# Institute of Economics, Bulgarian Academy of Sciences Friedrich Ebert Foundation

# ECONOMIC OUTLOOK OF BULGARIA BY THE YEAR 2000 AND BEYOND

Sofia, March 1998

C 99 - 01425

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### FOREWARD

The Institute of Economics, Bulgarian Academy of Sciences and the Friedrich Ebert Foundation sponsored a joint seminar in May 1997 and published the contributions on the subject: "Macroeconomic and Structural Policies in Bulgaria under Currency Board Arrangement". In the meantime (1st July 1997) the currency board became operational.

With this publication, which is the 6th in the series, initiated in 1992, the Institute of Economics and the Friedrich Ebert Foundation aim at two objectives:

First, to submit to the attention of the Bulgarian public opinion (and by the English translation - to experts from other countries) an analysis of the current macroeconomic and structural policies, of the necessary further steps in these areas over the following years, and to forecast the behaviour of the macroeconic indicators during 1998-2000.

Second, to call the attention of the Bulgarian policy-makers and of the experts both at home and abroad on the urgent necessity of high investment activity as an indispensable prerequisite for sustained economic growth over the following 10-15 years for getting out of the deep recession and meeting economic criteria for accession to the European Union. This is even more important within the context of already initiated negotiations with the first group of applicant countries and preparatory activities with the remaining associate countries, Bulgaria among them. The more successful economic development of Bulgaria, the greater the chances for accession to the EU, when economic and other criteria are met.

The views expressed in the publication belong to the authors and do not necessarily reflect the positions of the Institute of Economics and the Friedrich Ebert Foundation.

Dr. MARC MEINARDUS Director, Balkan Regional Office Friedrich Ebert Foundation Prof. ALEXANDER DIMITROV Director, Institute of Economics Bulgarian Academy of Sciences

### PREFACE

The first study "Economic Outlook of Bulgaria by 1995" was published in September 1992, followed by regular annual surveys. This is the sixth publication. One shares here the findings on the current situation in the economy, the progress of the transition, projections of the most important macroeconomic indicators by the year 2000 and some features of economic growth by 2010.

In Chapter One Macroeconomic Policy and Expected Behaviour of Macroeconomic Parameters one finds a review of macroeconomic policies (monetary, fiscal, foreign trade, income and employment) over the recent years with particular emphasis on 1997 under conditions of a currency board arrangement. Projections for the most important macroeconomic indicators are substantiated in the respective sections of this chapter.

Six years ago we began our forecasts by three years' horizon. At that time the only one possible under conditions of total uncertainty. Prerequisites are now emerging for combining medium- and long-term projections. The first step is made with Chapter Two Investment Activity, Growth and Economic Environment. The selection of the topic was made due to the importance of the issue. There is a consensus among Bulgarian economists, that economic policy must provide an economic and institutional environment for higher investment activity and sustained growth, and that fragile financial stability would collapse soon unless it is followed by economic growth in the near future. The big question is: how to achieve sustained economic growth?

The very subject of investment activity calls for a longer projection horizon - at least 10-15 years. An attempt is made in Chapter Two to forecast the GDP growth along with the contributions of the physical capital, human capital and total factor productivity. These are only fragments of and not a comprehensive long-term macroeconomic projection. Next year further steps will be made along this line.

Section 5 of Chapter Two offers alternatives for the GDP per capita growth by 2050. The intention is to identify the approximate timing of Bulgaria becoming an eligible applicant for European Union (EU) membership from the point of view of economic criteria only. These variants of growth rates, however are not a full fledged projection. Non-economic criteria for EU membership are not considered in this study.

Experience in economic analysis and projection teaches forecasters to refrain from being too categorical. The behaviour of macroeconomic indicators is subject to a number of factors economic and non-economic, internal and external. The interdependence and interaction among them is complex. They are very difficult to identify, and even more difficult (or impossible) to measure. This injects a lot of uncertainty and conditionality in economic projections.

The users of the forecasts should therefore be aware of the incorporated assumptions. The consolidated table on the medium-term (1998-2000) economic projection at the end could be understood better if one reads carefully the specialised sections of Chapter One and the summary presented in the **Conclusion**.

This publication is an abridged version of a more comprehensive one, published in Bulgarian. It is addressed to readers from abroad, interested in the current shape and future development of the Bulgarian economy and particularly those doing and/or intending to do business in Bulgaria.

The authors are independent researchers, staff members of the Institute of Economics at the Bulgarian Academy of Sciences. As independent as a professional human being could be. Our views usually differ from those of the Government, the political parties and vested interest groups. We feel this should be stated explicitly, as it is not easy to allocate truly independent professional analysis in this country.

It is a pleasure to express our gratitude to the Friedrich Ebert Foundation for their financial and moral support. This study would have been impossible without their backing.

The authors are the only ones responsible for the views expressed in the study. These views do not necessarily reflect the positions of the management of the Institute of Economics.

The translation into English has been made by the authors.

# I. EXPECTED CHANGES IN THE MACROECONOMIC POLICY AND ITS PARAMETRES

### I.1 GROSS DOMESTIC PRODUCT

Professor Dr of Economic Sciences ALEXANDER DIMITROV

We cannot say that changes (especially the economic ones) taking place in countries from Eastern and Central Europe (ECE) are abstract. They are an integral part of the global changes, started at the end of the 80s and the beginning of the 90s.

The issue is: what are the prospects and opportunities in different transition countries to face changes in a way to diminish the negative effects and facilitate the positive ones? In ECE countries this process was accompanied by demolition of the command central planning system and transition to a market economy and pluralistic democracy.

It is clear that various transition economies are at different stages in their economic development. The European Union (EU) policy is based on this criteria in bringing together regions and countries of various levels of economic development.

### 1.1 GDP GROWTH RATES

According to the Economic Bulletin for Europe<sup>1</sup> (pp. 20 and next) the total output of transition economies from the region of UN Economic Commission for Europe rose in 1997 for a first time 1989, although the expectations for higher rates were not met. Second, the Bulletin states the heterogenic nature of those countries and divergence in their economies on their journey towards positive growth. Bulgaria is among the countries with negative GDP growth rates for 1997 and the decline is among the highest. The others are: Albania, Bosnia and Herzegovina, Romania, Ukraine, Moldova, Armenia, Turkmenistan. It is only Ukraine from that region whose negative GDP rate has been forecasted.

1997 was the most unfavorable since the beginning of the Bulgarian transition. The produced GDP for 1997 is 17 trillion leva at current prices, i.e. \$10 billion, as the population is 8.4 million it makes the modest \$1200 per capita.

The market exchange rate has plenty of shortcomings and that's why the purchasing power parity (PPP) rate is preferable. The application of a market exchange rate underestimates the GDP in Bulgaria by a factor of 3.0-3.2. PPP data on Bulgaria have been published by the Economic Commission for Europe, European Statistics Papers, World Facts Book (WFB) of CIA, etc. For 1995, according to the Statistics Year Book of the National Statistical Institute (NSI) of Bulgaria, for instance the GDP was \$1537 per capita. According to WFB using PPP model GDP was \$4920 per capita. Computed by the Economic Commission for Europe it was \$4620 and by Eurostat - \$4720.

<sup>&</sup>lt;sup>1</sup> Economic Bulletin for Europe, Volume 49 (1997), UN, Economic Commussion for Europe, 175 p.

The PPP model is more appropriate for international comparisons. By the official exchange rate Bulgarian GDP per capita is 7% of the average level of the EU, while by PPP rates it is 24%. It is 7% and 23% for Romania respectively, 5% and 24% for Lithuania, 117% and 107% for France, etc. The less advanced EU economies (Greece, Spain, Portugal) have GDP per capita 70% of the average for EU by PPP rates.

Bulgarian GDP declined in 1997 by 6.9 per cent in real terms, compared to 1996. If the decline of 10.6 per cent in 1995 was added the difficulties, faced by the Bulgarian economy. The economic situation could be assessed more appropriately if the annual growth rates since the beginning of transition were taken into account (see Table 1.1). One should be aware, that these growth rates have been computed on the basis of previous year prices. The real GDP decline, computed by this method is undervalued.

What should one expect for 1998? The decline of GDP could go on, though at a lower rate, including zero growth. However, positive real growth is also feasible (e.g. 4% as forecasted by the government, or 3-4% projected by the NSi<sup>2</sup>. Both projections have nearly equal chances. However, the real issue is if there are sound foundations for optimism over the following years.

The growth might fluctuate significantly and could be both negative and positive in 1998, as there is no sound foundation for sustained financial stabilization and resumption of growth in the real sector.

GDP RATES OF GROWTH (PREVIOUS YEAR PRICE BASIS)

Table 1.1

Years	in %	
1991	-16.7	
1992	-7.3	
1993	-1.5	
1994	1.8	
1995	2.1	
1996	-10.6	
1997	-6.9	
1996 forecast)	2	

Source: Publications of National Statistical Institute (NSI) and author's estimations.

A reasonable optimism could play a positive role in mobilizing national resources. The restrained optimism has played important role in many countries including in Bulgaria. Economic and social motivation and political will are extremely important at present for stabilizing the society and pulling the economy out of the recession. Looking for a way out mainly by new borrowing only postpones the troubles in the future. One could hardly count on positive results in the shortrun without mobilizing domestic resources, particularly idle production capacities and unemployed labour force. On the other hand, additional difficulties arise from depressed domestic demand, underdeveloped domestic market and difficulties in exports.

Pessimists have more rational strategy: they are right if their expectations come true, if their gloomy expectations do not come true everything is fine and nobody remembers pessimistic expectations.

The international trust and favourable assessments of conducted reforms in Bulgaria, accompanied by moral and material support are of great importance for positive growth achievements. The above is enough for confidence by the Bulgarian people, on the one hand, and on the other it contributes directly to positive results. It is normal in the current situation to postpone the problems for the future when the resources will be enough to solve pending problems.

This strategy could be appropriate, provided the truth is understood and proper measures are taken. The desired effect could be reached if the drop in demand is overcome and impoverishment is stopped. Even the unpopular economic and social polarization could be accepted as normal if it does not lead to further impoverishment.

The only way out is the economic stabilization, growth of output by better utilization of available resources, rational investment policy and international cooperation.

The liberal market policy is unable to pull the economy out of the recession, as instruments boosting economic recovery are not being implemented. In similar cases active regulatory economic policy is used and some economic rules and market requirements are neglected. Instruments and methods for state regulation could be different: from pure economic ones (covered by phrases for economic liberalism) and ending with political and administrative pressure. The latter is likely to happen if positive economic outcome is not forthcoming.

Social effects of the economic crisis are determined by inflation, increasing unemployment and income differentiation, escalation of the shadow economy (about 40% of GDP). Deterioration of education and health care are reliable indicators revealing the poor state of the country. High mortality and negative rate of population growth are other indicators, accompanied by deteriorated nutrition and shorter life expectancy. Food expenditures grow by 2% per annum. The National Statistical Institute (NSI) has published life expectancy data, which are three year average and do not reveal explicit trends sufficiently. The mortality rate is increasing by 0.4 % during the last three years (1994, 1995 and 1996). The purchasing power of the households is sharply decreasing.

The consumption of future resources is in the basis of current economic policy of the government. This is the reason for a lack of future industrial policy as there are no resources for its implementation. The ambition and will for better use of material and human resources is also absent.

The transition revealed something which was not a surprise: economic stabilization and successful reform are possible only by external support. The above, together with accumulating domestic economic and social problems, slow privatization, large external debt and its servicing, insufficient external economic collaboration, decreased domestic and external trust, the flourishing shadow economy and poor investment performance altogether have contributed to the new economic collapse of the country.

The question is how long could last this process? The meaning and significance of the ongoing economic policy is to regulate and cushion harmful effects, and not to eliminate anything that objectively is impossible to get rid of. The objective of this policy is to promote the positive trends. The expected development of the GDP is based on the following general requirements and prerequisities:

- To stop the 'black' series of negative GDP rates which could escalate economic and social pressure and growing economic disequilibrium, resulting in unpredictable implications.
- To conduct a public policy of political compromise and appropriate follow up on the Declaration from February 4th 1997. Defining of clear cut short- and medium- term national economic objectives and their implementation by elimination of any attempts for domestic and external political confrontation.

AGENDA 2000 - Volume - Communication: The effect on the Union's policies of enlargement to the applicant countries of Central and Eastern Europe (Impact STUDY), ES, 1997.
Statistical Barometer 2, 1998. p. 7.

- Mobilization and utilization of available idle domestic material and human resources. Measures aiming at revival of domestic demand by higher incomes, restriction of excessive economic polarization, produced by illegal activities.
- Reasonable transfer of the burden to the future by external borrowing without exaggeration. of their importance under current instability.

On this basis the following GDP growth rates could be expectated for the following three vears:

Table 1.2

100

# GDP GROWTH RATE EXPECTATIONS (IN %)

Years	Low level	Average	Upper leve
1998	-1	2	4
1999	2	4	5
2000	3	5	7

If forecasted data proves correct by 2000 one will not achieve the GDP level of 1989. The expected level for 2000 will be less than 80% of the base year 1989. If GDP growth keeps at the bottom level of projected growth rates the lagging behind will grow larger. If GDP growth rates keep close to upper projections the 1989 level cannot be achieved; it will be over 80 - 85%, Therefore, the upper projections should be considered as minimal for achieving substantial changes in economic development, although instability and sharp fluctuations during transition will be a rule, rather than exception.

#### 1.2 STRUCTURAL DIMENSIONS OF GDP

# 1.2.1 Structure of GDP by Economic Sectors

The lack of clear strategy for implementation of structural reform is manifested in fluctuations as well as in the development of the sectoral pattern under the influence of irregular and random factors. The sectoral pattern of the gross value added evolves as follows:

Table 1.3 THE GROSS VALUE ADDED STRUCTURE BY ECONOMIC SECTORS (IN %)

Sector	1994	1995	1996	1997*	1998	1999	2000
Agriculture and Forestry	12.3	13.9	11.7	18	17	16	13
Industry	32.1	33.6	32.6	36	35	33	32
Services	55.6	52.5	55.7	46	48	51	55

Source: NSI publications and author's estimates

100.0

100.0

The substantial structural changes that took place in 1997 are due to the considerable drop of GDP and stagnation of the service sector which could develop faster and steadily with the real sector development only. During recent years there was both GDP fall and insufficient real sector development it is only normal to witness a decline of the services sector share.

Among CEE countries, applying for EU membership, only Romania and Bulgaria are with high share of agriculture in the gross added value (20.5% and 13.9% respectively for 1995). Among EU members only Greece has 14.7% (for 1994), while the rest are with lower share. The average share of the 15 EU countries is 2.4%, while the average one of the applicant countries is 8.6. including Bulgaria and Romania. There will hardly be important changes in Bulgarian share till the end of the forecasted period (See Table 1.3).

Similar is the situation with the industrial and service sectors. Although in the long run the sectoral structure of gross value added should follow the trends in the advanced countries. The changes in the macroeconomic sectoral structure will result from micro-structure developments. mainly in industry.

The share of manufacturing is expected to increase faster at the expense of mining while in the service sector production services will be developed first (e.g. transport, industrial tourism). The priority development of high value added products will provide additional employment, more favourable prices of produced goods, better terms of trade, discontinuation of the deindustrialization

### 1.2.2 Functional Structure of GDP

Structural changes affect both economic sectors and property rights. In 1996 47% of GDP was produced by the private sector while in 1989 it was 7%. The private sector's share is bigger in services (29%), and was only 9% both in agriculture and industry. The increase of private sector contribution in produced GDP will go on over the following years by cash and mass privatization. By the end of forecasted period the private sector contribution to GDP is expected to be close to three quarters.

The real sector privatization lags behind and this is why the expected positive effects are not forthcoming. Legal privatization level is underestimated. The illegal privatization of real and banking sector assets and income has achieved unexpected levels producing vague economic and social consequences that sharply challenge the society.

The private sector status in the economy has not been clearly defined yet neither regulated, although people rely for their living on goods raised in their households, which are not captured by statistics. The private sector still does not have economic importance as it was expected. It still plays compensation role against unemployment and impoverishment rather than a mechanism for savings, necessary for output increase. That is why this sector does not play yet the indispensable direct reproductive role for the society. Adding the high share of the shadow economy helps explain its controversial effect. It is the socialist psychology and way of thinking we need to get rid off together with the distribution process rather than blame private enterpreneurship psychology and modern market oriented private economy. The market economy has other dimensions. The issue is not in the of private sector only but in capturing by statistics of the whole range of goods and services and market transactions. The modern market has got a sophisticated structure and the private sector has its important share there. When important economic transaction take place beyond the range of the market how could on talk about market relations progress?

The produced GDP over recent years is larger than final consumption due to considerable net transfers for external debt service. Despite of the positive rate of GDP growth in 1994 the physical volume of its basic components; final consumption and gross savings decreases, especially the latter. The same is true for 1996 and 1997. The share of final consumption exceeds 90%. Probably this is going to be maximum.

Total

<sup>\*</sup>Preliminary data from publications for 9 months of 1997 and author's estimates.

The expected tendency reveals relative decline and absolute increase to provide resources for sustained economic revival.

Final GDP consumption for recent years is shown in Table 1.4:

Table 1.4

Table 1.5

# COMPONENTS FOR FINAL CONSUMPTION OF GDP IN % (CURRENT PRICES)

	1994	1995	1996	1997*
Final consumption	91.2	84.9	89.8	91.3
Individual consumption	83.5	78.2	83.7	84.7
incl. Household expenditure	74.2	70.1	76.9	77.6
Collective consumption	7.8	6.7	6.1	6.6
Gross fixed capital formation	14.2	15.3	11.5	10.8
Gross Domestic Product	100.0	100.0	100.0	100.0

\* Estimation

Source: Statistical Yearbook 1997, p.175

Basic macroeconomic indicators, NSI, 1996, p.20 and author's estimates.

Long run growth of Bulgarian economy has been generated by increased saving and prevalence of final consumption over produced GDP, i.e. at the expense of external savings. There is no economy in crisis which could get out of the recession and achieve sustained growth without external financing. At the same time one should look for domestic resources for better utilization of available capacities. Higher investment activity is indispensable for long term growth. In the short run, as it is the present case, the full utilization of idle resources is important. Therefore, the share of savings has to grow, though it will not be easy at the present low level of consumption. The pressure within the saving consumption ratio will grow and will reduce capacities for earmarking resources for public consumption.

Individual consumption share will probably stay over 80% in the long run which will be insufficient to compensate the absolute improverishment at low growth rates. Within the projected time horizon the composition of final consumption is expected to be as it follows:

PROJECTION ON COMPONENTS OF FINAL CONSUMPTION OF GDP
IN % (CURRENT PRICES)

	1997	1998	1999	2000
final consumption	91	91	93	92
ndividual consumption	85	82	83	83
nci. Household expenditures	78	75	76	76
Collective consumption	7	8	8	9
Gross fixed capital formation	11	13	12	14
Gross Domestic Product	100	100	100	100

Substantial changes in final consumption are not expected over the period under consideration. The use of comparative price basis (on previous year prices), will not cause essential changes.

Along with the physical decrease of reserves an increase of final consumption is possible through larger negative trade balance. This will affect gross investments and may produce other controversial implications if it is not thoroughly balanced.

### I.2 INFLATION

### Professor Dr of Economic Sciences ALEXANDER DIMITROV

Inflation is among the basic macroeconomic parameters that determine the economic policy of a country. Inflation magnitudes, subject to the methodology of measurement, determine to a great extent the state of the economy. Inflation should be considered as an objective process. On the other hand there are different interpretations of inflation including specific ones, emphasizing upon selected features of the phenomenon, which can not be accepted as universally valid, as some economists claim.

The controversial nature of the process is based on this aspect and it is impossible for inflation to be measured or understood in one way only. From this point of view there are many conflicts and contradictions about it. The ultimate issue is the utilization of approaches and models recognized by international standards, reflect the specifics of the country and feasibility to measure the process, based on statistical ethics and the capacities of the National Statistical Institution (NSI).

### 2.1 MONTHLY INFLATION DYNAMICS

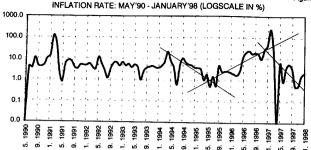
Let us first review the monthly inflation dynamics, measured by consumer price indices (CPI) from mid 1990 till the beginning of 1998. Despite of the monthly fluctuations there is a general tendency of decreasing inflationary potential in Bulgaria. The sharp fluctuations in the average monthly inflation rates over recent years usually precede periods of smoother fluctuations as it used to be after 1991. For a period of 12 months (April 1996 - March 1997) the inflation exceeded 21 times or 129% per month (29% monthly increase over the observed period). There has never been 12 months inflation like this since the beginning of transition in the early 90s. The price increase for a period of 12 months since mid 1990 till mid 1991 was approximately 6 times or average monthly index 116% (16% monthly increase). Despite price liberalization at that time the 1996-1997 inflation was twice as high. If one compares the substance of this process between the two periods the conclusions concern the reasons and the objectives of inflation: during the first period it was demand pooled aimed at balancing supply and demand, while during the second period the objective was to depreciate liabilities, i.e. speculation was prevailing. In this content inflation performed new function; redistribution by melting down dramatically the purchasing power of households savings, it reduced the pressure of these savings on the market and increased social polarization.

In order to overcome the acute social tension and increasing escalation of financial and bank destabilization the currency board (CB) arrangement was put into operation as of July 1st 1997. The introduction of CB was motivated more by social and political, rather than economic objectives to achieve consensus among the political parties and political situation stabilization resulting in taking inflation under control, preventing hyperinflation and achieving financial stabilization. That was the result itself.

With CB implementation the inflationary burst was stopped and hyperinflation was prevented. For seven months (July 1997 - January 1998) the inflation rate decreased at 119%, i.e. 2.5% average monthly rate. Government's objectives and IMF requirements stand for further inflation contraction although CB alone can't provide it. The requirements for decreasing inflationary pressure are clear, however the economy hasn't been stabilized yet and the necessary real sector growth is not secured so as to restrict inflation at relatively low level.

In the figure 2.1 one can see the 90's monthly inflation:





During recent years there were two key points where break down in inflation trend took place: mid of 1995 and beginning of 1997. The rule that high inflation is usually followed by lower monthly rates was confirmed although the economy hasn't reached the necessary statization. The major factors keeping declining inflation at a two digits level by 2000 are as follows: economic restructuring problems, unstable foreign economic relations, grave energy problems, high indebtedness of the economic agents, budget problems in restricted monetary policy environment caused by CB, fragile financial system stabilization, etc.

CB effect on inflation is not direct and it was naive to believe that there would be a zero inflation 'the day after'. First, economic processes are inertial and second, low monthly inflation before CB (there was deflation in April 1997) and the overvaluation of the lev at the time of initial pegging to the DM generated relatively high inflation rates during the second half of 1997, especially during the third quarter:

Table 2.1 MONTHLY INFLATION (CPI) IN BULGARIA JANUARY'96 - MARCH'98 (IN %)

Months & Years	Inflation Rate	Months & Years	Inflation Rate
01.1996	2.26	03.1997	12.27
02.1996	1.91	04.1997	-0.70
03.1996	1.71	05.1997	5.65
04.1996	2.92	06.1997	0.82
05.1996	12.46	07.1997	3.66
06.1996	20.25	08.1997	5.51
07.1996	23.33	09.1997	3.58
08.1996	17.07	10.1997	0.51
09.1996	18.77	11.1997	0.53
10.1996	16.66	12.1997	1.47
11.1996	9.65	01,1998	2.10
12.1996	26.94	02.1998	1.70
01.1997	43.54	03.1998	-0.10
02.1997	242.71		3.10

Source: NSI publications, Bulgarian Central Bank and Agency for Economic Analysis and Forecasts.

It seems high inflation is inevitable during the transition despite measures for financial stabilization. The issue boils down to the dosage of antiinflationary package and the feasible level of inflation with bearable social and economic price. The negative effects of inflation should be assessed mainly due to its fluctuations and growing inflationary expectations rather than its stable though high level.

Bulgarian market is still underdeveloped. There are still temporary shortages of certain goods and services; output is insufficient; unsatisfied potential demand is quite big and it determines producers' and consumers' behavior in this quasi market environment. Notwithstanding recent improvements in CPI methodology there are still shortcomings in its implementation. This been the case, inflation figures should be interpreted with caution.

#### 2.2 MOMENTARY AND AVERAGE ANNUAL INDEX OF INFLATION

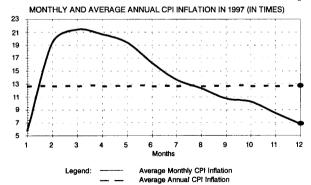
Inflation can not be measured properly in the absence of normal labour, capital and land markets. Its impact over economic activity and vice versa can not be understood. Applied measures of inflation have different economic content and serve different purposes. The accumulated inflation at the end of the year is taken usually as a measure of inflation disregarding the levels for each month compared with respective months from the previous year and therefore annual inflation.

At high inflation levels the difference between the two indices is big and the use of one measure only could be misleading. For instance the inflation index in December 1997 was 678% (578% increase), while the average annual one was 1254% (1154% increase).

Economic developments are not based on momentary values (including monthly averages) but on average annual magnitudes. This is the ground for assessment of levels of income, real output volume, interest rates, exchange rates. The statistics computes both monthly and annual parameters but authorities use those values only, which suit them best.

Figure 2.2 shows monthly inflation rates and the average annual values of the CPI inflation in 1997:

Figure 2.2



Inflation possesses inertia, caused to a large extent by economic agents' inflationary expectations. The inertia of inflation has not been built in Bulgarian economic policy so far. Embodied in institutional foundations of the economy and being stable inflation is neutral with regard to macroeconomic processes and does not cause problems to other growth parameters. Bulgarian economy however is still far away from this status and is quite sensitive to forecasted and actual inflation rates. The selection of inflation indicators should be subjected to the objectives of economic analysis or decision making. On this ground one could talk of hidden inflation (intentionally or random) aiming at results favouring someone and detrimental to others.

The impact of high inflation on the economy and society is hardly predictable. Priceincome ratio may change dramatically affecting various social strata and sharpening social polarization. This leads to large scale redistribution of income and wealth (including underground ways) among social groups. New relations emerge in prices, output and employment. These developments should not be dramatized as long as economic agents behave reasonably.

#### 2.3 INFLATION ALTERNATIVES IN 1998

Assume that in 1998 January inflation of 2.1% and February one of 1.7 (accumulated 3.8% or 1.9% average monthly) are followed by 1% average monthly inflation. The price index in December'98 compared to December'97 will be 114%, while annual inflation index will be 137%, i.e. average annual inflation will be nearly three times as high.

Suppose the average monthly inflation is 2% throughout the year, the numbers are respectively 127% and 144%, i.e. average annual inflation is lower compared to accumulated one at the end of the year (in December). Average monthly alternatives after January 1998 are shown in table 2.2.

AVERAGE MONTHLY INFLATION ALTERNATIVES

Table 2.2

Alternatives from February'98	Inflation Index (in %)	
Monthly Rate (in %)	Dec.'98/Dec.'97 Accumulation	Average Index for 1998
40	ale.	2.57
1.1	115	138
1.2	116	138
1.3	118	139
1.4	119	140
75	50000	14 (14)
1.6	122	141
1.7	123	142
1.8	124	143
1.9	126	144
20		
2.1	128	145
2.2	130	146
2.3	131	147
2.4	133	147
		<b>35.00</b>

# 2.4 PRODUCER'S PRICE INDICES (PPI) IN INDUSTRY

Producer's price indices in industry are very close to CPI monthly inflation indices. PPI are smoother (no sudden changes) and higher compared to changes of CPI. The average monthly index for 11 months (May'96 - March'97) is 130% (30% monthly increase) while after introduction of CB arrangement (July'97 December'97) the average monthly increase was 2% for six months:

Table 2.3

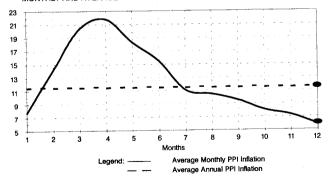
# MONTHLY INFLATION (PPI) JANUARY'96 - JANUARY'98 (IN %)

Months & Years	Monthly Rate	Months & Years	Monthly Rate
01.1996 02.1996 03.1996 04.1996 05.1996	0.81 2.26 2.43 1.17 14.89 18.88	01.1997 02.1997 03.1997 04.1997 05.1997 06.1997	42.02 129.44 36.58 4.44 0.47 1.83
06.1996 07.1996 08.1996 09.1996 10.1996 11.1996	32.98 17.57 13.24 16.02 10.68	07.1997 08.1997 09.1997 10.1997 11.1997 12.1997	3.06 2.85 1.94 2.96 2.79 -1.33
12.1996	32.02	01.1998	0.88

Source: Publications of NSI, Bulgarian Central Bank, Agency for Economic Analysis and Forecasts Figure 2.3, shows monthly and average annual PPI inflation rate for 1997:

Figure 2.3

# MONTHLY AND AVERAGE ANNUAL INFLATION PPI RATES IN 1997 (IN TIMES)



# 2.5 INFLATION FORECAST TILL THE END OF 2000

It is very likely that the two digits inflation rate will go on till the end of the forecasted period (2000). Taking into account the irregular and unpredictable inflationary fluctuations, the economy will develop in inflationary ambiguity, uncertainty and inflationary expectations irrespective of the currency board arrangement. Inflation can not reach sustained one digit annual levels as long as economic growth is not resumed. One could expect gradual decline of annual inflation down to 13% in 2000. One should not preclude unexpected sharp fluctuations along the declining trend.

One could assume that monthly CPI could fluctuate between 0.5 - 2.5% and the index value could be as follows:

Table 2.4

# EXPECTED ANNUAL INFLATION FOR THE PERIOD 1998 - 2000 AND MONTHLY ALTERNATIVES OF INFLATION RATES (IN %)

No Changes in Monthly Rates over the Year Average monthly rates (in %)

				•	
	0.5	1.0	1.5	2.0	2.5
Average Dec./Dec.	144.2 107.9	1 144.2 113.9	998 144.2 120.3	144.2 126.9	144.2 134.0
Average Dec./Dec.	106.2 106.2	1: 112.7 112.7	999 119.6 119.6	126.8 126.8	134.5 134.5
Average Dec./Dec.	106.2 106.2	112.7 112.7	119.6 119.6	126.8 126.8	134.5 134.5

# Changes in the Monthly Rates over the Year at Starting Levels: Average monthly rates (in %)

				,	
	0.5	1.0	1.5	2.0	2.5
		1	988		
Average Dec./Dec.	144.2 108.0	144.2 114.1	144.2 120.4	144.2 127.1	144.2 134.2
		10	999		
Average Dec./Dec.	106.2 106.3	112.7 112.8	119.6 119.7	126.8 127.0	134.5 134.6
		20	000		
Average Dec./Dec.	106.3 106.3	112.8 112.8	119.7 119.7	127.0 127.0	134.6 134.6

- (1) One expects development and consolidation of financial stabilization accompanied by slow economic growth. If any fluctuations occur they are expected to be along the overall trend and can not affect annual changes:
- (2) The exhaustion of inflation potential will go on and real sector growth will not generate additional inflation;
- (3) Average annual inflation in 1998 will be higher than its value at the end of the year. Its level is expected to be 144.2%. This is the bottom level, which could be higher if there are high inflation indices during 1998, which is unrealistic. The margin between average annual inflation and its value at the end of the year will be smaller the higher the average monthly inflation rate over the year. Hence the lower monthly inflation in 1998 the higher the temptation to ignore high annual inflation rate. For the next couple of years both indices will tend to equalize, provided there are no important monthly inflation fluctuations;
- (4) Inflation projections, shown in the table below, are based on assumptions for equalization of different annual indicators as it is in other countries. Such equalization will be indicative of forthcoming stabilization of inflation rates within the year. Under present conditions, however there are differences between inflation measures that should be taken into account. Economic statistics uses and compares mainly periodical and average annual values and not transitory ones. It is better to compare annual values and to look for opportunities for commensurability with other economic parameters:

Table 2.5

ANNUAL, MONTHLY AND AVERAGE MONTHLY INFLATION IN BULGARIA
FOR THE PERIOD 1994-2000 (IN %)

Years	Annual index of the deflator of GDP	Annual PPI	Annual CPI	Dec. to Dec. inflation of two consecutive years	Monthly average inflation (geometrical mean)
1994	179	185	187	222	107
1995	154	156	163	133	102
1996	214	226	123	411	112
1997 (estimation)	1200	1146	1254	687	117
1998 (forecast)	141	139	144	127	102
1999 (forecast)	121	121	120	120	101.5
2000 (forecast)	115	114	113	113	101

**Source:** Publications of NSI, Bulgarian Central Bank, Agency for Economic Analysis and Forecasts. Author's estimates.

One may also mention other deflators, such as the investment deflator and the foreign trade deflators (import and export). Expected resumption of investment activity will contribute to faster increase of investment deflator which could be higher than GDP deflator by 4 - 5 percentage points. Foreign trade deflators are usually lower than GDP deflator and will stay so, though the margin is expected to decline by the end of the period as import/export deflators ratio will be in favour of the import deflator.

Monthly inflation fluctuations are significant in Bulgaria. It is a product of temporary deficits, fluctuations in temporary demand, seasonal fluctuations of vegetable prices as well as of production and consumption of energy. As far as energy prices are concerned there is an increasing tendency due to evolving price system of energy resources in accordance with international prices, inherited from wrong economic policy in the past. Along with seasonal fluctuations monthly values comprise inertial and speculative nature.

#### 2.6 INFLATION FACTORS

There are conventional theories about thhe rates of inflation but they do not appear explicitly in pure form. An increase in the aggregate demand is an inflationary factor - demand pooled inflation. Insufficient supply and high production costs also foster inflation - cost pushed inflation. Their impact however can not always be clearly identified. Price increase in 1997 was accompanied by reduced supply and limited purchasing power of the. Purchasing power marked a drastic decline during the year. Therefore sharp price increases resulted from shortages of goods, some of them generated artificially.

Price increase pressure derives from higher labour costs, higher prices of inputs, such as raw materials and energy, growing financial costs and liabilities, budget deficit and decreasing budget subsidies. Fixed assets revalorization will also be a source of inflation for 1998. More important could be inflationary expectations due to instability of the real economy sectors, lack of meaningful economic recovery and sustained growth, continuing mistrust of public institutions.

Monopolies in some branches of the economy (both state and private sector) are another inflationary factor. It is especially true for the state monopolies in the energy and telecommunication sectors. Privatization in these branches is not expected to eliminate monopolies. It may even expanded owing to restricted domestic market. Monopoly prices increase inflationary pressure in such an environment.

Different forms of privatization are not expected to have antiinflationary effect. One may expect that **voucher privatization could also have inflationary impact on the economy** in pursuit of high short term profits at any price.

The same effect has the complete lack of control in domestic trade and the numerous intermediaries. The shadow economy is also an important inflationary factor, along with the non market behavior of economic agents.

General price level increase is associated mainly with output and employment expansion. The unemployment inflation ratio used to be a conventional macroeconomic model. This theoretical model however failed to explain various inflation unemployment ratios in transition countries. Economists have often overestimated the relationship between inflation rate and unemployment rate. It was accepted that at high inflation unemployment should be low and vice versa. The relationship was viewed as a balance between the magnitudes of the two phenomena. Economic stagnation combined with high inflation proved to be normal for a number of years in transition economies. The term stagflation even evolved into slumpflation in some CEE transition economies. Bulgaria was not an exception.

During the recent five years the unemployment level in Bulgaria has changed (sharp increase in the beginning, followed by a minor decline and another increase) at relatively high permanent inflation rate with a week decreasing tendency and another increase recently. It derives from the fact that in the past full employment was kept artificially, while after 1990 unemployment started to grow along with inflation. High unemployment went on growing, but did not produce a turn in inflation.

Inflation affects national currency, both her purchasing power and its real value through the interest rate and the exchange rates vis a vis foreign currencies. Interest and exchange rate

changes are used as antiinflationary monetary instruments, but inflation often overtakes them and thus burden is transferred to consumers. The margin between inflation and exchange rate dynamics was increasing as inflation rate was overtaking the exchange rate. With CB arrangement this effect has fallen. Price increase under currency board arrangement is independent from minor exchange rate fluctuations, and even from the pegging of the lev to the reserve currency - the DM.

External factors also affect the inflation rate. Hence there is export or import of inflation. The classical models treat this relationship for different goods on different markets and different producers and consumers. This however is quite restrictive and unrealistic although import and export of goods affect our quasi market relations due to insufficient output and limited demand.

The large external debt payments are additional powerful factor of inflation acting through higher budget expenditures (respectively budget deficit) and inflationary demand for its financing. Budget problems with revenues grow more severe with higher inflation and diminishing collection. The inflationary component can not compensate diminishing budget revenues despite its temporary effect. Therefore it turns into additional inflationary factor along with the ambition for depreciation of domestic debt payments. Hence curtailment of the shadow economy decreases her inflationary implications.

Therefore, inflation is a complex phenomenon and defining of its parameters should be based on all factors. It is naive to believe that the impact of each of these factors on inflation could be quantified and thus develop a multifactor model for inflation forecasting. The sharp fluctuations and instability of the Bulgarian economy cast doubt upon such an approach. The only pragmatic method might be comparative analysis and analogy with other countries under similar conditions and Bulgaria at different time.

\* \*

The key issue is: Was the inflation peak in Bulgaria achieved in 1997, could it be repeated soon and what would be its level?

- The answer for the short term (the 3 years under consideration) is 'No', but there are no guarantees that it will not be repeated at higher inflation level and with more destabilizing effect in the medium-run.
- There is an inflation suppressing effect by the CB arrangement, although it is not quite certain in the longrun.
- Only a political destabilization (both external and internal) could cause high inflation again.
- The future EU membership could have the effect of an antiinflation 'umbrella', however it is in the distant future and is impossible to rely on this at least over the following 10-15 years.

# 1. 3. THE MONETARY RELATIONS AND CHANGES IN THE MONETARY SPHERE

### Dr. TATIANA HOUBENOVA-DELISSIVKOVA Senior Research Fellow, Ph.D.

By the introduction of the currency board regime in Bulgaria an explicit legislative and executive policy commitment has been made in favour of the rules of the monetary automatism of regulating the money supply by backing the monetary base with a 100 per cent coverage of foreign assets and by fixing the exchange rate of the BG lev to the German mark. For the attainment of stability and credibility of the currency board the functioning of the monetary system is expected to be carried out consistently under the accepted rules within the medium term period under consideration.

The monetary stabilisation of the Bulgarian economy in medium term will be based on the discontinuance of the discretionary monetary policy which has contributed to a considerable extent to the inertia of the high inflation with all the unfavourable consequences for the economic trends and the business environment. Through the adoption of the new monetary rules a profound change is carried out by the suspension of the autonomous role of the Bulgarian National bank as a central bank as regards the issue of money and its former instruments of refinancing the Government and the commercial banks. The aim is to guarantee the possibilities for the monetary and financial stabilisation by a resort to a fixed exchange rate regime, disinflation and progressive realignment of the relative prices to the price level of the country whose currency has been chosen as a "nominal anchor".

Together with the transition of the monetary and credit system towards clear and transparent rules of its functioning, an additional feature of the currency board is the elimination of the instruments of the central bank policy aimed at the regulation of the liquidity of the economy. The suspension of any forms of politicised money supply through direct or indirect financing of the state budget and refinancing of the commercial banks may be expected to contribute to the improvement of the financial discipline at all levels of economic activities in the foreseeable future. In particular, the maintenance of an exchange rate parity will imply restriction of the monetary financing of fiscal deficits for the forecasted period 1998-2000. The currency board regime is expected to derive its credibility from the provision of a better potential for the servicing of the state debt as well.

The transition to the currency board has been provided by the adequate legislative and institutional arrangements since mid 1997 encompassing the existing central bank and the commercial banks. Thus the restoration of the credibility of the banking system has been started after the prolonged and deep banking and financial crisis. In order to guarantee the credibility of the currency board the Bulgarian National bank has been restructured and deprived of its former policy instruments with the exception of the minimum reserve requirements of the commercial banks. The last resort facilities allowed to the Bulgarian National bank (especially to its Banking Department) are restricted to systemic and emergency situations and are limited to the amount of the forex reserves in excess of the backing requirement (the reserves) of the Banking Department.

In its integrity the modifications of the "pure" orthodox type of the currency board as having been approved by the Bulgarian legislation may allow for a higher degree of adaptability of the monetary sector due to the fact that the Bulgarian National bank may serve the need of:

1) being the regulative centre of the settlements' system of the commercial banks;

September 1997 and 1997 and 1997 and 1998 and 1998 and 1999 and 19

- 2) governing the currency reserves of the Department of issue of money under the currency board rule:
- 3) regulating the commercial banks' activities in compliance with the prudential banking reserved to Banking and acting as a creditor of last resort in systemic risk cases.
- 4) executing the supervision of the banking and nonbanking financial intermediation and providing for the stability of the currency board.

In order to evaluate the results and prospects for the monetary sphere after the introduction of the currency board since July 1997 three main aspects of the new monetary regime are worth interest: 1) evaluation of the trends of the money supply changes as being crucial for the revival of the economy; 2) possibilities and prospects for the development of the money demand with regard to expectations of the progress of the structural reforms and the dynamisation of economic growth; 3) analysis of the factors and prerequisites expected to contribute for the monetary stabilisation.

The Bulgarian economy is still undergoing profound structural adjustment through privatisation and the strengths of the currency board regime and its contribution to the monetax tabiisation are not to be derived solely by interaction between the fixed exchange rate commitment and the fiscal stance. The sequencing of the structural policies with the functioning of the currency board will be of great importance to achieve lower inflation rates, to diminish the state budget deficit and implement credible policies in favour of setting the ground for enhancing economic growth.

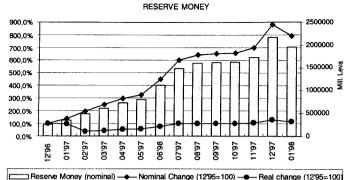
The currency board regime may be expected to be dependent to a great extent on the further progress of the transformation of the Bulgarian economy towards market oriented development. Thus the monetary stabilisation through the currency board regime has to meet the challenges as well as to be supported by the accelerated structural adjustment of the Bulgarian economy up to the year 2000.

### 3.1. THE DYNAMICS AND MAIN CHARACTERISTICS OF THE MONEY SUPPLY

The mechanism of the money supply is considerably changed under the currency board regime. The main factor of its dependence has become the dynamics of the capital flows and the forex reserves of the country. The major positive result of the introduction of the currency board is the increased amount of the forex reserves and the guaranteed backing of the monetary base. This has occurred due to the external financing support provided by the international organisations on the basis of the Fifth stand by agreement with the IMF. The recovering of the credibility of the Bulgarian National Bank has been made possible on the basis of the support for the servicing of the foreign debt and the domestic debt under the rules of the currency board.

The fiscal flexibility achieved on the basis of the currency board has become the most significant contribution to the monetary stabilisation. But similar to other countries' experience this fiscal flexibility is the result of the increased foreign debt with the newly borrowed official credits. Thus the management of the foreign debt has become extremely important for the sustainability of the currency board. The value of the external debt of Bulgaria increased from 9595.6 bill.US dollars in December 1996 to 9989.7 bill.US dollars by the end of 1997.

The problem in medium term prospect will be how to combine the servicing of the foreign debt with the maintenance of a volume of forex reserves of the Bulgarian National Bank allowing for the full backing of the domestic money liabilities and thus guaranteeing the sustainable functioning of the currency board.

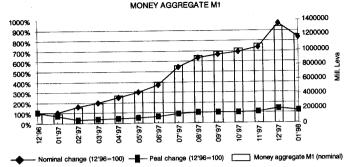


The increased **dynamics of the reserve money** is another important feature of the currency board (Fig. 3.1). The trends of nominal and real changes of this money aggregate by the beginning of 1998 are indicative of the improved liquidity of the economy after the currency board has been introduced. Some excess reserves of the banking system have been accumulated. The challenge for the monetary sphere will be to undergo the proper restructuring of the money demand which is yet to be balanced more adequately with the money supply.

A typical characteristic of the money supply since the introduction of the currency board has become the rising volume of quick liquid money and the ongoing remonetisation of the Bulgarian economy. A considerable rate of growth of the monetary aggregate M1 has been observed in 1997, especially for May-July and in December (Fig. 3.2). The higher rate of growth of liquid money supply explicitly has been combined by higher rates of the monthly inflation. In real value the most liquid money has been increased to a considerable extent by the end of 1997. Nevertheless the overall reduction of the inflation rate since the currency board introduction has made possible some compensatory process of the real remonetisation of the economy.

In medium term prospect the forex reserves of the Bulgarian National Bank (BNB) will be maintained at a relatively lower level than the one achieved in 1997. The sustainable functioning of the currency board would be guaranteed by a higher volume of forex reserves than the three months volume of the exports but this could be made possible only at the account of increasing the exports revenues or borrowing new loans from the international capital markets.

The forecast of the slower rate of growth of the foreign currency reserves is based on the following expectations: 1) lower rate of economic growth and export revenues than the officially forecasted ones; 2) moderate increase of foreign capital inflows in 1998 and their dynamisation from mid 1999 onwards due to the peculiarities of the much slower process of privatisation than the expected one for the beginning of the forecasted period;3)the necessity to service the foreign debt repayments due.



Under the currency board the official reserves will be dependent on exogenous factors of the money supply. The operations of the independent monetary authorities though limited in scope must be governed more efficiently by adequate foreign assets portfolio management in order to allow for the sustainable maintenance of the coverage of the monetary base and the overall stability of the monetary system.

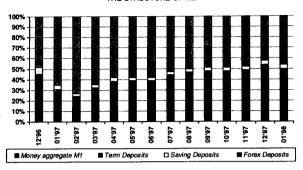
Due to the strict dependence of the liabilities of the BNB on the forex assets available, the role of the velocity of money circulation will increase. The growth of the ratio "GDP/broad money" as an indicator of the money velocity is a second main prerequisite for the sustainability of the currency board especially under the prospect of the decelerated dynamics of growth of the forex reserves. After having reached values of 1,26 to 1,3 in 1993-1996 the indicator of the velocity of money may be increased to 3,5-4,5 in medium term prospect by improving the money transmission mechanisms and the payments system efficiency.

The changes in the monetary aggregate M2 in 1997 are favourable but still higher growth of the less liquid money (the quasi money) as an indicator of improving financial intermediation is to be achieved (Fig. 3.3). The expectations of more active foreign banks' supply of services at the domestic market by year 2000 make possible to forecast a trend of rising competition and improved financial services.

Since the introduction of the currency board a positive trend of the remonetisation is the growth of the monetary aggregate "broad money". The real growth indexes (1995=100) of the broad money have increased to 32.7 in July, 33.1 in August and respectively up to 37 in December 1997. The future growth of the broad money will be more moderate due to the disinflation process and the improved money transmission. The ratio "broad money/ GDP" may be expected to be increasing from 25 per cent in 1997 to 30 per cent in 2000 if the annual inflation rate may be reduced to 8 percent. Higher rates of this indicator may reflect higher inflation rate and/ or still unsatisfactory degree of improvement of the money transmission mechanism.

The currency substitution has undergone some reduction in 1997. The ratio "deposits in foreign currency/ broad money" may be expected to continue to decrease from 43.8 per cent in December 1997 to 25-28 per cent by the year 2000 under a sustainable development of the currency board. The transition from the DM to the euro as a nominal anchor of the BG lev after





1999 may cause some resumption of the higher currency substitution rates if uncertainties would create preferences for higher dollarisation. It may be necessary to keep under control some higher degree of dollarisation in order to serve better the purpose of realignment of the real exchange rate of the BG lev without incurring the costs of loss of currency board credibility.

A specific feature of the currency board in Bulgaria is the interrelation of the net domestic assets of the Bulgarian National Bank (BNB) and the dynamics of the reserve money. The net domestic assets of BNB as assets of its Banking Department represent loans to the commercial banks and liabilities of the Government. Any direct loans of BNB to the Government have been already suspended and the reduction of the former liabilities will follow a stable trend of fiscal consolidation. In case of insufficient state budget revenues the Government may resort to its fiscal reserve which has reached a relatively high level of nearly 45 per cent of the liabilities of the Department of issue. The need to manage properly the fiscal reserve will be of crucial importance for the stabilization of the money supply. The specific feature of the Bulgarian currency board is the possibility of keeping the fiscal reserves of the Government as deposits with the BNB Department of issue. Nevertheless the maintenance and management of the fiscal reserves has been transferred completely to the competencies of the Government. The BNB has been deprived of any usage of open market operations or purchases of Government securities. Thus an imperative for the medium term stability of the money supply is to limit the endogenous factors of its growth. The maintenance of the stability of the fiscal reserves within the due limits as well as its proper operational management have to contribute for the sustainability of the currency board regime.

The potential resort of the BNB to its \_creditor of last resort\* facilities under the systemic risk circumstances may allow for some flexibility of the money supply in order to help to overcome the liquidity problems of the banking system. Main source of the \_last resort\* facilities are to be the reserves of the Department of Banking. Their growth will remain satisfactory for 1998 but special attention has to be paid to the maintenance of the reserves in the future. By the end of the forecasted period the banking system's vulnerability to incipient runs may increase as result of greater international capital mobility and the banks' involvement in trade with securities at the

emerging capital markets. The flexibility attained through the "creditor of last resort" facility may keep the development of the monetary system under a combination of the automatic currency board monetary rule and some application of monetary measures of discretionary nature. This unorthodox type of currency board in Bulgaria should allow for more adequate management of banking crises' risks. Some degree of duality of the monetary regime makes necessary the adequate application of any instruments of intervention in case of a systemic risk.

Under the currency board the BNB has retained the minimum reserve requirements as the only instrument of direct control of the monetary base and the liquidity of the banking system. The changes expected in the approaches to the evaluation and monitoring of the reserve requirements are yet to make possible a more differentiated and efficient management of the money supply through the banking system.

Since the introduction of the currency board the reserve requirements have not played any significant role for the banking system liquidity control. The small impact of the required reserves of the commercial banks is due to the availability of excess reserves of the banking system for the first 9 months of the currency board regime. The reserves required don't accrue any interest to the commercial banks any more and thus they act as an implicit tax on the deposit creation. The monetary authorities have to make them high enough to promote the stability of demand for reserves and low enough to minimize the distortions in resource allocation that inevitably accompany any tax. For 1998 the total demand for reserves is difficult to be predicted due to the ongoing process of restoration of the banks' credibility and the delay of the revival of the banks' credit activities. An introduction of a better reserve operating mechanism in 1999-2000 is to be undertaken in order to influence properly the money supply and the money growth through the reserve requirements ratio. For the banking system the problem will be to what extent the changes expected to be introduced in the mechanism of required reserves may have regulative but not a restrictive effect on the banks' credit activities. Setting the adequate money growth path for the period 1998-2000 is to be consistent with the non-inflationary type of economic growth Bulgaria has already undertaken under the present Government program.

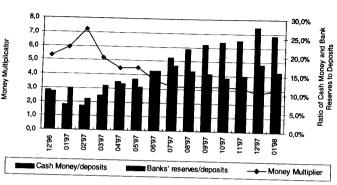
A more important aspect of the required reserves is their usage as the only instrument of the BNB for influencing the money multiplier. The reserve money multiplier model of money control will remain a better indicator of the economic activity than the banks' credits or interest rates in the medium term prospect. Under the currency board an important function of the required reserves will be to provide liquidity of the banking system acting as a buffer to liquidity shocks. In principle any changes of the ratios of required reserves cause restructuring of the banks' portfolios. The sustainability of the currency board will be supported by the stable maintenance of the required reserves ratio and by giving up its usage as a monetary instrument of fine tuning.

The money multiplier is a complex indicator of the money supply and the money transmission process. The general trend for 1997 is the reduction of the money multiplier. From 7,21 per cent in February 1997 the multiplier of the broad money was reduced to 5,18 per cent in March, than respectively to 3,19 per cent in July and 2.65 per cent in December 1997.

In 1997 substantial changes are to be observed in the two main components of the money multiplier.

For the reduction of the money multiplier has contributed greatly the growth of the ratio "banks' reserves to deposits" from 11.3 per cent in March respectively to 17,6 per cent in July and 20 per cent in December 1997. The availability of excess reserves in the banking system has already raised problems for the asset/liabilities management of the banks as their ROE and ROA are yet to be improved substantially. Yet the lending activities of the banks are not growing and the deposit multiplier is indicative of insufficient creation of money by the banks.

# MONEY MULTIPLIER AND ITS COMPONENTS



The ratio "money in circulation to deposits" shows a steady trend of growth of the cash money as compared to the deposits. The values of this indicator have risen from 6,8 per cent in February to 19,7 per cent in July and 28,2 per cent in December. For the prevailing rates of growth of the cash money as compared to the deposits have played an important role the following factors: 1) the slow process of restoration of the credibility of the banking system in spite of the undertaken consolidation measures; 2) the suspension of the facility allowing repurchase of the Government securities before maturities which decreased the interest of small investors to buy these securities; 3) the unclear timing of privatisation procedures of the state banks which has also caused the withdrawal of depositors.

In medium term prospect the dynamics of the money multiplier will be influenced by some reduction of the ratio "banks' reserves to deposits" Any further growth of the money multiplier may not be expected due to the following factors: 1) the banks will restrain from higher credit exposure if the delay of the economic revival continues in 1998 as well; 2) the changes due to be introduced in the deposit insurance schemes will impose the maintenance of greater amounts of reserves of the banks; 3) the low rates of interest will cause higher values of the ratio "banks' reserves to deposits".

Of great importance for the money supply is the dynamics of the net foreign assets of the BNB and the commercial banks. The growth of the BNB foreign assets is substantial (from 721.5 bill.US dollars in April to 1383.7 bill. US dollars in December 1997). Some further increase of the net foreign assets by 350-400 bill. US dollars may be expected for 1998 as result of capital inflow from external financing. The privatisation revenues of nearly 500 bill. US dollars could contribute to the surplus of the balance of payments.

The net foreign assets of the commercial banks have increased substantially since the introduction of the currency board. In July 1997 these assets amounted to 201.3 bill. US dollars and in December 1997 to 998 bill. US dollars respectively.

The excess reserves of the commercial banks will continue to foster the trend of growth of the net foreign assets though at a reduced rate. The delay of economic revival stimulates the capital outflow. This trend allows for some contraction of the domestic money supply and thus may have deflationary effect on the economy. The capital outflow may not be successfully overcome as long as the real interest rates remain negative and the underdeveloped capital markets continue to serve only partially the financing of the real sector. Any further delay of the economic growth may combine the deflationary effect of the capital outflow with higher rates of inflation. On the contrary, the economic revival will cause eventually some increase of the rates of interests thus stimulating the reduction of the net foreign assets as well as capital inflows. This may improve the supply of banks' credits as well. Thus it is to be expected that the currency board will influence the money supply indirectly in order to restore the stability of the monetary relations.

# 3.2 PROBLEMS OF THE MONEY DEMAND UNDER THE CURRENCY BOARD

In spite of the short period of functioning of the currency board regime some trends of the money demand raise the problem of the speed of achieving some positive effects of the adjustment mechanism of the currency board. On one hand, the money demand is positively influenced by the suspension of the direct credits to the Government and the state budget. The demand of money is becoming dependent on market oriented principles. On the other hand, due to the underdeveloped money and credit markets the money demand may not be performed only at market principles for a certain period in the future as well.

The adjustment of the money demand has been slower in 1997 than the one of the money supply due to factors as: 1) inadequate money transmission mechanism; 2) underdeveloped financial markets; 3) the comparative remoteness of Bulgaria from the international capital mobility.

As regards the money demand, the adjustment process is more difficult as the capital control and the underdeveloped financial intermediation limit the capital mobility. It may be expected that the adjustment of the money demand is to occur more gradually through further changes of the rate of absorption and the eventual worsening of the trade balance.

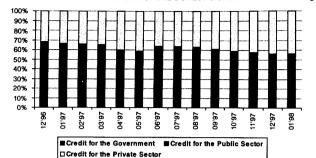
By the introduction of the currency board the sharp drop of the interest rates had decreased the burden of the interest related expenditures of the economic agents. Nevertheless the lowered rates of interest are not stimulating enough for the growth of the money demand. The economy has not come out of the deep crisis and the money demand will need some time to recover under the conditions of strict observance of the prudential banking criteria.

In 1997 the domestic credit as an indicator of the money demand has remained depressed. This is due to the overall economic destabilisation at the beginning of 1997 and the difficulties of the economic recovery. The suspension of the Government's borrowing from the BNB has limited the crowding out effect of the Government credit. In1997 for the first time since the transition to a market economy the Government credit has smaller share of the total domestic credit than the non-governmental sector (Fig. 3.5).

It is to be expected that the share of the Government credit will continue to decrease as a share of the GDP respectively to 6.7 per cent in 1998, 2.2 per cent in 1999 and 5.5 per cent in year 2000. The non-governmental sector will be increasing its credits up to 19.1 per cent of the GDP in 1998, 20 per cent - in 1999 and 20.3 per cent in year 2000. It is much more probable the demand for credits to grow more gradually because of the peculiarities of the ongoing privatisation and the high degree of segmentation of the real economy.



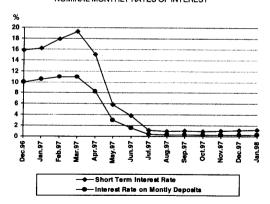




An important advantage of the currency board in the future will be the interest rate policy which will be based on the alignment of the interest rates' level with the "nominal anchor's' level of interest rates. The interest rates level has been reduced by a shock at the introduction of the currency board (Fig. 3.6). The fall of the nominal and real interest rates is a trend that has already contributed substantially to the monetary stabilisation. For the forecasted period the main problem will be whether the application of the yield of the 3-months Government securities as basic interest rate may continue to serve any market oriented monetary development.

### NOMINAL MONTHLY RATES OF INTEREST

Figure 3.6.



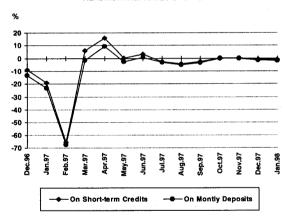
The preservation of higher interest rate differential between the credits and the deposits rates is typical of the difficulties of the financial intermediation in its adjustment to carry out properly the transformation of savings into investments. The interest rate differential is expected to be decreased by the end of the forecasted period.

In real terms the rates of interest (both on credits and on deposits) remain negative (Fig. 3.7). The economic recovery may lead to a reversal of this trend by the end of the period under consideration. The methodical approach to evaluation of the basic interest rate must be considered a crucial issue of the choice of monetary growth path in the future.

By the middle of the forecasted period there might be risks that higher growth of demand of money may cause greater fluctuations of the interest rates. The development of the financial market would also be dependent on the market formation of the rates of interest. The basic interest rate's policy of the present type will become even more vulnerable with the increased capital mobility and the growing needs of increased liquidity of the economic agents.

Figure 3.7.

### REAL MONTHLY RATES OF INTEREST



The prospects of any change of the approach towards the evaluation of the basic interest rate remain uncertain. The undeveloped money and capital market and the problems of the money transmission mechanism will delay the transition to market-oriented formation of the basic interest rate. It is expected to preserve the basic interest rate at the level of 10 to 7 per cent annually. This may be possible due to the availability of excess reserves, the fiscal consolidation and the maintenance of the fiscal reserves at stable level by the support of foreign financing.

# 3.3. PREREQUISITES AND CONDITIONS FOR THE ACHIEVEMENT OF THE MONETARY STABILISATION

# The achievement of the stability of the monetary sector

In medium term perspective the difference between the monetary stabilisation as a policy outcome of proper measures of the currency board and the consolidation and stability of the monetary sphere and its interrelations with the real sector may be of crucial importance for the better management and performance of the currency board.

The still existing uncertainty about the process of economic transformation through the privatisation of the main state owned banks as well as the delayed so far inflow of fresh foreign investments in the Bulgarian economy may cause a wider amplitude of fluctuations in the process of the monetary stabilisation.

Besides on the restriction of the inflation, the monetary stabilisation will depend on the adequate management of other sources of monetary disequilibria. Under the condition of the currency board rule of the issue of money the limited availability of foreign capital inflows so far may raise the importance of the following factors of monetary stabilisation: 1) making sustainable the reduction of the interest rates' expenditures of the economy by providing for adequate servicing of the public debt on a long term basis; 2) improving the markets' access of the economic agents and the competition rules and increasing the export revenues; 3) overcoming the burden of bad credits and improving the banking liabilities and assets' management in order to improve the liquidity of the economy; 4) consolidation and recapitalisation of the banking system by its privatisation with foreign participation as well; 5) better management of the credit and market risks at all levels of the economy.

By the beginning of 1999 the stability of the monetary system will remain still dependent on the overcoming of the debt crisis, the avoidance of any bank's insolvency and the delay of the revival of economic growth.

Summarising the analysis of the factors of achieving the consolidation of the monetary sector, it is important to underline that while at the start of the currency board the reduction of the interest rates and the fixed exchange rate to the German mark have contributed to the stabilisation, in medium term prospect it will be the interdependence with the real sector that will play the decisive role for the outcome of the sustainable monetary adjustment.

# The monetary transmission and the prospects of its normalisation

The main reason for the still inadequate monetary transmission in the Bulgarian economy is the delay of the market-oriented transformation, inconsistent financial reform and lack of proper functional and institutional development of the money, credit and capital markets. Due to this the formation of the main price variables in the economy (the rate of interest and he exchange rate) has become inadequate to reflect the dynamics of the adjustment process and acted pro-inflationary thus leading to the necessity of the currency board. The most difficult problem yet to be solved will be the choice of an appropriate financial mix as regards the money transmission. Though since mid 1997 the focus may seem to be on the financial markets development the banking institutions have to play a key role in the medium term prospect. Banks remain crucial for channeling the résources and for the restructuring of the non-financial sector. The financial sector reform has entered the stage of restructuring and together with sound, transparent solutions in corporate governance is yet to contribute to generate higher levels of domestic savings.

Under the currency board rules the regulative mechanisms of the interest rate formation at the market of Government securities and the fixed exchange rate of the BG lev will set the conditions for the balancing of the money supply and demand while the financial markets will still be in the process of being organised. The return to a market formation of the main price variables in the Bulgarian economy is to occur under the regime of the currency board by passing eventually through two phases: 1) Improving the monetary transmission by raising the credibility of the financial intermediaries (both banking and non-banking); 2)development of functioning money and capital markets that may make possible the abandonment of the fixed exchange rate regime in a long term prospect.

In favour of the improvement of the monetary transmission mechanism may be: 1) the expected acceleration of the privatisation process through new approaches and mechanisms; 2) the further restructuring of the real sector and the growing share of the private sector's contribution to the formation of the GDP; 3) the consolidation of the commercial banks and the recapitalisation of the banking sector; 4) increasing the role of the organised capital market in the privatisation process and as a source of external financing of the enterprises and other economic entities.

The factors contributing to the improvement of the money transmission under the currency board will involve in medium term prospect:1) the consolidation of the banks' portfolios in order to provide for the acceptance of prudential banking rules compatible with the international standards and the official creditors' requirements; 2) the availability of the specific information capital of the banks as regards the real economic agents and the potential of commercial banks' restructuring of the debts; 3) banking institutions' privatisation with foreign capital involvement.

The financial sector reform is proceeding at a lower speed than expected at the start of the currency board but the rational process of readjustment may be the better outcome of such a delay. The banking sector supervision and the management of the systemic risks are to be crucial for the avoidance of a banking crisis which in general is detrimental for the credibility of the currency board. Two possible alternatives of normalising the monetary transmission in the Bulgarian economy may be considered for the medium term perspective.

Under the first alternative the banking system is to meet the challenges of its recapitalisation and consolidation at a moderate speed of the privatisation with foreign participation and by sticking to the strict conditions of crediting the real sector. The money transmission will depend mainly on the Bulgarian banking system's potential to restructure itself to market-oriented conditions and relations with the real sector.

Under the **second alternative** a more radical involvement of foreign banks and intermediaries in the improvement of the money transmission mechanism will prove to reflect further spontaneous development of the monetary sector. Thus a higher degree of fluctuations of the financial markets trends in medium term prospect may occur. So far this alternative seems to reveal more adequately the segmented corporate interests in the banking and economic system as being crucial for the monetary transmission process. The lack of a national strategy for the development of the banking system until now may create risks of opportunistic behavior of foreign investors in the monetary sphere in the foreseeable future. Nevertheless the process of improving the money transmission will be actively supported by the entry of foreign financial intermediaries in the banking and nonbanking services in Bulgaria.

# I.4. THE OPERATION OF COMMERCIAL BANKS UNDER CURRENCY BOARD

# Dr. IVANKA KRAININSKA, Sen.Res.Fellow

# 4.1. CHANGES IN THE MACROENVIRONMENT OF COMMERCIAL BANKS

Before the implementation of the currency board, both commercial banks and business enterprises functioned in an extremely unstable macroenvironment. The follow-up developments, including fixing of the exchange rate, rigid budget and non-budget discipline, as well as meeting all other requirements of the Currency Board and IMF, have changed considerably the economic conditions in the country. The most substantial changes have occurred in the operation conditions of commercial banks.

### 4.1.1. Legal changes

Because of transition to currency board and in order to overcome the crisis in the banking sector, a number of changes and amendments have been introduced in the relevant legal basis. The Law on the Bulgarian National Bank and the Law on Banks have been adopted, which are considered to be rather conservative. The amendments imply additional restrictive regulations which create specific problems to banks. These problems may be summed-up as follows:

.First, with regard to banks' own capital and attracted resources:

- increase of the minimum required own capital to 10 bln. BGL. and higher capital adequacy parameters, 12%. Meeting this requirement has proved to be a difficult task for middle and small banks;
- requirement for constant availability of the minimum own capital. "Frozening" of the most
  expensive and stable source of funds will not improve the revenues of banks but will only secure
  their liquidity, just as a primary reserve. Commercial banks (and smaller banks, in particular) will
  rely only on revenues from attracted capital:
- abolition of the legally fixed upper limit (15%) of minimum reserves ratio maintained and the related interest payments. At the same time, the existing high level was preserved, which implies an increase of the price of credit and decrease of banks revenues;
- refinancing of commercial banks by the Central Bank will be allowed only in cases of system crisis and at the availability of a deposit with the Central Bank;
- substantial restrictive regulations with regard to the interbank market resources. Restrictions on "big loans" and their pledging will be applied also to interbank deposits and repo-deals, which form the basis of the interbank market. In this way, the development of the interbank market will be retained, along with the creation of possibilities for interbank refinancing in cases of temporary difficulties and decreased liquidity, as well as for the mobility of free bank resources;
- the expected removal of full-size deposits protection will give birth to additional problems for commercial banks. The maximum amount to be guaranteed (about USD 2,600), as pursuant to the draft-law, is rather unacceptable, given the ruined confidence in banks and the practice of other countries. At the same time, full (100-percent), though temporary, protection is preserved for the State Savings Bank depositors, which will inevitably result into shifting of deposits from commercial banks to the SSB, thus negatively effecting their capital basis. Banks expenditures will increase as a result of premium installments to be made to the Deposit Guarantee Fund.

Second, with regard to active operations:

• new restrictive regulations concerning the main group of assets, i.e. credits, including:

- \* total exclusion of non-pledged crediting. This is a limitation of the extension of particular types of credit, with collateral difficult to control, and implies a reduction of the range of credit services offered at the product market. In addition, pledging comes to be of prior importance for credit extension, while the investment of obtained funds in profitable activities and repayment of credit as a result of profits earned should be the guiding argument;
- \* rigid requirements towards big credits pledging. Few clients can afford meeting such requirements, which will result in the shrinkage of banks customer market;
- \* according to the new regulations, most of the credits fall in the group of "big credits" and should be extended according to a more complicated procedure. Therefore, it will be absolutely impossible for a single bank to meet the demands of big clients.
  - new principles of classification of bank assets and provision allotment.

Based on the foregoing brief review of the new institutional framework, in which commercial banks will operate, the following conclusions can be made:

- factors which may contribute to a more rational management of banks, include: the
  determination of bank insolvency criteria and the institutionalization of bank bankruptcy; the
  tightening of both banking supervision and internal control requirements; the obligatory implementation of international accounting standards; the increased responsibility of top managers
  and higher requirements towards their proficiency, etc.;
- banks will face considerable problems resulting from the imperfect and fast changing legal framework, which lacks complete correspondence to the specifics of Bulgarian banks and in some respect is inconsistent, incompatible and even contradictory;

new regulations are focused on securing bank liquidity as a primary and even single
objective. For the time being, this is of particular importance for the success of the currency
board, yet it will effect the activity of commercial banks in future. Securing the efficient functioning of the banking system demands the elaboration of a set of optimal regulating rules, providing
goals attainment at minimum price of regulation.

# 4.1.2. Changes in the economic environment

The decline of national economy continued in 1997 as well. In the next years, recovery and economic growth will depend on domestic consumption, external demand, and investments. Sustained economic growth can be accomplished only in the medium term. This have a significant effect on the policy and strategies of commercial banks in the following years.

For the time being, interest policy has a retaining effect. The low basic interest rate, set also as an objective, eases the foreign debt burden, but actually brings about a delay in economic stabilization. Real interest rates, and especially these on deposits, become strongly negative. There is a real danger of outflow and erosion of deposit basis. The only factor retaining these processes is the lack of alternatives of deposit instruments. Nominal interest rates planned by the government for the three-year period on average are twice lower the levels securing a zero real rate. In its turn, this will result in: first, decline in bank intermediation, and second, worsening of the structure of banks' attracted resources. To this, one should add also the restrictions on monetary supply formation under the conditions of currency board and the continuing mistrust in the banking sector. By end-1997, only 13% of the population declared confidence in commercial banks. At last, the banking sector can rely on a relatively slow rise in the propensity to save, respectively a slow expansion of domestic deposit basis.

The tax policy is of particular importance to the banking industry, by its multilateral effects, including customers, deposit basis, and financial results of banks. Recently made cosmetic changes will not produce substantial positive effects. In addition to corporate tax, banks will also pay tax on part of their provisions. It is more reasonable to maintain the existing tax preference for

still another year, so that banks could stabilize their condition. Or, fisk considerations should not be given priority at any price. With some legal changes coming into force, there is a real danger of artificially increasing of the tax basis, which will effect negatively banks profitability and liquidity, unless the proper amendments are made in due time.

### 4.2. COMMERCIAL BANKS BEHAVIOUR

Commercial banks initial positions in early 1997 were rather unfavourable, which, along with the requirements of the Fifth Agreement with IMF and conditions imposed by the Currency Board, predetermined to a great extent their behaviour for the whole year. The main problems to be solved were connected with: low capital adequacy; unstable deposit structure; bad structure of bank receivables from the real sector, resulting in disproportion between assets and liabilities. During the year, banks had to change (to a high extent, because of increased liquidity requirements) their policy of passive and active operations management. Stabilization of monetary flows was observed, as well as positive changes in the directions of their movement. At the end of 1997, attracted resources from individuals and firms increased by 35.5% in comparison with June 1997, yet trends of decline were noticed in January and February 1998. Deposits of the population account for 47.5% of total deposits amount. The structure of liabilities of commercial banks is still unfavourable, thus preventing banks from investments in long-term assets.

The main problem banks face, however, is how and where to reallocate their reserves. At the end of 1996 and in the beginning of 1997, banks held their assets in hard currency, thus earning enormous profits from rates differences at the exchange market. At present, this opportunity is reduced almost to zero. A strong reduction is also observed in banks capacity to buy government securities. By the restriction imposed on budget deficit financing, the government actually subjected commercial banks to an 'outlet squeeze' hoping in this way to reallocate credit resources to the real sector. The problem, however, is in the strong reduced supply of government securities, and the decline in banks revenues and hence profitability. Unfortunately, the Bulgarian market is still missing a variety of opportunities for low-risk investments (municipal securities, securities issued by public institutions, prosperous corporations, etc.), through which commercial banks could invest aiming at securing both liquidity and revenues.

The interbank market is the third potential profit source for banks, yet due to the high level of liquidity in the banking sector as a whole, only few of the financial institutions suffer deficits. This makes trade slacken. Moreover, profitability at the interbank BGL market has fallen below that of government securities, thus making the latter a more attractive investment. The market will develop slowly in future, due to legally set restrictions mentioned above, as well as the forthcoming transformation of the State Savings Bank into a universal commercial bank. At present, commercial banks prefer offering their free resources to foreign credit institutions at comparatively low risk and higher profitability, which doesn't serve national interests.

The expansion of credit activity is another option for commercial banks. The field, however, is full of problems.

First, most of the banks needed a restructuring of their credit portfolios. The positive trends in this regard are already apparent.

Second, the currency board conditions require that in the banking policy pursued priority is given to liquidity, which doesn't allow credit expansion. Waiting for their privatization, state banks also follow passive credit policy. In addition, the likely destabilization and diminishing deposit basis of banks should be considered. The structure of banks' attracted capital is another obstacle to investments in long-term financial assets. Moreover, banks lack reliable systems for crediting and credit risk estimation. The adequate legal framework regulating forced debts collection is underdeveloped, which makes banks still more cautious and credit-refluctant.

Third, the absence of changes in the real economy and the related risk factors. The positive influence of the currency board on financial stabilization has not effected the real sector yet. The economy proved to be unprepared to 'consume' the credit resources released by the government sector, hence the low level of credit demand. Several other factors also contribute to the limited bank credit demand, namely: a) most of the potential loan-demanding agents cannot service the credits obtained; b) in order to reduce risk, banks require high-liquid collateral and high interest earning assets, which most of the companies do not possess; c) interest rates on credits are still yery high ffrom 11% to 16%).

A gradual shift towards overcoming the reluctance to lend was observed in the last quarter of 1997 and early 1998. Banks began changing their strategy by entering the sphere of so-called retail servicing. This is a good news for SME, yet these clients are in weaker and more risky financial positions. Moreover, consumer credits are considered the most risky at all. Negative consequences in this regard are quite likely, yet banks are economically forced and cannot keep away from lending any longer.

The greater part of Bulgarian banks proved rather inadaptive regarding the development of innovative product strategies. This will effect negatively their market positions. All banks perform traditional bank services, offer similar range of products, and follow one and the same price policy. Entering non-traditional fields and expansion of intermediary services will give banks higher opportunities for survival and further development.

Commercial banks are characterized by low rate of profitability. This problem will deepen further in 1998. Credit institutions will be pressed by the shortage of income-generating financial instruments, as well as by recently imposed regulations. Additional difficulties will be created by the revaluation of assets and the partial taxation of provisions, if adopted. Net income from financial operations will be "eaten" by expenditures on provisions and maintenance. The timely optimization of expenses is therefore of key importance to banks. In the conditions of risky environment, banks will have limited opportunities to profit, and will face continuously growing obstacles to their development.

# 4.3. RECOVERY OF THE BANKING SYSTEM AND DEVELOPMENT OF BANKS: PREREQUISITES AND PROSPECTS.

Macroeconomic stabilization is the key prerequisite for the recovery of the banking system. For the time being, the rather fragile financial stability achieved contradicts with macroeconomic stabilization. A danger exists of repeating the experience of 1990, i.e. a financial stability isolated from the real sector, which always has a short-term effect. The tax, budgetary and monetary policy pursued contribute to these fears. The present situation is extremely difficult and contradictory with regard to commercial banks. On the one hand, enterprise development requires great amount outside financing, which can be obtained only through bank credits. On the other hand, this contradicts with the restrictive credit policy of banks incited by risky environment, severe regulations, and 'polluted' credit portfolios. The shortage of investment resources causes a delay of macroeconomic stabilization which in its turn effects negatively the activity of commercial banks, both in the short and the long term. The balance-of-payments equilibrium is of particular importance for the banking system stabilization. It is a determinant of the foreign currency reserves, resp. the money supply and the related enhancement of economic growth. Taking into account the foreign debt payments due in the next years, an aggressive export policy would be the only appropriate way to follow.

In order to achieve a well-functioning financial sector (and stabilization of the banking system, in particular), conditions should be created for the development of non-bank financing. Efforts should be focused on the development of the stock market. A relevant set of rules and legal norms should be developed and adopted to regulate the establishment and operation of

the venture capital market, securities over-the-counter trade, and the activity of money market mutual funds. Special attention has to be paid to leasing financing which could play a significant role for the economic revival. (Leasing financing in the EU accounts for 36% of total financing.) Progress in non-bank financing would assist the pursuit of an adequate financial strategy by the economic agents, and the investors will be given the opportunity for alternative decisions. Banks will experience a positive impact as well. They will be able to participate actively in obth listed stock operations and leasing operations, as well as to form high revenues and diversify the risk. The creation of efficient capital market is a prerequisite for the improvement of bank liquidity as well

Another prerequisite is the elaboration of a general concept for the development of the banking system and formulation of the objectives pursued by its restructuring, it seems, however, that attempts are made to manage and regulate current processes without orienting them to service long-term goals. The banking sector restructuring and the solution of present-day problems, as the financial, institutional and management stabilization of banks is to a great extent assigned to state banks privatization. (They hold 73.5% of total banks assets.) A lot of problems arise in this regard, and their solution will predetermine the development of the banking system in future.

First. Bank privatization alone will hardly solve all the problems in the sector, including structural ones. The denationalization strategy and privatization schemes should be subjected to the national development strategy and executed in close relation and coordination with the real sector privatization. Banks privatization in itself and at any price may result in worsening the state of the banking sector. Moreover, considering the technological time necessary, hasty privatization may bring forth inadequate decisions, as well as risks of weak post-privatization control on the execution of undertaken liabilities.

Second. Considering the declared intentions of the government, obviously all state banks are meant for privatization. Two questions arise in this regard. First, isn't it the 'pendulum' principle that is followed again, i.e. from a hundred-percent state-owned banking system to a totally private banking system, and all this within a very short time. The same transformation is carried out in Greece as well, yet in a very gradual way. The state banking sector in Italy, France and other developed countries is competitive at the international banking market as well. It is reasonable, therefore, to search for other alternatives of the state banks, so as to reach the optimal European and world level which will allow them efficiently to participate in the high-competitive banking market. Various forms of restructuring can also be applied in order to achieve cooperation between the state and the private sector. The second issue concerns the way in which particular financial demands will be satisfied (financing of infrastructure projects, promotion of exports, SME, etc.). These financial services are not attractive for private banks. They require particular infrastructure, i.e. specific public non-profit credit institutions.

Third. Given the announced commitments for state banks privatization within a short term and the requirements for subsequent increase of the capital of privatized banks, only foreign investors can afford participation in bank privatization. Meanwhile, private banks have undertaken an increase of their capital and to this end have directed their efforts to attracting foreign shareholders, or subsidiaries of foreign companies in Bulgaria. It is very likely that in many private banks control will be transferred to the foreign shareholders. Therefore, the forecast can be made that following state banks privatization, more than 80% of the banking market will be controlled by the foreign banking capital.

In addition, the following points should be mentioned:

the legal framework regulating foreign capital entry and performance lacks precision.
 Principles of national treatment and reciprocity are inconsistently applied. The elaboration is still missing of a regime of financial services offered by foreign banks according to the principle of national treatment and off-shore banking;

 after a certain period of time, the imminent liberalization of the capital account can be expected (this is a prerequisite for the functioning of the currency board and there are not mechanisms preventing the capital outflow);

 restrictive bank regulations should be reduced within a short term. Countries willing to ioin the EU should be ready to quickly apply its requirements for supervision standards.

Regarding the above—mentioned anticipation, it is necessary to stress on the following: greater attention should be paid when foreign investors are attracted, so that this is done according to clearly defined rules of performance in compliance with Bulgarian law; their share should not exceed 30-35% of the assets of the Bulgarian banking system, otherwise thus the economic sovereignty of the country could be infringed; although necessary, the privatization of the banking sector should not be unreasonably accelerated.

Four. The development of the banking sector in the next years is expected to be extremely dynamic and characterized by rather contradictory tendencies. The banking system is on the eve of new restructuring, its main tools being state banks privatization, attraction of foreign investments, consolidation and /or bankruptcy. At present, there are 31 banks in operation, of them 6 state institutions have the dominant position. The strategy envisages further concentration, thus reducing the number to 4-6 big commercial banks. Indications are already observed in the banking sector for certain endeavours towards establishing new bank mega-associations and review of the universal banking model. Foreign capital flows which enter the financial-andcredit sector will buy 'wholesale' and will attempt to form banking groups. The number of bank survivals will be determined by the market conditions. New capital requirements and other regulations will inevitably result in bank mergers and acquisitions, reduction of branch network and number of jobs. Small commercial banks haven't much chance to survive. They will hardly afford to join the "fight" for big clients and projects servicing. These niches will be a reserved territory for the privatized big credit institutions. Small and middle-sized banks have few alternatives, either to consolidate and specialize by types of operations, or to quit the banking market. Bank specialization should be encouraged by allowing the minimum required equity capital of SMBanks to fall below (within an admissible range) the legally determined amount (10 bln. BGL). By such a 'discount', three objectives can be attained: first, give economic incentives to specialization; second, provide additional opportunities for survival and preparation for the forthcoming competition, and third, secure equal conditions for operation with foreign financial institutions. The coming years will be difficult for the State Savings Bank as well. It has to survive and be transformed into a universal commercial bank.

Fifth. The prosperous development of banks in the next years will depend on the qualitative changes in their operation, which are connected with the solution of a number of problems, namely:

- building of an internal and external control system, which involves clear-cut rules of authorization, responsibilities, functions, related to bank's liabilities, payments by bank's own resources, and accounting of its assets and liabilities. The system should possess tools for controlling these processes. In this way, prerequisites will be created for the approval of financial discipline as the major regulator of banks behaviour and subordinating their activity to the economic logic;
- elaboration of adequate policy, practice and procedures, including precise rules of clients investigation, preventing the use of banks by criminal bodies;
- building of reliable information systems for management, providing information on the risky concentrations in assets and liabilities, the credit rating of clients and banks, etc.;
- development of a system for exact measurement and adequate control of market risks and risk management procedures.

# I. 5. FISCAL POLICY AND ITS PARAMETERS

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#### 5. 1. GENERAL EVALUATION

In 1997 the economy of the country was influenced by two contradictory events:

- severe financial crisis during the first two months of the year;

- introduction of a currency board arrangement in order to achieve financial stabilization.

In the light of these antagonistic events it is hardly possible to produce a synonymous evaluation of the fiscal policy during 1997. During the first 2-3 months of the year the financis shocks (as a consequence of the general economic crisis) helped the state budget to reduce the weight of the accumulated huge deficits. Each crisis plays the role of a rehabilitation factor for some economic proportions by means of deliberately or involuntarily loosening the management of macroparameters. In this case the leading factors turned to be inflation, stagnation of production, shocks for the banking sector, drastic reduction of income and acceleration of the redistribution processes.

The state budget is a system with huge potential for redistribution of revenues. The financial crisis created enough prerequisites for the budget to benefit from the situation and to bring under control its internal balance.

The leaps of the exchange rate supplied additional financial resources for the budget by using the indirect taxes. During this period each importer had to pay 2-3 times higher import taxes and VAT for imported goods. After the final consumption (selling) of the products/services that were realized on the basis of the imported goods/materials, these artificially formed taxes were paid by the consumer. The high inflation depreciated the fixed assets to a considerable extend and they took part in the production and pricing process as mere symbolic figures. During the whole year 90% of the depreciation were treated as taxable earnings and illegally from economic point of view, were paid to the state budget. This type of redistribution robbed the industry of its capacity for investment. The decapitalization that was going for years was accelerated.

During the turmoil of the political crisis the necessity of up-dating the rates in the Income Tax Law was merely "forgotten". In this way the real tax burden for the ordinary (individual) tax-payer became enormous. Considering the fact that income tax revenues are on second place, right after the VAT revenues, one may conclude that "the delav" was not accidental.

The expenditure part of the budget was also relieved by the financial shocks at the beginning of the year. Regardless of the inflation rate leaps the levels of salaries, stipends, pensions and social aid were kept "frozen". The reason was formal: lack of passed by parliament bill for Budget'97. The conventional mechanism was applied according to which the released money per month could not exceed 1/12-th of the financial resources for the previous year. The inflation for January-February 1997 was 493% and the budget expenditures were 5 times less or, in other words, the real amount of the allotted monthly finances were 1/54-th of the expenditures for 1996. The financial crisis at the beginning of 1997 relieved the internal debt of the budget due to the depreciation of the debt by the inflation. Due to negative real interest rate the concealed budget subsidization continued throughout the year. The marked redistribution processes draw a clear picture of the scale/scope of the various transfers of income realized via budget. The more detailed analysis shows that it was at the expenses of the population, the depositors and the working capital of industry. The result was substantial deterioration of the quality of life and living conditions for the prevailing part of the population, reduction of investment activities of the companies and exceptional mistrust of the general public towards the banking system and its quarantees.

The implementation of the currency board brought surprisingly fast stabilization. In fact the debate about the state budget for 1997 began after the establishment of the currency board. The fiscal policy of Budget'97 was based on the following objectives:

To legalize the new drop of net income of the employed in the budget sector. The Budget'97 bill was passed at the end of June and endorsed record-breaking low income for all budget sector employees. For the first half of the year the net income of the employees was even lower. The official comment for the drastic drop of income was a traditional one: "This is the only budget possible." Real practice showed otherwise - by the end of the year the budget was overfulfilled, the level of planned deficit was not reached by a margin of about 400 billion Leva.

The country relied on external financing and cash in flow from privatization. The exhausting payments of \$2 billion on external debt service during 1996/97 with no external refinancing inflicted heavy casualties on national economy. The state budget had to rely on internal resources only and this led to a rapid increase of internal debt. With unleashing the financial crisis some of these problems have been solved to a certain extend but it became evident that further servicing of foreign debt in the same manner was impossible. External refinancing was not enough to balance the debt service but it relieved the balance of payments and contributed to building up a reasonable currency reserve.

The fiscal policy during 1997 confirmed the low level of tax-collection. The tax revenues dropped by 2,5 points and reached the record low level of 18,2% of GDP. From macroeconomic point of view the fiscal policy during 1997 contributed to additional redistribution of incomerorm the budget sector towards the shadow economy. Tax evasion became a criterion for successful business for many private economic agents. Unfair competition spread widely due to the fact that it had the "privilege" of breaking the tax laws, ensuring in this wey a significant competition edge. The phenomenon is common practice and it has a disastrous effect both on the budget sector and the loyal regular taxpayers. Instead of applying administrative measures and when needed - firm action to restore order in the taxpaying practices, the new government took to develop new tax laws which could not guarantee by themselves the collection of the normal (planned) tax revenues.

At the end of the year advance information showed that the budget for 1997 was overfulfilled. The result was due to the revenues from income tax and VAT. In this way the income of the population became the main source of the budget. The total amount of expenditures is 95% of the planned figures. The reduction of expenditures is a consequence of the shrinking of payments for internal debt interest. Low levels of interest payments gave chance for a moderate slowing down of restrictions at the end of the year and overfulfilling the expenditures for maintenance, salaries and subsidies. Although the budget become effective during the second half of 1997, the government showed clear signs of conducting a fiscal policy with well defined targets.

For the first time since the start of the transition towards market economy the financial administration produced a blueprint of a budget (Budget'98) which passed in Parliament before the start of the new financial year. This is an undisputable success because alongside with passing the budget new laws were prepared and passed in Parliament too - the Corporate Tax Law and the Income Tax Law.

The fiscal policy incorporated in the 1998 budget is formulated by a new management team and implemented in a new macroeconomic environment. The budget was based on the assumption that economic growth is a must. Moreover, economic growth should be accompanied by a revival of investment activities. The state budget made definite steps in this direction by lowering the corporate profit tax rates and by permitting the revaluation of assets and liabilities. In this way during 1998 and the following years the real sector has got some opportunities to reinvest more financial resources in equipment renovation and working capital.

Special characteristics of the new budget policy is the allocation of the main tax burden towards the final consumers. All revenues with growing share in GDP are to come from: VAT, excise duties, income tax, fees. If the income of ordinary taxpayers does not change or if it increases only a little bit the population must cut down consumption due to increased tax burden. The economic growth targeted by the government relies mostly on higher domestic consumption. The tax policies however will in fact suppress economic revival and growth. The expected result can be non-fulfillment of the planned tax revenues.

The expenditure part of the state budget is made considerably lighter compared to previous years. It is due mainly to the fact that the interest payments are reduced from 20,7% of GDP during 1996 to 4,8% of GDP for 1998. Keeping in mind that the real interest rate will continue to be negative during the period 1998-2000, it is clear that concealed subsidies using deposits and treasury bonds will remain as basic resource of the government. This resource concerns the most valuable part of the society - the depositors. The melting down of deposits and their transfer to the budget curtails to a great extent the investment opportunities in economy over the following years.

Reduction of interest payments permits certain increase of expenditures for salaries. It is accompanied by a reduction of maintenance costs of budget institutions. Obviously this is the core of the assumption that budget sector reform will produce some positive results. The first steps of the government in this direction however are not encouraging. In most cases after the initial euphoria and stated good intentions real practical actions are postponed for the next years. Recovery of the losses during the last 5-6 years however requires substantial expenditures by the state.

# 5. 2. BUDGET REVENUES AND EXPENDITURES

The macroeconomic environment and the political situation in the country created favorable prerequisites for attaining the planned levels of tax-collecting. High inflation, large exchange rate margins, nominal distortion of the amounts of taxed turnovers contributed to higher shares of taxes as a percentage of GDP. Since March one of the main targets of the government was the proclaimed fight against corruption and organized crime. The public viewed as a top objective the efforts to strengthen financial discipline, reduce tax-evasion, improved performance of the tax administration, forceful measures included.

Instead updating the tax system the government focussed of development of new tax laws. The parliament passed the Corporate Tax Law (CTL) and the Income Tax Law (ITL). The Corporate Tax Law reproduced the existing Profit Tax Law. Most of the paragraphs of the old law were reproduced in the new one. The adjustments of the profit taxation mechanism could have been easily made by amendments of the old law.

A new Income Tax Law was passed. The law has been postponed for a long time and the public expected new solutions and radical changes in the field of income taxation. The basic elements of this taxation form are better regulated in the new law (ITL). Most of the misunderstandings existing in the old law were eliminated. Radical solutions however were not adopted. Severe penalties for tax-cheating were not introduced again. The provided administrative and punitive regulations are not a real menace for law-breakers.

The package of these two laws and some non-essential changes and amendments were called "a tax reform" by the government. It was not taken into account that the taxation regime had been changed every year since the end of the 70-s. This continuous changing of the "game rules" generates a feeling of total instability and embarrasses the business agents who want to design their own strategies. What was produced were mere cosmetic changes and amendments of the existing ineffective tax system. Since 1990 the revenue part of the budget has been altered

each year (mainly the taxes) but the roots and the implications of sustained decline of the tax revenue in relation to GDP had never been reviewed. Instead to improving the existing taxation activities, the government has engaged in designing new laws which lead to more confusion among taxpayers.

It is true that actual of tax revenues exceed the planned figures according to Budget'97. This however does not prove that tax-collection was improved. The over fulfillment was built in the initial budget by underestimating the revenues. The trends in the levels of revenues and their share in GDP lead to some conclusions about tax-collection (see Table 1).

Table 1

#### BUDGET REVENUES

(In % of GDP)

Years		Rep	Estimate	Law		
Years	1991	1993	1995	1996	1997	1998
REVENUES	41.2	39.4	38.9	33.6	28.2	29.5
1. Tax revenues	29.1	18.9	22.4	20.7	18.2	17.4
1.1. Corporate tax						
(non financial sector)	7.4	1.6	2.4	2.5	2.8	0.9
1.2. Corporate tax						
(financial sector)	6.2	0.3	0.7	0.7	0.8	0.5
1.3.Municipality	2.7	0.4	0.6	1.3	1.4	0.8
1.4. Income tax	3.7	5.0	4.2	4.2	3.7	4.2
1.5. VAT	3.6	3.5	7.4	7.0	6.1	7.0
1.6. Excise	3.5	3.8	3.1	1.6	1.4	2.2
1.7. Customs duties	1.1	3.0	2.4	2.3	1.9	1.7

With the exception of profit tax, tax revenues decline, the main reason being poor taxcollection. The expectations for a change in the trend during 1998 are baseless since the figures in Budget'98 predict further slump to 17,4% of GDP. The government expects some increase of the share of VAT-money but it would be lower than the 1995 level. If the government is really dedicated to the idea of conducting a genuine tax reform the expected results should be incorporated in the budget.

The forecasted economic growth will increase nominal budget revenues till year 2000 and will ensure the government the capacity of maneuvering with the money resources. One of the prospects is to reduce the tax burden by lowering and differentiating the VAT rates. Other things equal this would boast consumer demand and faster economic growth. The forgone tax revenues due to lower rates could be compensated improved tax collection and larger taxable turnovers. Some companies will get a real chance (at lastl) to become regular tax-payers as the rates would be reasonable and the products/services would have competitive prices.

One can expect that the reduced revenues from corporate tax will be gradually overcome by 1999-2000. Nevertheless the revenues from this tax would hardly exceed 3 % of GDP.

The low level of income of the employed in the real sector, the low productivity as well as the almost symbolic pay (salaries) in the budget sector are the main reasons for keeping practically unchanged the share of the income tax revenues in GDP. One may expect that the further development of the privatization process will provoke a slight decrease of the income tax revenues during 1999-2000.

The decline of revenues is not a mere statistical parameter. It is a basic element of the overall fiscal policy which reflects in the consolidated budget program. The budget revenues

ensure the main frame when the expenditure part of the budget is developed. For Budget'98 the overall revenues and especially the tax revenues mark the lowest level as a percentage of GDP from the very start of the transition (See: Table 1).

The share of tax revenues in GDP is expected to go down by 1 percentage point compared to that of the crisis year 1997. This means increased restrictions for those employed in the budget sector. What would be the result of a further cutting down the income of people working in budget organizations can be seen even from a brief review of the present day status of hospitals, schools, research institutes.

The fiscal policy aiming at economic growth requires increased government demand and spending (especially in the sphere of investment). During 1998 further sharp drop of expenditures is expected for internal debt interest payments. This ensures an extra financial capacity (free financial resources) which could be allocated to the increase of government demand and spending; besides, almost all sectors of public spending are desperately in need of extra money. Instead of softening the restrictions in 1998 additional cut down of expenditures for maintenance is expected. One faces again the absurd situation of 1993-95 when the expenditures for salaries exceeded those for maintenance. In case all other parameters stay unchanged, further reduction of expenditures for maintenance will lead to additional curtailment of public services as they require certain consumer costs. It is normal when the maintenance costs exceed the salary's volume 2 to 3 times. Obviously during 1998 the budget sector will service mainly the payment of salaries.

The budget expenditures are 1/3 of GDP and any changes of their structure will have a serious impact on the macroeconomic parameters. The most significant structural change is the reduction of interest payments. It is favorable for the budget but due to negative real interest rate, it reduces investment and melts down the credit resource. When the rate of return of treasury bonds is kept artificially low the commercial banks redirect their resources abroad as deposits in foreign banks instead of lending to Bulgarian companies. Only during 1997 the net foreign assets of Bulgarian banks have marked an increase of about \$1 billion.

The ratio "current - investment expenditures" is 97,2% to 2,8%. And it is typical for the whole period since 1990. None of the governments allocated enough financial resources and means to increase public investment spending. So instead of fastening economic growth the budget acted against. No changes are expected in this field for the next 2-3 years. The strain of current expenditures would not allow the implementation of a normal investment policy.

The trends in budget expenditures can be evaluated only on the basis of their real value. namely after adjustment for inflation (see Table 2).

REAL GOVERNMENT EXPENDITURES AT 1990 PRICES

Table 2

							(Mill. Lv.)
Years	1990	1991	1993	1994	1995	1996	1997
Defense	2190.0	1 285.1	1 059.8	900.4	938.5	603.6	515.3
Base index	100%	58.7%	48.4%	41.1%	42.9%	27.6%	23,5%
Social insurance	5 465.0	4 057.9	3 456.2	2821.2	2375.8	1903.6	1625,1
Base index	100%	74.3%	63.2%	51.6%	43.5%	34.8%	29,7%
Wages	2496.0	1 492.4	2075.8	1631.4	1 474.4	733,2	656,8
Base index	100%	59.8%	83.2%	65.4%	59.1%	29,4%	26,3%

The reduction of budget expenditures for salaries is interpreted sometimes as reduction of bureaucracy. Unfortunately this does not comply with reality because since 1990 personnel in budget sectors was reduced by 12-15 % while salaries was cut down be 73.7 % in real terms. The expenditures for defense are also under the "sanitary" minimum. The allotted funds are not enough to finance even the adopted scheme for army reform. The situation in health, education, science, culture - is identical. The policy of budget restrictions has totally exhausted its potential. Moreover, it has been overused.

The discussion about the necessity of a budget sector reform is going on for 8 years. Many governments have made public their projects in this field. Some of the basic ideas were discussed, advertised, debated upon, some of them were even adopted as government decisions. The budget sector however is a conservative system which resists any drastic changes. It absorbs significant amounts of revenue via redistribution and that is to the benefit of definite groups and individuals. The experience so far showed that the budget sector reform could not be carried out successfully by one political party with majority in parliament. This is possible only through national consensus on the nature of the reform in different budget spheres and recognition of the basic objectives for their reshaping. A national program should be developed, adopted and implemented irrespective of the political party in power.

Partial and uncoordinated measures for the reforming of health services, social insurance and education so far have only brought confusion and disorder of the existing systems and deteriorated quality of public services. This is due to the formal cutting down of allotments to the budget institutions.

The development of a national program presupposes clear philosophy on the changes of redistribution processes and enough information about "who will pay, how much" for the reform. Keeping in mind the low productivity of the employed in real sector as well as the age structure of the present population, one can hardly expect that the reform could be accomplished only with domestic resources. What is needed is Time and Money. On the other hand the financial 1997 year showed clear signs that the budget sector reform has no alternative and it is impossible to be delayed any longer.

### 5.3. BUDGET BALANCE

The new stand-by agreement with IMF was signed in 1997. It was accompanied by a credit, the first transh being received just before signing the document. This is symptomatic for the understanding by international financial institutions about the critical economic situation in the country. Foreign financing helped Bulgaria to service its external debt and the credit rating of the country was up-graded by one point. By the end of the year the budget balances were better than the figures adopted by law (see Table 3). Table 3

# BALANCES OF GENERAL GOVERNMENT BUDGET FOR 1997

(In % of GDP)

Balances	Law	Reported	Differences
Primary balance	0,9	4,6	+3.7
Internal balance	-3,9	-1,2	+2.7
Budget Deficit	-5,6	-3,9	+1.7

Judging by the extremely law income level of the employed in the budget sector and the accumulated strain in financing budget institutions, the overfulfilment of the budget balances could hardly be justified. In similar cases former governments allotted special reserves in order to be able to react adequately in the coming years.

The essential changes of the processes behind the budget balances could be established only by reviewing a longer period of time (see Table 4).

Table 4

# BALANCES OF GENERAL GOVERNMENT BUDGET

(In % of GDP)

						(··· /0 0: CD1
Indicators	-	Estimate				
	1992	1993	1994	1995	1996	1997
GDP growth rate Primary balance	-12,4 0.9	-6,2	1,8	2,1	-10,9	-7.5
Internal balance	3,9	-1,5 -9,8	7,5 -4,8	9,5 -2,1	9,7 -8,2	4,6 -1,2
Budget deficit	-5,6	-10,9	-6,0	-5,0	-11	-3,9

The primary balance shows the amount of resources which can be allotted for current budget financing to meet the payments of interest - both for internal and external debt service. It illustrates the level of restriction as well. Under the conditions of economic slump and diminishing level of budget revenues in GDP the increase of primary balance is a clear sign of restriction. Table 4 shows that only in 1993 the budget restrictions were slackened and then part of the current expenditures were financed by loans. After 1993 there was a shocking rise of the initial balance but economic growth during 1994-95 softened its impact. The year 1996 was critical when primary balance reached its positive peak while the GDP dived down by 11 per cent.

Savings from current budget expenditures (in the form of positive primary balance) could be allotted in two directions:

 for payments of real interest on domestic debt. This means that the budget is setting limits to the redistribution processes, boasts savings and accumulation of internal financial reserves.

for payment of external debt interest and up-grading the credit rating of the country. This
would increase the chances to attract international investors (foreign savings).

When an economy is in a long-term recession it cannot generate enough revenues for the budget to meet simultaneously the requirements of the two strategic directions cited above. The Bulgarian specifics of transition towards market economy implies the presence of constant political instability, social tension, poor finance discipline, shocks in the banking and absence of a capital market. This is one of the reasons for the modest presence of foreign investors in the country although the external debt is serviced correctly and the Bulgarian treasury bonds offer high profitability.

The low efficiency of the Bulgarian economy and the continuous drop of GDP limit the amount of available resources. The budget mobilizes huge money resources for its own needs and this crowds out the real sector from the credit market.

The internal balance indicates the government's commitment towards depositors. During the whole transition period the obligations on servicing domestic debt were transferred to the future by means of the negative internal balance. If one takes into account that after 1994 the external debt was serviced regularly and with real money one can see that liabilities toward internal depositors are met as follows:

#### SERVICING LIABILITIES TOWARD INTERNAL DEPOSITORS

Table 5

(in % of GDP)

Years	1995	1996	1997	1998
Primary balances	81 988	160 902	768 329	706 624
External-debt interest	24 850	47 477	458 866	651 100
Residual	+57 138	+113 425	+309 463	+55 524
Internal debt interest	100 227	296 691	967 410	398 900
% of servicing	57,0%	38,2%	32,0%	13,9%

Debt instruments are applied whose nominal value increases avalanche-like. The on going financial crisis melts down their real value and the servicing becomes totally fictitious.

The budget balance during 1997 met the level of the year 1991. The adopted restrictive budget policy and the expectations of 4 per cent economic growth gave the government reasons to plan deficit'98 as 1,7 % of GDP. It can hardly be achieved because the accumulated strain in family budgets would force the government to loosen the restrictions by mid-year. Economic growth (if any) would hardly come over 1 % which will have its impact over the budget balance.

The expectations that by the year 2000 budget deficit will be overcome have no real basis. The drastic deficit shrinkage from 11% of GDP during 1996 to a mere 3,9 % during 1997 is a direct consequence of the changes in monetary policy and the drastic reduction of the basic interest rate. This factor is nearly exhausting its potential and there is no substitute over the following years. The overcoming of deficit would mean more restrictions but the budget sector in its present state simply cannot endure any more of it. Much more probable is the option: the positive primary balance slowly melts away and the internal balance rests negative, to the amount of 1 % of GDP.

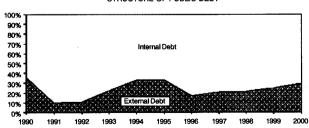
If there will be no further increase of external debt the interest payments will vary between 2,7 and 3 percent of GDP. So for the period 1999-2000 the general budget balance is expected to be within the limits of 3,5 - 4 percent of GDP.

#### 5. 4. PUBLIC DEBT

The changes of public debt level reflect the negative effects of the fiscal policy during the last 8 years. Huge transfers of income and capital were carried out via public debt on macroeconomic level. They are the basic factor for debt fluctuation through the years and determine its structure (see Figure 1):

Figure 1

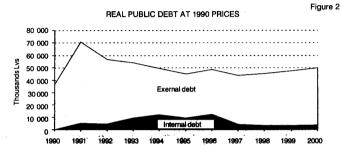
### STRUCTURE OF PUBLIC DEBT



External public debt transfers annually 2-3 % of GDP abroad as interest payments. In order to feel the effect of an economy revival the growth of GDP should be more than 3 %. One could hardly expect that over the following years the GDP growth rates would be much higher than this bench-mark.

The increased share domestic public debt during the period 1992-96 is due to the high budget deficit and the transformation of state-owned companies liabilities into public debt.

The share of domestic debt in the overall public debt declined sharply in sharply in1996-1997 owing to high inflation. The inflation shocks at the end of 1996 and the beginning of 1997 melted down the domestic debt. The variations of internal debt are shown on Figure 2.



The financing of public debt underwent a change during the recent years. Being mainly banking at the start it evolved gradually into emission of treasury bonds, long-term bonds included. This had its positive effect and one may claim for the last 1-2 years that we had a real public debt management. After the introduction of the currency board a direct relationship between profitability of treasury bonds and basic interest level was established. The nominal basic interest rate became independent of the inflation level. Inflation in present Bulgaria is consistently viewed as a production problem and is treated as business objective of managers to prove their ability to transfer production costs to the consumers. At the beginning of transition when the real sector was still not decapitalized to the present status the production managers and private businessmen did try to take into account the low capacity of solvent consumer demand and risked to sell underpriced. At present it gets harder to proceed this way and the production companies press the final consumer to accept the full volume of production costs. So inflation is connected more closely with supply rather than demand and purchasing power of consumers.

Viewed at this angle the non-banking budget financing does not provoke additional inflation drives and the financing of public debt is carried out at very low interest levels. Inflation is generated however also outside the budget system. The establishment of a tight link between the basic interest rate and profitability of treasury bonds breaks the link between interest rate and inflation. A highly negative real deposit interest rate emerges. The budget's burden on domestic debt interest payments is alleviated as it benefits from negative real basic interest pass (for the budget they are positive). In this way inflation contributes both to debt-reduction and interest payments. The price, though not so visible, is paid by the depositors – households and the real sector companies.

The described domestic debt interest payments have a short-term favorable effect on the budget system. In the medium and long run however their impact on the saving propensity, investment activity and resumption of growth is highly negative.

# I.6. FOREIGN TRADE, BALANCE OF PAYMENTS AND EXTERNAL DEBT

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# 6.1. ANALYSIS OF FOREIGN TRADE TURNOVER, THE BALANCE OF PAYMENTS AND EXTERNAL DEBT IN 1997

The downward trend in the dynamics of foreign trade turnover, which started in 1996, continued in 1997. According to official statistics data, foreign trade turnover has decreased by 1,7% in 1997, as compared with 1996. This decline is a result of the considerable shrinkage in the volume of imports (by some 4%), whereas the volume of exports stood practically unchanged (the registered rate of increase was less than 0,5%); consequently, there was an increase of foreign trade surplus from 187,6 min USD to 396,0 mln USD.

The rate of decrease of foreign trade turnover is considerably higher, if measured on the basis of data, released by the Central Bank, which are derived from the information on export earnings and import payments, received from commercial banks. In this case, the rate of decrease of the foreign trade turnover in 1997, in comparison with that of 1996, is 21,1%, that of the sum total of exports being 18,7%, and of imports - 23,6%.

The definite tendency of decrease of the foreign trade turnover has a considerably negative effect on the state of national economy and especially on economic growth rates. On the other hand, the continuing downward trend of the foreign trade turnover is a consequence of the deep economic crisis of the Bulgarian economy and, particularly - of the lasting decline in the real economy sector, the extremely weak investment activity, the sharply diminished living standard of the prevailing part of the population, the acute financial difficulties of most of the firms in the real sector, the low level of competitiveness of the predominant part of the export-oriented products of the Bulgarian industry and agriculture, as well as - of the practical lack of effective measures, aimed at stimulating investment, production and exports.

During 1997 the changes in the commodity structure of the Bulgarian foreign trade turnover have been relatively more significant in exports.

According to officially released data of the National Statistics Institute (NSI) an increase in the volume of exports (and, hence - in their relative shares in the total sum of exports) in 1997, as compared to 1996, has been registered in respect to the following commodity groups:

- the relative share of ferrous and non-ferrous (non precious) metals, in the sum of total of exports has risen from 17,7% in 1996 to 21,3% in 1997;
  - mineral products and fuels have increased their relative share from 9.0% to 10.2%;
- the relative share of textiles, clothes, shoes and other (manufactured) consumer goods has increased from 14,7% to 16,2%.

On the other hand, there has been a drop in exports (and - in the relative shares) of the following commodity groups:

- the relative share of food and beverages in the total sum of exports has fallen from
- 18,7% in 1996 to 14,2% in 1997);the relative share of chemical products has gone down from 20,0% to 18,5%;
- the relative share of machines, transport equipment and instruments has dropped from 15,2% to 14,6%.
- It is difficult to give a precise judgement of these changes in the commodity structure of Bulgarian exports (on the basis of the available, officially published information) as regard to the economic efficiency and international competitiveness. Nevertheless, it is evident enough, that a decrease in the volume of exports has been observed for such commodity groups (with the

exception of metals), for which Bulgaria is a traditional exporter with stable (until recently) positions in certain regional markets; it should be noted, also, that in the past the nation has invested a lot in building the necessary capacities (plant and equipment) for the production of a great number of such commodities (mainly export-oriented).

As for the imports, it may be noted, that in 1997 there has been a decrease of volumes, practically of all imported commodity groups. The structural changes, having taken place, naturally result from the different rates of reduction.

The analyses of changes in commodity structure of imports according to the criterion: "Mode of use of imported goods", shows, that in 1997 there has been an increase in the relative share of raw materials (from 35,8% to 38,7%), and a decrease in the relative share of energy resources (from 35,4% to 32,8%) and in that of investments goods (from 18,2% to 17,0%). The relative share of consumer goods has stayed practically stable.

As a whole, changes in the commodity structure of imports can be regarded as a (more or less) adequate reflection of the continuing crisis in the real sector, and especially - of the sharp drop in investment.

The major changes in the geographic structure of foreign trade turnover, which took place in 1997, are as follows.

An increase was registered in the relative share of OECD member-countries, more definitely expressed in respect to Bulgarian export - from 51,4% in 1996 to 57,7% in 1997. Within this group the relative share of EC member-countries alone has risen from 39,1% to 43,3%. In the volumes of Bulgarian imports, the relative share of OECD member-countries has increased from 42,2% to 46,1%, and that of EC member-countries alone - from 35,1% to 37,3% respectively.

On the contrary, there has been a definite reduction of the relative share of CEE-states, relatively stronger in the export volumes again - from 22,8% in 1996 to 21,3% in 1997. The relative share of CIS-states alone has fallen from 19,4% to 17,9% respectively. The relative share of CEE countries in the Bulgarian imports has also fallen - from 41,4% in 1996 to 38,3% in 1997, and the relative share of CIS countries - from 36,8% to 32,9%, respectively.

A moderate surplus (of 49,7 mln USD) was registered on the other "items" of the BOP current account, with a considerable surplus on tourist (travel) services (of 147,4 mln USD) and an approximate balance on transportation services. On the other hand the amount of interest (paid and due) on the external debt of the country was egual to 520,8 mil USD. As a whole, the BOP current account registered a surplus of 445,7 mln USD, as compared with a surplus of 81,8 mln USD for 1996.

The capital account of the balance of payments in 1997 was also in surplus (of 401,2 mln USD), whereas in 1996 it was concluded with a deficit of 715,2 mln USD.

The balance on direct investment was equal to +497,1 mln USD and those on portfolio investment - to +76,1 mln USD.

According to preliminary data of the Foreign Investment Agency, the amount of foreign investment in the Bulgarian economy in 1997 was 714,1 mln USD, of which: 510,0 mln USD direct investment and 204,1 mln USD - portfolio investment, consisting wholly of Government securities. However, during the last quarter of 1997 there was a net outflow of portfolio investment, because of the sharp decline of yield on Bulgarian Government securities.

A considerable increase of the amount of bank deposits abroad was registered, especially during the second and the third quarters of 1997. As a whole for the last year these deposits amounted to 459,8 mln USD. This outflow is mainly due to the substantial fall of the level of domestic interest rates, the relative stabilization of the lev exchange rate (which considerably limited the possibilities for making profits by forex deals of the national market), as well as to the

easily understandable (under present conditions, prevailing in the national economy) lack of desire on the part of the commercial banks to lend credits to firms, operating in the real sector of the economy.

On the other hand, during the period under review, a tendency of slightly intensified repatriation of resident capital appeared, as well as - a definite increase in forex deposits of firms and households with Bulgarian commercial banks, as a result of the growing confidence in the national banking system.

The amount of the gross external debt of the country as of 31.12.1997 was equal (according to officially released data by the BNB) to 9741,8 mln USD, which represents about 97% of the value of GNP. The debt has increased since 31.12.1996 by 146,2 mln USD (by 1.5%)

The amount of the long-term debt is equal to 86,1% of the total sum of Bulgaria's external debt. During the period under review it has gone up by 1,6%. The debt to international financial institutions has grown at the highest rates - by 11,9% (from 1983,9 mln USD as of 31.12.1996 to 2220,2 mln USD as of 31.12.1997). The debt to the IMF has grown by 55,9% - from 584,6 mln USD to 911.4 mln USD, respectively.

The amount of debt to private creditors, which represents 61,2% of the total long-term debt of the country, has decreased in 1997 by 229,2 mln USD (by 4,3%).

The total sum of the short-term debt has increased by 30,1% - from 1040,6 mln USD on 31.12.1996 to 1354,3 mln USD on 31.12.1997, mainly as a result of growing purchases of government securities by non-residents.

The amount of external debt service payments during 1997 was equal to 1026,9 mln USD, of which 520,8 mln USD - interest and 606,1 mln USD - repayment of principle. The "debt-service/export-earnings" ratio was equal to 20,1%, which is considered (according to internationally accepted criteria) a very high level. It is equal to 26,6% as measured on the basis of data from commercial banks about the amount of export earnings.

# 6.2. FORECAST FOR THE FOREIGN TRADE TURNOVER, THE BALANCE OF PAYMENTS AND THE EXTERNAL DEBT FOR 1998-2000

For the year 1998 we expect a slight increase of the volume of foreign trade turnover - to about 9,9 bin USD (or within the possible lowest and highest limits of 9,7 bin USD and 10,1 bin USD, respectively). Most probably this upward trend will continue through the next two years, maybe even by slightly higher rates. For 1999 we forecast a volume of about 10,7-10,8 bin USD (with the lowest probable volume of 10,5 bin USD and the highest of 11,0 bin USD). For year 2000 the foreign trade turnover may amount to about 11,3-11,4 bin USD (or within the range between 11,1 - 11,6 bin USD).

The whole period covered by the forecast, most probably will be characterized by at moderate negative balance of foreign trade within the range between 100 and 400 mln USD with a possible upward trend. Thus, for 1998 we could expect a deficit of approximately 100 mln USD or - in the best case the foreign trade will be balanced (or near to balance). In the worst case the deficit may amount to 150-200 mln USD. For 1999 we forecast a deficit of about 200-250 mln USD (with possible variants between 100 and 350-400 mln USD), and for the year 2000 - a deficit of 300-350 mln USD (within a probable range of 200 to 500 mln USD).

The balance on the other items in the current account of the BOP will continue to be, most probably, moderately negative, with annual deficits between 50-100 and 150-200 mln USD, mainly because of the considerable amount of interest, paid on the external debt (of approximately 500-550 mln USD annually). This will definitely surpass the expected surplus on services and current transfers. As a result, we forecast a negative balance on the BOP current account as a whole for 1998-2000:

- for 1998 about 150-200 mln USD (in the best possible case the current account will be near to balance, whereas in the worst - the deficit could amount to 300-400 mln USD);
- for 1999 and 2000 the annual deficits may amount to approximately 300-400 mln USD (or, within the probable range of 100-150 and 450-500 mln USD).

In this situation the Bulgarian economy must inevitably rely on a considerable surplus of the capital and financial account, in order to achieve an overall balance without any reduction of the amount of official forex reserves, which is (especially under the system of Currency Board) highly undesirable. Practically this can be achieved as a result of net capital inflows in the form of direct and portfolio investment and/or newly received credits from abroad (whose amount should surpass the amount of repayments on principle of existing credits).

As a whole, we forecast a substantial surplus on investment mainly as a result of the inflow of foreign direct investments being expected to intensify. For 1998 we forecast a surplus of about 400-500 mln USD (or within the range between 300 and 600 mln USD); for 1999 and 2000 - the amount of the annual surplus may reach about 700-750 mln USD, (with possible variants, ranging from 450-500 to 900-950 mln USD).

For 1998 we expect a more or less moderate surplus on credit operations with abroad reaching about 200 - 300 mln USD and resulting to an increase of the amount of the external debt to approximately 10,0 - 10,1 bln USD.

A possible trend of reduction of the amount of the external debt could appear no sooner than the end of the period, covered by the forecast. Most probably, for 1999 there will be a stabilization of the amount of the external debt. In year 2000 some quite slight decrease is possible, if the currency board mechanism continues to function relatively normally and there are no critical situations in the economy as well as in the social and political sphere.

Under such circumstances, by the end of 1999 the amount of the external debt most probably will be around the level of 10,2 bln USD. By the end of year 2000 it could decrease, quite modestly, to around 10,1 bln USD.

A relatively higher rate of reduction of the amount of the external debt can be expected eventually well after year 2000.

This forecast is based on the following arguments and presumptions.

First, the external factors, as a whole, will hardly have any decisive significance on the dynamics of the foreign trade turnover and the balance of payments.

On the one hand, most of the preliminary forecasts envisage relatively stable growth rates for the Central and East European countries and particularly an eventual renewal of the positive growth trend in Russia. This trends could have some favourable effect on Bulgarian exports.

On the other hand, however, for most of the West-European countries, as well as for North America and Japan, the forecasts show some slowing down of economic growth.

The forecasts are valid to a great extent for most of the developing and newly industrialized states, (especially from South-East Asia). The forecasts may have to be considerably adjusted downwards in case of an eventual further negative development of the financial crisis in this region.

In particular, any aggravation of the international financial crisis could lead to a higher level of cautiousness and even to some withdrawal and/or abstention by potential investors (and private creditors) from markets of high-risk countries and regions, among which still belongs the Balkan region, as a whole.

A substantial negative effect can have also a possible aggravation of the Kossovo crisis, especially if it results in renewal of economic sanctions against Yugoslavia.

Some measures, undertaken by the EC, aimed at liberalizing imports of some commodity groups from Bulgaria, facilitating admission of Bulgarian products to markets of member-countries.

can have some stimulating impact on Bulgarian exports. On the other hand, a number of production entities and export firms might encounter certain problems, connected with measures, undertaken by the Russian Government, aimed at tightening the import regime and especially - quality control on imported goods.

Second, the process of further liberalization of foreign trade and of financial relations with abroad will certainly have a significant stimulating effects both on imports and exports. For the period covered by the forecast, (up to year 2000) most probably the stimulating effects on imports will be relatively stronger.

Third, the expected renewal of the economic growth in Bulgaria during the current year and its continuation during the following two years should also lead to an increase in the volume of exports and imports. We expect relatively higher rates of growth of imports, namely - of investment goods. The seriously damaged production potential and competitiveness of most of the traditionally export-oriented branches of the national economy, as agriculture, food-processing industry, machinery construction, electronics, will continue to have a significant constraining effect on the exports.

Fourth, the expected increase of the lev real exchange rate (the higher real appreciation of the lev, especially if the actual inflation rate proves higher than the officially forecast) will have a considerable negative effect on exports, as well as a stimulating effect on imports; both effects will be, even more intensive, in case of an eventual upsetting of the upward trend of the dollar exchange rate, since the prevailing part of payments on Bulgaria's imports and exports is effected in dollars.

If the inflation process is not put under effective control (with a monthly inflation rate definitely below 1%), the need for a readjustment of the fixed lev/DEM exchange rate (of 1000 levs for 1 DEM), can arise.

Fifth, the inflow of financial resources from abroad in the form of direct investments and of private (bank and firm) credits will probably be stimulated, in a medium-term perspective, by the further progress of the privatization processes, the normalization and more intensive and effective functioning of the national capital market and the stabilization of the financial (and especially - of the banking) sector. The expected upgrading of the credit rating of the Bulgarian sovereign debt also could have a substantial positive effect in this respect.

In a relatively longer-term perspective this may allow for the possibilities of raising capital from the eurocurrency market by issuing eurobonds more realistic.

On the other hand, any eventual aggravation of some potentially negative tendencies and processes either in the sphere of the real economy or in the financial sector, which could lead to difficulties, impediments and even, eventually - to compromising of the currency board mechanism, might have dramatic consequences on the inflow of foreign capital and on the possibilities for regular servicing of the external debt.

Under the circumstances, the main purpose of the foreign economic policy of the state until the end of the period discussed, at least should be the stimulation of exports by implementing adequate instruments of trade, monetary and fiscal policy.

Having in mind the limitations on monetary policy, posed by the principles of functioning of the currency board mechanism, efforts should be concentrated on seeking possibilities for a more efficient and flexible exploitation of some of the means and instruments of fiscal policy and for raising the necessary financial resources for investment in export-oriented branches and for stimulating of export activities through the domestic money and capital markets.

Some particular measures could be undertaken through the establishment of a state or joint (with the participation of private capital) financial institution, specialized in export credit financing and guarantees.

Efforts, aimed at attracting foreign capital, first of all - in the form of direct investment in the real sector, evidently should be intensified.

Certain measures, aimed at rationalizing the mechanism of regulation and management of external credit relations and the external debt of Bulgaria also have to be undertaken. Among other things, they could include the introduction of annually fixed (by on act of the Parliament) limits on the amount of official external debt or, respectively - on the amount of external credits which the government can borrow and/or lend.

In a relatively longer-term perspective, one of the most significant purposes of the respective administrative bodies should be the elaboration and adoption of a long-term, strategic program for the development of foreign economic relations of the Bulgarian economy (covering, at least the next 10-20 years), in which the fundamental purposes, priorities and principles of the foreign economic policy of the state have to be defined.

FOREIGN TRADE TURNOVER

				(Bin USD)
	1997	1998	1999	2000
Foreign Trade	9,4	9,9	10,75	11,35
Turnover		(9,7-10,1)	(10,5-11,0)	(11,1-11,6)
Exports	4,9	4,9	5,25	5,5
(FOB)		(4,8-5,0)	(5,1-5,4)	(5,3-5,7)
imports	4,5	5,0	5,5	5,85
(FOB)		(4,9-5,1)	(5,3-5,7)	(5,6-6,1)
Balance	+0,4	-0,1 (-0,05 + -0,15)	-0,25 (-0,1 + -0,4)	-0,35 (-0,2 + -0.5)

Table 2

Table 1

# BALANCE OF PAYMENTS (CURRENT ACCOUNT), OFFICIAL FOREIGN EXCHANGE RESERVES AND EXTERNAL DEBT

				(Bin USD)
	1997	1998	1999	2000
Balance of Payments	+0,4	-0,15	-0,3	-0,4
(Current Account)		(-0,1 + -0,2)	(-0,2 + -0,4)	(-0,3 + -0,5)
Official Forex	2,2	2,3	2,3	2,2
Reserves		(2,2-2,4)	(2,2-2,4)	(2,1-2,3)
External	9,75	10,1	10,2	10,1
Debt		(10,0-10,2)	(10,1-10,3)	(10,0-10,2)

### 1.7. INCOMES, CONSUMPTION AND INCOME INEQUALITY

Senior research fellow Dr. VASSIL TZANOV

### 7.1. INCOMES: DYNAMICS AND SHORT-RUN POLICY UNDER CURRENCY BOARD

The application of restrictive measures on the dynamics of the incomes persisted also in 1997. The introduction of currency board put in reconsideration the issues for the priorities and principles of the incomes policy, the instruments for its realization and the expected social and economic effects in short-run aspect.

### 7.1.1. Dynamics and structural changes of incomes

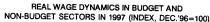
The unfavorable tendencies in the sphere of incomes continued to develop in 1997. They could be summarized in the following directions:

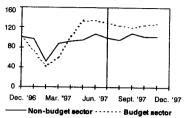
Reduction of real incomes. The price shock at the beginning of 1997 caused the consecutive fall of real incomes of the population. The reduction of their purchasing power was different for the particular sources of incomes (fig. 7.1). Most strongly were affected the minimum payments, which are used as a basis for determination of the social benefits: minimum wage and basic minimum income (BMI).

Figure 7.1.



Despite the strong decline in 1997 a recovey in the trend of real incomes was achieved (fig. 7.2). All sources of incomes began to restore their lost purchasing power. The preliminary data for the period Dec.'96-Dec.'97 shows an increase of real wages over 28%, pensions by 32.3%, minimum wage and BMI - respectively by 21.9% and 22.4%. It is important to mention that this growth has been achieved before the introduction of the currency board. After that the real wages remained almost unchanged.





- 2. Increase of differentiation. The differences in the levels of incomes and the polarization effects, observed in the previous years persisted to develop also in 1997. Due to the wages, the differences are most strongly expressed between wages in the budget and non-budget sphere. The average wage in the non-budget sector was greater than the budgetary salary by 33.8% in 1995, and by 68.2% in 1997. The currency board indirectly stimulates the wage differentiation between both sectors because the restrictions imposed on the budget sphere are stronger. For the period Jun. '97- Oct. '97 this ratio has raised to \$1.9%.
- 3. Abandonment of the minimum payments from wages. During the years of transition all minimal payments (minimum wage, minimum pension and BMI) lagged from the average wage. This process went deeper in 1997. The ratio between minimum to average wage fell to 26.6%, while the ratio of BMI decreased to 14.9%. This contributes to the extension of incomes inequality of households.
- 4. Restructuring of incomes. The high inflation and the restrictive incomes policy led to further restructuring of the incomes. The changes in 1997 concerned the following aspects: further decrease of the share of wages in total income; enlargement of incomes from home production and unchanged share of incomes from private economic activity.

The enlargement of non-monetary incomes is a natural response of the households to the challenge of the high inflation and the real wage decline. To compensate the great erosion of real incomes, the households increase the incomes from own production. The sharp expansion of incomes from households production has been observed in the years of highest reduction of real incomes (1991, 1994, 1996 and 1997). The share of incomes from home production increased from 22.6% in 1996 to 24.9% in 1997.

5. Disconnection with economic results. The restrictive incomes policy has destructive impact on the efficiency and restructuring of the economy. There could be outlined three main negative tendencies: 1) weak connection with productivity, 2) restructuring of relative wages irrespective of the economic efficiency, and 3) drastic shrinkage of domestic demand.

The level and dynamics of wages in almost all sectors and branches have low correlation with productivity and financial results. This is typical for industrial branches where wage bargaining and wage regulation are imposed. The gap between real wages and productivity has begun to increase since 1993 (fig. 7.3). The trends observed show that the faster decline of employment than production did not correlate with labour remuneration.





Independently from the changes in employment and economic efficiency there were no substantial changes in relative wages. Generally, relative wage structure remains unchanged from the period before the reform. This means that the position of branches with lowest and highest wages persists but the differences between them have been sufficiently enlarged.

The stabilization measures applied and the external demand shocks have reduced dramatically the aggregate demand. Both demand for consumer and investment goods and servcies have fallen considerably. Since the government consumption has a negligible share in GDP (1.5% in 1994), the household consumption remains the main source for stimulation of GDP growth. But the low level of incomes could not have considerable impact on the economic prosperity. Aggregate demand and supply should be stimulated by a less restrictive incomes policy.

### 7.1.2. Priorities and mechanisms of incomes policy

The main requirement to the incomes policy in the current situation is to be strongly connected with the economic results and financial possibilities of the budget.

An incomes policy aimed toward improvement of the social and economic situation must be based on the following priorities and targets:

- achievement of non-inflationary incomes growth without implementation of restrictive measures:
  - · binding the wages with economic results;
  - social protection of most affected groups:
  - stimulation of labour remuneration in more efficient sectors.

The policy of non-inflationary incomes growth must be turned into a basic priority independently of economic environment. As an element of the stabilization program it has particular meaning in the current conditions in Bulgaria. The problem is which instruments and mechanisms are suitable for implementation in conditions of inefficient market structures and weak market forces. Incomes determination must be strongly related to the results and efficiency. In this way pro-inflationary influence of the incomes (wages) should be automatically reduced and there will not be a necessity to impose regulatory measures.

An important priority of the incomes policy under the currency board should be the social protection of vulnerable groups. In the social programs selectivity and personality must predominate because of limited resources

The stimulation of labour remuneration in efficient entities and restraint of the wage growth in inefficient firms have transitory meaning. It is related to the current unfavorable conditions. The essence of this priority is expressed in reduction or abolition of the restrictions in profitable enterprises and the imposition of such measures in bad performing firms. The problem is in the sensible balance and dosage of regulatory mechanisms.

A purposeful and flexible incomes policy could be realized by well composed set of economical and administrative instruments and mechanisms. Of great importance are the mechanisms of wage determination in the budget sphere and the wage regulation.

The question is to what extent these mechanisms are suitable for realization of such incomes policy. These mechanisms should guarantee the reduction of the negative effects, emerging from the currency board and non-market behaviour of the state firms.

Wage determination in the budget sector. Salaries in the budget sector are determined on the basis of minimum wage and the coefficients for occupations. Also many other payments are tied to the minimum wage, including unemployment benefits, child allowances, etc. From economic and social point of view this is not an appropriate solution, but from the position of the regulation it is very efficient instrument.

The minimum wage has important social and economic functions and their incorporation creates conditions for the emergence of contradiction between its protective function and the regulation of the wage growth. The minimum wage did not fulfill its social function during the period past. More attention has been paid to its regulatory function as an effective instrument to restrain the wage increases in the public sector.

The solution could be sought in the radical change of this practice towards disconnection of minimum wage and salary and replacement of the current system by salary scales for state officers.

The wage determination in the budget sphere is related to the other important problem: how to determine the wage bill in the budget. This problem is a subject of negotiation with IMF. Fixing the wages or the wage bill at certain levels should strongly restrict the possibility for maneuvering with wage growth, independently of the fact that the revenues could be greater than expected. In this way a priority is given to the restrictions at the expense of stimulation function. A better solution is to fix the share of wage bill in the total government expenditures. This approach will create more favorable conditions for flexibility of wage policy within the framework of budget constrains.

Wage regulation. The question of the necessity of wage regulation is very important and had been discussed during the last years. The applied tax-based incomes policy led to insufficient results and was abolished in 1997. The new regulatory system has an important plausible feature: it allows unlimited wage increase for profitable firms. In the loss - making enterprises the wages remain unchanged.

The question of the necessity of wage regulation becomes more significant under the conditions of currency board. There are strong doubts about the necessity of regulative mechanism. But the currency board itself does not solve the problems of wage determination, although it imposes restrictions over the incomes from budget sphere.

Having in mind the current unfavorable conditions and climate for wage determination it is difficult to give an unique answer. There are serious evidences confirming and rejecting the wage regulation.

The behaviour of many state enterprises due to wage determination is not rational and does not respond to the market principles. They are willing to increase wages without any

connection with the production and financial results<sup>1</sup>. This is possible because of different reasons: subsidies, monopolistic pricing, soft budget constraints, "easy" credits, etc. The problem is that this is widely spread practice - not only in the monopolistic and subsidized firms, but also in the small ones. There are many facts confirming these conclusions<sup>2</sup>.

The other strong argument is that in the environment of weak market mechanisms, the wage increase will cause the growth of the labour cost and of prices as well. The weak market constraints could not stop such a process.

The arguments against wage regulation proceed from the changed economic environment after the introduction of the currency board. Under the regime of currency board conditions are created for automatical limitation of incomes in the budget sphere (wages, pensions and social benefits). Due to the state non-budget sector restrictions are imposed indirectly - through credits, strict financial discipline and bankruptcy of the firms. The loss - making and inefficient enterprises will have limited access to credits which will force them to restrain all elements of the production cost (including wages) in order to survive. Under circumstances there will be no necessity to regulate wages.

Proceeding from these arguments the radical abolishment of wage regulation seems to be unsuitable in near future. The outcomes must be sought in two aspects: creation of microeconomic climate for non-inflationary wage determination and gradual removal of the restrictions. The existing system is the right mechanism because it constrains only bad performing enterprises.

### 7.1.3. Forecast of incomes development

The incomes forecasts must consider a complex of factors related to the incomes policy and the forecasts for the basic macroeconomic indicators as GDP, inflation and productivity.

The reported variant of incomes forecast (table 7.1) is based on the following assumptions:

- administration of wages in the budget sphere and their co-ordination with international financial organizations (IMF and World Bank). Having in mind the strategy of IMF for more restrictive monetary policy this prerequisite will have restrictive character. In this way the field of choice of different variants has been made narrower;
- more strict binding of wages in the real sector with financial and economic results. This
  has an impact on the relation of labour remuneration and productivity. During the following 3
  years it is assumed an annual increase of production by 7-10% and simultaneous reduction of
  employment by 2-3%;
- determination of budget salary in accordance to budget revenues. In case of budget surplus the wages should grow;
- reduction of the number of state enterprises applying wage regulation. Since this process is connected with privatization and improvement of economic results the effects should not have the same signs. The expectations are the positive effects on the wage growth to be predominating;
  - growth of GDP by rates, forecasted in the previous sections;
- fall of annual inflation. Price shocks and sharp fluctuations of inflation are not expected during the forecasted period. The rates of real wages and pensions have been calculated on the basis of two forecasts of inflation: minimal and maximal;
  - removal of indexation mechanism.

<sup>&</sup>lt;sup>1</sup>The removal of wage regullation in the first quarter of 1997 caused substantial growth of wages 'mainly in the monopolistic and subsidized enterprises) without real improvement of the financial results.

<sup>&</sup>lt;sup>2</sup> The inspection of wages carrried out in the state sector has proved this thesis. Many of the loss making firms had calculated high wages which did not corespond to their possibilities.

### FORECAST OF INCOMES OF POPULATION FOR THE PERIOD 1998-2000

Indicators	1998	1999	2000
Average wage - BGL	182 000	204 500	230 000
Real average wage - rates of growth (%)	-1.7-2.1	-1.3-2.4	1.9-2.8
Average pensions - BGL	53 000	61 000	69 000
Real pension - rates of growth (%)	-1.3-2.6	-1.2-2.1	1.4-2.4

The quantitative forecasts presented above may be considered as optional. They reveal the expected general tendency of development during the next few years if the assumptions specified would be fulfilled.

The growth of nominal average wage in 1998 is predetermined by the fixed wage bill in the budget. Basically the average wage depends on the forecasted growth in the budget sector and expected nominal increase in the real sector. The latter is a function of changes in the factors, forming the wages in this sphere. Under this premise it is realistic to expect the growth of nominal wage by 37-40%. In real terms there are possibilities for positive and negative rates. In conditions of annual inflation of 35-40% the rate of growth will change in the frame from -1.7 to 2.1%.

The forecast to year 2000 takes into account the real growth of production and GDP, more strict binding of wages with productivity, removal of wage restrictions because of privatization and improvement of economic results, removal of compensatory component in labour remuneration, and stabilization of inflation at considerably lower levels. Under these circumstances the rates of nominal wages should fall with regard to the previous years. A negative rates of growth in magnitude of 1-1.5% cannot be excluded in unfavorable conditions. The realization of the forecast assumptions should bring to real annual growth of 2.5-2.8%.

The level and dynamics of pensions also have been determined under the expected low inflation and satisfactory revenues of the pension funds. It is possible the growth of the average pension to be greater than wages for 1998 because of removal of the ceilings of pensions. In the future higher growth of pensions over wages cannot be expected since the enlargement of pensions funds will be used for compensation of lower security taxes.

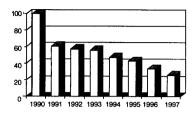
### 7.2. CONSUMPTION AND SAVINGS OF THE POPULATION

The extension of economic crisis in 1996 and 1997 had unfavorable influence on the consumer demand and consumption. The changes in 1997 could be summarized as continuation of the tendency towards reduction and restructuring of the consumption, corresponding to the low living standard.

The consumption measured as a total households expenditures per person has been reduced by 75% in the period 1990-1997 (fig. 7.4). After the initial drastic drop in 1991 more significant reduction has been observed after 1993. It was more significant in 1994, 1996 and 1997. The drop of real consumption in 1997 was estimated to be about 22%.

The growth of real incomes after the 1st quarter of 1997 has favorable impact on the households consumption. The total expenditures in real term have raised by about 23% during the period Dec. 96-Sept. 97.

# REAL HOUSEHOLDS' EXPENDITURES 1990-1997 (INDEX, 1990=100)



Substantial decline of real incomes in 1996 and 1997 led to significant reduction of savings. The share of savings in total households incomes fell from 20.3% in 1995 to 9.7% in 1996, and further cut to 3.1% was observed in 1997. It is not unexpected, since almost all households incomes are spent on consumption. This has a significant negative economic effect as it has reduced the possibility for domestic investment.

The dynamics of the consumption is influenced not only from the levels of the incomes, but also from the inertia and consumption in-kind. In the conditions of high inflation and market narrowing, these two factors have important meaning to keep the consumption at previous levels. The share of consumption in-kind has increased in years of high inflation. It reached 14.8% in 1997.

The reduction of consumption in the last four years is combined with notable restructuring of the expenditures. The direction is towards confirmation of the consumption model, corresponding to the low living standard and mass poverty. The main trends could be expressed as: considerable growth of food expenditures (55.1% of the family budget); expansion of household's expenditures for housing and energy; strong reduction of equipment and cloths' expenditures; decline of expenditures connected with the welfare of the society (education and leisure).

The consumption and changes in the consumption structure during the next 3 years will depend on the level of incomes, inflation and to a less extent on the interest rates. Also the economic stabilization should have a weak positive effect. The forecast of the consumption and changes in the structure have been based on the following main assumptions:

- growth of the production and GDP;
- low inflation and lack of price shocks:
- weak stimulation of the consumer demand by the incomes policy. A moderate increase of real incomes is forecasted;
- maintaining interest rates at low level, which has not stimulated the propensity to save. On one hand, this should stimulate the consumer demand, but on the other, it will have a negative effect on savings and growth:
- overcome the shortages at the domestic markets as well as the possibilities for speculation and creation of artificial deficits.

On the basis of these assumption the following changes could be expected:

 growth of real consumption by 3-5% annually, i.e. with 1-2 percentage points above incomes. This is possible as a result of enlargement of home production and consumption;

- maintain the low living standard consumption model. The structure of consumer expenditures will not change significantly. The share of basic goods will take almost the total household budget:
  - the food share probably should be stabilized at 45-50% of the total expenditures;
- consumption in-kind in the next two years will not change significantly. It will continue to take the big share in the consumption and will remain as one of the main sources of incomes.

#### 7.3. INCOME INEQUALITY

The be-polar model of social stratification developed in the last several years persisted to be consolidated in 1997. The greater part of the population gets low incomes, a small part earns middle incomes and a very small part - high incomes. The main important underlying factors for this situation have not changed significantly. The main cause is the criminal redistribution of the national wealth and incomes. On the second place, it is worth to notice that the banking system is a source of enrichment. Credits borrowed and not serviced were predominantly used for consumption and accumulation of property. The differentiation in wages, pensions and incomes from individual economic activity (small private business) may be pointed as the third factor, differentiating the population mainly under and above average level.

The quantitative measures and development of the incomes inequality may be monitored by some widely used integrated and desegregated indicators (table 7.2).

Table 7.2
INTEGRATED AND DESEGREGATED MEASURES
OF INCOMES INEQUALITY OF HOUSEHOLDS

-							
Indicators	1990	1991	1992	1993	1994	1995	1996
Gini coefficient - (%) Ratio of the incomes	22.8	23.5	33.1	33.7	36.6	37.8	39.0
between top and bottom 20% of households Share of the income in total	-		3.5	5.1	6.0	6.5	5.8
income: - - bottom 20% -			8,3	7,9	7,2	7,1	7,2
- top 20%	-	-	40.0	40.6	43.5	43.2	42.1

Sources: Household Budget Survey in Bulgaria, NSI,1994,1996.

The incomes inequality measured by the Gini coefficient has permanently increased. For the period 1990-1997 incomes differential went up about 71% (from 22.8 to 39.0%). The rates of inequality downwards after 1994 (near by 3.1%). According to the magnitude of the Gini coefficients the inequality is closely to the level of the developed European countries.

Disagregated indicators of inequality confirm also this tendency. The ratio between incomes of the top 10% of households and the bottom 10% increased from 7.8 times in 1992 to 10.7 times in 1996, and fell to 10.2 times in 1996. Similar trend has been observed using the ratio

between incomes of top and bottom 20% of the households. According to this, Bulgaria exceeds some countries like Japan, Sweden, Belgium<sup>3</sup>. The downward trend of inequality in 1996 may not be considered as a recovery point. There are no other evidences supporting this trend.

The incomes transfers are going from poor and middle incomes classes to the richer ones. This is supported by the fact that the income share of the lowest income classes has decreased at the expense of the growth of the share of too income classes.

The process of extension of inequality will persist during the following years. It is not realistic to expect reversing of that tendency. The problem is to constrain the intensity of this process and to take special measures for its overcoming. The government measures taken in 1997 must be evaluated as positive. Activities in this field have to be extended and which is more important, they must bring to a considerable economic and social effect.

<sup>&</sup>lt;sup>3</sup> In these countries the relation is between 4.3.-4.6. Cit. from Budget survey in Bulgaria, NSI, 1996.

# I. 8. EMPLOYMENT AND UNEMPLOYMENT

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# 8.1. DEVELOPMENT AND SPECIFIC FEATURES OF EMPLOYMENT AND UNEMPLOYMENT IN 1997

The alternations of the employment and unemployment policies in the context of the economic conditions in 1997 as well as the goals outlined in the government program "Bulgaria 2001" reveal the readiness for more radical changes both concerning the philosophy of the changes and the tools for their realization.

# 8.1.1. Macroeconomic preconditions for balancing the labor demand and supply

The dynamics of employment and unemployment in 1997 reflects the specific features of the economic and political reforms, including the introduction of the currency board" as an extreme measure for restoring the management of the economy, for macroeconomic stabilization and accelerated transformation of the state ownership.

In 1997 the macroeconomic environment did not create better prerequisite for increasing the employment rate and decreasing the unemployment rate. On the contrary, the collapse of the economic equilibrium at the end of 1996 deepened the problems of the labor market. The macroeconomic equilibrium restored since the end of 1997 has not led to an essential change in the labor demand and supply so far. Thus, the short-term prognoses must be directed to the continuing stagnation of employment and relatively high level of unemployment.

# 8.1.2. Normative and institutional changes in the labor market in 1997 and their impact on the labor demand and supply

Some attempts were made in 1997 for improving the existing institutional structure, considering its imperfection. For example, supervisory boards were established within the frame of the state labor structures, that are attached to the National Employment Agency, the Chief Labor Inspection, etc. Such type of bodies contribute for widening the public basis of the state government. A positive solution, specifically in the area of employment, isthe increasing number of representatives of the tripartite partnership and the civil structures in the discussions of crucial problems concerning the development of the country. In spite of these steps towards further disintegration of the state monopoly in the management of the labor relations, the system is still highly centralized and with awkward administration. The participation of the civil society structures with their controlling and evaluating functions, such as women's organizations, foundations, children's organizations, associations of disabled people, organizations of unemployed, etc. is still weak. As a result the established system of labor relations faces a serious problem there are no internal and external correctors, and its development is based on self-estimations. This prodetermines the unreallistic evaluation of its efficiency and the lack of incentives for its progress.

The legislative basis related to the labor market was further amended in 1997 as regard as the new law of employment and protection upon unemployment. This law was adopted by the Bulgarian Parliament at the end of 1997. Before that some of its provisions were introduced through sub-law mechanisms<sup>1</sup>.

The most significant feature of the legaslative amendments is the strictly restrictive character of the access to the unemployment benefits system. The restrictions are applied, both concerning the amount of the received benefits and the additional requirements for access to the system: for example, length of service before getting unemployed. The minimal insurance period has been increased as a condition for entitlement to unemployment benefits (from 6 months in the last 12 months to 9 from the last 15). The purpose of the implemented restrictions is to stimulate the unemployed to more active actions for getting out of the "unemployment" condition.

The administrative management of the labor relations system is of essential importance for the development of the labor market. Since the very beginning of the establishment of the administration of the labor market there have been plenty of disadvantages, related to the system's structure and its staff and informational provision. From this point of view the administration of the labor market system requires a lot of actions related to the improvement of the overall process of management of the labor system, and primarily its coordination, control and assessment of the efficiency of the policy pursued.

### 8.1.3. Specific features of the aggregated demand of labor in 1997

The economic failure in 1996 and the indirect impacts of the currency board , introduced in July 1997 found the following specific dimensions in the dynamics of the employment and unemployment rates.

Table 1

# DYNAMICS OF THE EMPLOYMENT RATE IN BULGARIA

lindicators	1990	1991	1992	1993	1994	1995	1996	1997
Total-thousandincl.	4096	3466	3273	3221	3241	3310	3279	3198
Public sector	3846	3189	2662	2266	2032	1924	1901	1517
Private sector	250	277	611	912	1167	1348	1377	1681

Source: Statistical reference book, National Statistics Institute, 1992 and 1997.

Several characteristics of the employment are to be outlined, as follows:

First- a clearly establishing employment structure, formed under the influence of the persisting decrease of labor demand within the state sector and the slow increase of labor demand in the larger private sector;

Second- an increase of the employment rate in the small private business sector, where the number of the employed exceeds one third of the total employment rate with all resulting unfavorable characteristics of this type employment, such as: instability, lack of insurance, etc.;

Third- stabile and high labor supply in relation to the labor demand:

Forth- increasing structural discrepancy between labor demand and supply.

The tendency towards reduction of labor demand in the state sector is stabile and is clearly expressed after the introduction of the Currency Board. The budgetary restrictions and the severe financial rules forced the state owned enterprises to dismiss part of their workers. The binding between the salary level dynamics and the final financial results had a stimulating role for the optimization of the number of the employed in accordance to the labor force demand. Nevertheless, the excess employment, typical for the state sector in the period of the plan econormy still exists chiefly in the state administration. One of the last year's paradoxes was that

<sup>&</sup>lt;sup>1</sup> Decree No 331/18 August 1997 of the Bulgarian Government, State Gazette, 70.

the restructuring of the employment in the budgetary sphere was terminated in 1997 due to shortage of budgetary funds for payment of compensations upon dismissal.

The dynamics of the working places turnover is a basic indicator of the labor demand. Several conclusions can be drawn from the data in the table, given below:

First: The average number of the employed working places for the period

January- December was 13 640, and that of the announced- over 16 thousand.

Second: There is a structural discrepancy between the requirements to the available working places and the free labor force.

Third: Few conclusions concerning the restructuring of the economy can be drawn on the basis of the dynamics of the shut-down and revealed working places: the restructuring of the economy through closing working places, which was widely spread in the beginning of the transition period is slowly shifted from a restructuring process through transformation of the ownership. According to preliminary data of the NSI the drop of the employment rate in the state sector for one year reaches the number of approximately 135 000 jobs; the employment rate in the private sector has increased by 304 000 jobs for the same period. The increase of the employment rate in the private sector not only covers the size of the dismissed from the state sector labor force, but also absorbs part of the unemployed.

DYNAMIC OF THE WORKING PLACES (LP) TURNOVER IN 1997

Table 2.

Months	Unoccupied LP	Registered LP	Occupied LP	Closed LP	Avaiable LF
January	10445	17229	12985	2930	11759
February	11759	12516	10508	1902	11865
March	11865	15606	14316	2119	11036
April	11036	12915	11039	2639	10273
May	10273	20966	16427	1991	12821
June	12821	21425	19917	2382	11947
July	12798	18244	14688	2554	12798
August	11796	12545	8713	3344	13286
September	13286	20230	15216	3936	14364
October	14364	14138	14043	2808	11651
November	11651	12242	8728	2376	12789
December	12789	11869	12509	1978	10171

<sup>\*</sup> from the previous month.

According to the data of the monthly registration of BT, NEA.

Forth: There is still an information deficiency concerning the issue of alternation of employment rate in the privatized enterprises. Therefore, the evaluation of the impact of the privatization (regardless of its specific form) on the employment and the number of jobs is not possible. At the same time the issue is of essential importance, bearing in mind that privatization is a first-priority goal of the reform in 1997 and of the governmental program "Bulgaria 2001". The privatization post stage of the enterprises is extremely important for the changes in the employment state.

The state policy of employment protection provides contractual conditions for maintaining the existing jobs for a certain period of time. On the other hand, the technological and organizational restructuring of the enterprise cannot be held with alternation of the working places, both qualitatively and quantitatively. In fact, the processes of dismissing labor force and the job number decrease take place besides the formal protection of employment. These processes are not subject to periodic statistical observation and analysis. That is why we dispose only with indirect data and information on the amendments in employment or the conditions of employment after alternation of the ownership as a result of changes in the management and organization of labor. The problem of the labor conditions and violations of elementary rights of the hired wage in the privatized enterprises is sharply outlined.

Fifth: The changes in the employment status confirm the expectations as well: the number of the employed in the state sector has fallen down with more than 150 000, the number of the employed in the private sector-with about 30 000.

The number of employers has also fallen down- from 60900 people to 59200. The number of the unpaid married workers increases- from 40 000 to 58700. The restructuring employment policy as regards its effectiveness has to reflect the above mentioned alternations in the employment structure. In a long-term aspect the issues of establishing an employment structure in compliance with the European economic structures should not be underestimated as an element of the integration process of Bulgaria in the European Union.

Sixth: The reduction of the employment rate is connected mainly with a drop of the production volume and to a lower degree with the growth of the labor productivity. Generally, the process of employment rate decline in the state sector is a positive one and reveals an originating process of strengthening the employment restructuring in this sector. This tendency would have had affected positively the economy if the employment decrease had been a part of an overall process of restructuring of the state-owned enterprises, their stabilization and their further efficient development.

In 1997 the following branches of the state sector registered minimal increase of the employment rate: forestry, hostels and public food establishments, business services, communal activities and public utilities.

The employment structure in the private sector demonstrates the predominant share of the employed in agriculture 43%. The dynamics of the rising employment in the industry shows the influence of the privatization process over the shift of employment from the state to the private sector.

DYNAMICS OF EMPLOYMENT IN SOME BRANCHES OF THE PRIVATE SECTOR (THOUSAND PEOPLE)

Branches	1993	1994	1995	1996	1997
Total	912	1167	1332	1377	1681
Industry	. 77	115	143	151	318
Agriculture	464	579	643	677	723
Transport	37	41	72	69	77
Construction	69	81	93	93	94
Trade	187	252	257	266	278

Source: Statistical reference book, 1997, NSI, page 39.

Table 3

<sup>\*\*</sup> at the end of the month.

The described tendencies of the labor market in 1996 are kept in 1997 as well. The main characteristic of these trends is the decreasing rate of labor supply due to decrease of the economic activity of the population (77.9% in 1995, 72.0% in 1995) and emigration. The limited labor supply under the conditiond of stagnated demand is a favorable occurrence considering the economic and social problems which are created from the disbalance of the labor market. At the same time, in short-term and midium-term aspects the development of the demographic indexes reveals very disturbing tendencies towards aging of the population, respectively, reduction of the number of people at able-bodied years, outflow of young and highly qualified labor force and worsening qualifitative labor force structure.

The labor supply in the future will be predetermined from the negative demographic parameters too: reduction of the total number of population under continuously worsening structure increase of the relative share of the people over working age and decrease of the share of those under working age.

Table 4

### DEMOGRAPHIC CHARACTERISTICS OF THE LABOR FORCE IN BULGARIA

Indicators	1985	1990	1995	1996	2000
Population,incl.	8950	8669	8384	8339	8136*
under working age	2057	1957	1598	1551	1301
in working age	5034	4835	4745	4746	4474
over working age	1881	2022	2041	2041	2361

According to data of the NSI; The population of 2000 from "Economic strategy and policy in the forthcoming perspective" and prognoses and evaluations by the author.

Several reasons are to be mentioned for the reduction of the economic activity of the population after 1990. On one hand, the restitution of the ownership led to withdrawal of part of the working-age population from the economic-actively population. On the other hand, the increase of the illegal hidden employment, often of criminal character. Thirdly, the diminished confidence in the employment offices as mediators at the labor market.

A more active shift of the employed in the state sector is to be expected in short-term perspective; towards the circle of the unemployed and towards the private sector. The changes in the employment rate within the state sector will continue as well. It is anticipated that the movement of labor force within the private sector will increase due to its expansion and the bigger choice of job possibilities. At this stage the movement from the private sector to the state sector is still limited.

# 8.1.5. Structure, dynamics and rate of unemployment in 1997

The data of the specialized periodical observation of the employment and unemployment rates conducted in the country reveal the following basic characteristics of the labor market: reduction of the population's economic activity, drop of the employment rate; higher reduction of the employment rate among men; decreasing employment coefficient; increase of the number of unemployed as the dynamics of expansion of the unemployment rate concerning men is higher comparing to the women's unemployment rate; increase of the unemployment coefficient; enlargement of the current economically inactive population<sup>2</sup>.

### DYNAMICS OF THE UNEMPLOYMENT RATE IN BULGARIA

Indicators	1990	1991	1992	1993	1994	1995	1996	1997	
Unemployed As % of the economicaly	65	419	576	626	488	423	478	521	
active population	1.5	6.7	13.2	15.7	14.1	10.7	12.5	13.7	

Source: Nil, monthly bulletins on the unemployment registration.

The monthly unemployment rate does not differ significantly from that in 1996, but the average monthly unemployment rate in 1997 (14%) is about 3 points higher than that in 1996 (11%). The share of those not entitled to social benefits prevails in the structure of unemployment (Table 7) - approximately two thirds from all unemployed.

Table 6

### STRUCTURE OF UNEMPLOYMENT IN 1997

Months	Totalincl:	Eligible to unemployment benefits	Eligible to social assistance	
January	100	31.6	5.3	
February	100	32.4	3.6	
March	100	31.1	3.1	
April	100	30.1	2.6	
May	100	29.1	1.4	
June	100	27.8	1.2	
July	100	29.1	4.4	
August	100	26.2	5.0	
September	100	25.5	5.0	
October	100	30.2	5.1	
November	100	30.0	4.7	
December	100	30.1	4.5	

Source: Calculated on the basis of data, reported in the Monthly employment and unemployment Bullettin - NLS.

The share of the unemployed entitled to social benefits shows the number of people in continuous labor isolation, leading them to hard poverty and necessity for social assistance. The combination between labor and social isolation is an extremely unfavorable occurrence concerning the marginalization of society groups with heavy economic and social consequences for the whole society.

The age structure of the unemployed clearly outlines another risk group at the labor market - the young people. More than one third of them are unemployed. The share of the registered unemployed youth up to 29 years of age in the total number of unemployed varies from 38.8% in January 1997 to 35.4% in December 1997. The share of the unemployed upto 24 years is 23.1% in January and 20.6% in December 1997 respectively. Apparently, the policy applied for encouraging the youth employment or youth business endeavors are not quite effective and needs a general reconsideration.

<sup>&</sup>lt;sup>2</sup> See Employment and unemployment, 1/1996, page 16.

The share of the long-term unemployed in 1997 remains comparatively high- 23.1% in January 1997 and 28.9% in December 1997, and as a whole for this period the share has not dropped below 20.5%. The stagnant unemployment will obviously remain an acute problem for the labor market in Bulgaria. The experience so far reveals that the right approaches for overcoming this negative phenomenon have not been found.

The regular observation of the employment and unemployment rates suggests two options for solutionswith respect to starting a job and terminating the unemployment registration. The average monthly number of the newly unemployed, entering the system was 60 000 people, and those leaving the system-about 45 000. The average monthly number of those starting a new job was approximately 15000 people, as a "boom, of the number of people with new jobs (25-26 thousand) has been registered for the months May and June.

The employment offices have been left by a considerable number unemployed in the months May and June. Most of the dropping out of the employment offices are a result of falling off of registration - 75%. This means that these unemployed individuals are not interested in keeping registered in the employment offices and observing the normative rules for maintaining the status "unemployed". Since there is no information on the future of these people, we can only consider that some of them participate actively in the \_hidden\*, illegal employment.

In 1997 there are no great alternation of the unemployment distribution in regional aspect: the lowest unemployment rate has remained in the city of Sofia - 4.5% in January and 4.9% in December 1997; the highest rate is in the region of Montana - 20.7% in January, 20.0% in December 1997; in the regions of Russe, Plovdiv, Varna and Bourgas were observed values above the average one for the country.

The regional policy on employment and unemployment is not well developed and currently there are not any essential results concerning the reduction of the unemployment rate in regional aspect. A good example is the region of Montana where the highest unemployment rate has been registered since the beginning of the transition period.

### 8.2. A SHORT-TERM PROGNOSIS ON THE LABOR DEMAND AND SUPPLY

It is anticipated that the labor demand will revive in the second half of 1998, when the currency board, the restructuring efforts and the new investment are to contribute for the recovery of the real economy.

The prognoses are that the aggregated employment will change with regard to three basic factors:

First: the extent to be the achieved by the macro stabilization in order to be long-lasting and steady;

Second: the mode of the privatization processes taking place;

Third: the dynamics of the foreign investments.

Two possible scenarios can be forecasted: for example, upon GDP from 2 to 5% in 1998 the anticipated employment increase is 2% or 66 000 working places. Upon GDP below 2% the employment rate will remain the same, but the opening of new jobs will continue to stagnate. Considering the present high unemployment rate, this may sharpen the social tension in the country. Thus, in macroeconomic aspect one of the first - priority task is the opening of new working places. The efforts can be concentrated in providing stimulus for the development of the private sector.

The anticipated GDP growth in 1998 is between 1-3, according to the NSI. This means maintenance of the current employment rate and insignificant increase if a 3% growth of the economy is achieved next year<sup>3</sup>.

The European bank (E.B.R.D.) evaluations of the potential possibilities of the Bulgarian economy are more than modest. Taking into account the deep recession, according to this institution, our country must find the solutions of some basic tasks of the transition-stabilization, privatization and liberalization.

The Government envisages real GDP growth of 4%, i.e. a growth which may generate more dynamic rates of employment<sup>5</sup>.

Actually, these expectations are connected with the more intensive movement of the labor force from unemployment to employment in the private sector and to a lower degree to these sectors of the state economy which are stabilized and gradually enlarge their production, respectively employment.

The private sector is expected to generate employment with considerably higher rates than the state sector under a steady macroeconomic stabilization. The assumption of the employment prognosis in this sector is: first, mechanical increase of the employment rate due to more dynamic privatization transactions and change of the ownership; second, the weak development of the private sector imposes stimulating measures for its growth stabilized macroeconomic environment and possibly the new economic policy will include a package of encouraging measures; third, the currency board should create more favorable conditions for the development of the private sector, its stimulation, which will be expressed in the opening of new working places and consequently, this will lead to an increase of the employment rate; forth, the private enterprises which are more flexible and with higher adaptation to the market should maintain stable employment.

The short-term trends of the unemployment developments will be determined by the economic policy parameters, enforced by the currency board and mainly by the rates of the economic restructuring. The unemployment rate may be seriously influenced by the liquidation and restructuring of the main state enterprises, the financial sector and the coming waves of the mass privatization.

After the introduction of the currency board and the successful economic reforms, the positive effects related to the development of the labor market will be acknowledged when the employment rate reaches its values from the end of 1995. Thus, the unemployment rate is expected to reach 10-12% in 1999 or approximately half million people.

The expected unemployment "peak" at the end of 1997 (26% or a bit less than one million people) was not attained. Several reasons are to be pointed out but the primary ones are: delay of the economy restructuring, administrative and financial factors, because the radical restructuring requires financial funds which could not be provided by the budget in 1997. Considering the postponed restructuring of the employment in the state sector and the active restructuring in 1998 the predicted unemployment rate increase is about 18% from the active population or up-to 700000 people. The forecosted number of economically active population is 3900 000 people, and the number of the employed 3200000.

Simultaneously a more intensive development of the private sector and the self-employment till 1999 will contribute to maintaining a lower unemployment rate - about 12% as a final limit or 500 000 people. The stabilization of the unemployment rate about 8-9% is a long-term perspective when a consistent economic growth is achieved as well as conditions for creating working places and generating employment will be settled.

<sup>3 &</sup>quot;24 hours" Newspaper, 19.09.1997, p. 16.

<sup>4-168</sup> hours" 15-21 August, 1997, p. 14.

<sup>5</sup> \_24 hours" Newspaper, 24 October, 1997.

#### DYNAMICS OF THE UNEMPLOYMENT RATE IN BULGARIA

Indicators	1994	1995	1996	1997	1998	1999	_
Unemployed-thousand	488	423	448	523	700	500	
Unemployment rate	14	10	11	13	18	12	

<sup>\*</sup> Upon the registration at the end of year and prognosis evaluations of the author.

In conclusion we must point out, that considering the state of the transitional period, the dynamics of the labor demand and supply in a short-term aspect will depend to a higher degree on the macroeconomic stabilization and the economic recovery. To a lower degree it can be regulated by the mechanisms of the labor market itself. At the same time in midium and long term perspective the development and the effective utilization of the labor market tools will be of a vital importance for the achievement of a sustainable economic development. This means, that active steps towards implementation of the necessary market mechanisms and tools have to be initiated as well as their adaptation and approbation to the economy in the country.

# II. INVESTMENT ACTIVITY, GROWTH AND ECONOMIC ENVIRONMENT

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This analysis is a logical follow-up of our previous publications (/2/ - 123-146) . The need of investment activity felt three years ago is even more acute now (see Table 1)

Table 1

### INVESTMENT ACTIVITY IN THE ECONOMY

Indicators	1990	1991	1992	1993	1994	1995	1996	1997
Investment for fixed assets								
at current prices (bill. BGL)  2. Investment for fixed assets	9.8	24.8	43.6	43.5	84.2	125.9	240.0	171.2
at constant 1990 prices (bill. E	3GL) 9.8	6.2	7.1	5.6	6.1	6.0	4.8	3.4
3. Saving rate (%)	21.3	18.2	16.2	13.0	13.8	14.0	11.5	8.6
4. Investment rate (%)	21.6	18.3	21.7	14.6	16.0	14.5	12.7	10.1

Notes: The 1990-1996 data are reported by the Central Statistical Office (CSO) and for 1997 - assessment. Saving and investment rates are percents of the GDP at current prices for the respective year.

The investment revival is the most appropriate way for an exit from the deep recession. Its delay postpones the overall economic revival and the sustained growth.

## II.1. THE FINANCIAL STABILISATION - A PREREQUISITE FOR ECONOMIC GROWTH

Sustained economic growth is impossible in an inflationary environment. Investors refrain from investment decisions at high inflation, waiting for its fading away. "The positive correlation between this "waiting ratio" and inflation (a correlation coefficient of 0.61) can be interpreted as a measure of the potential for investments once uncertainty subsides" (/5/ - 85-86).

The negative correlation between inflation and economic growth has been proven empirically, particularly at high inflation. More ambiguous is the link with growth under lower inflation. On the basis of numerous studies of this linkage one could draw several conclusions: "First, there is no support for the notion that higher inflation is beneficial for longer-term growth,

<sup>\*</sup>The figure in brackets /2/ is for publication N2 in the list at the end of the book, while 123-146 are the pages of the quoted publication.

#### TWO PROJECTIONS FOR INFLATION AND THE REAL EXCHANGE BATE

Variants	Vii->	(ii 1997	19	998	1999		2000	
	for the period	accumu- lated	for the year	accumu- lated	for the year	accumu- lated	for the year	accumu- lated
Government's projection:								
-inflation - % - real exchange	16.2	16.2	16.4	35.3	8.8	7.8	47.2	58.6
rate BGL/DEM	-	873	-	763	-	718	-	682
Our projection:								
-inflation - % - real exchange	16.2	16.2	27.0	47.6	20.0	77.6	13.0	100.1
rate BGL/DEM	-	873	-	693		587	-	530

Notes: Inflation (measured by the CPI, which is close to the PPI) for the second half of 1997 is actual. The remaining figures are projected. The accumulated inflation and the appreciation of the BGL with regard to the DEM are computed on the basis of 30 June 1997.

682 BGL/DEM by the end of 2000, and according to our projection - to 530 BGL/DEM. The Bulgarian economy is not capable of facing such a challenge within so short a period, even after taking into account the import intensity of the export and the output as a whole. The likely depreciation of the DEM to the USD over the following years would alleviate the Lev vis-a-vis the American dollar, and vice-versa.

The higher domestic production costs due to higher prices could be neutralised only by increased total factor productivity. This productivity however cannot be increased by 35-4 per cent by the end of 1998 and by 59-100 per cent by the end of 2000. During 1998 total factor productivity would probably stay at the present level, or decline due to revaluation of the fixed assets, and in 1999 and 2000 would increase by 6-7 per cent at best (see Table 8). Even if one assumed the apparently unrealistic - increase of total factor productivity by 15-20 per cent by the end of 2000. Jarge negative effect remains uncompensated for.

What are the potential implications of such real appreciation of the Lev over the financial stability during 1998-2000? The expensive Lev will suppress exports and encourage imports. This would contribute to higher negative saldo of the trade balance. The average annual external debt service payments would be around 1 bill. USD, or 6-8 per cent of the average annual external debt service payments would be around 1 bill. USD, or 6-8 per cent often annual financial institutions are expected to be below the 1997 level, due to ongoing disturbances within the world financial system, depletion of resources of the international financial institutions and the high external indebtedness of Bulgaria (100 per cent over GDP and 200 per cent over annual export revenues). The latter calls for restraint in new borrowing. The same would be true for medium- and long-term borrowing from private banks. For the likely unfavourable

although... there is also no evidence that zero inflation is superior to very low positive rates of inflation. Second, the evidence is strongly indicative of a negative relationship between inflation and long-term growth, even at moderate rates of inflation of 10 to 30 per cent. High rates of inflation are clearly harmful to growth. Growth falls steeply as inflation exceeds 30-40 percent and tends strongly to become negative at very high rates of inflation. The experience of the transition economies in particular shows that reducing high inflation has been a precondition for the revival of growth and that stabilisation leads to growth: specifically, it seems that annual inflation has to be reduced to less than 50 percent for growth to resume. Third, even at the lower rates of inflation of 2-10 percent, experienced by industrial countries over the past three decades, the greater variability of output associated with relatively higher inflation complicates the conduct of macroeconomic policy\*(/13/ - 120-122).

Among the numerous studies of the relationship between financial stabilisation and growth in Central and East European (CEE) countries, a paper by a group of IMF economists led by Stanley Fischer merits attention. It is particularly relevant with the conclusions on macroeconomic policy. "The evidence discussed in this paper strongly suggests that growth requires stabilisation and that stabilisation leads to growth. (bolding by the author) Moreover, it appears that for growth to begin, annual inflation should be less than 50 percent... transition countries that stabilise inflation will begin to grow within two years... Stabilisation succeeds only if growth follows. (bolding by the author) If growth does not follow stabilisation, governments may find it impossible to sustain the stabilisation\* (/8/ - 17-18).

In previous publications of this series we have stressed upon the linkage between macroeconomic and structural policies. Within the context of the above quotations the same could be pointed out by reminding of the linkage between financial stabilisation and structural reform, and both as prerequisites for growth. These relationships are complex, but within the framework of the issue under consideration, one of them deserves special attention. With the instruments of macroeconomic policy alone inflation could be brought down quickly from several hundred or even several thousand percent per annum to 40-50 per cent. However, it can not be kept at this level too long or reduced to one-digit levels without structural reforms. In this sense one may affirm that there is a high correlation between inflation and structural reform and sustained growth.

A fragile financial stabilisation was attained in the Bulgarian economy during the second half of 1997. It is an indispensable prerequisite for resumption of economic growth, provided it begins soon. Lasting financial stability is impossible in the absence of growth.

The risk of a new financial destabilisation over the following years remains high. The most vulnerable component of the system is the ongoing moderately high inflation under a fixed exchange rate (see Table 2):

The big question is: how would accumulating inflation affect competitiveness of the Bulgarian goods under conditions of a fixed exchange rate? As at the time of pegging to the German Mark the Lev was overvalued, would the export-oriented goods be able to absorb by the end of 1999 an increase of the domestic production costs between 47 and 77 per cent and by the end of 2000 - between 59 and 100 per cent? The question stands equally acute, even if assumed that the Lev was not overvalued at the time of pegging.

The analysis of changes of the real exchange rate, computed on the basis of the projected inflation differentials between Bulgaria and Germany leads to the same troublesome conclusions. According to the Government's inflation projection the Lev would appreciate to

consequences of the financial crisis in East and Southeast Asia upon emerging economies see /17/- 41, 51-60, 63, 74-80, 95-96, 99-102. One should also keep an eye on potential negative implications of possible deterioration of the ongoing crisis in Yugoslavia.

The above, along with the low credit confidence to Bulgaria, is expected to affect negatively the inflow of foreign direct investment and the interest of foreign investors in the Bulgarian privatisation in the real and the banking sectors. This will, in turn, have a negative impact over the balance of payments, may destabilise the budget and the banking system. Their instability would be transmitted to the real sector, by delaying its revival. Unemployment would remain high, and real incomes low.

This environment of growing economic and social tension generates a growing pressure for a revision of the fixed exchange rate of the Lev. If the Bulgarian government ventured for such a change unilaterally (without consulting the IMF), this will certainly produce strong destabilising effects within and without the country. This would destroy the still fragile confidence of the World financial community in the Bulgarian public institutions with unpredictable negative implications. Therefore, the macroeconomic analysis confirms the availability of a potential serious danger of forthcoming new financial destabilisation during the second half of 1999 and even more so in 2000.

Such an alarming conclusion should be checked up by an alternative analytical method. This could be done by an analysis of the economic developments in the other CEE countries, performing under similar conditions. These are the Czech Republic and Slovakia from 1991 till May 1997, and the countries with a currency board arrangement: Estonia - since June 1992, and Lithuania - since April 1994 (see Table 3). Such an analysis is relevant as in the present situation in these countries one could see the future of Bulgaria in 3-5-7 years or more:

Table 3

MACROECONOMIC INDICATORS IN SOME CEE COUNTRIES WITH FIXED EXCHANGE
RATES OF THE NATIONAL CURRENCIES

Countries and indicators	1991	1992	1993	1994	1995	1996	1997
Czech Republic							
1. Inflation:							
for the year - %	52.0	12.7	18.2	9.7	7.9	8.6	9.0
- accumulated - %	-	12.7	33.2	46.1	57.7	71.2	86.7
2. Exchange rate:				-			
nominal	29.5	28.3	29.2	28.8	26.6	27.1	33.0
- real	29.5	25.9	23.3	21.4	18.9	18.2	20.9
3. Commercial saldo							
· bill USD	-0.4	-1.9	-0.3	-0.9	-3.7	-5.9	-6.0
4. Budget deficit - %			2.7	0.8	0.4	-0.2	-1.5
5. GDP growth - %	-11.5	-3.3	0.6	2.7	5.9	4.1	1.0
Slovakia							
1. Inflation:							
for the year - %	61.2	10.1	23.2	13.4	9.9	5.8	6.5
accumulated - %	-	10.1	35.6	53.8	69.0	78.9	90.5
2. Exchange rate:							
nominal	29.6	28.3	30.8	32.1	29.7	30.7	33.3
real	29.6	26.4	24.1	22.7	19.7	19.7	20.7

# MACROECONOMIC INDICATORS IN SOME CEE COUNTRIES WITH FIXED EXCHANGE RATES OF THE NATIONAL CURRENCIES

Countries and indicators	1991	1992	1993	1994	1995	1996	1997
3. Commercial saldo							
- bill USD			-0.9	0.1	-0.2	-2.1	-2.2
4. Budget deficit - %			-7.0	-1.3	0.1	-1.2	-3.5
5. GDP growth - %	-14.6	-6.5	-3.7	4.9	6.8	6.9	4.5
Estonia			•		0.0	0.0	4.5
1. Inflation:							
for the year - %	304.0	954.0	36.0	42.0	29.0	15.0	12.0
accumulated - %			-	42.0	83.2	110.7	135.9
2. Exchange rate:				12.0	00.2	110.7	100.0
nominal			3.2	13.0	11.5	12.0	13.5
real			13.2	10.0	7.0	6.6	6.8
3. Commercial saldo	••	••		10.0	7.0	0.0	0.0
bill USD		-0.09	-0.15	-0.34	-0.67	-1.06	
Budget deficit - %	5.2	-0.3	-0.7	1.3	-1.2	-1.5	
5. GDP growth - %	-7.9	-14.2	-8.5	-1.8	4.3	4.0	
ithuania			0.0	-1.0	4.5	4.0	**
I. Inflation:							
for the year - %	345.0	1161.1	188.8	45.0	35.5	13.1	10.0
accumulated - %	-			40.0	35.5	53.3	68.6
2. Exchange rate:					00.0	30.0	00.0
nominal			4.3	4.0	4.0	4.0	4.0
real				4.0	3.3	3.0	2.8
3. Commercial saldo			••	4.0	0.0	0.0	2.0
bill USD	.,	0.10	-0.28	-0.31	-0.49	-0.63	
I. Budget deficit - %	2.7	0.10	-3.1	-4.2	-3.3	-3.6	-2.8
6. GDP growth - %	-13.4	-37.7	-24.2	1.0	3.0	3.6	-2.0 4.5

Source and notes: EBRD, Transition Report 1997, pp 221,222, 229, 234. Some data for 1997 are taken from other sources (see /9/). The data for 1991-1995 are actual, for 1996 assessments, for 1997 - projected. The data on inflation are for end of the year CPI. Deficits are for general government budgets as per cent of the GDP. Exchange rates are with regard to USD. Real exchange rates are computed by the end of the respective years on the basis of inflation differentials (CPI) between respective countries and the USA.

The common among the above mentioned countries is that they have, or have had fixed exchange rates of their national currencies under conditions of moderately high inflation, i.e. the same which Bulgaria will experience in 1998 and the following years. There is sufficient ground to expect that what has happened and is happening in these countries as consequence of the fixed rate and the moderately high inflation, will be repeated in Bulgaria, probably in a worse version due to the more unfavourable economic and other conditions.

The preliminary analysis confirms that one of the four major reasons for the financial crisis in Eastern Asia are the ... difficulties and shortcomings in macroeconomic and exchange rate policy management, particularly in the context of the pegged or relatively fixed exchange rate arrangement maintained by most of the countries concerned..." (177-19). And further on ,... the maintenance for too long of pegged exchange rate regimes that encouraged external borrowings and led to excessive exposure to foreign exchange risk in both the financial and corporate sectors" (177 - 61).

The analysis of the comparative dynamics of the macroeconomic indicators in Table 3 leads to the following conclusions:

First: There is a very close positive relationship between the real appreciation of the national currency and the negative trade saldo. The longer the appreciation lasts, the higher the negative said of the trade balance. The destabilising implications over the foreign balances of the Czech and Slovak Republics are well known. Similar problems are expected for the other two countries.

The linkage between the exchange rate and the trade saldo is so close in spite of the counteracting factors, among them labour productivity increases (/9/ - 8-12). The more liberal the foreign trade regime, the stronger the impact of the exchange rate over the trade balance saldo. This positive relationship is absent, or very weak and with longer lag only when the exporting country has no access to foreign markets, or it is very limited. Even the most appropriate exchange rate is helpless when foreign trade flows of a country are blocked for other reasons.

The growing negative trade saldo is not only a product of long-lasting overvaluation of the national currency. Simultaneously and in a long-run even stronger is the impact of the delayed structural and technological modernisation of the economy. As a result Bulgaria and the other CEE countries do not have attractive for pretentious Western markets new products with high value added and instead rely in their exports on products of medium quality the production of which in the advanced countries has been or is being discontinued due to their high labour, energy- and material-intensities and ecological unacceptability. Such a pattern of exports cannot be instrumental for a sound and sustained economic growth. The speedy import liberalisation in the CEE countries also contributes to the negative trade balances. The consequences of the above mentioned and other factors are felt stronger and are more difficult to absorb under fixed rate regime for many years. The carefully managed floating rate is a useful shock absorber in such a situation.

Second: The growing negative trade saldo contributes to slackening of GDP growth. One knows from the textbooks that trade saldo is a component of the GDP. The negative saldo is an indication that domestic consumption exceeds the GDP. This could be limited only by a curtailment of domestic consumption. In the Czech Republic the fading away of the GDP dynamic was felt only in 1996 and even more in 1997, because during 1992-1996 private consumption was growing by 7.8 per cent per annum, and investments by 9.9 per cent, contributing to accumulation of even larger negative trade saldo. The situation in Slovakia and Estonia is similar.

Third. The growing negative trade saldo contributes to increasing budget deficit. At final account foreign economic disequilibrium destabilises internal equilibrium. With forced investment activity and related additional import of investment goods, the larger negative trade saldo could be neutralised only by curtailment of household and Government consumption. The linkage between the budget and the foreign balance is direct and this is being confirmed by the analysis of economic developments in CEE countries.

Fourth. The slackening GDP growth and the higher budget deficit along with delayed structural reforms begin to generate inflationary impulses and therefore counteract to its further reduction. Moreover, the inflation in the Czech Republic and Slovakia in 1996 and 1997, and the projections for 1998 indicate a negative turn. Inflation may climb to 12% in 1998 in the Czech Republic as compared to 7.9% in 1995. For the same reasons Estonia has been with double-digit inflation for 5.5 years, and Lithuania - 4 years after the introduction of a currency board arrangement.

The longer the above processes last, the shorter the financial stability and less likely the sustained growth of GDP. The solution of this problem should be sought in the undoing of the complex economic knot, called "moderately high inflation under fixed exchange rate."

The most radical and economically healthy solution is the quick increase of total factor productivity in order to neutralise the negative effects of the appreciation of the national currency over the competitiveness of the national goods. Over the last 30 years (1967-1996) from 23 most advanced OECD member countries only 7 have succeeded in maintaining by the end of the period their national currencies more expensive with regard to SDR, compared to the initial year. CEE countries cannot even dream of such a solution in the forthcoming 10-15 years, at the present conditions in their economies and their modest investment and technological potential. Even less affordable is this for Bulgaria over 1998-2000 and hevond

Broadly speaking, the CEE countries have achieved a lot during the short historical period of 9-10 years. At the beginning of 1998 the region is very different from what it was at the end of 1988. The transformation to a pluralistic democracy and market economy in the region as a whole is irreversible.

The thorough examination of the most important indicators of economic development gives rise for more cautious conclusions on the progress of transformation. This is particularly true for the qualitative aspects of economic development. For substantiation of this conclusion with regard to GDP growth, unemployment, budget deficit, balance of payments, external debt, saving and investment rates and others see respective tables in /9i. /14i. /177 and /20i.

The analysis of the medium-term trends also leads to serious reflections. Not so much for the destiny of the reforms, rather to the speed, controversy, social price and the huge difficulties during the implementation. A successful summary of the difficult path of the reforms in CEE countries is a publication of the Vienna Institute of Comparative Economic Studies. See /9/ - 26-27. On the same issue see also /1/ - 18-19.

The conclusion of the publication of the Vienna Institute for the CEE as a whole is valid even more for the Bulgarian economy. However, this should be understood now by the Bulgarian government and the IMF, and not wait until 1999-2000, when the country will face another financial and macroeconomic destabilisation.

Is there a constructive exit from this complex situation? There is no easy or smooth solution, it is possible however to soften the destabilisation, to give time to the economy to "take a fresh breath", to start growing, to increase total factor productivity and on this ground simultaneously improve the living standard of the people and service the external debt. Further stagnation or deterioration of real incomes in the name of regular debt servicing will not be tolerated by society. The solution of this complex task could be achieved by a package of stabilising measures:

First. Action by the Bulgarian government: strict application of the rules of the currency board arrangement (which is not being done so far), and increase of disciplining pressure over the companies from the real, financial and budget sectors for tough financial discipline, faster structural and technological modernisation, more economic rationality; appropriate measures for reduction of inflation through radicalisation of the structural reform for which a price will be paid in terms of temporary higher unemployment; package of measures for boosting exports; improved management of the domestic and particularly of the external debt; increased efforts for attraction of foreign investors in the privatisation of 400-500 mill. USD average annual by the year 2000, etc. The essence of these measures is acceleration and radicalisation. The time factor here is of key importance. The Government should have initiated these painful measures during the second half of 1997 to benefit from the credit of confidence by society. The more these measures are delayed, the more difficult their implementation. What was relatively easy to implement over the fall of 1997 will be rather difficult in the fall of 1998, extremely difficult during the fall of 1999 and impossible by the turn of 2000. The Bulgarian government must be aware of its political business cycle and act promptly and decisively if the difficult reforms are to succeed.

Second. Support by the international financial community: continuation of refinancing of the external debt service payments of Bulgaria by inflow of fresh credits, foreign direct investments for new production capacities in the real sector and infrastructure, and investments in privatisation - altogether 1 bill. USD per annum for the following years; additional financial support by the EU within the framework of the preparation of the country for future membership negotiations and as an indirect partial compensation for the huge loss incurred by the UN embargo operations against Irag and Yugoslavia.

Third. If everything possible was done in both directions, and by the end of 1998 one finds (which is more than certain), that total factor productivity lags very much behind real appreciation of the Lev. one should readjust the exchange rate when pegging the Lev to the Euro as of January 1999. The readjustment should comprise 15-20 per cent devaluation of the Lev coupled with a shift to a crawling peg. If this change is done with the concurrence of the IMF and within the context of a major progress of macroeconomic, structural, institutional and social reforms in Bulgaria, it would probably meet understanding both at home and by the international financial community. This would enable the economy to pass through the most difficult phase of transition (July 1997- December 2000), with its still relatively high inflation at fixed exchange rate. After 2000 with resumed sustained growth and crawling peg regime the economy will manage easier with the implications of an annual inflation of 6-8 per cent until 2003-2005, and thereafter - 3-5 per cent. This is probably a proper point of reminder - Hong Kong has got a currency board arrangement as of 1981 but since then inflation has never fallen below 6.0 per cent (/17/-85). Argentina is the only currency board country which brought inflation down to 0.2 per cent in 1996, but increased unemployment from 5.8 per cent in 1991 to 18.4 per cent in 1996 (see /15/ - 115-189). One may ask - was it worth paying such a social price in terms of unemployment?

It follows from the above analysis that one needs a constructive revision of the classical regime of the currency board. Moreover (with the exception of Argentina) the currency board arrangement has been applied so far only in small countries, former or present colonies. The system of instruments of the currency board is not a frozen dogma forever and should be adjusted appropriately to the economic and social realities, if one wants it (the currency board) to serve the economy, and not vice versa.

One of the lessons of the financial crisis in East and Southeast Asia is that the longlasting fixed exchange rate of the national currency, coupled with moderately high inflation could destabilise even strong economies, like those affected by the crisis. This is far more relevant for weak backward economies such as the Bulgarian transition economy.

The essence of the proposed revision is to substitute the classical requirements for a fixed exchange rate for many years by a well designed and regulated crawling peg after the second or third year of the currency board. The combination between fixed rate for the initial years and a crawling peg over the following 4-6 years or more could play the role of an anti-inflationary anchor, and at the same time provide an environment for exports and growth. The

crawling step of the nominal exchange rate should lag moderately behind the step of the inflation. Thus, the exchange rate will contribute to extinguishing inflation and help the economy to stabilise and grow by increasing total factor productivity. The crawling peg with a lagging behind step should be combined with very strict anti-inflationary policy, radical structural reform, improved financial discipline, strict banking supervision over the activities of the commercial banks, curtailment of the shadow economy.

Similar approach was recommended in 1992 by K. Osband and D. Vilanueva, and in one version or another has been applied in Argentina, Chile and Uruguay by the end of the 70s, and in Israel in the middle of the 90s. John Williamson considers that the compliment to such an exchange rate policy would have to be austere anti-inflation policies designed to reduce the inflation rate in parallel to the deceleration of the crawl "(1/19/-23).

It is clear from now that it would be extremely difficult to obtain the concurrence of the IMF for such alterations in the currency board regime. The most persuasive argument of the Bulgarian government in favour of such a change could be the maximum efforts for radicalisation of the reform during 1998, mainly in the structural and institutional areas and expedient measures against criminality and corruption. When proven that even most radical reforms are insufficient within a short term to neutralise stagnation effects of the fixed rate under moderately high inflation, and limited potential for quick increase of total factor productivity, there might be a chance for the IMF to accept the rationality of such an idea. It is a pity that Bulgaria has fallen into such a trap when every meaningful economic decision should be cleared in advance by the IMF. The blame for this goes to all Bulgarian governments from 1990 to the end of 1996, which were preoccupied with imitation of and not with authentic economic reforms. Nothing however could be changed now. Confrontation with the IMF under the present circumstances is inadmissible, as it would be suicidal for Bulgaria.

There are other smouldering fireplaces of financial destabilisation which may ignite under certain conditions. These are: the fragile stability of the banking system and the related credit stagnation; the large foreign indebtedness and related heavy net transfers; the destructive interest rate policy; the half-way revaluation of fixed assets; stagnation of structural reforms; the growing pressure for wage and pension increases; the huge shadow economy; criminality and corruption penetrating the highest corridors of power. For more on some of these destabilising centres see /3/ and /4/.

## II. 2. INVESTMENT ACTIVITY - A PRECONDITION FOR OVERALL ECONOMIC ACTIVITY

Intensive, sustained and of high quality could be only an economic activity based on investment activity. The investment activity should aim at structural and technological modernisation of the economy, boosting the development of ecologically acceptable, competitive and high value added products. This, in turn calls for surpassing investments for education, research and development, improving the absorption capacity for technology transfers. All that, in its turn, requires active investment-oriented economic policies.

The investment efforts have got quantitative and qualitative dimensions. This distinction was built in the Cobb-Douglas production function from the very beginning. It is also present in the Harrod-Domar equation as well as in many studies on economic growth during the second half of this century. One calls the attention to these issues only to share some thoughts on the current situation in the Bulgarian economy and prospects for the following 10-15 years.

A quantitative measure of economic activity are the saving and investment rates. Due to the absence of reliable information with sufficiently long statistical series for investment

rates in this country under market conditions one has to study such information in both advanced and newly industrialised countries over the last 30-40 years (see Table 4). The table contains information, which facilitates the projection of investment in Bulgaria over the following 10-15 years and longer. This is the reason why one undertakes this short review of the world investment activity.

Table 4

LONG-TERM AVERAGE ANNUAL INVESTMENT RATES IN SOME DEVELOPED AND DEVELOPING COUNTRIES

(% to GDP)

						(% to GDP)
Country	1958-1966	1967-1976	1977-1986	1987-1996	1967-1996	1958-1996
USA	18.8	18.4	19.7	18.6	18.9	18.9
UK	18.1	20.0	17.5	17.1	18.2	18.2
Japan	33.8	36.0	29.9	30.2	32.0	32.5
Germany	26.7	24.2	22.6	22.8	23.2	24.1
France	23.5	26.1	21.7	19.8	22.5	22.8
Spain	22.8	26.3	21.8	22.5	23.5	23.4
Italy	22.9	24.7	23.8	19.5	22.7	22.7
Austria	27.1	28.7	25.1	25.4	26.4	26.6
Finland	27.1	29.3	24.6	20.5	24.8	25.4
Netherlands	25.9	25.1	20.2	20.8	22.0	23.0
Belgium	18.6	22.7	18.3	18.3	19.8	19.5
Denmark	19.8	24.3	19.2	16.7	20.1	20.0
Switzerland	29.6	28.8	24.1	17.1	23.3	24.9
Greece	21.1	27.5	24.3	21.6	24.5	23.6
Portugal	17.6	25.9	29.7	26.6	27.4	25.0
Israel	24.2	27.9	22.9	24.2	25.0	24.8
Cyprus	20.2	24.2	33.4	26.5	28.0	26.1
Turkey	15.5	19.1	25.0	24.1	22.7	20.9
iran	••	28.6	23.0	26.6	26.1	26.1
South Korea	14.5	26.0	30.5	35.3	30.6	26.6
Malaysia	15.3	21.1	30.7	31.6	27.8	24.7
Singapore	17.1	35.8	43.6	35.0	38.1	32.9
Thailand	18.2	25.1	28.1	38.3	30.5	27.4
Indonesia	9.9	15.2	25.1	33.2	24.5	20.9
India	17.0	18.0	22.3	23.9	21.4	20.3
Brazil	19.5	24.4	20.9	21.2	22.2	21.5
Chile	15.7	14.6	16.5	25.9	19.0	18.2
Mexico	17.9	21.5	23.2	21.2	22.0	21.0
Venezuela	20.2	28.4	25.9	18.3	24.2	23.2
Argentina	17.7	21.0	22.0	17.3	20.1	19.5
Algeria	25.6	36.0	39.4	29.4	34.9	32.6
Egypt	16.3	16.6	30.0	24.8	23.8	21.9
South Africa	22.7	27.8	25.7	19.9	24.5	24.0

Source: Computed from IMF, International Financial Statistics, Yearbook 1997, pp 152-155 and Yearbook 1986, pp 155-159

Even a quick review of Table 4 leads to several important conclusions:

First. On the journey towards socio-economic welfare all countries pass through a long period of investment accumulation. Bulgaria made substantial investments after World War II and until the end of the 80s, however much of it now prove to be erroneous, old-fashioned and useless. Within the context of this world-wide pattern of investment behaviour is easier to comprehend that Bulgaria must undertake a major investment effort to develop a modern economy.

Second. All OECD member countries after World War II and some of them (Greece and Portugal) later on, have maintained high rates of saving and investment for 25-30 years and longer, although some of them have started it much earlier. The advanced countries reach the peak of their investment activity over 1958-1976. During the following decades the investment rates decline by 3-5-7 percentage points in most of them, but remain relatively high until recently.

Third. Another group of countries started the implementation of ambitious development programmes later on and are now at the height of their investment activity. In most of them it has already produced results while in others the harvest is forthcoming.

Fourth. Some of the developing countries do not follow an active investment policy. This affects negatively the dynamics of economic growth and the welfare of their people over recent decades.

A qualitative measure of investment activity is the incremental capital-output ratio (ICOR). As a matter of fact it contains both qualitative and quantitative dimensions of the investment process and numerous related activities. (See Table 5)

ICORs IN SOME DEVELOPED AND DEVELOPING COUNTRIES

Country	1967-1976	1977-1986	1987-1996	1967-1996
USA	7.1	7.3	7.8	7.4
UK	9.8	8.5	8.6	8.9
Germany	11.5	7.0	6.7	8.0
France	6.8	10.1	9.7	8.7
Italy	5.5	9.2	10.5	7.8
Spain	4.9	13.2	8.0	7.5
Austria	6.7	12.5	10.2	9.1
Finland	7.1	7.9	14.1	8.6
Belgium	4.6	6.5	8.5	6.3
Netherlands	4.9	11.9	8.2	7.1
Denmark	7.5	8.3	10.4	8.6
Switzerland	12.5	10.3	15.5	12.3
Greece	4.5	10.1	13.5	7.3
Portugal	4.7	10.6	6.9	6.7
Japan	5.0	7.5	9.9	6.8
South Korea	2.7	3.9	4.3	3.6
Singapore	3.3	7.4	3.9	4.5
Malaysia	2.6	5.3	3.7	3.8
Thailand	4.0	4.5	4.0	4.1
Indonesia	2.4	4.0	4.8	3.8
India	4.9	4.7	4.1	4.5

Table 5

Table 5

#### ICORs IN SOME DEVELOPED AND DEVELOPING COUNTRIES

(Continued and end)

Country	1967-1976	1977-1986	1987-1996	1967-1996
Brazil	2.7	5.3	10.9	4.5
Mexico	3.3	6.6	8.5	5.3
Chile	36.5	4.5	3.9	5.3
Argentina	9.5	25.9	6.7	10.9
Venezuela	5.2	30.6	5.6	8.5
Israel	3.9	6.8	4.2	4.6
Cyprus	8.5	4.7	4.7	5.4
Turkey	3.2	6.3	6.4	4.9
Iran	2.5	-	7.7	7.0
Algeria	5.8	-	25.6	15.9
Egypt	3.7	5.1	6.3	5.0
South Africa	6.7	17.1	2.8	10.2

Source: Computed from IMF International Financial Statistics, Yearbook 1997, pp 144-147, 152-155 and Yearbook 1986, pp 152-155, 156-159

The available statistical information on investment rates and ICORs in CEE and for Bulgaria over the recent 30 years is unreliable and for that reason - not included in Tables and 5. The causes are the administrative mechanisms of investment decision-making and for sectoral and regional allocation of investments; the great price distortions for capital goods; large budget subsidies; heavily distorted administrative exchange rates. The available statistical information for the last 7-8 years is equally unreliable due to the deep recession in the economy and related difficulties in computing ICORs. The lack of information for the past hampers the projection of the ICORs for the future. The absence of reliable information for our economy must be filled with cautious use of information for the ICORs in developed and developing countries for sufficiently long intervals of time.

Bulgaria should choose between various strategies for economic development over the following decades. If one reduces the alternatives to the investment activity they ultimately boil down to two: moderate and high in terms of the magnitude of the investment rates. This however is not enough. The moderate or high investment activity express mainly the quantitative dimension of development. The qualitative dimension is missing - the outcome of the investments, measured by the volume, the structure and the quality of the produced GDP and their efficiency, measured by the ratio between investment and the increment of output. At given rate of investment there could be different GDP growth rates subject to the efficiency of these investments.

The most simple measures of the linkage between investment activity and economic growth are the Harrod-Domar equation and the original version of the Cobb-Douglass production function. The two methods could be applied in parallel:

## II. 3. INVESTMENT ACTIVITY AND ECONOMIC GROWTH - THE HARROD-DOMAR EQUATION

Harrod and Domar present the increment of the GDP as a product of saving rate and the ICOR. Our objective here is not so much to project the future saving and investment rates, the ICORs and the GDP growth rates, but rather to call the attention of the public opinion to the enormous challenges ahead of us and to share ideas concerning the investment and the overall economic activity needed to Bulgaria over the following decades. The Harrod-Domar equation is used only as a framework for presentation of our "projection assignment" for the minimum investment activity needed to the Bulgarian economy over the following 10-15 years and even longer.

The equation is used replacing the saving rate by the investment rate. Four variants were developed for the investment rate and the ICORs for the three periods - 1998-2000; 2001-2005 and 2008-2010 (see Table 6):

Table 6

## QUANTITATIVE AND QUALITATIVE DIMENSIONS OF THE INVESTMENT ACTIVITY

/ariants	1998-2000	2001-2005	2006-2010
. Investment rates (%):			
	12.5	19.5	24.0
Į.	14.0	22.0	26.0
Ш	15.5	24.0	28.0
V 2. ICORs:	17.0	26.0	30.0
	5.0	5.5	6.5
1	4.5	5.0	6.0
II	4.0	4.5	5.5
/	3.5	4.0	5.0

The investment potential of the economy over 1998-2000 will be limited due to low economic activity, large transfers on servicing external debt, high average level of taxation, deficiencies in depreciation policy, negative real interest rates on deposits and credits, unfavourable impact of external factors, including the uncertainty in Yugoslavia.

The investment rates are expected to be somewhat higher than domestic saving rates due to inflow of foreign direct investments. During 1994-1995 the net inflow of foreign investments in CEE was negligible. One expects it for 1997-1998 and an average for 1999-2002 around 3.3 per cent (/14/-204). The ongoing disturbances on the world financial markets may affect negatively these projections of the IMF. On this see /17/- 59-60, 78-80.

For Bulgaria the inflow of foreign savings was and will stay lower than the average for CEE. Our expectations are that for 1998-2000 foreign direct investments for new production capacities would be around 1.5-2.0 per cent of GDP. There is a considerable uncertainty in this projection, due to possible implications of the financial crisis in the Far East, which may make potential investors more cautious with regard to countries such as Bulgaria. The investment climate could be further destabilised by developments in neighbouring Yugoslayia.

On the basis of the above, among the four variants one expects 15.0-15.5 per cent as the most likely average annual investment rate over 1998-2000.

For 2001-2005 there are also 4 variants for average annual investment rates (see Table 6). This requires normal economic activity, lower average taxation, normal depreciation policy, normal interest rate policy, lower burden on external debt service, favourable international conjuncture. One expects also higher households saving propensity and normal saving behaviour of the budget and the enterprises.

One counts on larger inflow of foreign direct investment during this period - around 3.0-3.5 per cent of GDP. This would enable higher average investment rate - around 24-25 per cent of GDP which is comparable to projected investment rates in CEE for 1999-2002 (/14/-204).

If pessimistic projections for the implication of the East Asian financial crisis materialise along with other unforeseen external shocks (Russia, Yugoslavia), the inflow of foreign investments may be much lower.

For 2006-2010 also four variants are assumed for the average investment rates (see Table 6). This presumes high overall economic activity, lower level of taxation, close to the EU standards, modern depreciation and interest rate policies, normal servicing of bearable external debt, high saving propensities by the households, the enterprises and the state, favourable international environment.

In order to have some chances for European Union membership by 2025-2030 Bulgaria should have narrowed down by at least 1/3 the gap in terms of GDP per capita and the other important macroeconomic indicators vis-a-vis the levels of the least advanced member countries by that time: Poland, Hungary, Czech Republic, Slovenia, Cyprus, Greece and Portugal. This is possible provided Bulgaria reaches and maintains for a long time higher than those countries' growth of GDP, of total factor productivity and other indicators. If the growth dynamics is the same our backwardness would grow larger. Projections of the Vienna Institute by 2010 indicate that at 4 per cent average annual growth marges between Bulgaria and all other CEE countries in terms of GDP per capita at PPP grow in their favour (/9/-4; /20/-19). See also Table 9 in this chapter.

The projected level of investment activity for Bulgaria is below the level of the fast growing far eastern countries over the last 20 years and corresponds to the investment rates in the advanced West European countries between 1958 and 1976 (see Table 4). Although very high for the present Bulgarian and European standards, the projected investment rates are far below the highest achieved at home and in the other CMEA member countries at the time of central planning. For additional information see: /5/-67-68, 77; /6/-80; /7/ - 107; /11/ - 238-239: /13/ - 83.

One expects the inflow of foreign direct investment to reach over this period and beyond up to 3.5-4.5 per cent of GDP. This would make possible an average annual investment rate of 28-30 per cent.

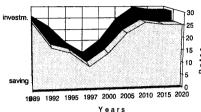
The structural and technological modernisation of the economy cannot be completed by 2010 even at such high investment rates. High investment rates between 27-29 per cent should be maintained at least till 2020 (see fig. 1). Only afterwards the investment rate might stabilise around 23-25 per cent, compensating for the reduction by higher efficiency of investments.

The maintenance of high saving and investment rates for 20 years and longer calls for mobilisation in society and could face objections. Such a policy, however, is indispensable. All advanced countries have gone through periods of high investment activity at earlier phases

of their development. This has been done also by the newly industrialised countries. The average annual investment rates for the last 30 years were: Cyprus - 28.0 per cent, Portugal - 27.4 per cent, Austria - 26.4 per cent, Israel - 25.0 per cent, Finland - 24.8 per cent, Greece - 24.5 per cent, Spain - 23.5 per cent, Germany - 23.2 per cent, etc. (see Table 4).

Figure 1

#### SAVING AND INVESTMENT RATES IN BULGARIA



rears

Bulgaria is on the verge of a long period of high saving and investment, which should not last less than 20-25 years. If the concept for lower domestic saving gets an upper hand, it would affect negatively the inflow of foreign savings. Both would have a negative impact on the quality of saving and investment. This would lead to a slower structural and technological modernisation, delayed progress in education, research and development, lower growth rates of GDP, lower competitiveness of the Bulgarian goods, larger brain-drain, lower living standard, growing backwardness with regard to the rest of Europe.

For each of the three periods four variants were developed for ICORs:

For 1998-2000 one counts on lower (more favourable) coefficients. The reasoning lies in the hope that one should put back to work the idle potential of the economy - free production capacities and unemployed skilled personnel. The positive impact of this factor would prevail over the period and the early part of the next decade. It will probably be exhausted by 2005 and should be progressively substituted by structural and social policies and other qualitative factors. For this period one expects average ICORs between 3.8 and 4.2.

For 2001-2005 and 2006-2010 one expects higher ICORs - between 4.5 and 6.0. They will be determined by the above mentioned and a number of other factors, among them the sectoral allocation of investments. Along with the traditional factors one will witness ever greater impact by appropriate macroeconomic and structural policies and the pace of economic integration into the EU. The impact of the new technologies and the stricter ecological standards will grow stronger over the following decades.

Under normal conditions the ICORs would grow higher in Bulgaria as they did in other countries with the progress of their overall development (see Table 5). It is difficult to predict how this will take place - relatively smoothly (as in the advanced market economies), or with big fluctuations (as in many developing countries). The integration into the EU is expected to play a stabilising role in the long run, but fluctuations are possible over the following one or two decades.

Bulgaria has no choice but to rely on quality. Under the present situation of the economy, if one has to count mainly on the high investment rates in the range of 32-35 per cent and more, huge resources would be needed for structural and technological modernisation of the economy, which the country does not possess. According to some analysts, if the OECD countries grow at 2 per cent per annum, and the CEE countries maintain an investment rate of 36 per cent and average GDP growth of 7.2 per cent, they would need more than 30 years to catch up with the OECD countries (/5/-74). According to other analysts, CEE countries would need 38 years, and Poland 47 years to catch up (/13/ - 92). According to third - even longer (/9/ - 4). For our projection on the economic catch-up of Bulgaria, see Table 10 in this chapter.

Having the most likely and feasible investment rates and ICORs one could compute the likely average annual growth rates of GDP for each of the three periods:

For 1998-2000 the most likely annual growth rate is 3.5-3.9 per cent at average investment rate of 15.0-15.5 per cent and average ICOR around 4.0 This result is comparable with IMF projections for the GDP growth in CEE countries as a whole of 4.8 per cent for 1996-2001 (/13/-79). The updated projection for 1999-2002 is more optimistic - annual growth rate of 5.4 per cent (/14/ - 205). The next projection, which will be published in May 1998 will be probably more cautious due to expected implications from the East Asian financial crisis.

For 2001-2005 the most likely average annual growth rate of GDP is around 4.8-5.0 per cent at average investment rate of 24-25 per cent and an ICOR between 4.5 and 5.0. These results are comparable with IMF projections for 1999-2002 (/14/ - 204-205).

For 2006-2010 the most likely average annual growth rate of GDP is around 5.0 per cent at average investment rate of 28-30 per cent and ICOR between 5.0 and 6.0.

The summary analysis indicates that for the 13 years (1998-2010) one could expect an average annual growth rate of GDP around 4.8-5.0 per cent. Of course, at the expense of a huge national effort and appropriate macroeconomic, structural, institutional and social policies. The most likely average annual magnitudes are presented in Table 7:

Table 7

#### INVESTMENT ACTIVITY AND GDP GROWTH

Periods	Investment rate - %	ICOR	Average annual GDP growth - %
1998-2000	15.0-15.5	3.8-4.2	3.5-3.9
2001-2005	24.0-25.0	4.5-5.0	4.8-5.0
2006-2010	28.0-30.0	5.5-6.0	4.8-5.2

The analysis beyond this time horizon indicates that under our conditions it would be difficult to maintain for too long a saving rate above 25-27 per cent. One should also count on an inflow of foreign direct investment on the range of 3-4 per cent of GDP in order to maintain with great efforts an investment rate of 27-29 per cent by 2020 (see Fig. 1). Such an investment activity should be combined with an orientation towards less capital-intensive sectoral and product structure of the economy, as well as higher quality of both investment and non-investment factors - i.e. lower ICORs - around 6-7 or less. This could make possible, under appropriate macroeconomic, structural and institutional policies, average annual GDP growth rates of 4-5-5.0 per cent as an optimistic projection and 3.5-4.0 per cent - the pessimistic one. In the absence of such an economic policy the growth rate may fall to 2.5-3.0 per cent even at an investment rate of 22-24 per cent.

The projected magnitudes for the GDP growth are indicative of the supply potential, hoping that it would be matched by sufficient domestic and foreign demand. If this is not the case the actual GDP growth would be smaller than the projected one.

## II. 4. INVESTMENT ACTIVITY AND ECONOMIC GROWTH - THE PRODUCTION FUNCTION

There are many versions of the production function - from the initial simple version at the end of the 20s to the most sophisticated ones. Our objective does not call for utilisation of the complex techniques of the production function. One only uses the overall framework of the production function to present a "projection assignment" for the role of the various growth factors in the Bulgarian economy over the following 10-15 years.

Five variants were examined for each of the three periods. They were designed taking into account the current and the projected shape of the physical, human, technological and institutional capital, counting on active macroeconomic, structural and institutional policies, aiming at intensive growth. In each of the periods the low variants (the first and second) are based on inertial policy and moderate investment activity. The medium variant (the third) relies upon rational economic policy, investment activity and efforts by the state, and the economic agents to increase the role of qualitative growth factors. In the highest variants (the fourth and particularly the fifth) one counts on very active economic policy, very high investment activity and foremost - transfers of modern technologies, big institutional capacities, modern real, investment and budget sectors, strict financial discipline, modern legislature and its proper enforcement, curtailment of the shadow economy, lower criminality and corruption, higher trust in the state by its citizens, ever-growing integration into the united European market. The experience of other countries was also used (77 - 105-110; 1/8) - 164, 111-125.

Being aware of the development and application of economic policies in Bulgaria; the quality of public institutions, the administration and legislature; the shape of the banking and non-banking financial institutions; the behaviour of economic agents; the status of production capacities and the limited opportunities for their modernisation; the production, financial, contractual, labour and civil discipline in the society; the scale of criminality and corruption, in neither of the three periods one assumes implementation of the fourth and even less so of the fifth variant. This would have meant higher growth rates: 4.8 per cent for the first period, 6.2 per cent for the second, and 8.3 per cent for the third. Such average annual growth rates are not realistic in Bulgaria.

The capital will play an important role for the GDP growth over the entire projected time horizon. Moreover, its share is expected to grow: from 31 per cent during the first period to 35 per cent during the second and 40 per cent in the third. This matches the projected growing investment rate over these periods (see Table 7). The increment of the capital comprises quantitative and qualitative components. The qualitative ones (the embodied technical progress) grow in importance, but cannot be measured.

The projected share of the capital increment for 1998-2005 is comparable with the role of capital as a growth factor in Germany, France, Italy and Japan over 1950-1973 - between 32 and 37 per cent. The projection for 2006-2010 is similar to the role of capital in South Korea, Hong Kong and Singapore for 1966-1990, and China - for 1979-1994 (7/ - 101; 1/3/ - 83).

Labour is also an important growth factor, particularly its upgrading quality. If for the first period one projects 7.9 per cent contribution of the labour to growth, 5.3 percentage points are due to the quality component. The remaining 2.6 percentage points are for additional manpower from the unemployed contingent. One expects for the last period labour contribution of 8 per

cent - entirely from improved quality. As a matter of fact this contribution is larger. Part of it contributes through the capital, the other one - through the residual factor. Its measurement, however, is impossible.

This internal structure of the labour as a factor of growth is a product of a number of factors: the deteriorating demographic situation and expected substantial reduction of the population over the following 20-30 years; reduction of unemployment from 13.7 per cent at the end of 1997 (and even higher over the following years) to 6-7 per cent by 2010; the fairly high educational and skill level of the manpower; expected additional efforts by the state and the economic agents for the upgrading of skills of the personnel over the next 10-15 years; the active international exchange of knowledge and working discipline as a result of economic, political and cultural integration of Bulgaria into Europe and the world.

All international analysis underline the relatively high skills and education of the Bulgarian manpower. In this respect Bulgaria compares with Central European countries (/7/ - 54, 109; /10/ - 123-131; /11/ - 220-221, 224-225, 226-227; /13/ - 88-93).

The availability of skilled manpower helps attract foreign investment. Particularly for the production of high tech products. Although there were some traditions in this area, the present opportunities to develop such export oriented production lines seem to be limited during the next 5-10 years at the saturated international markets.

There is much truth in the positive assessments of the international observers on Bulgarian manpower. However, one should also note some unfavourable trends: the skilled engineers and workers are at the higher age groups, approaching the end of their working cycle, while many of the young professionals left the country to go abroad; substantial portion of the accumulated skill has been lost as many of those people are unemployed or employed in activities far from their field of education and working skills; the working discipline and moral is low; the allocation of the skills by sectors, enterprises and jobs is not rational; the utilisation of the skilled personnel is low; the intellectuals' wages are miserable, particularly in the budget sectors.

The total factor productivity measures all improvements, considered as technical progress or a residual factor. It comprises improvements, not embodied in the physical and human capital, and other technical, technological, organisational, institutional, managerial and other upgrading. The effects from participation in world economic integration, of catching up, of economies of scale, of restructuring, etc. are also taken into account.

Bulgaria should rely mainly on the increase of total factor productivity. It would be somewhat easier to achieve over 1998-2000 and maybe in 2001-2005, when the available idle production factors could be reintegrated into the economy. This could also be done with less investment. By the end of the second and mainly during the third period (2006-2010) and even later on the importance of qualitative factors will grow. The role of macroeconomic, structural, institutional and social policies would be of utmost significance. The effects of the declining productivity of capital will also remind of themselves more and more.

All that is expressed by the high share of total factor productivity during the first period (60 per cent), somewhat lower during the second (around 55 per cent) and the third period (52 per cent). If one adds the qualitative improvements embodied in the capital and labour along the lines of mutual complementary and substitutability, this share would be higher. Total factor productivity, along with higher level education is expected to generate 61 per cent of the increment of GDP over the second period and around 60 per cent around the third. The growing contribution of capital from 32 per cent in the first period to 40 per cent in the third contains ever larger qualitative component, but it cannot be isolated. One expects that along with the embodied cualitative components of labour and capital, the technical progress would

generate the prevalent portion of the increment of GDP over 2001-2010. This would be even more important over the following decades. Bulgaria will need it for many reasons, some of them stated at the end of section 5 of this chapter.

The described findings are also commensurate with those in other countries. The share of total factor productivity in GDP growth of the advanced West European countries over 1950-1973 varies between 40 and 64 per cent. With few exceptions during 1973-1992, this share declined, but increased the share of technical progress embodied in the labour and the physical capital (77 - 101: /13/ - 83).

The expected average annual values of the GDP growth - total and by factors, are presented in Table 8:

GROWTH OF GDP - TOTAL AND BY FACTORS
(In percentage points)

Periods	Capital	Lai	oour	Total factor	GDP growth
		Total	Education	productivity	%
1998-2000	1.2	0.3	0.2	2.3	3.8
2001-2005	1.8	0.5	0.3	2.8	5.1
2006-2010	2.0	0.4	0.4	2.6	5.0

The application of such a desagregating method is useful for development of appropriate macroeconomic, structural, institutional, social, educational, research and development, health-care, regional, ecology, integrational and other policies. Even a tentative idea about the role of various growth factors could be useful for policy-makers for development of appropriate public policy. Particularly having in mind that the importance of the non-tangible growth factors keeps increasing at the expense of physical ones. The wealth of the states and their potential for economic and social progress will depend not so much on the availability of mineral and other resources, but rather from the entrepreneurship, the management, health, education, skills, discipline, law and order, adoption of rules of the civil society, etc.

#### II. 5. INVESTMENT ACTIVITY AND INTEGRATION INTO THE EUROPEAN UNION

The integration into the EU became the most discussed subject in the Bulgarian society recently. And with good reason, as Bulgaria has no political and economic future outside the EU. The cold-minded analysis, however, proves that the economy is far away from the high economic and other standards for membership in this most advanced integration community in mankind's history.

One needs a reliable overall indicator, or a system of mutually complementary indexes to assess the readiness of a country in the economic area for joining the EU. The advantage of the overall indicator is that it provides simple, clear-cut expression of the eligibility, unlike the system of indicators, which may often be mutually conflicting. The system needs also weights to commensurate the relative importance of each indicator.

In international economic analysis such comparisons are made usually by GDP per capita. The relative level of GDP per capita at PPP is a highly aggregated indicator, which provides a satisfactory picture for the level of Bulgaria compared to the EU member countries

Table 8

in the real, financial and budget sectors; on labour productivity and total factor productivity; on quality of macroeconomic, structural, institutional and social policies; efficiency of the budget system and the foreign economic relations; income levels; quality of the pension system, health-care, educational, R and D; efficiency of the public institutions and public administration, of the legal system and law enforcement; market infrastructure; business discipline and particularly the relationships among economic agents; environment protection; size of the shadow economy, criminality and corruption and so on.

The listed characteristics of the economic and social system, and the state with its institutions, interacting among themselves determine the size and the quality of the GDP and its changes over time. This has been confirmed beyond doubt by economic theory and world economic development. Of course, this indicator is not ideal, but we are not aware of anything better off.

Table 9 offers relevant information on the readiness of Bulgaria and of the other CEE countries for EU membership now and over the following 10-12 years:

GDP PER CAPITA AT PPP
(The average for the 15 EU member countries = 100)

Table 9

						(Per cent)
Country	1990	1996	1997	2000	2005	2010
Czech Republic	62	58	57	61	67	74
Hungary	37	35	37	39	43	47
Poland	27	30	32	34	37	41
Slovakia	47	41	42	45	50	55
Slovenia	60	57	57	60	67	73
Bulgaria	29	21	19	20	22	24
Romania	26	24	23	24	27	29
Croatia	31	23	24	26	29	32
Russia	39	22	23	24	26	29
Ukraine	29	11	11	12	13	14
Austria	108	111	110	110	110	110
Germany	104	110	109	109	109	109
Greece	60	66	67	67	67	67
Portugal	61	68	68	68	68	68
Spain	77	77	78	78	78	78
Turkey	30	32	33	33	33	33
USA	144	144	146	146	146	146
EU (15) average	100	100	100	100	100	100

Source and notes: Leon Podkaminer, et al., Transition Countries: 1997 External Deficits Lower than Feared,... WIIW, Vienna, No 243, February 1998, p. 19. Computations are made at current PPP rates to the USD until 1998, and for the following years at constant PPP rates. One assumes average annual GDP per capita growth rate of 4 per cent for the CEE countries, and 2 per cent for the OECD countries with constant population.

The table shows the alarming lagging behind of Bulgaria. Bulgaria is the only CEE country (except Russia and Ukraine) which by 2010 will not achieve the relative level to EU of 1990. By 2010 Bulgaria would be the last among the applicant countries on this table in terms of GDP per capita. Moreover, the lagging behind will grow by 2010 and would reach 2-3 times compared to the remaining CEE countries, and will be only a quarter of the expected average for the EU. At this relative level of GDP per capita Bulgaria has no chance for joining the European Union by 2010.

When could one reach a level of development, providing such a chance? Trying to answer this difficult question in the present analysis one takes into consideration the economic criteria only, without involvement of political, social, legal, humanitarian, ecological, ethnic, religious and other criteria. The progress of Bulgaria in the listed and other areas is compulsory for EU membership, but economic criteria will play a major role.

The negotiations for accession of the CEE countries from the first group will certainly be difficult and lengthy. Before accepting new members the EU will have to solve difficult internal problems: on the pressing modification of the common agricultural policy, the structural policy, the introduction of the common currency and numerous related problems, the mechanisms of decision making, increasing the employment rate from 60 to 70 per cent within 10 years and so on. The unemployment in the EU in 1997 was 11.1 per cent and has been at this level for 5 years (/17/-94). This complex environment will generate additional hurdles to the accession of new members.

The EU will consider each applicant on its own merits. Our assessment is that the EU would have new members not before 2005, coupled by long transition periods postponing the full-fledged membership to 2010-2012. By 2005 the Czech Republic and Slovenia will probably reach GDP per capita around 67 per cent of the then average for the EU, and Poland and Hungary - around 40-43 per cent.

On the basis of the above and of the past experience of accepting new members, one may assume that Bulgaria could count on EU membership when it achieved GDP per capita at PPP rates at least 40-45 per cent of the average for the Union. So far no country has been admitted to the EU below this level for obvious reasons. The analysis of the present situation and accession criteria confirms that this is the minimum indispensable level for accession, coupled by a number of stipulations, including a long transition period.

EU membership means privileges and responsibilities in one. Even the most backward countries are capable of benefiting from privileges. Responsibilities, however, could be performed only by countries with solid minimum of economic, social, political, institutional, cultural, humanitarian, legal and ecological development and capacities. Bulgaria should join the European Union only when the indispensable minimum of developments has been achieved, enabling it to perform satisfactorily the responsibilities of a member. Otherwise there might be negative implications for the country.

When would Bulgaria achieve the minimum indispensable level of GDP per capita? The data in Table 10 and Fig. 2 offer information, helping the answer to this difficult question.

One assumes as first basic variant (as in Table 9) that GDP per capita in the EU would grow by 2 per cent per annum for a long period. This projection might be conservative, as over the last 30 years (1967-1996) almost all EU member countries had an average annual growth rate above 2 per cent. Under normal conditions the EU member countries could maintain average annual growth of 2.5 per cent. The establishment of the EMU, the enlargement of the EU and the liberalisation of world trade would contribute to this end. On this ground one designs the second basic variant for the EU: GDP per capita growth rate of 2.5 per cent.

Table 10
PROJECTION FOR GDP PER CAPITA AT PPP IN THE EUROPEAN UNION AND BULGARIA
(in per cent)

					(in per cent)
Years		EU		Bulgaria	
First variar	nt				
	Growth	2%	4.0%	4.5%	5%
1997		100.0	19.3	19.3	19.3
2000		100.0	20.3	20.6	20.9
2005		100.0	22.5	23.4	24.3
2010		100.0	24.8	26.4	28.1
2015		100.0	27.4	29.8	32.5
2020		100.0	30.2	33.7	37. <del>6</del>
2025		100.0	33.2	38.0	202
2030		100.0	36.6	3500	50.2
2035		100.0	CYCL	48.4	58.1
2040		100.0	44.5	54.7	67.1
2045		100.0	49.0	61.7	77.6
2050		100.0	54.0	69.7	89.7

Second	MOI	io m

Growth	2.5%	4.0%	4.5%	5%
997	100.0	19.3	19.3	19.3
000	100.0	20.2	20.5	20.7
005	100.0	21.7	22.5	23.4
010	100.0	23.3	24.8	26.4
015	100.0	25.1	27.3	29.8
020	100.0	27.0	30.1	33.6
025	100.0	29.0	33.2	37.9
030	100.0	31.2	36.5	42.8
035	100.0	33.5	40.2	48.2
040	100.0	36.1	44.3	54.4
045	100.0	38.8	48.8	61.4
050	100.0	417	53.8	69.2

The choice of the variants for average annual GDP per capita growth for Bulgaria is not accidental. It is subordinated to the major strategic goal: achieving the minimum indispensable level for EU membership. Under normal conditions and normal national efforts an average annual GDP growth rate of 3.0-3.5 per cent for 50 years would be a very good achievement for a country such as Bulgaria. At 3.0 per cent growth of GDP per capita Bulgaria would reach 30.5 per cent of the EU level (if they grow at 2 per cent) and 23.6 per cent (if they grow at 2.5 per cent). At 3.5 per cent per annum Bulgaria would reach by 2050 39.1 per cent of the EU level (if they grow at 2.5 per cent). With such relative levels of GDP per capita even by the middle of the next century Bulgaria would not have sufficiently strong position for accession to the Union, if the present criteria for membership are applied.

Therefore, to achieve the minimum indispensable level of economic development for accession to the EU the Bulgarian economy must grow faster. To identify the necessary growth rate three variants of GDP per capita growth were designed as shown on Table 10 and Fig. 2.

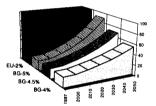
First: annual growth rate of 4 per cent: GDP per capita would reach around 40 per cent of the EU level by 2035, and by the second basic variant - by 2048.

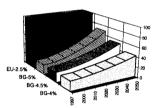
Second: annual growth rate of 4.5 per cent. GDP per capita would reach 40 per cent of the EU level by 2028, and by the second basic variant - by 2035. Average annual growth of 4.5 per cent for 25-30 years is a difficult objective for Bulgaria. Over the last 30 years (1967-1996) Greece had average annual GDP growth of 3.35 per cent at an average investment rate of 24.5 per cent, and Portugal - 4.10 per cent at an investment rate of 27.4 per cent (see Table 4).

Third: annual growth of 5.0 per cent. GDP per capita would reach around 40 per cent by 2023, and by the second basic variant - by 2029. The implementation of such a variant is nearly impossible for Bulgaria. Average annual growth rates of this range and for such a long period of time have not been witnessed in Europe over the recent decades.

Figure 2

GDP PER CAPITA AT PPP RATES IN BULGARIA AND THE EU-First variant GDP PER CAPITA AT PPP RATES IN BULGARIA AND THE EU-Second variant





The overall conclusion is that at 4 per cent GDP per capita growth Bulgaria has no chance to reach the minimum indispensable level for accession to the EU before 2040-2050; at 4.5 per cent could reach it by 2030-2035; at 5 per cent - around 2025-2030. The first variant (4 per cent) is feasible, though with great national effort, but does not meet the strategic goals (if any) for joining the EU by 2015-2020. The third variant (5 per cent) ensures the achievement of this goal by 2025-2030, but it is close to unfeasible.

As stated earlier, higher GDP growth rates presuppose higher investment rates, other things being equal. No question, Bulgaria could pass successfully through the journey to EU membership provided it could maintain sufficiently high saving and investment rates (see fig. 1). Only by outstrippingly high investment and saving rates and higher efficiency in a long-run one could achieve the necessary high growth rates. The review of the recent past as well as the short and medium-term saving and investment prospects (see Table 11) does not generate encouraging reflections:

Table 11

#### SAVING AND INVESTMENT RATES IN THE EU AND THE REFORMING ECONOMIES

(Per cent to GDP)

Regions, countries and indicators	1994	1995	1996	1997	1998	1999-2002 aver.annual
European Union:						
- saving	19.3	20.2	19.9	20.3	20.7	21.1
- investment	18.8	19.3	18.7	19.2	19.7	20.4
- net outflow of capital	0.5	0.9	1.2	1.1	1.0	0.7
CEE countries:						
- saving	22.2	20.5	18.9	18.5	19.9	21.2
- investment	22.2	21.3	21.0	21.5	23.1	24.5
- net inflow of capital	0.0	8.0	2.1	3.1	3.2	3.3
Bulgaria:						
- saving	13.8	14.2	11.5	8.6	12.5	15.0
- investment	16.0	14.5	12.7	10.1	14.0	17.5
- net inflow of capital	2.2	0.3	1.2	1.5	1.5	2.5

Source: for the EU and CEE: IMF, World Economic Outlook, May 1997, pp 200, 204. The data for 1994-1996 are actual, for 1997 - assessment, and for 1998 and 1999-2002 - projection. The actual data for Bulgaria come from publications of the Central Statistical Office, and projected - by the author.

Lagging very much behind on all macreconomic and social indicators, one should have expected that the authorities take proper action to surmount it. Unfortunately has not been done so far. A gigantic decapitalisation of the real and banking sectors has taken place over the last 7-8 years and is still going on. The saving and investment rates have been and still are much lower than in the EU and CE countries. The domestic saving potential is so meagre that for 1998-2002 the saving and investment rates in Bulgaria are expected to be around 70 per cent of the projected levels for the EU and CEE.

It is worrying that public institutions and society at large are not even aware how much the country is lagging behind and what are the challenges ahead. It is even more alarming that politicians disseminate illusions for easy accession to the EU and the EMU. This generates utopic naive expectations for joining the Union within 5-6 years and romantic expectations for positive effects, without paying due account to the enormous national effort which should prepare the growth for accession. These naive expectations are also nurtured by improper courtesy statements by key West European visitors. Such an approach could produce dangerous boomerang effects.

Bulgaria has no choice but to adopt an investment-oriented economic policy with high quality of both investment and non-investment growth factors, which would provide an environment for long-term outstripping GDP growth rates, compared to those in the EU and CE transition economies. Even the projected very high for the European standards and nearly unfeasible for Bulgaria long-term ground rates of 5 per cent per annum and investment rates of 26-28 per cent for 2001-2010 and the following years are short of narrowing the gap with the EU. In the absence of such a policy one could not expect Bulgarian accession to the EU even during the third decade of the next century.

On the basis of traditional concepts for economic growth factors it is unrealistic to expect average annual GDP per capita long-term growth rates higher than 4.0-4.5 per cent. Even this rate is questionable. One could not also expect higher than projected long-term investment rates, bearing in mind the starting positions of the economy, the miserable level of consumption, the heavy burden of external debt service, the weary public and market institutions, the limited opportunities for an inflow of foreign direct investment, the large scale of the shadow economy, the dangerous size of criminality and corruption, penetrating even into the highest corridors of power.

Are there solutions, which could produce better results over the following 15-20 years and longer? The only alternative could be the more rational utilisation of non-investment factors: appropriate macroeconomic policy; modern structural, institutional and social policies; orientation towards less capital- and energy-intensive sectoral and product patterns; high education and skill formation; tough financial, contractual, labour and ecology discipline; upgrading the efficiency of public institutions and public administration; well developed and smoothly operating financial system; building up and protection of the public confidence towards the banking system; limiting to a minimum the misuse of monopoly and monopsony power; imposition and protection of loyal competition; efficient social partnership; accelerated integration into the European market; modern legislation and strict law enforcement; curtailment of the shadow economy, of criminality and corruption. And of foremost importance - political, social and ethnic stability in the country.

The utilisation of the non-investment factors, however, is much more difficult than the investment ones. This presupposes much higher maturity in the behaviour of public institutions, economic agents and households, which is possible only at a solid minimum of economic, social and cultural development, smoothly functioning civil society. Bulgaria is still far away from this critical mass of economic, institutional, social and civic maturity.

On the basis of currently available information one could draw the following general conclusion: Bulgaria has got no chance for accession to the European Union before 2030 if the present criteria are applied. If, however for political, social and other considerations, provided a favourable internal climate within the union itself, a decision is taken to modify the accession criteria and introduce new transitional (probation) status with softer requirements, parallel to smaller benefits, Bulgaria may have some chances by 2020, subject to maintaining GDP per capita average annual growth rate of at least 4.5 per cent.

This analysis confirms that Bulgaria faces great challenges on its journey to the European Union. The Bulgarian society is still not aware of the size of the challenges and even less - on the acute problems waiting solution over the following decades. This proves once more, that Bulgaria needs a long-term strategy for economic and social development, the corner stone of which must be the preparation for accession to the European Union.

## II. 6. MACROECONOMIC ENVIRONMENT FOR FOSTERING SAVING AND INVESTMENT

The focus of this section is the macroeconomic policies, needed to boost domestic saving as it is expected to play the major role for economic growth over the following decades, while foreign saving will be of secondary importance. "... The transition countries need to guard against excessive reliance on the foreign saving. Experience from other countries clearly shows that large capital inflows often finance domestic consumption rather than investment, implying that foreign saving becomes a substitute for domestic saving. Under the circumstances, there is a heightened risk that the external deficits that are the counterpart of the capital inflows may become unsustainable and require painful economic adjustments... Capital inflows are

It is also well known that macroeconomic policy which boosts domestic saving and investment, attracts foreign investment. These "foreign direct investments should be treated neither more nor less favourably than domestic projects. But the attraction of a stable, transparent, and non-discriminatory tax code is lost if investors are, in effect, "taxed" for organised crime or by corrupt government officials" (/13/ - 93).

Led by such arguments, which summarise the experience of a number of both developed and developing countries, one expects foreign saving during 1998-2000 around 11 per cent of the total, over 2001-2005 - approximately 13 per cent, and over 2006-2010 - 14 per cent. This might well be the pick, and during the second decade of the next century the foreign saving may stabilise at 12-14 per cent of the total. After accession to the EU the share of foreign saving is expected to rise.

Domestic saving comprises savings of the government, the enterprises and the households. Macroeconomic policy should provide appropriate environment for boosting the three sources of saving, or a composition, which contributes to economically rational high level of total domestic saving.

In 1997 the Central Statistical Office (CSO) published for the first time information on the share of the three components of domestic saving from 1991 to 1995 (see Table 12):

Table 12

## COMPOSITION OF GROSS CAPITAL FORMATION (For fixed capital and changes in stocs)

					(Per cent)
Indicators	1991	1992	1993	1994	1995
Nonfinancial and financial enterprises	86.8	77.5	77.3	36.8	66.7
Government	11.3	15.6	15.3	18.9	6.0
Households	1.9	6.9	7.4	44.3	27.3
Total for the aconomy	100.0	100 A	100.0	100.0	100.0

Notes: Computed from CSO, Major Macroeconomic Indicators 1991-1996, Sofia, 1997, p. 96 (in Bulgarian)

Even if these data are not perfectly reliable, they provide a tentative picture for the role of the three institutional sectors in domestic saving. The enterprises play a major role in savings, followed by the households and the government.

#### 6.1. MACROECONOMIC POLICIES BOOSTING GOVERNMENT SAVINGS

Government saving is an algebraic sum of the budget saldo and the budget investment. The more advanced with the reforms CEE countries have got positive rates of government saving, while the less advanced - negative ones. (/6/ - 51-54, 81-82). Bulgaria belongs to the second group. After 1990 the government's saving rate is negative (see Table 13).

Bulgaria is in a more difficult position than the other CEE countries, as budget deficits are among the highest, and budget investment - among the lowest. The economic and social crisis brought a savings crisis. Savings crisis in turn deepens economic and social crisis by delaying economic growth.

### GOVERNMENT'S SAVING RATE

Table 13

						(Per cer	it of GDP)
Indicators	1991	1992	1993	1994	1995	1996	1997
Deficit	14.7	15.0	15.7	7.0	5.7	10.9	3.9
Budget investments	2.0	2.8	1.9	1.5	1.1	0.8	0.9
Government's saving rate	-127	-122	-13 0	.5.5	16	10.1	20

Notes: the data for 1991-1996 are actual from IMF publications (see /12/ - 78, 81) and Bulgarian sources, and for 1997 - assessment.

How is government saving rate to be boosted? All instruments of macroeconomic policy, which foster revenues and suppress expenditures, balance the budget and contribute to higher rate of government saving. It is unrealistic to expect positive budget saldos over the following years, but the negative ones should be brought down to the economically and socially rational minimum.

Very hard work is ahead to balance between two fundamental objectives of the budget: higher savings on one side, and financing current social programmes, ecological projects, restructuring the real and the banking sector, on the other hand. Problems grow more complex with the ongoing accumulation of quasi budget deficits from current losses and liabilities of the enterprises to the budget, the banks, the social insurance, the suppliers and the personnel, as well as the difficult situation in the pension system.

The government should gradually increase budget investments over the following years, mainly for infrastructure projects of international, national and local importance, so that by 2004-2005 they reach 4-5 per cent of GDP, up from the present 0.9 per cent. This is not impossible bearing in mind that in 1989 budget investment was 5.5 per cent of GDP in Bulgaria and 8.3 per cent in the CEE countries. The more advanced transition countries keep budget investment 4 per cent of GDP, and less advanced - 2-3 per cent (/6/ - 81). The share of budget investment in Bulgaria is between 2 and 5 times lower than in other transition countries (/16/ -9).

Starting from 1998 a portion of revenues from privatisation should be earmarked for infrastructural projects. The utilisation of these revenues for financing budget deficit (as done now) is economically irrational. This should be practised only temporarily due to total destabilisation of the budget.

Some economists believe government saving could be fostered by higher taxation. This however is very difficult to implement as tax revenues do not increase proportionally to higher tax rates. After a certain level of tax rates revenues even decline, as more and more economic agents cease paying taxes. Moreover, even to the extent the tax revenues increase, this is at the expense of the disposable income of economic agents and households, which reduces their saving potential. Subject to the levels of the tax rate and of disposable income, the decline of saving usually outstrips the decline of disposable income due to lower propensity to save. Ultimately this produces larger overall decline of savings of enterprises and households than the temporary increase of government saving and therefore reduces the total domestic saving rate. In a medium and long-term the domestic saving rate will decline even further, as lower saving of enterprises and households will be followed by a reduction of government saving.



The lesson is that higher taxes do not produce higher government saving. The opposite is true in medium and long run.

There is a constructive alternative to the above approach. The moderate reduction of taxes, coupled by higher collection rates contributes to the achievement of two objectives:

First, to maintain and even increase the amount of revenues, and with this - the rate of government saving. The larger revenues would come mainly from irregular tax payers, and would therefore reduce their disposable income. Bearing in mind that these economic agents demonstrate higher propensity for extravagant consumption and lower propensity to save, it is unlikely for their saving to fall further down, it is more likely that this would curtail their current consumption and the capacity to finance criminality, corruption and other shadow activities.

Second, regular taxpayers will have larger disposable income. One may expect that taxpayers with higher income would exercise the same if not higher propensity to save. This would contribute to higher rate of domestic saving. Large portion of low and medium income taxpayers would probably use the additional disposable income for larger current consumption. This would boost consumer demand and production of consumer goods. They would load available free capacities, and if needed - expand them. Thus even poorer taxpayers would indirectly contribute to boosting saving rates in enterprises, and through the economic turnover (which means larger revenues from profit and income taxes, VAT, customs tariffs and excises at constant rates) would increase budget revenues and foster government savings.

With more efficient tax and customs administration one could upgrade collection rates under existing tax system. This would contribute to government saving and curtail disposable income of irregular taxpayers mainly in the shadow economy. As in the case described above, this would affect more the parasite consumption, rather than the saving. This could also restrict the opportunities of the shadow economy to allocate a portion of its income to corruption of civil servants and financing criminal and shadow activities. Under all circumstances the impact on the economy will be positive. Improved tax collection would not affect regular taxpayer's propensity to save, as they pay anyhow these high taxes.

#### 6.2 MACROECONOMIC POLICIES BOOSTING ENTERPRISES' SAVINGS

The saving of enterprises consists of net profit (income) and accumulated depreciation. The enterprises prefer to invest their own resources, as they are safer and cheaper than borrowing.

Saving of the enterprises is the major source for investment in the advanced countries, followed by borrowing (/5/ - 97-98). This would come to Bulgaria too, but over the following years it is impossible for many reasons. One of them is the absence of a stable pattern of ownership in the real sector. Saving and investment decisions could be taken only by owners and factory managers with stable positions and clear-cut prospects. Such decisions can't be taken by enterprises in process of privatisation, expecting privatisation or under frequent changes of factory managers. Such decisions are also very difficult in privatised companies through mass privatisation schemes. The same is true for "employees-managers" privatisation schemes, particularly when workers possess large portion of the shares.

Long-term investment decisions are taken usually under concentrated majority ownership and by strong executives. These prerequisites are absent in Bulgaria at present, and could not be expected in the foreseeable future. This predetermines (along with a number of other factors) low profitability of the public and newly privatised companies in the real sector over the following years. The only exception could be the companies purchased by foreign investors, provided they do not pursue other objectives. It is very difficult to make prognosis on

this subject as there is no clarity whatsoever on the functioning of the Bulgarian economy during the postprivatisation period.

A disciplining pressure for more rational economic behaviour on the enterprises could come from competition, freed from nonmarket pressures by natural and other monopolies and by criminal quasi-economic agents. Such pressure could be kept also through import liberalisation.

The saving potential of the companies is determined by their disposable net income (profit). Comparisons between companies in Bulgaria and other CEE countries indicate that the latter are in a better position (/6/-81). The situation in the Bulgarian companies deteriorated over the following years (see Table 14);

LIABILITIES OF THE REAL SECTOR COMPANIES
(At the end of the month)

Type of liability	XII. 1995		XII. 1996		VI. 1997		XII. 1997	
	bill, BGL	%	bill. BGL	%	bill. BGL	%	bill. BGL	%
I. Public companies	319.1	100.0	1065.0	100.0	4374.5	100.0	6342.1	100.0
1. To banks	44.1	13.8	111.0	10.4	1022.7	24.5	2364.3	37.3
2. To budget	67.8	21.2	184.0	17.3	646.8	15.5	805.8	
3. To social security	17.1	5.3	38.0	3.6	91.9	2.2	107.9	12.7
4. To suppliers	98.9	31.0	412.0	38.7	1416.6	33.9	1470.5	1.7
5. To personnel	14.4	4.5	41.0	3.8	163.9	3.9		23.2
6. Others	76.8	24.2	279.0	26.2	1032.5		152.6	2.4
I. Private companies			275.0	20.2	1032,5	20.0	1441.0	22.7
I. To banks	190.1		646.3	-	1806.0		1982.2	
III. Total	509.2	-	1711.3	-	180.4	-	8324.3	

Notes:Liabilities of public companies are from CSO publications, and those of private companies to banks - from annual reports and monthly bulletins of the central bank. The CSO does not publish data on other liabilities of private companies.

Table 14 and other publications of the CSO and the central bank provide ground for important general conclusions:

First, during 1997 and particularly after introduction of the currency board the financial performance of the real sector public companies deteriorated (see Table 15). For the private sector the CSO does not publish information.

Table 15

Table 14

### PROFITABILITY OF PUBLIC SECTOR COMPANIES

		(Per cent)
Profitability	I-VI. 1997	1997
Profitability from main activity	18.4	15.7
Profitability before taxes	10.2	8.4
3. Profitability after taxes	4.2	3.4

Source: Monthly bulletins of CSO: July 1997 and February 1998



### REVALUATION COEFFICIENTS

(Times)

Groups of assets	acquired (evaluated) during						
	up to 31.XII.1993	1994	1995	1996	1997		
1. Land	31	16	11	4			
2. Orchards and vineyards	28	15	10	4	1		
3. Productive cattle	21	12	9	3			
4. Buildings	29	16	10	4	:		
5. Machinery and equipment	24	15	9	4			
6. Transport vehicles	16	12	9	4			
7. Inventory	17	10	7	3	!		
8. Others	35	20	9	6	1		
9. Average weighted coefficients	25	15	10	4	1		
<ol><li>Average weighted coefficients based</li></ol>				7	,		
on actual index of wholesale prices	82.4	41.6	30.0	7.0			
11. Increase of producer prices	65.6	37.1	23.9	9.5	;		

Notes: Coefficients on rows 1-8 are from the Methodology of the Ministry of Finance; rows 9 and 10 are from paper of Prof. G. Petrov, Banker, N48/1997, and row 11 - author's calculations.

Within the new environment the loss making companies should look for opportunities to rationalise their economic activities through getting rid of useless material assets; production, product and technological restructuring; firing of redundant personnel; improved utilisation of available capacities; looking for new markets. Some prices will go up, but not beyond the point which makes the product unsellable.

The analysis confirms that with revaluation of the assets the major objective - to discontinue decapitalisation of the real sector and provide investment resources is being achieved only partially. A second round of revaluation will be needed by the end of 1998.

The propensity of the enterprises to save requires also stable and transparent tax system, strict law enforcement on property rights protection and contractual relations, protection from arbitrariness by criminality and corruption. The positive relationship between quality of public institutions and curtailment of criminality and corruption on one hand, and the investment rate on the other, has been proven on the basis of highly representative investigations (see Fig. 3).

## 6.3. MACROECONOMIC POLICIES PROMOTING HOUSEHOLDS SAVINGS

Household savings are expected to become an important source of domestic saving over the following years. The propensity to save will be determined by the changing structure of the households, the ambition of the people to ensure a normal level of consumption over their living cycle and the precautions against unforeseen fluctuations of current income. This behaviour is stronger, the weaker the social security system (pension, health, unemployment). The number of financial instruments for saving is also expected to increase. Lower inflation and gradual increase of real income would also boost the propensity to save.

Bearing in mind that six months after introduction of the currency board is too early for generalisations, one cannot neglect that profitability remains dangerously low and deteriorates even under symbolic depreciation allowances for 1997 which in 1998 might be 20 times as high. This would reduce dramatically the number of profitable companies for 1998 and following years and would affect their saving potential. It is also a proof that there are no structural reforms in the real sector.

Second, liabilities of the companies are too large, although inflation melted dramatically their real value over recent years. After revaluation of the assets liabilities could be as high as 70 per cent of the assets. Companies which have to service such debts could hardly afford saving. They may even face problems in servicing old debts. One does not compute liabilities/GDP ratio as it would be misleading. Liabilities are not inflation adjusted, while GDP at current prices reflects inflation.

Third, all structural dimensions of the companies' liabilities deteriorated during 1996-1997. The composition of liabilities of public companies also deteriorates.

Fourth, the core idea of the currency board arrangement was the imposition of strict financial discipline and economic rationality. Six months are not sufficient to draw important conclusions, but the absence of improvement troubles, as this type of reaction by economic agents should be very quick. The size of liabilities and their servicing is one of the most important indicators of financial discipline in the economy.

It follows from the above that there is no improvement in the financial position of the real sector companies. There are no symptoms of more rigid financial discipline. Moreover, with the destructive interest rate policy and delayed revaluation of assets the authorities imitate an environment of seeming successes in the budget, the banks and the companies, which (apart from being untrue) delays the imposition of financial discipline upon economic agents and public institutions.

The saving potential of the companies will remain limited over the following years, although there will be some improvements. They will be manifested in better economic environment owing to lower inflation, stability of exchange rates, more rational depreciation policy.

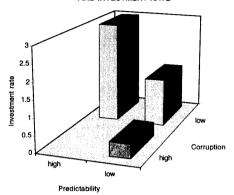
The saving potential of the real sector companies will be dependent on depreciation policy. The long delayed revaluation of the assets (from 1992 to 1998) brought to complete break between their value and their role in the production process. The consequences were devastating. Among the most destructive was the large scale decapitalisation of the real sector and deprivation of the enterprises from investment resources. Huge volume of national wealth, accumulated for decades, was utilised for current consumption in the enterprises and through the budget, mainly for salaries and wages, pensions, current material expenditures, etc.

By Government Decree on 19 November 1997 a Methodology for revaluation of the assets and liabilities of the companies for the period up to 31 December 1997 was approved. The new values become effective as of 1 January 1998. The core of the Methodology are the revaluation coefficients (see Table 16).

This was a proper decision of the Government, although it should have been more comprehensive by adjusting to all accumulated inflation and therefore boosting investment revival instead of serving current needs of the budget.

It is well known that at very high inflation one adjusts the prices of all assets. This is a requirement of article 33 of the Accounting Law. From end of 1992 to the end of 1997 consumer prices grew 140 times, and wholesale prices 102 times. Under these circumstances the net balance value of the assets acquired or evaluated by the end of 1993 should have been augmented by a factor of 100, and the total net value at the end of 1997 should be 30-33 trillion BGL, instead of 13.5-14.0 trillion BGL, as it is by the Methodology of the Ministry of Finance.

## INTERDEPENDANCE BETWEEN CORRUPTION, TRANSPARENCY AND INVESTMENT RATE



Source: IBRD, The State in a Changing World, World Development Report 1997, p. 103

A policy of moderately positive real interest rate on deposits and credits would be a guarantee for normal operation of the chain: depositor-lending institution-borrower. This is being done by the developed and the transition economies, but not in Bulgaria (see /3/).

The positive real interest rate on deposits is an indispensable prerequisite for higher saving propensity of the households. Otherwise the lasting policy of a gap between the nomial interest rate and inflation, called "financial repression" in economic theory suppresses saving in Bulgaria - both in BGL and foreign exchange under fixed and stable exchange rates. This boosts higher propensity to consume and an outflow of both foreign capital (particularly the short-term) and assets of Bulgarian banks. The net foreign assets of Bulgarian banks increased by 998 mill. USD only for 1997. This unfavourable prospect for economic growth could deepen if present economically illogical interest rate policy continued. These apprehensions were confirmed by the Government's official three-year projection, announced in November 1997 (see Table 17).

In case of higher actual than projected inflation, which is very likely for 1998 and 1999, the gap between the nominal basic interest rate and nominal deposit and lending rates, on one side, and the inflation rate on the other, would grow larger with all negative implications. The seeming winner will be the budget due to artificial alleviation from interest payments on domestic public debt. The big looser will be the Bulgarian economy, owing to the damage on depositors, on the banking system, the outflow of both Bulgarian and foreign capital, suppression of domestic saving, and as an ultimate result - delay of investment activity and resumption of economic growth, new postponment of restructuring of the real and budget sectors.

## GOVERNMENT'S PROJECTION ON INFLATION AND BASIC INTEREST RATE

					(Per cent)
Indicators	1996	1997	1998	1999	2000
GDP deflator     CPI inflation (aver.annual)     CPI inflation (end of year)     Basic interest rate (aver.annual)	114.3 123.0 310.8 115.7	997.7 1090.6 599.5 75.4	32.1 35.0 16.4 10.0	9.5 10.7 8.8 8.8	7.6 8.1 7.8 8.0

Source: Enclosure to the letter of the Prime Minister to the Chairman, Standing Committee on Budget, Finance and Financial Control, 29 Oct. 1997. The data for 1996 are actual, for 1997- assessment, for 1998-2000 - projection.

One of the numerous reasons for the lending stagnation and particularly the non-existence of investment lending is the short-term deposit basis of the Bulgarian banks. The longest fixed-term deposit is one year at present. One of the possible solutions is a change in the nature of deposits: increasing the share of time deposits at the expense of demand deposits, and of long-term (more than one year) saving deposits at the expense of the short-term deposits. This could be achieved over the following years by consolidating financial stabilisation, increasing confidence in the banking system, higher real interest rates on long-term saving deposits as compared to short-term deposits, stronger protection of long-term saving deposits and so on.

The new law on deposit protection (protecting 95 per cent up to 1000 and 80 per cent up to 2000 USD) will have detrimental implications on the propensities of households to save. The long-term saving deposit will be a risky shelter for money wealth, while secondary capital market is still non-existent. The only remaining alternative for households is consumption, while national economy needs saving.

## CONCLUSION: OVERALL SUBSTANTIATION OF THE PROJECTION FOR 1998-2000

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The accuracy of projection is subject to precision in assessing the impact of various factors. The most difficult for forecasting is economic policy. The IMF reports play safe by assuming constant economic policy within the projected period (/13/ - 132).

The specialised sections of Chapter One offer justifications for the medium-term projections. To facilitate the reader one summarises here assumptions on the basis of which the behaviour of macroeconomic indicators were projected.

The forecast is based on the following fundamental assumptions:

- There will be political, social and ethnic stability in the country; true national consensus for carrying out authentic market reforms; normal relations among the social partners.
- 2. The state will work in partnership with the market by filling in its gaps, instead of replacing it. "The state has to move from doing many things badly to doing its fewer core tasks well" (/10/ 110).
- The Government will adopt investment-oriented economic policies aiming at resumption of economic growth within the projected time horizon.
- 4. The State will adopt constructive interest rate policy ensuring moderately positive real interest rate, boosting saving and investment activity. Action will be taken to overcome lending stagnation and resumption of investment lending, as well as for discontinuation of the outflow of Bulgarian savings abroad.
- 5. The Government will embark on comprehensive structural reforms comprising: major changes in the property structure in favour of the private sector; upgrading functional structures of GDP; modernisation of sectoral, production and product patterns; improvement of structural dimensions of the financial and budget sectors; upgrading structural characteristics of saving and investment, of imports and exports, of public debt, balance of payments and foreign exchange reserve; improving structural dimensions of manpower and unemployment, of incomes, expenditures and consumption of households, of income and wealth diversification; reducing the share of shadow economy in favour of the official one, etc.
- 6. The Government will initiate **expedient** institutional reforms, comprising accelerated development of market infrastructure, rationalisation of public governance, building up of an efficient public administration.
- 7. The currency board will go on over the projected period and its major rules and requirements will be strictly adhered to. One should immediately put an end to hidden subsidising of the budget at the expense of households and enterprises, which is a grave violation of the currency board fundamental rule, banning central bank lending to the budget. Replacement of lending by subsidisation is inadmissible.
- 8. The Government will take preventive measures against forthcoming new financial destabilisation by eliminating deeply rooted causes.

- 9. The support of the international financial institutions, the EU and the governments of the advanced countries will go on. The inflow of fresh resources will be approximately equal to external debt service payments during the projected period.
- 10. The national economy will develop within a complex international environment: destabilisations within the world financial system; difficult internal reform in the EU; growing instability on the Balkans. One counts that unfavourable external shocks would not affect dramatically the stability of the Bulgarian economy during the projected period.
- 11. The economy will develop within a complex internal social environment with its major features enormous social fatigue and growing public expectations for positive outcomes from the reform at limited capacities of the state to meet them. One counts that the Government and all public, political, trade unions and other institutions would make everything possible to preclude aggravation of social tension, which could threaten the reforms.
- Public institutions will take explicit measures against criminality and corruption and for curtailment of shadow economy.

If some of those assumptions do not materialise, the actual values of the indicators will differ from the projected ones. The larger the deviations from the assumptions, the greater the margins.

#### 1. GDP AND ITS COMPONENTS

The GDP growth will depend on potential demand. The idle capacities along with the unemployed man power could generate high growth rates, though at mediocre quality. The low domestic and external demand however will be a bottleneck over the following years.

Domestic demand (consumer's, investment and government's) is subject to the portion of the produced GDP for final consumption at home after making the transfer payments for external debt service and take into account the inflow of fresh foreign resources. The annual inflow will probably be less than 1 bill. USD for 1998-1999. Therefore it is quite likely that final consumption in 1998 and the following years will be less than GDP produced. This will hamper the increase of real income during 1998-2000 and will predetermine stagnation of private consumption which is the major component of the GDP - between 70 and 77 per cent.

Gross investment for capital formation is an important element of domestic demand-between 10 and 14 per cent of GDP. In 1996 investment declined in real terms by 13.5 per cent and in 1997 - by 15 per cent. During 1998 and the first half of 1999 one can't expect meaningful investment revival for a number of reasons: limited domestic demand; export problems; lack of liquidity in enterprises and stagnation in investment lending; high liabilities of the companies reduce their capacities to service new borrowings; the uncertain future of many companies waiting for privatisation. One cannot rely on large inflow of foreign direct investment in 1998 due to uncertainties on the international financial markets and growing tension in Yugoslavia. Within such an environment one expects stagnation of investment activity during the first half and some revival over the second half of the period. However, it cannot provide sufficient boost for GDP growth.

Similar is the picture with the government's demand, which varies between 6.5 and 9 per cent of GDP and along with collective consumption - between 12.5 and 17 per cent. The burden on the budget was alleviated in 1997 through dramatically reduced interest payment on domestic debt by imposing an artificial, administratively controlled basic interest rate. This effect will be felt in a more limited scale in 1998, and will be exhausted by 1999 and the following years. The pressure for restructuring and rationalisation in the budget sectors will grow and this will curtail orders to suppliers. One may expect that during 1998 the impact of the

government's demand on GDP will be neutral or moderately negative, while in 1999 and 2000 - strongly negative.

Under these circumstances one has to rely on external demand. During 1998 and the following years Bulgaria will open more and more domestic markets for EU imports as associate member. This will mean additional import against which one cannot provide equivalent exports. The large negative saldo with Russia will stay for obvious reasons. Bulgaria was easily loosing traditional markets and was not able to find new ones over recent years. There is no indication so far that this trend will change soon. Due to long delayed modernisation of the economy the exported goods are of medicore quality. In addition, with fixed exchange rate under moderately high inflation the competitiveness of Bulgarian goods will decline on the international and local markets.

One expects growing negative trade saldo which will suppress growth. The growing import of investment goods will also contribute to this end, but not before the end of 1999. If present taxation, interest rate, lending and depreciation policies persist, along with the unclear market conjuncture, investment revival may be delayed even longer. Unfavourable external environment may also contribute to this end.

The growing negative saldo could be softened if the US Dollar gets more and more expensive towards the DEM. Particularly after introduction of the EURO, and until the new system adjusts properly to service simultaneously the conflicting requirements of the macroeconomic equilibrium in the core countries (France and Germany) and in the so called peripheral countries (Portugal, Greece, Spain, Ireland, Finland). This would affect positively Bulgarian trade with the Dollar-zone countries. One should not however expect dramatic changes because first, the spectacular development of the US economy for a number of years already would not be endless. The record high values of the Dow Jones index already produce more concern than joy, and one should not preclude surprises over 1998-1999; second, at sharp fluctuations of exchange rates governments and central banks of the G-7 countries usually intervene.

Under the circumstances described above with some optimism one could project 2 per cent GDP growth for 1998, 2.5-3.5 per cent for 1999 and 4-5 per cent for 2000 (see row 3 of Consolidated table on macroeconomic framework for 1998-2000).

Within this context the proper adjustment of macroeconomic policies on growth waves is of paramount importance. Further delay of tax reform may have strong negative effects. Quick action is needed to reduce corporate profit and income taxes, as well as VAT, coupled by efforts to improve tax collection. The revaluation of assets should be completed by the end of 1998, taking care of the entire accumulated inflation over recent years. Substantial part of production investments should be deductible from the tax base. One needs urgently constructive interest rate policy, fostering saving propensity. One must overcome lending stagnation and put and end to outflow of Bulgarian savings abroad as deposits of Bulgarian commercial banks in foreign banks. One should initiate as soon as possible the construction of important infrastructure projects and related increase of investments to 2.5-3.0 per cent of GDP by 2000. In short an active investment-oriented economic policy is needed to provide an environment for investment revival and resumption of sustained growth. If the government does not follow such policy the projected growth would be questionable.

#### 2. INFLATION

Contrary to the expectations of some economists, Bulgarian inflation can't be brought down to the level of the reserve currency country - Germany (1.8-2.0 per cent). There are many reasons for this: The transition from the price levels and ratios of the central planning to the levels and ratios, typical of a normal market economy has not been completed. Important changes are forthcoming in the energy prices, which may go up by 40-60 per cent or more by 2000. The difficult process of drawing closer the Bulgarian price level to that of the EU countries is still ahead.

The revaluation of assets will be an inflationary factor during 1998 and the following years. It will be felt stronger in the capital-intensive products. New postponement of the complete revaluation of the assets may reduce direct inflationary effects over 1998-1999, but will contribute to further delay of investment revival and growth resumption and would ultimately bring dangerous financial destabilisation.

Possible further depreciation of the Lev with regard to the US Dollar through the DEM will also have inflationary effects. Imported inflation from the Dollar-zone could be partially neutralised by increased exports. The size of the neutralising effect will depend on the ratio of the impact of depreciated Lev through flows of imports over exports.

The ongoing delay of structural reforms accumulates quasi-budget deficits - losses and liabilities of enterprises from the real sector. The lack of structural reforms will keep in business producers of expensive and low quality products as well as of monopolists, which will also have inflationary effects. The resources will be used irrationally in the budget sectors, where authentic structural reforms have not been initiated so far.

The likely financial destabilisation during the second half of 1999 and particularly over 2000 would generate higher inflationary expectations, which may quickly transform into inflation. During 1998 and even more over the following years the pressure will grow for higher salaries, wages, pensions and social benefits owing to the present miserable level. This will also generate inflationary implications.

The external debt service payments (6-8 per cent of GDP and 20 per cent of expected export revenues) will also have inflationary consequences over the following years. Large expenditures are being made for production of these goods. Salaries and wages will be paid without commodity equivalent on the local market, as the final product in pecuniary terms will be transferred to creditors abroad.

The currency board arrangement cannot put an end abruptly to these deeply rooted and long lasting processes. On the basis of the above one projects moderately high, gradually dying down inflation over the following three years (see rows 7,8,9 and 10 of Consolidated table). Having in mind the availability of several powerful smouldering inflationary fireplaces, the fragility of present stabilisation and the vulnerability of the economy to external shocks, these projections should be considered optimistic. There is no ground whatsoever to worry about prospects of deflation in this country, expressed recently by a high level politician.

### 3. NOMINAL AND REAL INTEREST RATES

Economically healthy is a level of nominal interest rate, which provides for moderately positive real interest rate, and at worst (for a short period of time) zero or moderately negative interest rate (see /3/ and /15/ - 94-105, 108-115). On this ground, and at the expense of a compromise, one projects average annual nominal basic interest rate of 30 per cent for 1998, 23 per cent for 1999 and 16 per cent for 2000 (see row 11 of Consolidated table). It is being done as called for by economic logic, although the government sticks to 3-6 times lower basic interest rates. Moreover, during the first quarter of 1998 the nominal basic interest was between 5.0 and 5.5 per cent, i.e. below the LIBOR for all types of USD deposits. This alone is enough to

judge for the quality of the Bulgarian basic interest rate. Indeed its arbitrary fixing resembles very much the worst years of administrative central planning in this country.

With the adopted pseudo-market method for defining the basic interest rate, it will be as low as desired by the party concerned, namely the Government, and not as required by economic logic. Current fiscal interests (to reduce budget deficit, though at the expense of depositors) are placed higher than medium- and long-term interests of the economy - to increase saving and investment rates and resume sustained economic growth, regaining at the same time the confidence of the public in the banking system and the state institutions. It goes without saying that the public will not trust institutions, which take away its savings through double taxation by inflationary tax on deposits.

As long as there is no authentic market for government securities the levels of interest rates should follow the levels of inflation. For the time being Bulgaria has got no other objective market criterion for interest rate levels. The authorities say that the present method is market based. The answer is simple - there is no true market in the absence of equivalent exchanges. On the Bulgarian "market" for government securities there are no such exchanges, as the seller (the Government) is always in a gaining position, while the buyers (the public and the banks) are always in a loosing position, and are deprived of market alternatives. In addition, depositors in the banks loose substantial portion of their savings. They have paid an income tax, when receiving it and the saved portion of income is taxed again by inflation tax (the differential between inflation and nominal deposit interest rate). Obviously this is not the way to boost saving propensity as a source of investment, which the Bulgarian economy badly needs to resume growth.

With the present method for defining the basic interest rate and the projected by us GDP defator the economy faces highly negative real basic interest rate for 1998 and the following years. The same is true for deposits and lending rates. The implications are not difficult to predict.

#### 4. NOMINAL AND REAL EXCHANGE RATES

Although the Lev is pegged to the DEM, an important portion of foreign trade and other external transactions of Bulgaria are being made in USD. This calls for projection of the exchange rates of the Lev to both currencies.

The German Mark: it is possible, that the government may try to keep the fixed rate unchanged until the end of the projected period and even beyond. In section 1 of Chapter Two we pointed out the dangerous implications of such policy and recommended a constructive solution. Here one calls the attention once more to the likely changes of the real exchange rate of the Lev to the DEM over the following years if our recommendation is not taken into account and remind of the imminent new financial destabilisation.

If one took as a starting point July 1st, 1997 (the official starting date of the currency board), by the end of 2000 around 100 per cent inflation would accumulate. This means doubling of domestic production costs (see row 13 of Consolidated table). Along the exports to the DEM-zone this will reduce competitiveness of Bulgarian goods, adjusted by the import intensity of exports. The import of foreign goods to Bulgaria will become more and more attractive, and local production will suffer. The overall ultimate result will be negative.

The US Dollar: one projects depreciation of the DEM with regard to the USD by 6.5-7.0 per cent per annum. Over the second half of 1998 and particularly during 1999 and 2000 one should not preclude larger depreciation of the EURO to the USD, which will be transmitted to the BGL (as the Lev will be repegged to the EURO as of January 1, 1999). The deeply rooted

reasons for the expected depreciation of the DEM (EURO) are the present situations in the US and the EU economies and the forthcoming unavoidable fluctuations during the initial years of the introduction of the common European currency. One should not preclude temporary financial and currency destabilisation in the EU during those years. After the stabilisation of the EMU by 2002-2003, along with comprehensive measures both at EU and national levels one should expect strengthening of the EURO to the USD.

Even with nominal depreciation due to large inflation differential between USA and Bulgaria, the Lev will appreciate in real terms to the USD. The appreciation may reach approximately 32 per cent by 2000 (see row 12 of Consolidated table), and will have similar effects on exports and imports to those of the DEM.

If the fears of financial destabilisation over the second half of 1999 and particularly in 2000 due to accumulated real appreciation of the Lev proved true, this would affect negatively all macroeconomic indicators projected here.

#### 5. BUDGET DEFICIT

The deficit of the general government budget was reduced threefold during 1997 by maintaining highly negative real basic interest rate. Interest payments on domestic debt fell from 17.9 per cent of GDP in 1996 down to 5.7 per cent for 1997, and will be reduced further down to 1.5 per cent in 1998. The ratio between non-interest and interest expenditures of the budget gets back to normal.

With this the opportunities for manipulation of the budget deficit are nearly exhausted. The maintenance of relatively low deficit or its further reduction would be feasible only through substantial tax reforms, tough measures to improve tax collection and bold structural reforms in the budget sectors. Not a single government since 1990 has dared to embark upon such reforms. If the present government carried them out, the deficit of the general government budget could be 2.1 per cent for 1999-2000. The positive primary saldo will be reduced close to zero (see row 14 of Consolidated table).

On the basis of past experience and missed opportunities during 1997 and the first half of 1998, there is no likelihood for substantial improvement of budget revenues collection and meaningful structural reforms in the budget sectors over 1999-2000. If the government keeps postponing painful structural reforms in the budget system for 1999-2000 it would face evergrowing resistance, which would make reforms even more difficult.

## 6. BALANCE OF PAYMENTS, FOREIGN EXCHANGE RESERVE AND GROSS EXTERNAL DEBT

On the basis of the projected overall situation of the real sector, the budget, inflation and exchange rates one expects growing deficit on the current account (see row 15 of the Consolidated table). It will be caused mainly by the trade balance deficit, computed as a difference between exports (f.o.b.) and imports (c.i.f.). The negative trade saldo will be a product of the limited foreign markets and low competitiveness of Bulgarian goods. The fixed exchange rate coupled with moderately high inflation generates additional difficulties.

The government's expectations for a large scale-import of investment goods might materialise during the second half of 1999 at the earliest, provided investment-oriented economic policy was initiated now. Otherwise these expectations will not occur.

One expects stabilisation of the official foreign reserve provided there is a balance between payments on the external debt service and fresh inflow of foreign resources, and a deficit on the current account not exceeding projections (see row 16 of Consolidated table). This is an optimistic expectation. The consolidation of financial stability, initiation of large-scale structural reforms, suppression of criminality and corruption would play a positive role. If delays in reforms persist the foreign exchange reserve may fall below projected level.

Future development of the East Asian financial crisis may also affect us, though indirectly. Possible delay in the rehabilitation in these economies and deepening stagnation in Japanand Russia will affect negatively the other regions and would increase investors' caution towards risk countries, such as ours. Unfavourable course of events in Yugoslavia may also affect the inflow of fresh foreign resources in Bulgaria.

One also counts on relative stabilisation of the gross external debt, hoping that foreign exchange inflows would balance payments (see row 17 of Consolidated table). Those expectations are also somewhat optimistic. The solution of the Iraq crisis would help us, though by a lag of two years at least. Deterioration in Yugoslavia would have an immediate negative effect upon us.

The stabilisation of the external debt and the exchange rates, and foremost - the ongoing relatively high inflation, play a major role for the decline of total public debt to the GDP (see row 18 of Consolidated table). The public debt consists of external debt mainly (75-80 per cent), and the balance is for domestic debt. As external debt remains stable, domestic one grows slowly, and the increase of GDP at current prices is mainly due to inflation, and not of real growth, one should not draw optimistic conclusions from the decline of total public debt as per cent of the GDP for the respective year.

If this ratio is computed on the basis of GDP at constant (1997) prices one gets the true picture: while in 1997 total public debt was 132 per cent of GDP, in 2000 it is expected to climb to 155 per cent (see row 19 of Consolidated table).

#### 7. UNEMPLOYMENT

Registered unemployment was 13.7 per cent at the end of 1997. This relative stability (12.5 per cent at the end of 1996) is due to the absence of adequate reactions from economic agents and of meaningful structural reforms in the real, financial and budget sectors.

Further postponement of structural reforms would hardly be possible. First, because the pressure from IMF and IBRD for such reforms will grow as a precondition for new credits, which Bulgaria badly needs. Second, the ongoing economic agony and related increase of social tension will press ever stronger for such reforms. The tolerance of higher than economically rational employment was possible so far by paying very low wages and salaries, causing growing discontent. The increasing pressure for higher payments would probably force the government (for public companies and budget sectors) and private economic agents to start firing redundant personnel. This will be painful for those concerned, but it is economically healthy. The present situation, apart from being economically unhealthy is painful for all employed, as they get low wages and insecure jobs. In addition, this delays structural reforms, worsens prospects for the enterprises, the economy and society.

The government and economic agents should choose between two alternatives. If the economically healthy alternative was selected at the end of 1997-beginning of 1998 unemployment could reach 670-700 thousand (18 per cent) by the end of 1998 and decline gradually by a couple of percentage points over the following years (see row 20 of Consolidated

table). A modified path is equally likely: 15.5-16.0 per cent in 1998, 17.5-18.0 per cent in 1999, 20-21 per cent in 2000. This is the pattern of delayed structural reforms, ongoing economic agony and growing unemployment.

There was also another alternative - bold structural reforms from the summer or fall of 1997, which would have brought unemployment to 18-19 per cent by the middle of 1998 and 21-22 per cent by the end of 1998 and the beginning of 1999. By the middle of 1999 a turn could have taken place and unemployment might have been brought down to 15-16 per cent by the end of 2000, 12-13 per cent by 2001, and so on. This viable alternative was missed. The Bulgarian society, tired of imitation of reforms might have tolerated unemployment up to 20-22 per cent during the second half of 1997 and over 1998, but would hardly endure it over 1999-2006.

If the Government adopts (as it seems it will) the less painful at a first glance (but unhealthy in a medium- and long-term) alternative, unemployment in 1998 could stay around 14.5-15.0 per cent. This means further delay of structural reforms, deepening of economic agony and sharpening of social fatigue and tension, which may go out of control during the second half of 1999 and particularly in 2000. This may have devastating implications. Such course of events must be prevented. The most efficient tool is - speedy and comprehensive reforms.

#### 8. NOMINAL AND REAL INCOME

It is impossible to make a satisfactory overall assessment of all nominal and real incomes of households. This could be done only for salaries and wages, pensions and social benefits, which make around 55 per cent of total households incomes. It could be partially done only on income from deposit's interest. For the remaining types of incomes there is no reliable information, while for income from shadow activities - it is completely absent.

The expected nominal salaries and wages over the projected period will be in the range of zero growth in real terms (see row 21 of Consolidated table). At more favourable development of the economy 1.0-1.5 per cent real growth of average salaries is possible in 1998-1999, while at unfavourable development - 2-3 per cent real decline is likely.

More important is real disposable income from salaries. It could decline over 1998 and the following years in case of higher income and other indirect taxes: VAT, custom tariffs, excises, property taxes, municipality taxes and others. For instance, the effective tax burden for 1998 is higher and this reduces further disposable income from salaries and wages.

The expected nominal pensions are also in the range of the zero growth in real terms (see row 22 of Consolidated table). Real increase of 1.5-2.0 per cent is possible in the favourable version, and real decline of 2-3 per cent in the unfavourable one. The higher indirect taxes over 1998 and the following years will depress the real disposable pension.

At the announced government's policy of negative interest rates over the following years the double taxation of the saved portion of personal income will continue unabated. It could affect the BGL deposits - stronger subjected to the behaviour of the exchange rates.

In short, over the first half of the projected period the real disposable income will tend to decline slightly. During the second half of the period one could expect stabilisation and small increase.

The consolidated table on the macroeconomic framework for 1998-2000 contains only the most important indicators with average annual values. The relevant sections of Chapter One provide detailed projections for macroeconomic indicators.

#### MACROECONOMIC FRAMEWORK FOR 1998-2000

Indicators	Measure	1996	1997	
			Assessment t	
Produced GDP at current prices	bill, BGL	1 660	16 875	
2. Produced GDP at 1997 prices	bill, BGL	15 609	16 875	
3. GDP growth at previous years				
prices	%	10.9	-7.5	
4. Gross industrial value added				
growth at previous years prices	96	-8.3	-7.0	CANAL SECTION
5. Gross investment growth at				
previous years prices	%	13.5	-15	40.4
6. Share of private sector in				Property and Southern
produced GDP	%	45.9	55	AND REPORTS
7. GDP deflator	%	125.0	1 100	Section 2 delection
8. Inflation (producer prices)				feit and griebber bei e
- average annual	%	126.0	1 046	39 (21)
9. Inflation (consumer prices)	l	l		
- average annual	%	123.0	1 154	44 20
10. Inflation (consumer prices)				
end of the year	%	310.8	578.7	27, 420
11. Nominal basic interest rate	-			
- average annual	l %	115.7	72	30 23
real basic interest rate	%	1.4	-1 028	31 7 2 7
12. Nominal exchange rate				period by the Telephone
- average annual	BGL/USD	161.8	1681.9	1840 7 1960 20
- real exchange rate	BGL/USD		1 681.9	1306.8 1196 4111
13. Nominal exchange rate			1	Encharge Continues of 3
- average annual	BGL/DEM		1 000	1.000 - 1.000 - 1.00
- real exchange rate	BGL/DEM		1 000	693
14. Deficit of general govt. budget	%	-10.9	-3.9	
- primary saldo	%	9.8	4.6	21 38-13-3 24 3 07 5 0
15. Saldo of balance of payments:	,-			
- current account	mill. USD	-22.3	80	150 330 -4
- trade balance	milf. USD	-216	30	100 240 1 35
16. Official foreign exchange	,			the last of the la
reserve - end of the year	mill. USD	483	2 200	2300 2300 220
17. Gross external debt		,,,,,		
end of the year	mill. USD	9.65	10.0	10.2 10.2
18. Total public debt to GDP-				
end of the year	%	346.8	131.9	98.0 86.5 1.80
incl.domestic debt	96	63.4	26.7	20.7 20.4 21
19. Total public debt to GDP				The state of the s
at 1997 prices - end of year	%	_	131.9	138.20 147.61 1 355
incl.domestic debt	%	-	26.7	26.7. 30.9 11.35
20. Registered unemployment -				
end of the year	thsnd	478.8	523.5	700 620 446-54
· % to economically active population		12.5	13.7	18.00 16.00 18.00 14
21. Average monthly salaries and				
wages	thand BGL	13.96	132.0	182.0 + 204.5 + 230
22. Average monthly pension	thand BGL	4.22	38.4	53.0 61.0 69

### LIST OF QUOTED PUBLICATIONS

- 1. Ангелов Ив. с колектив "Икономиката на България до 1997 г." Икономически институт на БАН, С., декември 1994.
- 2. Ангелов ИВ. с колектив "Икономиката на България до 1998 г.", Икономически институт на БАН, С., март 1996 г.
- 3. Ангелов Ив. "Лихвената политика е антипазарна и антисоциална", в-k "24 часа", 12 и 13 ноември 1997 г.
- 4. Ангелов Ив., Огнища на дестабилизация тлеят в икономиката ни. В-к "Труд", 5 февруари 1998 г.
- 5. EBRD, Transition Report 1995. Investment and enterprise development. London, November, 1995.
  - EBRD, Transition Report, 1996. Infastructure and savings, London, November, 1996.
     EBRD, Transition Report, 1997. Enterprise performance and growth. London,
- 8. Fischer Stainly et al., Stabilization and Growth in Transition Economies: The Early Experience. IMF Working Paper WP/96/31, April, 1996.
- 9. Havlik Peter et al., Transition Countries Outlook Falters in 1997:... WIIW, No. 239, July 1997.
- IBRD, From Plan to Market. World Development Report 1996, Oxford University Press, New York, 1996.
- 11. IBRD, The State in a Changing World. World Development Report 1997, Oxford University Press, New York, 1997.
  - 12. IMF, World Economic Outlook, May, 1996, Washington DC.

November, 1997.

- 13. IMF, World Economic Outlook, October, 1996, Washington DC.
- 14. IMF, World Economic Outlook, May, 1997, Washington DC.
- 15. IMF, International Financial Statistics. Yearbook, 1997. Washington DC, July, 1997.
- 16. IMF, Government Finance Statistics. Yedrbook 1997, Washington D.C.
- 17. IMF, World Economic Outlook. Interim Assessment, Advance Copy, Washington D.C. December, 1997.
- Kendrik John W. The Formation and Stocks of Total Capital, NBER, New York, 1976.
   Williamson Yohn, What Role for Currency Boards? Institute for International Economics, Washington DC. September, 1995.
- Podkaminer Leon et al., Transition Countries: 1997 External Deficits Lower than Feared, Stability Again a Priority. WilW, No. 243, February 1998.

Designer of the cover V. Gigov Technical editor G. Michailova

Technical carte № 152 Format 1/16 70 x 100 Circulation 200 Printer's sheets 7,25 Publisher's sheets 9,40

Submitted for printing on 20.05.1998 Signed for printing on 17.06.1998

Preprinting design and printing produced by the Publishing and Printing Hause at the National Statistical Institute of the Republic of Bulgaria