.3 Electricity Production and Consumption

(In millions of kwh)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Production</b>	19515.0	25237.1	34833.0	36971.9	40458.1	42644.4	44671.8	41632.1	41820.4	43472.8	45038.0	44249.8
<b>Of which:</b>												
<b>Thermal</b>	17355.5	20230.5	24955.0	24235.0	26663.2	26974.8	28677.1	26264.8	27422.4	28499.8	26434.4	27022.1
<b>Hydro</b>	2159.5	2452.6	3713.3	3617.8	3049.6	3353.0	3259.8	2236.7	2326.4	2537.8	2575.6	2685.1
<b>Nuclear</b>	-	2554.0	6164.7	9119.1	10745.3	12316.6	12734.9	13130.6	12071.6	12435.2	16030.0	14542.6
<b>Imports</b>	101.6	3902.1	4697.9	4497.2	4440.8	4582.2	4635.6	5959.0	4571.0	4672.6	4450.1	4936.8
<b>Exports</b>	-	278.6	865.7	1094.5	1794.4	2220.5	2243.1	1655.3	599.1	324.0	304.2	548.4
<b>Losses</b>	1538.1	2386.6	3454.2	3694.6	3888.1	4046.2	4300.9	4016.2	4170.1	4412.7	4793.8	4513.5
<b>Domestic consumption</b>	18078.5	26474.0	35211.0	36680.0	39216.4	40959.9	42763.4	41919.6	41622.2	43408.7	44390.1	44124.7
<b>Of which:</b>												
<b>Industry</b>	10735.2	14305.5	17501.7	18472.9	19201.7	19979.3	20375.1	20001.9	20246.7	20616.1	21149.1	21590.1
<b>Agriculture</b>	675.4	955.3	1114.8	1109.9	1139.4	1123.2	1196.9	1097.1	1101.1	1143.3	1096.1	1041.3
<b>Households</b>	2469.4	4587.8	6844.1	6992.2	8104.7	8515.9	9444.4	9552.4	8685.5	9445.3	9935.1	10182.9

Source: Central Statistical Office

Table 8.4 Energy Balance Sheet

(in Thousands of Joules)

	1977	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Domestic sources</b>	<b>317766</b>	<b>369165</b>	<b>385082</b>	<b>413576</b>	<b>431507</b>	<b>434956</b>	<b>415449</b>	<b>430391</b>	<b>447203</b>	<b>468121</b>	<b>451176</b>
Coal	195914	228301	220988	239544	239727	239908	229593	256092	266909	247379	246330
Other solid fuels	10654	8716	8379	8356	8276	8321	8522	8429	8440	8602	8331
Liquid fuel	5292	14903	8211	8211	5830	5748	4311	3818	3490	3161	2989
Other 1/	105906	117245	147504	157465	177674	180979	173023	162052	168364	208979	193526
<b>Imports</b>	<b>672249</b>	<b>938504</b>	<b>951886</b>	<b>923334</b>	<b>922871</b>	<b>996526</b>	<b>1014718</b>	<b>1004185</b>	<b>997975</b>	<b>969074</b>	<b>983685</b>
Liquid fuel	407052	619221	611459	563828	563295	612244	609448	615884	603653	588414	591430
Gas	98074	137740	151857	164512	167607	188325	185603	193223	206558	212682	232424
Other primary energy imports	167123	181543	188570	194994	191969	195957	219667	195078	187764	167978	159831
<b>Exports</b>	<b>28064</b>	<b>130491</b>	<b>117071</b>	<b>79745</b>	<b>96955</b>	<b>94513</b>	<b>106898</b>	<b>104428</b>	<b>106451</b>	<b>103683</b>	<b>109286</b>
Liquid fuels	25106	128797	115474	72564	89814	84475	105157	103586	105705	100229	106501
Gas	1505	1694	1261	963	1507	1751	1741	842	746	975	632
Solid fuels	1453	-	336	6218	5634	8287	-	-	-	2479	2153
<b>Change in stocks</b>	<b>2320</b>	<b>-17020</b>	<b>16862</b>	<b>4925</b>	<b>23173</b>	<b>-2176</b>	<b>-12203</b>	<b>-22195</b>	<b>-7622</b>	<b>20278</b>	<b>4937</b>
<b>Domestic use of primary energy 2/</b>	<b>964271</b>	<b>1160158</b>	<b>1236759</b>	<b>1265090</b>	<b>1280596</b>	<b>1334793</b>	<b>1311066</b>	<b>1307953</b>	<b>1331105</b>	<b>1353790</b>	<b>1330512</b>
For electricity and heat energy generation (including hydro- and nuclear power)	319444	384908	415653	460003	480780	498359	476371	485173	503182	518757	506841
<b>For other purposes</b>	<b>644827</b>	<b>775250</b>	<b>821106</b>	<b>805087</b>	<b>799816</b>	<b>836434</b>	<b>834695</b>	<b>822780</b>	<b>827923</b>	<b>835033</b>	<b>823671</b>
Of which:											
By industry	381381	510276	587022	501807	550278	575638	568233	565533	560926	575285	542255
By agriculture	46679	33353	33418	41789	38864	38327	35448	35096	36434	37935	42670
By households	68316	70414	68236	71016	68829	72481	74248	74116	78128	76914	82731

Source: Central Statistical Office

1/ incl. primary energy equivalent for the energy production in MPS and MPS

2/ visible consumption = domestic sources + import - export + or - change in stocks

Table 9.1 Developments in Wholesale and Retail Prices 1/

(Year = 100) 2/

	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
	(In billions of leva, fixed prices)						(In billions of leva, current prices)					
1. Wholesale prices *	98.1	100.3	100.0	114.0	105.3	107.2	100.6	100.8	100.5	100.9	100.7	103.7
Industry a/	97.8	99.9	99.8	112.8	104.6	108.7	100.6	100.7	100.3	100.9	100.7	102.5
Construction b/		98.2	99.5	124.2	101.0	102.7	100.4	101.9	102.7	100.1	100.2	105.2
Construction imports c/												
Housing d/								100.8	98.8	99.9	100.6	100.6
Investment goods e/												
Agriculture f/	100.0	103.3	100.8	118.1	111.5	99.5	101.0	101.2	101.1	102.1	101.4	114.8
Agricultural imports j/												
Foreign trade h/												
Exports i/		110.5	103.9	104.9	104.7	99.4	104.0	101.8	100.4	101.1	101.8	101.3
Imports k/		113.7	106.9	107.9	110.7	106.9	106.1	103.3	101.4	100.0	97.4	96.8
2. Consumer prices												
Goods and services				113.5	100.5	100.3	101.5	100.7	101.8	103.9	100.1	101.2
Groceries l/	99.7	100.6	106.2	124.7	100.3	100.6	103.0	101.5	102.2	104.3	100.0	101.4
Nongroceries m/	99.5	100.2	103.4	106.6	100.7	100.1	100.2	101.1	101.3	103.0	100.1	101.1
Public restaurants n/												
Services p/	100.6	100.4	101.1	111.9	100.5	100.1	101.6	101.2	102.8	107.7	100.9	100.5
Groceries and nongroceries	99.6	100.4	104.6	114.0	100.5	100.3	101.4	100.7	101.7	103.5	100.1	101.2

Source: Central Statistical Office

1/ Used weights

a/ The value of sold goods

b/ The value of supplied construction materials

d/ The market value of 1 sq.m built-up dwelling area

f/ The value of agricultural products sold

l,m/ The value of sales in retail trade

i,k/ The value of real commodity exchange in hard currency converted in leva

p/ The value of receipts from the population for services rendered

2/ The previous year = 100

\*/Aggregated index includes rows a,b,d f



Table 9.2 Wholesale prices index in state and cooperative industry by branches

Branches	(1980 = 100)							
	1981	1983	1984	1985	1986	1987	1988	1989
1. TOTAL	104.6	114.0	114.8	115.2	116.2	116.9	119.9	123.3
2. Production of electricity and thermal power energy	99.1	102.5	102.6	103.4	104.8	105.3	112.3	113.6
3. Coal industry	100.7	102.5	103.0	102.6	102.2	102.4	102.5	100.8
4. Oil-extracting and gas processing industry	100.0	100.0	100.0	100.0	100.0	99.8	99.8	99.8
5. Ferrous metallurgy (ore extraction included)	100.1	104.3	105.0	104.3	105.0	104.6	108.2	108.9
6. Non-ferrous metallurgy (ore extraction included)	119.9	125.5	125.6	125.4	124.5	124.2	146.7	146.7
7. Machine-building, electrical and electronic industry	104.4	107.8	109.2	110.4	112.1	113.0	114.7	118.3
8. Machine-building and manufacture of fabricated metal products (spare parts production included)	103.7	108.7	110.5	112.4	114.5	115.2	117.2	122.0
9. Electrical and electronic industry (spare parts production included)	105.6	106.5	107.3	107.4	108.7	109.7	111.1	113.3
10. Chemical and oil-processing industry	107.7	112.7	112.9	113.6	114.3	115.3	112.3	112.2
11. Industry of building materials	110.6	114.2	114.9	113.5	114.2	114.9	115.5	129.0
12. Logging and manufacture of wood and wood products	105.4	111.6	111.8	112.5	115.6	118.6	123.2	134.5
13. Pulp and paper industry	105.0	105.2	105.2	105.8	105.6	105.2	112.7	116.3
14. Glass, china and earthenware industry	99.7	104.7	105.3	105.6	106.0	105.3	123.8	131.0
15. Textile and knitwear industry	102.8	122.4	122.8	122.9	123.6	124.0	126.4	129.0
16. Clothing industry	102.6	133.4	138.3	139.9	146.7	154.6	158.1	160.9
17. Leather, furriery and footwear industry	102.2	107.9	107.0	106.8	107.6	109.6	113.4	128.4
18. Printing and publishing industry	107.6	111.7	119.7	121.9	126.1	126.3	136.8	155.1
19. Food, beverages and tobacco industry	101.2	124.4	125.0	124.4	124.0	123.7	129.6	134.1
20. Other branches of industry	100.7	101.1	102.5	102.9	107.3	111.2	112.7	113.0

Source: Central Statistical Office

Table 9.3.a Index numbers of average retail prices 1)

Year	base years				
	1985	1986	1987	1988	1989
1985	100	97.33	94.81	92.61	87.04
1986	102.74	100	97.41	95.15	89.42
1987	105.47	102.66	100	97.68	91.30
1988	107.98	105.10	102.38	100	93.98
1989	114.89	111.83	108.93	106.40	100

Table 9.3.b Index numbers of average retail prices by commodity groups 1)

	1980 = 100					1989 2)
	1985	1986	1987	1988	1989 2)	to 1988 = = 100
Total	114.88	118.03	121.17	124.05	131.99	106.40
Foodstuff	111.7	112.94	114.63	117.19	119.38	101.87
Non - foodstuff	117.58	122.33	126.66	129.81	142.6 <sup>a</sup>	109.85

Source: Central Statistical Office

1) Index numbers calculated by quantity with two decimal figures

2) Calculated on the base of a consumer goods basket of 166 commodity groups (foodstuff -68 and non-foodstuff - 98)

Table 9.4 Price index of import and export in foreign exchange leva

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Export</b>													
Socialist countries	104.0	103.1	101.3	100.3	103.4	104.7	99.5	106.3	102.2	101.3	103.2	102.6	101.2
Non-socialist countries	96.8	98.4	99.7	116.2	108.7	104.8	99.2	97.2	100.6	97.5	91.5	98.3	101.6
<b>Import</b>													
Socialist countries	110.1	106.0	104.9	105.4	106.8	113.8	111.4	108.8	104.6	103.9	102.6	98.0	94.9
Non-socialist countries	93.0	103.7	97.7	114.2	112.3	102.0	93.8	96.7	98.6	94.0	92.1	95.1	103.8

Source: Central Statistical Office  
 Rate of exchange - leva for 100 US dollars  
 1988 - 83.36 leva; 1989 - 84.30 leva

Table 9.5 Distribution of Monthly Wages

(December 1989)

Material Sphere:	Industry			Construction			Agriculture & Forestry			Communication & Other			Trade (Wholesale & Retail) & Other		
	Total	Workers	Others	Total	Workers	Others	Total	Workers	Others	Total	Workers	Others	Total	Workers	Others
Under 140	2.8	3.2	1.1	1.8	1.6	2.3	10.1	11.6	3.8	2.2	2.2	2.0	6.2	7.8	1.3
140	5.2	5.8	2.8	4.1	3.9	4.6	18.1	19.5	12.2	4.7	4.8	4.1	14.2	17.4	4.3
180	8.9	9.5	6.3	7.5	7.2	8.4	26.5	28.2	19.5	8.7	8.9	7.9	24.0	28.6	9.4
200	14.6	15.2	12.1	13.1	12.7	14.4	36.8	38.9	27.6	15.2	15.5	13.7	36.5	42.4	18.1
250	32.0	32.1	31.8	30.9	28.8	37.1	54.6	56.4	47.2	33.5	33.6	33.0	62.3	68.0	64.0
300	51.4	51.1	53.0	50.2	47.7	57.8	70.5	69.7	73.6	54.1	54.3	53.1	79.8	83.6	67.5
350	68.3	68.0	70.1	67.9	65.6	75.0	82.2	81.4	85.7	70.8	71.0	70.2	89.5	91.7	82.6
450	87.2	87.1	87.8	86.8	85.3	91.4	92.5	91.7	95.9	88.0	87.6	90.2	96.3	97.1	94.0
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
No. of Employees (in '000s)	1184	984	200	258	192	66	543	440	103	233	194	39	281	213	67
% of Socialist Sector covered	78.6%			72.2%			77.8%			72.6%			73.6%		
Average Wage	327	326	329	340	349	315	287	294	258	261	249	299	261	249	299
<b>Non-Material Sphere:</b>	<b>Municipal Services &amp; Public Administration</b>			<b>Education, Culture &amp; Arts, Science, Research &amp; Devel.</b>			<b>Health, Social Security, Sports &amp; Tourism</b>			<b>Finance, Credit &amp; Insurance</b>			<b>TOTAL All Sectors</b>		
	Total	Workers	Others	Total	Workers	Others	Total	Workers	Others	Total	Workers	Others	Total	Workers	Others
Under 140	2.9	5.2	1.0	2.8	7.3	1.1	2.6	5.2	1.2	2.7	5.9	1.6	4.2	5.3	1.6
140	8.9	14.9	3.8	11.3	29.3	4.4	11.5	22.0	5.4	11.4	22.6	7.5	9.3	11.0	5.1
180	16.6	25.0	9.4	24.0	53.5	10.9	24.8	44.5	13.4	18.9	34.5	13.5	16.1	18.3	10.9
200	26.9	38.6	16.8	34.1	69.0	20.9	40.6	65.9	25.9	29.4	48.7	22.7	24.4	26.7	19.4
250	51.8	62.6	42.6	57.0	83.0	47.2	71.2	90.2	60.3	65.7	84.2	59.3	44.7	44.8	44.4
300	71.5	79.2	64.9	73.4	88.8	67.5	85.8	97.0	79.3	84.6	96.3	80.6	62.7	61.8	65.0
350	84.4	87.5	81.8	85.5	94.1	82.3	91.8	98.7	87.9	93.7	99.0	91.8	76.8	75.6	79.7
450	93.7	94.2	93.2	95.0	97.9	93.9	97.0	99.6	95.5	97.8	99.8	97.1	90.7	89.9	92.6
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
No. of Employees (in '000s)	109	50	59	378	104	274	187	68	118	20	5	15	3192	2261	931
% of Socialist Sector covered	71.0%			89.2%			87.8%			88.5%			78.5%		
Average Wage	273	253	290	279	218	301	248	215	266	257	225	268	303	304	303

Source: Central Statistical Office.

Table 9.6 Index of Real Wages

(1980 = 100)

	1970	1980	1985	1986	1987	1988
<b>AVERAGE</b>	84	100	111	112	117	123
<b>Material Sectors</b>						
Industry	81	100	113	115	120	127
Construction	89	100	110	111	114	119
Agriculture	82	100	110	113	116	127
Forestry	74	100	109	116	122	128
Transport	83	100	109	110	112	116
Communications	84	100	114	113	119	124
Trade (Retail and Wholesale)	86	100	107	106	110	117
Other Material Production	87	100	112	114	119	129
<b>Non-Material Sectors</b>						
Municipal Services	81	100	110	110	117	122
Science, Research & Development	85	100	118	117	123	129
Education	83	100	110	110	113	114
Culture & Arts	83	100	107	106	103	113
Health Care, Social Security, Sports	80	100	113	111	114	115
Banking, Finance, Credit, Insurance	86	100	119	118	124	131
Government	82	100	110	106	111	117
Other Non-material	89	100	102	105	111	108

Source: Central Statistical Office.

Table 10.1 Gross Fixed Investment, 1970-89

(In millions of leva)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Material sphere</b>	<b>2704.9</b>	<b>4057.4</b>	<b>5135.1</b>	<b>5311.9</b>	<b>5633.2</b>	<b>5568.3</b>	<b>5679.5</b>	<b>6279.7</b>	<b>6634.0</b>	<b>7383.0</b>	<b>7625.7</b>	<b>7940.4</b>
<b>Total</b>												
Agriculture	528.5	780.8	893.9	622.9	617.3	627.3	643.3	694.7	610.9	690.3	868.1	869.4
Forestry	30.7	2.7	1.5	8.6	9.5	12.2	10.8	13.5	8.7	9.0	6.7	4.1
Water economy												
Industry	1606.8	2140.1	3012.8	3254.0	3581.6	3466.6	3617.5	4059.2	4537.7	4926.8	5128.1	5191.8
Construction	101.7	220.6	177.2	210.4	227.4	267.5	261.0	325.9	337.3	346.8	370.5	505.1
Mining and development 1/												
Freight transport 2/	276.5	644.1	698.9	860.1	779.0	754.9	734.7	737.8	654.6	1009.4	763.4	618.1
Trade 3/	125.8	167.3	218.5	232.4	268.5	280.2	248.2	283.6	308.0	230.8	282.0	445.1
Other	34.9	101.8	132.3	123.5	149.9	159.6	164.0	165.0	176.8	169.9	206.9	306.8
<b>Nonmaterial sphere</b>	<b>846.8</b>	<b>1303.7</b>	<b>2060.5</b>	<b>2180.6</b>	<b>2295.5</b>	<b>2402.4</b>	<b>2313.7</b>	<b>2401.7</b>	<b>2727.3</b>	<b>2659.7</b>	<b>2662.4</b>	<b>2486.4</b>
<b>total</b>												
Housing	344.5	509.4	954.7	1026.4	1056.1	1113.0	1113.1	1108.4	1220.0	1195.8	1205.2	976.5
Passenger transport 4/												
Other	502.3	794.3	1105.8	1154.2	1239.4	1289.4	1200.6	1293.3	1507.3	1463.9	1457.2	1509.9
<b>TOTAL</b>	<b>3551.7</b>	<b>5361.1</b>	<b>7195.6</b>	<b>7492.5</b>	<b>7928.7</b>	<b>7970.7</b>	<b>7993.2</b>	<b>8681.4</b>	<b>9361.3</b>	<b>10042.7</b>	<b>10288.1</b>	<b>10426.8</b>

Source: Central Statistical Office

1/Included in Sector "Industry"

2/The data is about sector Transport-total

3/The sector is "Trade, material and technical supplies and purveyance"

4/Included in sector Transport

**Table 10.2 Change in stocks**  
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 (in millions of leva)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Total</b>	<b>1351.1</b>	<b>1478.6</b>	<b>2181.9</b>	<b>1928.6</b>	<b>1832.0</b>	<b>2404.1</b>	<b>1882.0</b>	<b>3059.1</b>	<b>2202.9</b>	<b>2937.4</b>	<b>2416.3</b>
<b>Material sphere-total</b>	<b>842.5</b>	<b>1187.2</b>	<b>1808.1</b>	<b>1713.8</b>	<b>825.2</b>	<b>1209.3</b>	<b>994.2</b>	<b>1731.0</b>	<b>1221.8</b>	<b>1968.6</b>	<b>2251.6</b>
<b>Industry</b>		<b>394.6</b>	<b>933.6</b>	<b>1005.0</b>	<b>-53.2</b>	<b>1203.0</b>	<b>617.9</b>	<b>1273.3</b>	<b>1145.9</b>	<b>1228.0</b>	<b>1479.5</b>
<b>Construction</b>		<b>88.3</b>	<b>51.5</b>	<b>37.5</b>	<b>-3.5</b>	<b>80.2</b>	<b>52.4</b>	<b>43.3</b>	<b>46.4</b>	<b>63.4</b>	<b>92.4</b>
<b>Agriculture</b>		<b>164.5</b>	<b>337.2</b>	<b>360.0</b>	<b>172.9</b>	<b>213.9</b>	<b>-115.1</b>	<b>132.2</b>	<b>-176.4</b>	<b>16.5</b>	<b>-3.1</b>
<b>Forestry</b>		<b>45.2</b>	<b>49.3</b>	<b>45.2</b>	<b>46.7</b>	<b>49.0</b>	<b>52.7</b>	<b>53.1</b>	<b>24.1</b>	<b>3.8</b>	<b>-3.3</b>
<b>Transport</b>		<b>19.5</b>	<b>22.1</b>	<b>24.8</b>	<b>17.5</b>	<b>12.9</b>	<b>35.3</b>	<b>40.3</b>	<b>10.7</b>	<b>39.5</b>	<b>36.3</b>
<b>Communication</b>		<b>6.2</b>	<b>-1.6</b>	<b>3.0</b>	<b>0.3</b>	<b>1.5</b>	<b>3.2</b>	<b>3.8</b>	<b>4.3</b>	<b>4.2</b>	<b>8.5</b>
<b>Trade and Catering</b>		<b>459.1</b>	<b>413.6</b>	<b>242.0</b>	<b>640.1</b>	<b>-363.0</b>	<b>334.5</b>	<b>172.8</b>	<b>149.0</b>	<b>606.4</b>	<b>629.4</b>
<b>Other material sphere</b>		<b>9.8</b>	<b>2.4</b>	<b>-3.7</b>	<b>4.4</b>	<b>11.8</b>	<b>13.3</b>	<b>12.2</b>	<b>17.8</b>	<b>6.8</b>	<b>11.9</b>
<b>Nonmaterial sphere-total</b>	<b>499.9</b>	<b>298.3</b>	<b>380.9</b>	<b>198.7</b>	<b>1000.4</b>	<b>1187.6</b>	<b>892.8</b>	<b>1316.7</b>	<b>981.8</b>	<b>962.9</b>	<b>138.5</b>
<b>of which:</b>											
<b>Housing and communal economy</b>											
<b>and consumer services</b>	<b>2.0</b>	<b>5.5</b>	<b>3.4</b>	<b>4.6</b>	<b>2.5</b>	<b>1.7</b>	<b>6.2</b>	<b>4.5</b>	<b>4.7</b>	<b>17.0</b>	<b>5.2</b>
<b>Science and science services</b>	<b>7.1</b>	<b>15.8</b>	<b>29.2</b>	<b>20.6</b>	<b>22.7</b>	<b>11.7</b>	<b>23.1</b>	<b>32.4</b>	<b>14.6</b>	<b>55.7</b>	<b>28.7</b>
<b>Public health, social se-</b>											
<b>curity, physical culture</b>											
<b>and tourism</b>	<b>3.9</b>	<b>2.2</b>	<b>8.2</b>	<b>3.4</b>	<b>6.4</b>	<b>-0.3</b>	<b>6.1</b>	<b>6.5</b>	<b>1.9</b>	<b>7.3</b>	<b>2.6</b>
<b>Education</b>	<b>2.4</b>	<b>9.2</b>	<b>-4.6</b>	<b>-7.4</b>	<b>6.9</b>	<b>45.6</b>	<b>9.9</b>	<b>4.1</b>	<b>6.3</b>	<b>-1.0</b>	<b>1.1</b>
<b>Culture and arts</b>		<b>1.9</b>	<b>-35.1</b>	<b>4.6</b>	<b>2.6</b>	<b>5.2</b>	<b>4.7</b>	<b>-0.7</b>	<b>1.7</b>	<b>3.2</b>	<b>1.3</b>
<b>Population</b>	<b>8.7</b>	<b>-6.9</b>	<b>-7.1</b>	<b>1.1</b>	<b>6.4</b>	<b>7.2</b>	<b>-5.0</b>	<b>11.4</b>	<b>-0.7</b>	<b>5.9</b>	<b>26.2</b>

Source: Central Statistical office

Table 10.3 Stocks at end of the year

(in millions of leva, current prices)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Material sphere</b>	<b>15859.9</b>	<b>17866.6</b>	<b>18982.6</b>	<b>21755.3</b>	<b>22574.3</b>	<b>25630.1</b>	<b>26079.6</b>	<b>28124.6</b>	<b>29152.8</b>	<b>31315.6</b>	<b>33567.3</b>
Industry	6156.0	6556.0	7326.3	8700.1	8619.4	10968.4	11082.3	12794.0	13641.9	15110.1	16589.5
Construction	719.2	819.4	871.9	921.1	942.1	1040.9	1078.3	1120.9	1165.4	1241.4	1348.7
Agriculture	2836.3	3849.5	3465.3	4567.5	4746.2	5602.7	5468.7	5656.0	5660.3	5581.9	5571.1
Forestry	660.1	705.3	754.6	799.8	846.5	895.5	948.2	1001.3	1009.3	1017.8	1013.8
Transport	256.3	265.3	291.7	544.0	346.6	359.8	395.1	413.0	408.6	447.6	499.6
Communication	53.1	50.3	41.8	58.6	35.8	37.4	40.6	44.3	50.8	55.0	63.5
Trade and Catering	5128.9	5561.8	6174.2	6330.6	6979.3	6662.1	6962.9	7019.0	7118.4	7759.0	8369.5
Other material sphere	50.0	59.0	56.8	53.6	58.4	63.3	103.5	76.1	98.1	102.8	111.6
<b>Nonmaterial sphere</b>											
of which:											
Housing and communal economy and consumer services	27.2	33.5	30.1	39.6	42.1	43.8	50.3	44.8	50.9	55.7	69.8
Science and science services	93.0	116.8	140.5	157.7	182.1	190.6	209.9	205.1	242.3	259.6	250.8
Public health, social security, physical culture and tourism	35.8	38.0	47.2	44.8	39.2	45.0	51.0	58.7	61.9	53.4	47.9
Education	162.9	79.8	94.5	99.5	118.4	233.8	178.7	159.5	165.6	71.4	32.7
Culture and arts		84.4	42.3	52.3	54.9	56.2	57.8	59.9	19.6	56.8	48.6
Population	56.1	58.3	60.6	79.0	85.7	96.2	91.0	102.4	99.4	102.1	127.9

Source: Central Statistical Office



Table 10.4 Capital Investment for Unfinished construction

(in millions of leva)

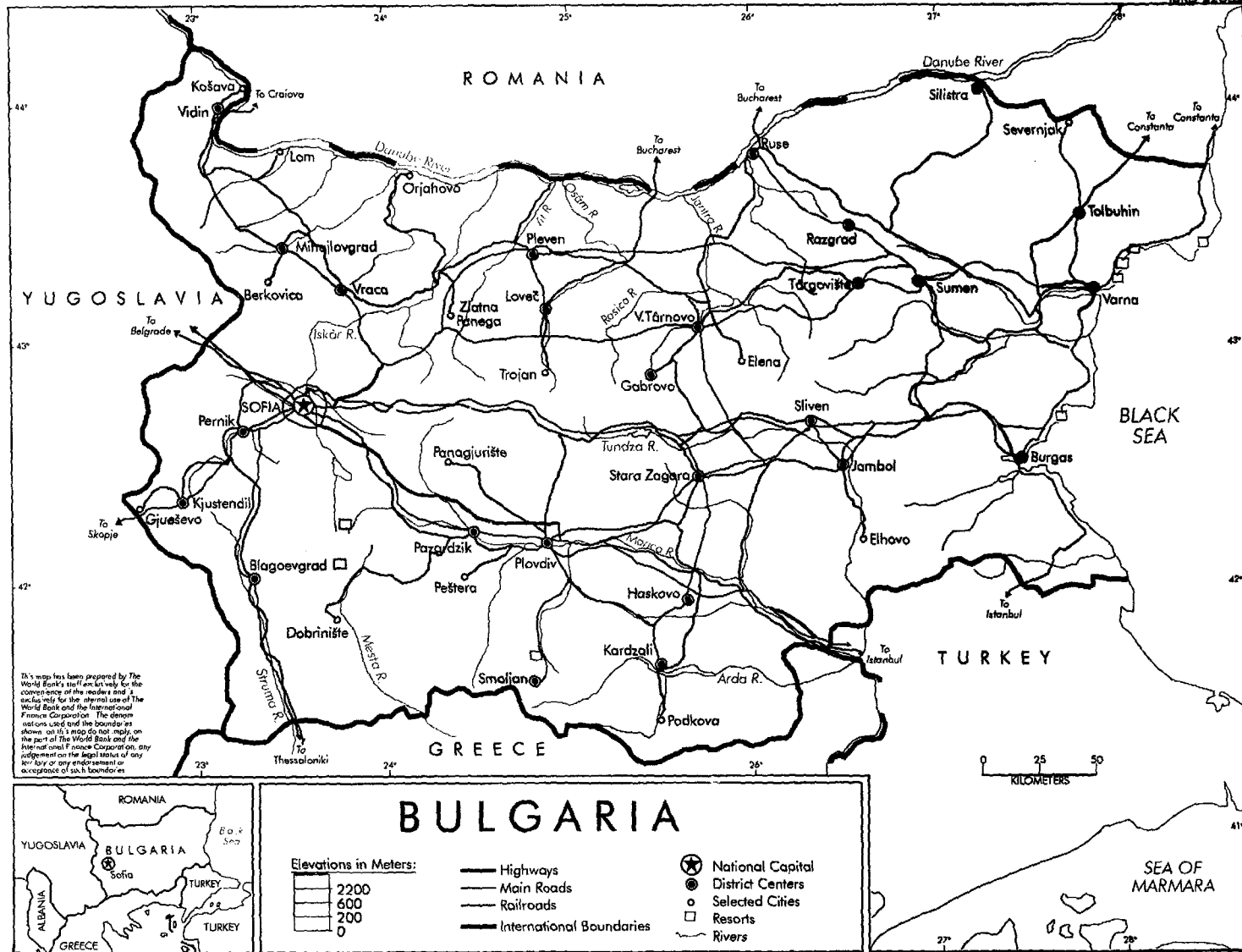
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Total</b>	<b>323.7</b>	<b>618.8</b>	<b>814.4</b>	<b>237.1</b>	<b>331.0</b>	<b>654.9</b>	<b>1136.9</b>	<b>1714.2</b>	<b>-383.8</b>	<b>1525.2</b>	<b>2214.2</b>
<b>Material sphere</b>	<b>276.2</b>	<b>196.0</b>	<b>763.6</b>	<b>-4.7</b>	<b>261.1</b>	<b>515.4</b>	<b>972.4</b>	<b>1495.3</b>	<b>-439.1</b>	<b>1236.2</b>	<b>1774.9</b>
<b>Industry</b> 1)	<b>191.6</b>	<b>-10.1</b>	<b>578.2</b>	<b>-26.4</b>	<b>270.7</b>	<b>454.6</b>	<b>887.8</b>	<b>1301.6</b>	<b>-737.3</b>	<b>1114.5</b>	<b>1391.5</b>
<b>Construction</b>	<b>15.2</b>	<b>14.6</b>	<b>14.4</b>	<b>11.6</b>	<b>-11.3</b>	<b>25.3</b>	<b>19.7</b>	<b>83.7</b>	<b>35.0</b>	<b>38.3</b>	<b>101.4</b>
<b>Agriculture</b>	<b>-11.0</b>	<b>57.1</b>	<b>16.3</b>	<b>23.7</b>	<b>26.8</b>	<b>36.9</b>	<b>57.2</b>	<b>33.2</b>	<b>69.2</b>	<b>106.3</b>	<b>75.4</b>
<b>Transport</b>	<b>58.7</b>	<b>84.5</b>	<b>97.6</b>	<b>-59.2</b>	<b>-23.5</b>	<b>-10.4</b>	<b>-49.1</b>	<b>10.2</b>	<b>204.1</b>	<b>34.4</b>	<b>130.3</b>
<b>Communication</b>	<b>5.8</b>	<b>16.7</b>	<b>14.1</b>	<b>8.3</b>	<b>-5.6</b>	<b>-0.7</b>	<b>12.1</b>	<b>15.6</b>	<b>-</b>	<b>-4.0</b>	<b>30.1</b>
<b>Trade and Catering</b>	<b>15.4</b>	<b>33.0</b>	<b>33.1</b>	<b>33.4</b>	<b>4.8</b>	<b>10.5</b>	<b>33.1</b>	<b>42.9</b>	<b>-21.1</b>	<b>-46.4</b>	<b>35.8</b>
<b>Other material sphere</b>	<b>0.5</b>	<b>0.2</b>	<b>9.9</b>	<b>3.9</b>	<b>-0.8</b>	<b>-0.8</b>	<b>11.6</b>	<b>8.1</b>	<b>11.0</b>	<b>-6.9</b>	<b>10.4</b>
<b>Nonmaterial sphere</b>	<b>33.5</b>	<b>397.1</b>	<b>48.2</b>	<b>252.7</b>	<b>60.3</b>	<b>159.9</b>	<b>145.4</b>	<b>188.8</b>	<b>80.3</b>	<b>297.1</b>	<b>439.3</b>
<b>of which:</b>											
<b>Housing and communal economy</b>											
<b>and consumer services</b>	<b>33.4</b>	<b>209.9</b>	<b>112.6</b>	<b>99.0</b>	<b>4.8</b>	<b>97.2</b>	<b>57.8</b>	<b>94.1</b>	<b>20.5</b>	<b>186.1</b>	<b>283.4</b>
<b>Science and science services</b>	<b>-15.7</b>	<b>3.6</b>	<b>17.0</b>	<b>11.2</b>	<b>7.2</b>	<b>12.7</b>	<b>12.3</b>	<b>19.4</b>	<b>10.9</b>	<b>29.9</b>	<b>7.1</b>
<b>Public health, social security, physical culture</b>											
<b>and tourism</b>	<b>-0.5</b>	<b>16.0</b>	<b>19.1</b>	<b>57.4</b>	<b>18.0</b>	<b>42.0</b>	<b>21.1</b>	<b>35.5</b>	<b>24.9</b>	<b>-4.9</b>	<b>64.8</b>
<b>Education</b>		<b>40.0</b>	<b>-1.2</b>	<b>32.5</b>	<b>17.0</b>	<b>-4.3</b>	<b>11.0</b>	<b>15.8</b>	<b>-2.3</b>	<b>51.1</b>	<b>44.3</b>
<b>Culture and arts</b> )	<b>8.1</b>	<b>92.9</b>	<b>-90.3</b>	<b>14.2</b>	<b>9.0</b>	<b>-13.9</b>	<b>17.7</b>	<b>-4.5</b>	<b>16.2</b>	<b>-3.3</b>	<b>3.9</b>
<b>Population</b>	<b>14.0</b>	<b>25.7</b>	<b>2.6</b>	<b>-10.9</b>	<b>9.6</b>	<b>-20.4</b>	<b>19.1</b>	<b>30.1</b>	<b>-25.0</b>	<b>-8.1</b>	<b>49.5</b>

Source: Central Statistical Office

1) White Forestry



**MAP SECTION**



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