INFLATION REPORT

2/2002

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N O T E

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Bucharest Stock Exchange, RASDAQ and National Bank of Romania supplied data.

Some of the data are still provisional and will be updated
as appropriate in the subsequent issues.

The Research and Publications Department carried out the drafting,
English version and technical co-ordination.

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Contents

ABBREVIATIONS

AMIGO	Households labour force survey
ANRE	Romanian Electricity and Heating Regulatory Authority
ANRGN	National Authority for Regulation in Natural Gas Sector
BARA	Bank Assets Resolution Agency
BIS	Bank for International Settlements
CEFTA	Central European Free Trade Agreement
ECB	European Central Bank
EIA	Energy Information Administration
EU	European Union
EUR	Euro
EVTA	Employment and Vocational Trading Agency
FOB	free on board
GDP	Gross Domestic Product
HICP	Harmonised Index of Consumer Prices
ILO	International Labour Organisation
IMF	International Monetary Fund
MFP	Ministry of Public Finance
NBR	National Bank of Romania
NIS	National Institute of Statistics
OPEC	Organisation of Petroleum Export Countries
PSAL	Private Sector Adjustment Loan
SDR	Special Drawing Rights

1. Inflation developments in the latter half of 2002

Disinflation gained speed in the latter half of 2002; the change in prices ran at 7.9 percent (December/June), compared with 9.3 percent in the first half of 2002 and 13.5 percent in the same year-ago period. This trend was more conspicuous in the case of food items, the adjustment of administered prices (in particular, prices for heating, postal services and telephony, sewerage, water and refuse collection) dampening the contribution of the other two categories (i.e. non-food items and services) to this process.

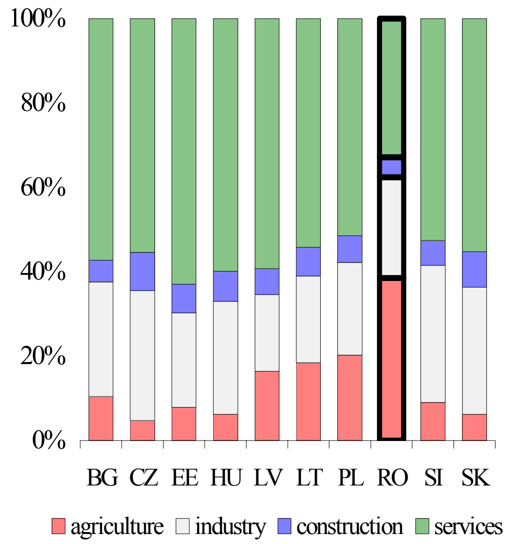
Thus, although the agricultural sector recorded a poorer performance than in the previous year, in H2 the growth rate of prices for foodstuffs stood only at 5.2 percent, about half of that recorded in the 2002 H1. Decline in the output of grains and fodder led to sharper increase in prices for bakery products, milk and dairy products, and eggs. This development was, however, dampened by the moderate rise or even decline in prices for seasonal products (fruit and vegetables) and for other staples such as sugar, edible oil, meat and meat products whose prices dropped on the international market, thus making domestic producers wrestle with the fierce competition from imports.

Prices for non-food items stepped up 10 percent (compared with 8 percent in the first half of 2002), against the backdrop of higher prices for heating (39.1 percent), fuels (16.5 percent) and medicines (11.1 percent); the price for electricity went up 1.1 percent while that for gas remained unchanged although the latter is by far lower than in the EU and in some accession countries (unlike the price for electricity, which is closer to the convergence level). Leaving aside the influence of adjustment in administered prices and in price for fuels, this group of goods posted an increase in prices of 4.1 percent.

During the period under review, excise duties were not subject to alteration anymore, but the 7.3 percent depreciation of the ROL against the EUR (December/June 2002) entailed the rise in prices for products subject to excise duties, particularly in the price for fuels, out of which excise duties (expressed in euro) account for about 35 percent.

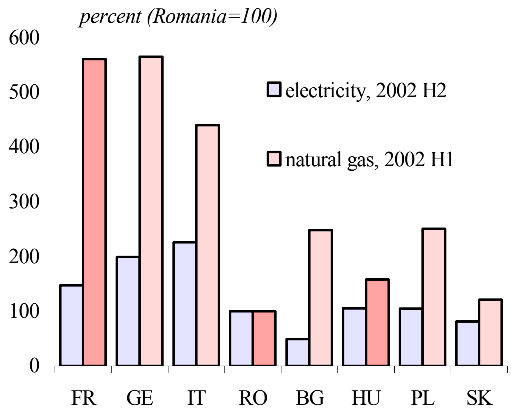
At end-December 2002, services grew 9.8 percent more expensive compared with June 2002 under the impact of noticeable pick-up in prices (in the range from 9 percent to 18.1

Composition of Employment in CEFTA Countries, 2002 Q3



Source: NIS - CESTAT No. 3/2003

Average Prices (before tax) for Households



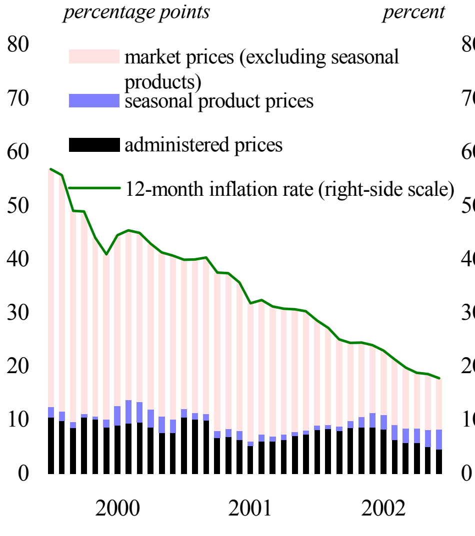
Source: Romanian Electricity and Heating Regulatory Authority (ANRE), National Authority for Regulation in Natural Gas Sector (ANRGN)

Administered Prices

	percentage change		
	Dec.01/ Jun.01	Jun.02/ Dec.01	Dec.02/ Jun.02
1. Inflation rate	13.5	9.3	7.9
2. Administered prices geared to inflation, of which:	23.7	16.3	13.6
- railway transport	87.3	0.0	0.0
- water, sewerage, waste disposal	20.4	19.0	18.1
3. Share in CPI basket (%)	4.7	4.7	4.7
4. ROL/USD exchange rate (+ depreciation, - appreciation)	8.2	5.5	0.8
5. Administered prices geared to ROL/USD exchange rate, of which:	27.6	10.7	12.5
- electricity	27.9	15.0	1.1
- heating	57.2	4.6	39.1
6. Share in CPI basket (%)	7.9	9.5	9.5
7. Administered prices geared to inflation and ROL/USD exchange rate, of which:	37.4	7.9	6.6
- telephony	6.7	7.5	10.1
- postal services	12.8	19.7	17.7
- natural gas	99.6	8.4	0.0
8. Share in CPI basket (%)	4.6	5.3	5.3
9. Administered prices (total)	29.1	11.3	11.1
10. Share in CPI basket (%)	17.1	19.5	19.5
11. Contribution to general price level (percentage points)	5.0	2.2	2.2

Source: NIS, NBR calculations

Inflation Rate



Source: NIS, NBR

percent) for services such as water, sewerage, refuse collection, postal services, telephony and city transport. By contrast, prices for railway transport were kept unchanged in this period too (after the about 117 percent hike in the previous year); however, although this stability was beneficial to the evolution of inflation rate in H2, the build-up in arrears might fuel inflation in the near future.

All in all, administered prices rose by 11.1 percent during the period under consideration, a rate similar to that recorded in the first six months of 2002, contributing 2.2 percentage points to the inflation rate.

Consumer price growth rate averaged 19.8 percent, compared with the same year-earlier period, down 5.7 percentage points from the first half of 2002.

The decline in inflation rate in the latter half of 2002 was supported by both supply- and demand-side factors, which were further boosted by a mix of consistent macroeconomic policies and by the increase in the capability of the economy to absorb monetary inflows, thus enabling credit to non-government sector to stick to the upward trend (13 percent in real terms, December/June 2002) without jeopardising the inflation target.

Cost-push inflationary pressures receded due to (i) reining in the increase in gross wages, (ii) slowdown in the growth of costs associated with electricity, heating, gas, water, imported raw materials and materials amid slower depreciation of the ROL against the EUR-USD basket[1], and (iii) productivity gains in industry.

Thus, the growth rate of gross nominal average wage decelerated from 12.2 percent in 2002 H1 to 9.3 percent in 2002 H2[2], producer prices for electricity, heating, gas, and water went up 20.5 percent in H1 and 7.8 percent in H2 while the ROL eased by 9.1 percent versus the EUR-USD basket in H1 and 4.4 percent in H2[3]. Moreover, during the period under review, productivity in industry increased markedly; i.e. by 10 percent on average, compared with H1, while real gross wages went up 3.1 percent.

The inflationary impact of consumer demand weakened from the first half of 2002, as a result of the following factors:

[1] EUR 60 percent and USD 40 percent.
[2] Averages, compared with the previous six month-period.
[3] The change in producer prices and depreciation of the ROL are calculated based on end-of-period figures.

(i) the slower increase in real net wages, by 0.8 percent on average in 2002 H2/2002 H1 versus 2.4 percent in 2002 H1/ 2001 H2;

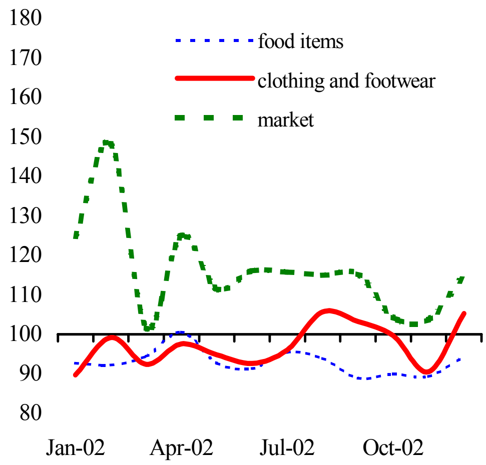
(ii) the step-up in the apartment maintenance expenses (electricity, heating, gas, water, sewerage, refuse collection);

(iii) the increase in spending on durables and motor vehicles[4] (given the drop in interest rates on loans and retailers' widespread adoption of instalment sale) to the detriment of outlays on other market-priced goods and services, the weak demand for which depressed the rise in prices. For instance, the turnover in retail trade of textiles, clothing and footwear stagnated during the period under consideration while that of market services rendered to the population was 8 percent lower than in the same year-earlier period[5]; and

(iv) the increase in propensity to save (household time deposits went up 4.8 percent[6] in real terms, compared with 3.7 percent[7] in 2002 H1).

Retail Trade Turnover (a)

index against similar period of previous year

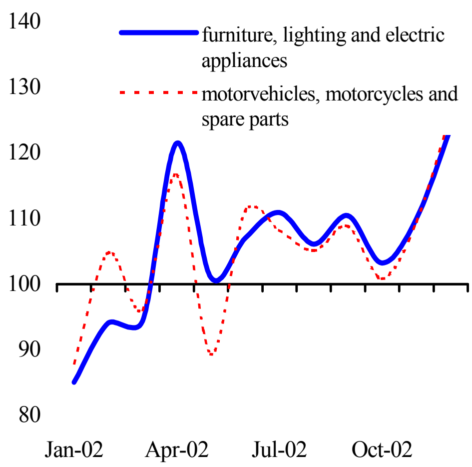


Source: NIS

The impact of the aforementioned factors on the disposable income for purchasing non-durables as pointed out by market research and statistics translated into the shift in the consumers' preference towards low-quality goods traded at lower prices. This state of affairs is mirrored by the drop in turnover of retail shops selling mainly food products, beverages and tobacco (by 8.1 percent, on average, compared with 2001 H2) and the increase in that of retail trade at the market (by 11.4 percent).

Retail Trade Turnover (b)

index against similar period of previous year



Source: NIS

Against this background, slack demand for market priced non-durables and services having a large weight in the consumption basket contributed to the deceleration of inflation rate.

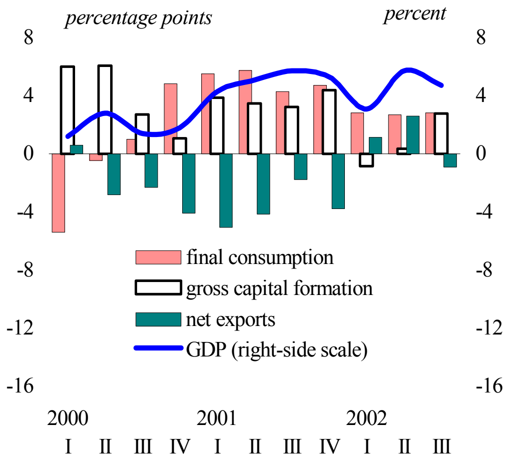
Despite some easing in the stance of fiscal policy in the latter half of 2002, maintenance of public administration consumption within reasonable margins played a part in achieving a lower-than-envisaged budget deficit and contributed to the undershooting of the annual inflation target.

[4] Accounting below 3 percent of the consumption basket.
[5] The seasonal pattern of retail trade makes more relevant the comparison with the similar period of 2001.
[6] December 2002 / June 2002
[7] June 2002 / December 2001

2. Determinants of inflation

2.1. Demand

Contribution of the Main Components of Demand to GDP Growth



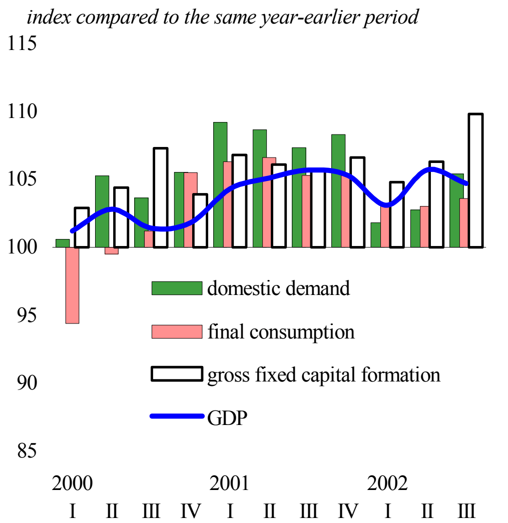
Source: NIS, NBR

Economic growth accelerated in 2002 H2[8], compared to the first half of the year, with estimated GDP increasing by more than 4.5 percent year on year in the last two quarters. Thus, real GDP grew by 4.7 percent in Q3, while the full year's economic growth reached 4.9 percent, up 0.4 percentage points from the first nine months of 2002.

This dynamics was boosted mainly by external demand, despite the uncertainties which had a negative impact on the international business environment, and by investment demand. The latter was spurred by progress made in macroeconomic stabilisation process and by upbeat outlook for a sustainable growth that expanded the access of companies to domestic and external finance. The same as in the first six months of 2002, total final consumption rose at a moderate pace, lagging behind GDP growth rate.

2.1.1. Consumer demand

Domestic Demand



Source: NIS

The growth rate of total final consumption fluctuated during the period under review, speeding up in Q3 (by 3.6 percent from the similar year-ago period) and declining in the last part of the year (as suggested by the development of cumulative figures of growth rate, from 3.4 percent in the first nine months of 2002 to 3 percent for the year).

These fluctuations were induced by actual final household consumption, which increased by 3.8 percent in 2002 Q3 compared with the same period of 2001, and by only 3 percent for 2002 as a whole (down 0.6 percentage points over the first nine months).

The year on year growth in household consumption in the latter half of 2002 was confined by the limp rise of real net wages, higher apartment maintenance expenses (as a result of dearer heating in the last few months of the year), and households' increased propensity to saving[9]. Market research and statistics pointed out the shift in the consumers' preference from non-durables to durables amid lower interest rates and more easily

[8] The assessments are based on estimates as long as the National Institute for Statistics did not release data on Q4 GDP (data are available only for Q3 and for the whole year 2002).

[9] In the period under consideration, household time deposits increased by 4.8 percent, in real terms.

available consumer credit[10]. Thus, the aforementioned factors dampened the increase in the demand for fast-moving consumer goods and services, which hold a large share of final consumption of households.

Tight control of budget expenditures translated into a mere 0.3 percent tick-up in public sector consumption in the first six months of 2002, enlarging public administration's margin for manoeuvre in the latter half of the year without putting at risk the budget deficit targeted for 2002. Thus, the annual growth rate of public administration consumption accelerated to 1.7 percent in Q3, reaching 2.1 percent for the year as a whole (after running at 1 percent in the first nine months of 2002).

2.1.2. Investment demand

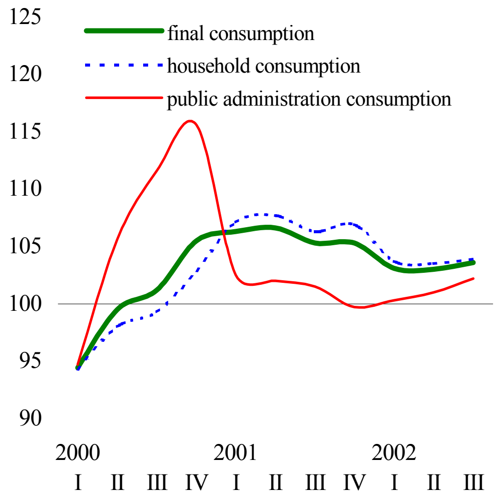
In the third quarter of 2002, gross fixed capital formation increased by 9.8 percent year on year; all through 2002, gross fixed capital formation advanced 8.3 percent, up 0.5 percentage points from January-September 2002.

The increase in gross fixed capital formation at a faster pace than that of GDP was mainly driven by the following factors: (i) the increase in companies' own resources as a result of positive economic performance and (ii) the more readily available domestic loans. According to the data supplied by the Credit Risk Bureau, bank credit for purchasing equipment and real estate picked up 18.3 percent and 72 percent, respectively in real terms, in 2002 (it is assumed that part of loans extended in the first half of 2002 were used for investment undertaken in the second half of 2002).

The expansion in investment demand was also driven by the more readily available foreign loans, due to low interest rates on the international market and upgrades of country ratings – the medium- and long-term net foreign loans (expressed in USD) to the non-bank sector surged by 49.6 percent in 2002. By contrast, non-resident net direct investment fell by 21.7 percent in 2002 H2 from same year-ago period, the uncertainties about the international environment and the flagging interest of the leading industrialised countries' companies in foreign investment having an unfavourable impact on such capital inflows.

Actual Final Consumption

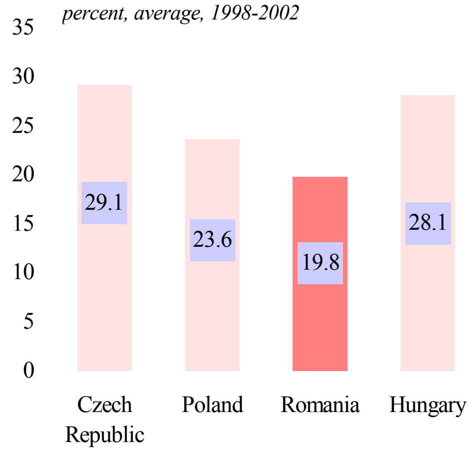
index compared to the same year-earlier period



Source: NIS

Investment Rate*)

percent, average, 1998-2002



**) Gross capital formation to GDP (current prices)*

Source: NIS, NBR

Investment

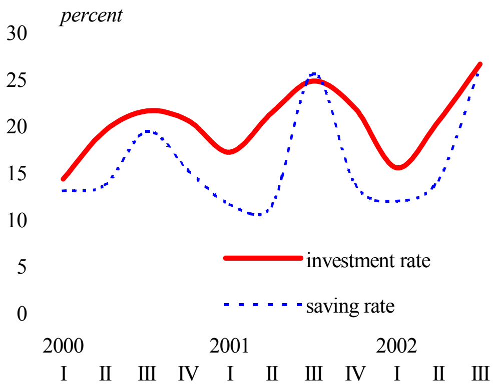
change compared to the same period of previous year

	Years	Q1	Q2	Q3	Q4
Total	2001	4.7	3.9	3.4	6.6
	2002	2.8	6.2	8.7	8.7
- new construction works	2001	5.1	4.5	4.6	3.8
	2002	0.1	6.1	7.0	5.6
- equipment	2001	8.1	4.8	2.9	9.9
	2002	5.5	7.4	12.2	11.9

Source: NIS

[10] Short- and medium-term current loans to households rose by 65.3 percent, in real terms; concomitantly, the turnover in retail trade of furniture, lighting and electrical appliances rose by more than 10 percent, compared with the same year-ago period.

Investment Rate and Saving Rate

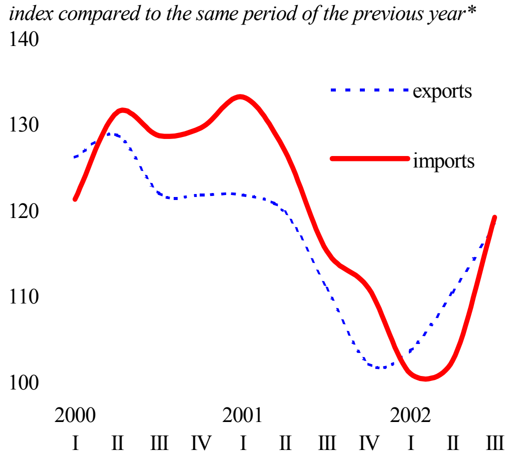


Note: investment rate is the ratio between gross capital formation and GDP; saving rate is the sum between gross capital formation and current account deficit as a share of GDP

Source: NIS, NBR calculations

Exports and Imports of Goods and Services

*index compared to the same period of the previous year**



**) Based on data denominated in ROL, used for GDP calculation.*

Source: NIS

Foreign Trade by Group of Commodities

change compared to the same period of previous year

	Exports		Imports	
	2002 H1	2002 H2	2002 H1	2002 H2
Total	9.1	34.5	3.1	26.5
1. Foodstuffs	23.1	-10.4	-11.9	6.7
2. Mineral products	12.3	100.2	-22.4	34.8
3. Chemicals and plastic products	-0.9	31.9	18.5	32.1
4. Wood products, paper	3.2	34.2	17.3	31.3
5. Textiles, wearing apparel, footwear	11.2	24.5	10.3	23.8
6. Base metals	3.6	33.7	3.2	27.6
7. Machinery and equipment	10.0	50.8	8.3	26.6
8. Other	12.9	25.3	8.1	25.8

Source: NBR

In 2002 Q3, the investment rate (calculated as the ratio of gross capital formation to GDP) ran at 26.7 percent, up 1.8 percentage points from the same period of 2001. This indicator stood at 21.8 percent during January-September 2002, increasing to 23.1 percent for 2002 as a whole.

Investment rose by 8.7 percent year on year during the last two quarters of 2002, driven mainly by fast growth rate (about 12 percent) in purchasing of equipment and transport means, which accounted for about one half of total investment. In addition, investment in new construction projects (about 40 percent of total) grew faster than in the first six months of 2002, due solely to the private sector. During the period under review, investment by the state-run companies seems to have been largely made to upgrade the industrial equipment, transport means and communication network; thus, compared with the first half of 2002, investment by public enterprises rebounded (by 11.3 percent in Q3 and 6.3 percent in Q4, compared with the similar periods of 2001). As regards companies with majority private capital, statistics do not provide sufficient information on the distribution of investment by structure in 2002 H2, but for the year as a whole, investment funds were mainly used for purchasing equipment and transport means.

2.1.3. Net external demand

In the second half of the year, both exports and imports of goods and services picked up markedly compared with the same period of 2001. Exports of goods and services surged by 18.4 percent year on year in 2002 Q3 and by 16.9 percent for 2002 as a whole (8.8 percent in H1). Imports of goods and services rose by 19.3 percent year on year in 2002 Q3 and by 12.1 percent for 2002 (a noticeable increase compared with 3.8 percent in the first half of the year).

In the latter half of 2002, compared with the same year-ago period, the most significant increases in export values were recorded by the following groups of goods[11]: machinery, apparatus, equipment and transport means, textiles, clothing and footwear, mineral products, base metals, transport services and other services; demand for imports rose especially for machinery and equipment, mineral products, chemicals, and plastics.

It is worth mentioning that in contrast with the previous years, in 2002, net exports contribution to GDP growth was positive (i.e. 0.7 percentage points), but because of missing data the

[11] According to data on balance of payments referring to exports and imports of goods and services, since data released by the NIS on GDP by expenditure do not allow structural analysis by category of products.

magnitude of this contribution in the latter half of 2002 cannot be assessed.

2.2. Supply

In 2002 H2, industry, construction, and services displayed a step-up in growth rates while gross value added in agriculture, forestry and fishery went down year on year, reflecting the decline in output as a result of unfavourable weather conditions.

Gross value added in agriculture fell year on year by 13.9 percent in Q3, 4.9 percent in January-September, and 3.9 percent for the year as a whole.

Gross value added increased from 2001 H2 in industry, construction, and services due to the following factors:

– alleviation of inflationary pressures, with favourable impact on production costs;

– significant productivity gains in industry (17.7 percent);

– increase in employment rate as also reflected by gradual decline in unemployment rate;

– steady concern of the authorities to improve the business climate[12] and underpin the development of private sector, particularly small and medium-sized companies, by providing consulting services and unredeemable funds[13].

Gross value added in industry rose by 10.9 percent year on year in 2002 Q3 and by 7.2 percent in 2002, up 0.3 percentage points from the first nine months.

Activity in **industry** was spurred by the following factors:

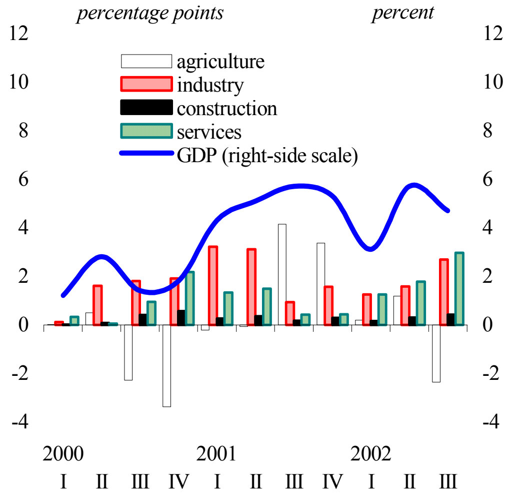
– productivity gains in the wake of investment in modern technology and revamping of the operational process;

– more favourable gap between labour productivity dynamics and growth of the gross wage, which contributed to preserving external competitiveness (labour productivity rose

[12] Government Decision No. 965/2001 on the approval of Romania's Industrial Policy and Action Plan and Government Decision No. 1189/2001 on the approval of Action Plan for removal of administrative barriers in the business environment.

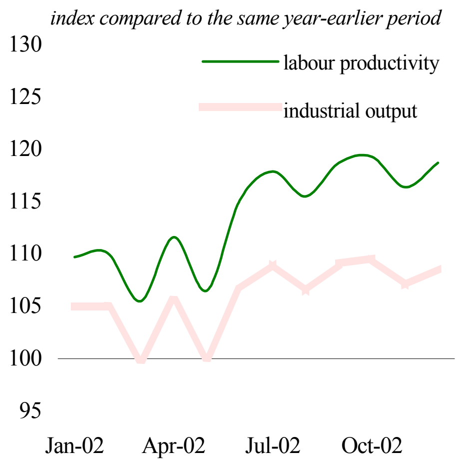
[13] Government Decision No. 840/2002 on the approval of the structure, indicators and funds associated with sub-programmes financed by the budget of the Ministry for Small- and Medium-Sized companies and Cooperation for 2002 under the programme "Measures to stimulate establishment and development of small- and medium-sized companies" and Government Ordinance No. 60/2002 ratifying the memorandum of understanding between Romania and European Community concerning participation of Romania to the EU programme for companies and entrepreneurship, in particular, for small- and medium-sized companies.

Contribution of the Main Components of Supply to GDP Growth



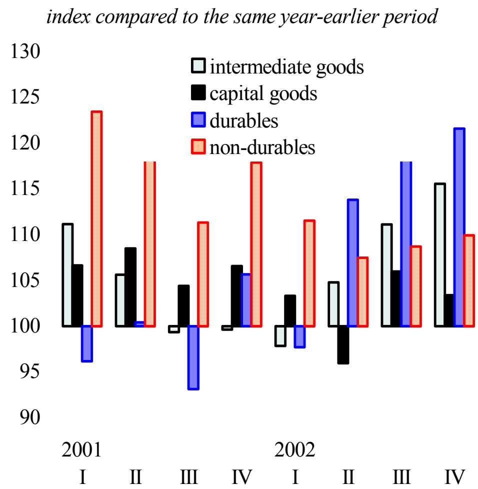
Source: NIS, NBR calculations

Industrial Output and Labour Productivity in Industry



Source: NIS

Industrial Output by Main Group of Commodities



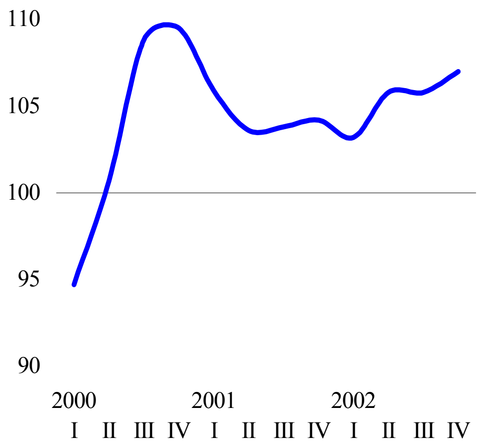
Source: NIS, NBR calculations

by 17.7 percent during the period under review, up some 8 percentage points from the first six months of 2002 while gross wages dropped by a real 0.7 percent on average in H2 compared with 2001 H2, reversing the increase of 2.2 percent in 2002 H1);

Against this background, industrial output growth rate accelerated from 3.6 percent in 2002 H1 to 8.3 percent in 2002 H2, due mainly to the increase in output of durables and intermediate goods by 24 percent and 13.1 percent respectively. Output of non-durables grew further above average (by 9.2 percent) while capital goods output inched up 4.7 percent after stagnating in the first half of 2002.

Construction Works

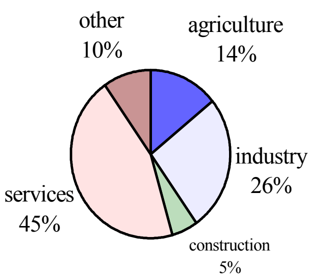
index compared to the same year-earlier period



Source: NIS

Gross value added in **construction** increased by 8.6 percent in 2002 Q3 from the same year-earlier period and by 6.9 percent for 2002 as a whole, by 0.1 percentage points higher than in January-September 2002. This rise was attributed to the widespread use of domestic bank loans for dwellings and to external financing from the international financial institutions for infrastructure development and upgrading. The value of construction works upped year on year about 6.4 percent in 2002 H2 due to construction works in the private sector, while those in the state-run sector experienced a contraction.

GDP Formation in 2002 Q3



Source: NIS, NBR calculations

Gross value added in the **services** sector went up 6.7 percent in Q3 from the same year-ago period and 5.3 percent for 2002 (0.7 percentage points higher than the last authorities' assessment prior to the tentative figures released by the National Institute for Statistics[14]. Given that the available data do not show an increase in household consumption of services (turnover in market services rendered to population[15] declined year on year in a range from 4.2 percent to 12.8 percent in every month of 2002 H2[16]), one can state that gross value added rose in the services sector due mainly to the corporate sector. Thus, diversification of products and their tailoring according to customer needs contributed to the positive developments of transport and storage services, postal and telecommunication services, trade, financial, banking and insurance services.

[14] In December 2002, the Ministry of Development and Prognosis' projection, based on preliminary data, was a 4.6 percent increase in gross value added in the services sector in 2002.

[15] Such as hotels and restaurants, activities of travel agencies, gambling and other recreation activities, hairdressing salons and personal grooming establishments, fitness, cleaning, dyeing textiles and furs, undertaking services etc.

[16] Except for services rendered by travel agencies whose turnover stepped up 11.7 percent on average over 2001 H2.

2.3. Budgetary and fiscal developments

In 2002 H2, the fiscal policy was aimed at achieving both disinflation and economic growth. Changes in both the fiscal policy configuration and the manner in which the fiscal policy was implemented, including in the structure and sources of funding the budget deficit, contributed to the decline in consolidated budget deficit to 2.6 percent of GDP, a lower-than-originally projected level for 2002.

Maintenance of the fiscal deficit within cautious limits was accompanied by further improvement of the regulatory framework. Thus, in order to alleviate discriminatory fiscal treatment of companies, Law No. 414/2002 was issued, thereby removing some facilities, which gave birth to distortions. Moreover, the aforementioned law was instrumental in incorporating legislation on profit tax into one piece of legislation, the approval of Government Decision No. 859/2002[17] bringing forth additional measures to the regulatory framework governing the tax system. In addition, several measures aimed at putting a brake on tax evasion were envisaged by Law No. 521/2002 on supervision and licensing of manufacturing, import and movement of some goods subject to excise duties. Law No. 500 was passed – the new public finance law – which was aimed at enhancing fiscal transparency, providing greater flexibility and predictability of budgeting.

The government budget featured higher-than-expected revenues, when taking into account the revisions operated[18] (in 2002 H2 58.9 percent of the annual figure projected and 101.7 percent of the target for 2002 as a whole); H2 revenues rose 1.4 times compared with the cumulative figure reported for June; concurrently, expenditures increased 1.2 times. The rise in revenues was attributed mainly to better performance in collection of excise duties, customs duties, VAT, and profit tax. Expenditures expanded relatively evenly, except for public debt-related outlays, which declined markedly. The government budget underwent two revisions during this period: in August, the deficit was revised downward due especially to lower interest payments on the public debt while in November, the deficit was revised upward as a result of decline in budget revenues.

Consolidated Budget Revenues*)

%

	2001 H2	2002 H1	2002 H2
Revenues	100.0	100.0	100.0
Tax revenues, of which:	93.7	92.9	93.2
Profit tax	6.2	6.6	6.8
Income tax	10.3	9.4	9.2
Social security contributions	36.2	37.1	35.1
VAT	22.0	21.9	24.5
Customs duties	2.6	2.0	2.2
Excise duties	8.0	6.5	7.9
Non-tax revenues	6.1	6.9	6.3
Capital revenues	0.1	0.2	0.1
Non-redeemable funds	0.1	0.0	0.3

*) transfers between budgets were removed

Source: NBR calculations based on MPF data

The full-year consolidated government budget deficit ran at ROL 39,826.5 billion (55.2 percent of which was recorded in 2002 H2), well below the indicative target set in the Technical

[17] This GD contains instructions concerning methodology underlying the calculation of profit tax.

[18] However, revenues did not reach 31.8 percent of GDP as initially projected in the draft budget law for 2002.

Memorandum of Understanding agreed with the IMF (87.8 percent of the target). During the considered period, the main components of the budget posted divergent developments. Thus, monthly balances of the government budget and local budgets were either on surpluses or on deficits while social security budget ran deficits every month, except for December. By contrast, government budget and local budgets ran wide deficits in the last two months of the year.

In the latter half of 2002, revenues of the consolidated general budget reached 16.1 percent of GDP (13.6 percent of GDP in 2002 H1) while expenditures accounted for 17.5 percent of GDP (14.8 percent of GDP in 2002 H1). All in all, in 2002 the social security budget[19] and the special fund for rehabilitation of public roads posted poorer performance in revenue collection. On the expenditures side, subsidies, bonuses and transfers continued to hold the largest share (14 percent of GDP and 43.4 percent of total expenditures respectively) as social transfers represented a priority of the government's policy. The increase in social transfers and in capital expenditures exceeded the amounts saved on the back of lower public debt-related outlays.

Consequently, consolidated general budget posted a small primary deficit in 2002 H2. In 2002, the primary balance was however, on surplus, i.e. 0.4 percent of GDP, but it was lower than the target set initially (0.6 percent of GDP, a level similar to that recorded in 2001).

In 2002 H2, the consolidated budget deficit was entirely covered from external resources. These consisted mainly of: projects co-financing from international institutions and deposits in the Ministry of Public Finance's foreign exchange account following the Eurobond issues launched on the international capital markets in the first half of 2002, as well as funds from the loan under the World Bank's PSAL II. Thus, during the latter half of 2002, the Ministry of Public Finance's foreign exchange account fell by about EUR 130 million and USD 200 million; external resources earmarked for project financing amounted to almost ROL 18,000 billion.

Against this background, resources provided by the domestic sector, consisting in net amounts raised from households following the sale of Treasury certificates as well as proceeds from bank assets disposed by Bank Asset Recovery Agency, and privatisation proceeds offset the decline in the volume of government securities held by banks and bank clients, legal

Consolidated Budget Expenditures*)

%

	2001 H2	2002 H1	2002 H2
Expenditures, of which:	100.0	100.0	100.0
Public authorities	4.9	4.5	4.8
National security and defence, and public order	10.4	9.9	9.9
Education	8.2	10.8	9.0
Health	12.7	12.7	10.9
Social activities and culture	37.2	38.4	37.6
Economic activities	14.1	12.5	18.4
Interest related to public debt	10.3	9.5	7.2

*) including adjustments according to IMF methodology; transfers between budgets were removed

Source: NBR calculations based on MPF data

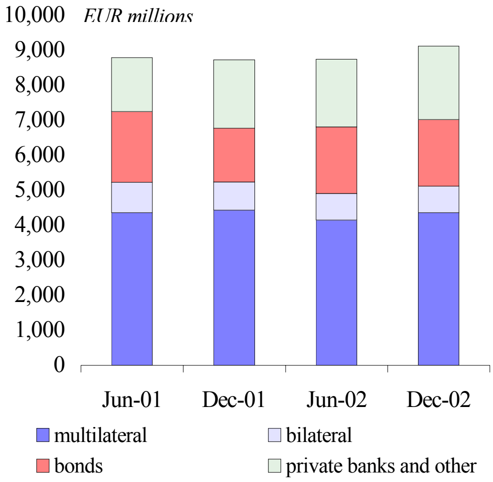
Balance of Consolidated Government Budget

percent of GDP

	2001 H1	2001 H2	2002 H1	2002 H2
Conventional deficit	-1.53	-1.78	-1.18	-1.45
Primary surplus (+)/ deficit (-)	0.09	0.49	0.40	-0.01

Source: NBR calculations based on data supplied by MPF and NIS

External Public Debt
- financing sources -



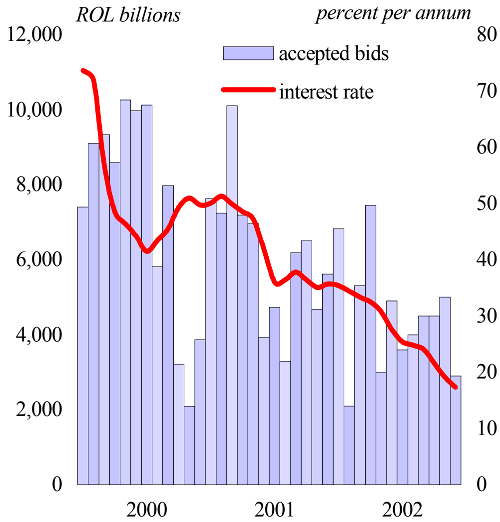
Source: NBR calculations based on MPF data

[19] Discrepancy between weak revenue collection and large expenditures was the characteristic feature of the social security budget in the previous years as well.

entities and contributed to the increase in the Treasury's General Account by more than ROL 4,500 billion.

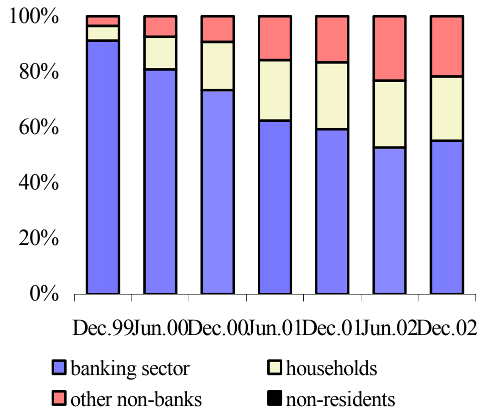
The Ministry of Public Finance organised auctions for government securities destined to banks and bank clients; monthly issues of government paper were addressed to fully roll over the T-bills falling due. The investors' demand for government securities was high, although by issuing T-bills the public authority also intended to raise funds necessary to redeem two issues of government securities launched for restructuring of the banking system[20]. Moreover, external financing allowed frequent re-scheduling of issues, so that the volume of government paper placed on the market (more than ROL 29,000 billion) was about ROL 3,300 billion lower than the volume announced; during the period under review, a net volume of government securities worth only ROL 800 billion was redeemed. The average monthly interest rates on the newly-issued government securities continued to follow a downward path, dropping by more than 10 percentage points in the latter half of 2002; frequent recourse to two-year notes made the average maturity of government securities increase to more than 300 days.

Interest-bearing and Discount Government Securities Issues



The volume of new funds supplied by individuals fell more than 8 times from the first half of 2002, as individuals were offered mostly 6-month government securities. The relatively weak demand for such securities in July and August rendered the maturing T-bills difficult to be fully rolled over, the net redemption equalling about ROL 800 billion. The cut in interest rates on 6-month government paper by only one percentage point in September and October and resumption of 90-day T-bill issues starting November made investors shift towards these saving instruments. Thus, in 2002 H2, Treasury certificates worth ROL 16,250 billion were floated, exceeding the government paper falling due in this period by more than ROL 400 billion.

Composition by Holder of Government Securities Outstanding



Note: - forex-denominated securities converted in ROL at end-of-period exchange rate
- composition reflects secondary market movements

Effects of banking system restructuring on public debt continued to alleviate in this period too, with bad assets taken over by the Ministry of Public Finance equalling about USD 8 million.

At end-2002, domestic public debt[21] amounted to ROL 108,434 billion, about ROL 4,000 billion lower compared to end-June 2002. Structural analysis shows that borrowings to finance and refinance public debt gained weight, increasing by 7 percentage

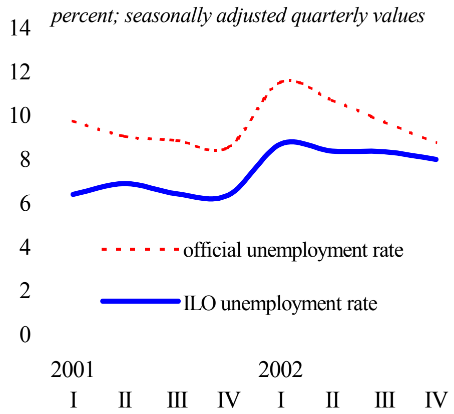
[20] A total amount of ROL 8,000 billion for restructuring of Bancorex and Banca Agricolă.
[21] Defined based on Art. 1, para. 3 of Law No. 81/1999 – Public Debt Act.

points from 86 percent to 93.3 percent of public debt. Against the backdrop of sharp decline in the volume of government securities issued on the basis of some special laws (by about ROL 8,500 billion), such borrowings accounted for only 6.7 percent of domestic public debt.

2.4. Labour market

2.4.1. Labour force

Official Unemployment Rate and ILO Unemployment Rate



Source: NIS - AMIGO

According to official data, unemployment in 2002 H2 declined considerably. On average, the share of job seekers registered with the Employment and Vocational Training Agency (EVTA) in total labour force was 8.6 percent in the said period, down 3.2 percentage points from the average for 2002 H1. The drop in unemployment is also illustrated by data provided by the AMIGO survey, the average ILO unemployment rate[22] in 2002 H2 (7.7 percent) being lower versus H1 (9 percent).

An overview of the tightening/easing of labour market conditions can be made based only on a comparison between these conditions and those in the same year-earlier period as the aim of this assessment is to correct seasonal influences that are highly relevant in the case of data on employment and unemployment. Although data supplied by the AMIGO survey are deemed more relevant, such a comparison cannot be made – due to methodological alterations experienced by the AMIGO survey in 2002 – but based on registered unemployment. In the last two months of 2002, unemployment rate disclosed by EVTA did not follow the seasonal pattern of the prior years. Thus, although the year-end is associated with the growth in unemployment, in November and December 2002 the unemployment rate kept declining.

Mention should be made that EVTA data seem to overestimate unemployment rate to the detriment of staff numbers, having a negative effect on the accurate assessment of labour market conditions. In this respect, one can mention the lower unemployment rate and the larger staff numbers permanently reported by the AMIGO survey[23]. Under these conditions, it is difficult to see the 3.3 percent drop (2002 H2/2001 H2) in the number of employees in the economy as an indication of looser labour market conditions, the more so as, during July-December 2002, unemployment rate stuck to the downward path. Furthermore, if we compare the demand for and supply of

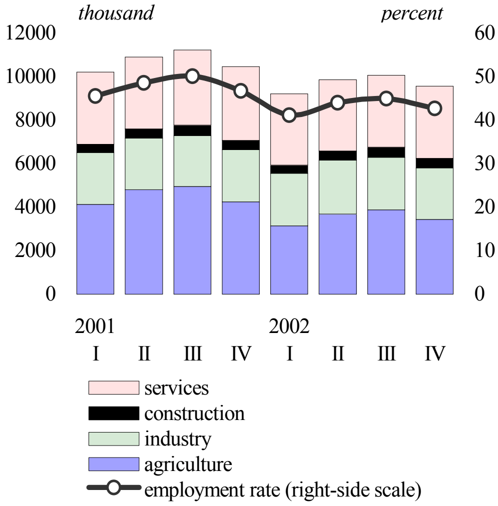
[22] Based on ILO methodology.

[23] The comparison between the two sources providing statistical data shows, in 2002 H2, an average number of 1,588 thousand employees that are not included in official statistical data, along with 10.8 thousand more registered unemployed.

labour by using the ratio between the number of indemnified unemployed and the number of vacancies registered with EVTA, the decreasing value of this ratio, from the 23:1 average in 2001 H1 to 19:1 in 2002 H2[24], points once more to the shrinkage of the labour market. Another reason in this respect is the smooth implementation of the 2002 National Employment Programme; in 2002, about 540 thousand unemployed were hired (more than twice the number planned initially), the EVTA mediation programmes making a major contribution (almost 60 percent of total hirings).

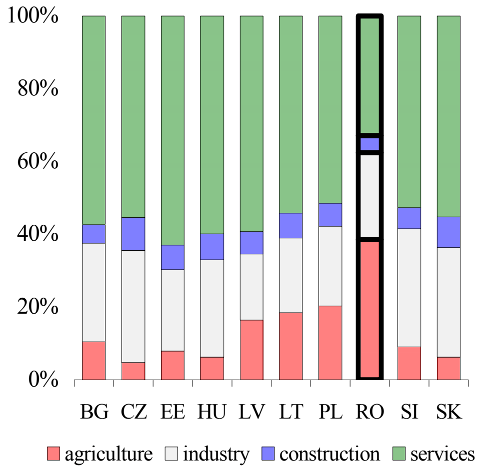
It is worth noting that the revision, starting with 2002 Q1, of the definitions and scope of the main employment indicators provided by the AMIGO surveys improved their international comparability. From this viewpoint, Romania stands out in terms of an activity rate of population over 15 years (included), which is 3.2 percentage points[25] higher than the average for CEFTA countries and in terms of an unemployment rate 4.5 points lower than the average for these countries. These differences derived partly from the stronger seasonality of economic activity in Romania, the rise in employment in Q2 and Q3 owing mainly to the commencement of agricultural works, a large part of the additional labour force engaged in this activity coming from the inactive population[26]. Romania is, in fact, the country featuring the largest number of employed in the agricultural sector among CEFTA countries – 39 percent of total employment in 2002 Q3[27] – followed, at quite a distance, by Poland which records 20 percent of the employed in agricultural sector. In all the other economic sectors, services in particular (which account for 33 percent of the employed, as compared to an average of 55 percent for the other CEFTA countries) Romania displays a relative underemployment of labour force.

Employment by Sector and Employment Rate



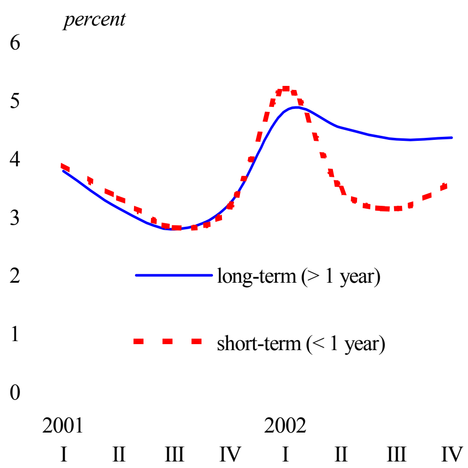
Source: NIS

Composition of Employment in CEFTA Countries, 2002 Q3



Source: NIS - CESTAT No. 3/2003

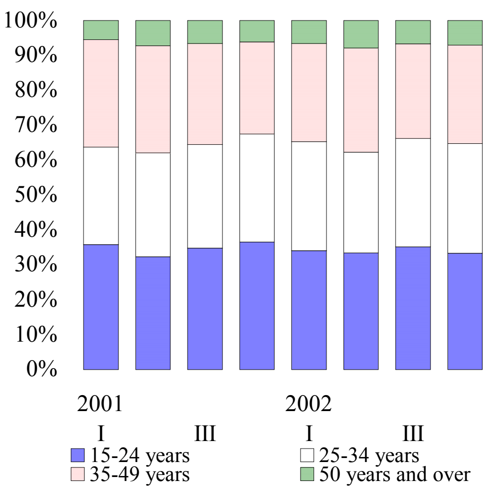
Unemployment Rate by Duration



Source: NIS - AMIGO

24 Own calculation based on indicators supplied by EVTA.
25 Source: NIS-CESTAT No. 3/2002. In order to ensure the comparability of statistical indicators using the latest data available, the reference period was 2002 Q3.
26 In 2002 Q2 and Q3, the number of employed in agriculture jumped by 745 thousand from 2001 Q1, while inactive population in the rural area declined by 526 thousand.
27 If we refer only to the employed in the private sector, 52.7 percent of them were working in agriculture in Q3. Self-employed and unpaid family workers accounted for 94.6 percent of farmers, the two said categories representing 22.5 percent and 16.3 percent respectively of the total number of the employed.

Unemployment by Age Group



Source: NIS - AMIGO

The composition of 2002 H2 unemployment illustrates the difficult labour market conditions. The prevalence of long-term unemployment (over one year) – 56.4 percent of total unemployed – and generally the high average duration of unemployment (21.6 months) and its expansion (by 1.1 months from the H1 average)[28] highlight the difficulties of the jobless to meet employers' demands. One of the latter's top requirements appears to remain the relevant work experience, the 15-24 age group providing the largest part of the people who are out of work (34.2 percent of total).

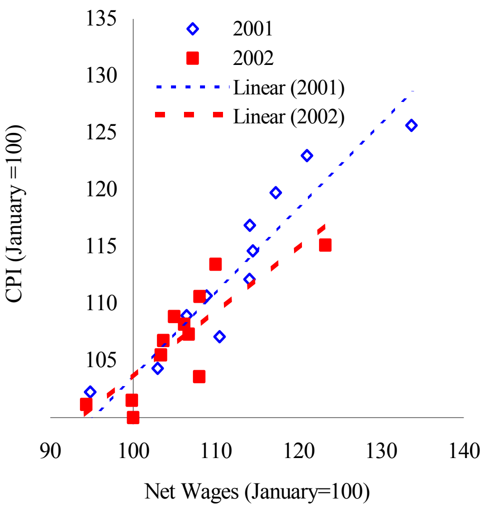
2.4.2. Incomes

2.4.2.1. Wages

In the reviewed period, the moderate wage increases – gross average wages expanded by a real 2.3 percent year on year and by 1.9 percent from H1 – alleviated the pressure of labour costs on consumer prices.

On the other hand, the net wages-CPI correlation was, throughout 2002, considerably lower than in 2001 (the correlation coefficient between the two variables equalling 94 percent in 2001 and 84.4 percent in 2002). Moreover, the strong impact of end-of-year bonuses[29] on net nominal wages – December average wages were 12.1 percent higher from November – was not passed on in consumer prices, as December inflation rate was lower that that in the prior month.

Correlation between CPI and Net Wages 2001-2002 Comparison



The analysis of wage increases by sector shows mixed developments. As compared to 2001 H2, in the latter half of 2002, moderate increases in real net wages were detected in industry and agriculture; in exchange, wages rose more substantially in the services sector, in construction in particular, where real net wages augmented in the said period by 9.5 percent, amid the 6.4 percent growth of the volume of construction works.

In industry, wage gains – both gross and net (real values) – compared to 2001 H2, were smaller than the growth rate of labour productivity. This is also illustrated by the evolution of the unit labour cost[30] which diminished by 15.6 percent during

[28] The growth of the average duration of unemployment is also illustrated by the downward trend in the share of indemnified unemployed in total registered unemployed, manifest throughout 2002, which fell below 50 percent in 2002 H2 (EVTA data). According to Law No. 76/2002, the unemployment benefit is granted, starting 2002, for a period of at most 12 months.

[29] They include, for instance, annual bonuses from the wage fund, Christmas bonuses, and payment of entitlements for holidays not yet taken as well as payment of long hours not paid during the year.

[30] Unit labour cost is calculated as a ratio between the (CPI-deflated) gross wage index and the labour productivity index.

the same period. Large competitiveness gains were recorded in manufacturing (unit labour cost fell by 16.3 percent) and energy sector. The latter saw improvement in competitiveness as a result of restructuring measures that contained wage increases (real gross average wage dropped by 2.6 percent) and reduced the number of employees by 8.5 percent versus 2001 H2.

In other sectors in which companies with majority state-owned capital monitored based on Government Decision No. 866/2001 prevail, net-wage gain remained in real positive territory in 2002 H2 too (compared to 2001 H2): up 2 percent in mining (despite the more than 1 percent decline in productivity; up 5.3 percent in transport means other than road transport means, up 4.8 percent in the transport and warehousing services.

Services sector posted a 4.2 percent growth in real gross average wage in 2002 H2 year on year, which entailed a 4.9 percentage point positive differential as against the change in real gross wage in industry. Choosing industry as representative for the tradables sector (producer of goods subject to international competition) and services as illustrative for the non-tradables sector, this wage differential (detectable throughout 2002), corroborated by a steeper rise in consumer price index for services versus industrial producer price index (2.2 percentage points, on average) suggests the manifestation of the Balassa-Samuelson effect in the Romanian economy throughout 2002.

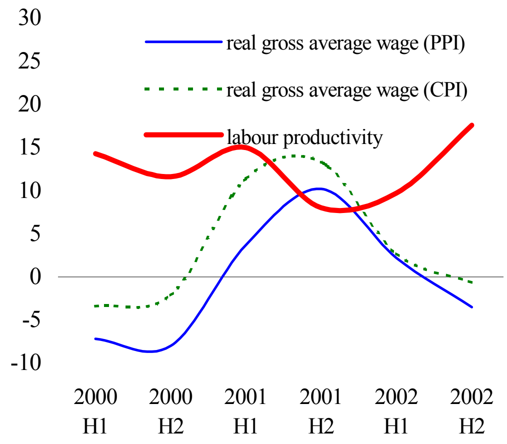
The purchasing power of net wages in public administration, and particularly of those in healthcare and social security fell in 2002 H2 from 2001 H2, yet wages in education moved up by a real 10.3 percent, following the implementation, in October, of the second stage of indexation stipulated by Government Emergency Ordinance No. 187/2001. It may be asserted that in 2002 – in terms of the inflation target (22 percent December/December; 26 percent annual average) – the Government managed to maintain constant the level of real net wages in the public sector. Attaining an actual inflation rate below the target entailed the 3.5 percent[31] increase in the purchasing power of the net average wage in this sector as against 2001.

2.4.2.2. Other incomes

In the latter half of 2002, the realignment of pensions carried on with the implementation of the second stage set forth in Government Decision No. 1315/2001. Following this realignment and the indexations in September and December,

Gross Wage and Labour Productivity in Industry

change compared to the same period of previous year



Source: NIS, NBR calculations

Real Net and Gross Wages

change compared to the same period of previous year

	Net		Gross	
	2001 H2	2002 H2	2001 H2	2002 H2
Whole economy	3.4	3.2	10.7	2.3
Agriculture, hunting and related services	0.7	0.2	7.4	-0.6
Industry	5.2	0.7	13.3	-0.7
of which:				
Mining	4.0	2.0	13.0	0.2
Manufacturing	5.4	1.5	13.5	0.4
Energy	8.7	-0.6	17.5	-2.6
Construction	0.0	9.5	7.8	9.5
Services*	2.6	4.6	9.3	4.2
of which:				
Public administration	-3.7	-0.4	1.0	0.5
Education	-3.9	10.3	2.4	9.8
Healthcare	-0.9	-3.2	5.4	-4.5

*) By weighting to the number of employees in: transports and warehousing, postal services and telecommunications, hotels and restaurants, financial intermediation, real estate transactions, public administration, education and healthcare.
Source: NIS, NBR calculations

[31] Calculated based on monthly averages.

the purchasing power of the monthly average pension picked up 6.9 percent versus 2001 H2. Despite the real positive increase of pensions and the large number of pensioners (over 6.3 million in 2002 H2) one cannot assert that the increase in these incomes would prompt domestic demand to generate inflationary pressures. Amid the low level of the average pension (35 percent of the average wage in 2002 H2), the demand for goods and services of the retired is most likely limited to staple goods and services, among which apartment maintenance expenses (energy, heating, natural gas, water) held a large share.

The purchasing power of incomes of the unemployed picked up in H2, the monthly unemployment benefit moving up by a real 8.4 percent and from 32 percent to 34 percent[32], as a share in the net average wage (both as compared to 2001 H2). The other categories of incomes (welfare allowance and resettlement allowance which were granted to persons entitled to them before the enforcement of Law No. 76/2002) climbed as well in real terms (by 5.1 percent and 5.5 percent respectively) but the numbers of recipients diminished. As with pensions, the low level of these incomes prevented the rises occurring in the said period from having an inflationary impact.

An important source of additional incomes for many households were the transfers of non-residents (nationals working abroad), to residents. According to balance-of-payments data, in 2002 H2, these transfers equalled USD 881 million, up 32.1 percent year on year. The conversion of these transfers in local currency puts additional pressures, pushing up the real appreciation of the ROL beyond the level accounted for by economic fundamentals and requires the central bank's intervention in the money and foreign exchange market.

2.5. External environment

2.5.1. External demand

After a promising onset of the year, structural imbalances, volatility of financial markets and the geopolitical tensions slowed down the global economic upturn in the latter half of 2002.

Therefore, despite the bright economic prospects at the outset of 2002, accompanied by the introduction of the euro notes and coins, the expected economic growth, after the poor performance in 2001, failed to materialise. In 2002 Q3 and Q4, euro-zone GDP went up 0.4 percent and 0.2 percent respectively from the year-earlier period, economic growth for

[32] Source: EVTA

2002 equalling only 0.8 percent, below the 2001 level (1.4 percent). As for the drivers of growth, in Q3 private consumption and exports played the key role while in Q4 government consumption prevailed over exports. Investments remained on the downtrend the same as in the first two quarters, albeit at a slower pace.

Despite the worsening of the international economic environment, the countries seeking EU accession displayed, in general, a robust economic growth underpinned mainly by domestic demand. According to preliminary data[33], the best performers in 2002 H2 were the Baltic countries (especially Latvia which recorded growth rates of 7.4 percent and 8.3 percent respectively in 2002 Q3 and Q4 from a year earlier).

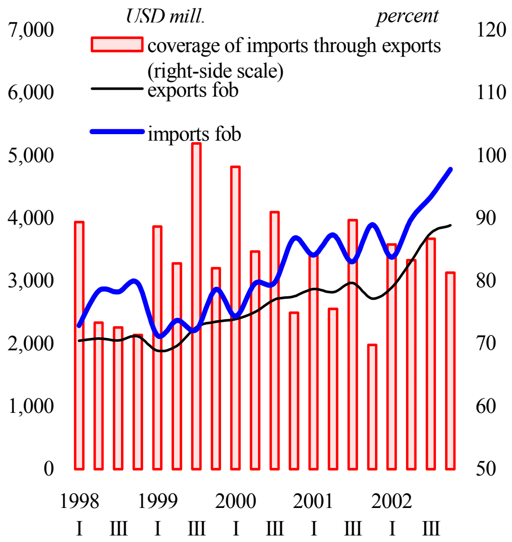
Although the economic situation of Poland improved from H1 it further posted, the same as the Czech Republic, the weakest performance, recording growth rates below 2 percent.

2.5.2. Foreign trade

The adjustment of external accounts carried on into the latter half of 2002, the positive gap between the growth of exports (up 35.8 percent from a year-earlier) and that of imports (up 27 percent)[34] – albeit sharply lower over 2002 H1 – entailing the narrowing of trade deficit by 5.6 percent and the 5.3 percentage point increase in the coverage of imports through exports.

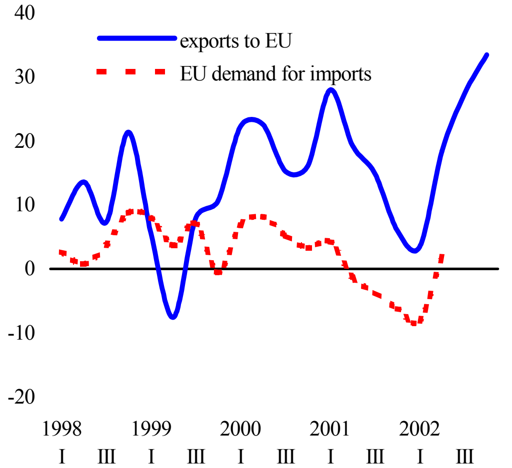
The improvement in the composition of Romanian exports initiated as early as 2002 H1 continued in H2, the share of “machinery, apparatus and equipment” going up 2.4 percentage points year on year (up to 21.9 percent). Nevertheless, export of textiles, ready-made clothes, and footwear, which were in high demand mainly on Western European markets, still prevailed. Under these conditions, the growth of Romanian exports is highly conditional upon the EU demand for imports, the two indicators showing a strong correlation as early as 2000. It is to be noted that despite the fact that the shrinkage of the EU demand for imports in 2001 and at the beginning of 2002 slowed down the rate of increase in domestic exports, they remained in positive territory, which helped consolidate Romania’s presence on this market. This trend was manifest in 2002 H2 as well, the stepped-up private consumption in the euro-zone in the last two quarters of the year spurring Romanian exports.

Trade Balance



Exports to EU and EU Demand for Imports

change compared to the same period of previous year

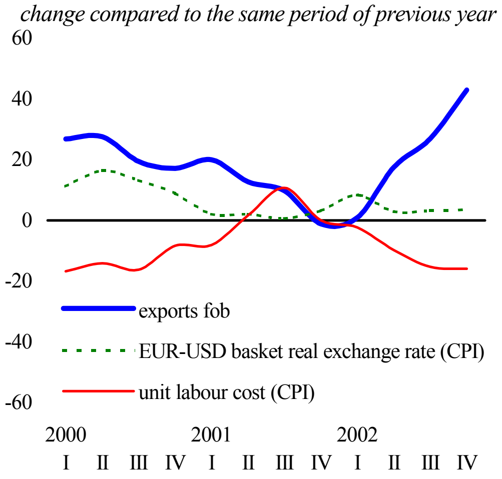


Source: IMF - IFS, NBR

[33] Source: BIS – Economic Indicators for Eastern Europe, April 2003.
[34] Based on balance-of-payments data.

Exports, Real Exchange Rate and Unit Labour Costs in Industry

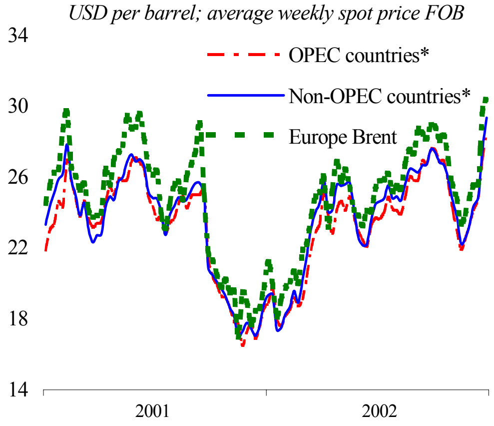
change compared to the same period of previous year



Source: NIS, NBR

World Crude Oil Prices

USD per barrel; average weekly spot price FOB

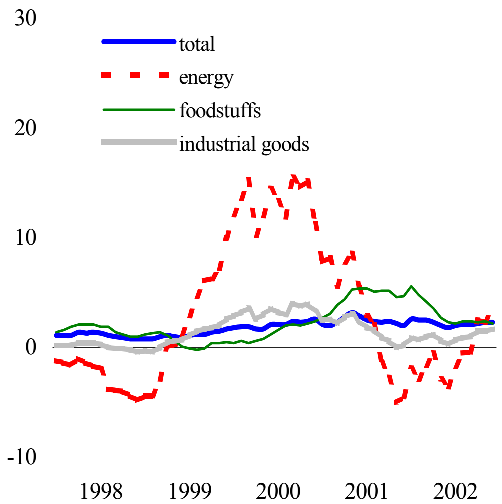


**) Averages weighted by estimated export volume.*

Source: EIA

HICP and its components

change compared to the same period of previous year



Source: Eurostat

The competitiveness of Romanian exports was underpinned in the period under review by the substantial productivity gains and the moderate growth of manufacturing wages (unit labour cost dropped by 16.3 percent in 2002 H2 year on year) which offset the appreciation of the effective real exchange rate entailed by the favourable development of the terms of trade and, possibly, by the manifestation of the Balassa-Samuelson effect.

2.5.3. Imported inflation

The major international development with a positive impact on domestic inflation (by anchoring inflation expectations and easing the pressure put by the higher oil price) was the depreciation of the US dollar against the main foreign currencies, amid the Iraqi crisis and the poorer-than-expected performance of the US economy in 2002 H2.

As demand for oil increased, due to an unusually cold winter in North America and Asia, and the Iraqi crisis sped up, the oil price kept rising in 2002 H2. In Q3, the average oil price was USD 25.5 /barrel, up 7.9 percent from the previous quarter. In Q4, the oil price became more volatile, the price per barrel ranging from USD 22.1 to USD 28.95 in the last week of 2002.

Even if these developments triggered, in the last two quarters of 2002, the rise in import prices (by 1.1 percent and 4.2 percent year on year) the conveyance of this impact on domestic prices was considerably contained by the real appreciation of the ROL against the USD. The change in the fuel price during July-December 2002 (up 16.5 percent over June 2002) was rather the joint effect of the large share of excise duties and the contribution to the special road fund on fuel price (35 percent and 15 percent for petrol)[35] as well as of the depreciation of local currency against the euro.

As regards imported inflation through non-energy products, its impact may be deemed limited as 2002 H2 witnessed favourable inflation rate developments in the main commercial blocs (euro-zone and CEFTA countries). In the euro-zone, the change in HICP was, in the reviewed period, 0.4 percentage points lower from a year earlier. Moreover, this change was induced by the volatile price components of the generic consumption basket (chiefly non-processed foodstuffs to which the energy price was added in Q4), industrial producer prices experiencing below-average increases.

[35] Both are expressed in euro.

In 2002, all CEFTA countries made good progress in dragging down inflation, the annual average inflation rate[36] (Romania excluded) diminishing to 3 percent (from 6.4 percent in the prior year). In 2002 H2, disinflation gained momentum, the average inflation rate running at only 2.2 percent year on year.

2.5.4. Exchange rate

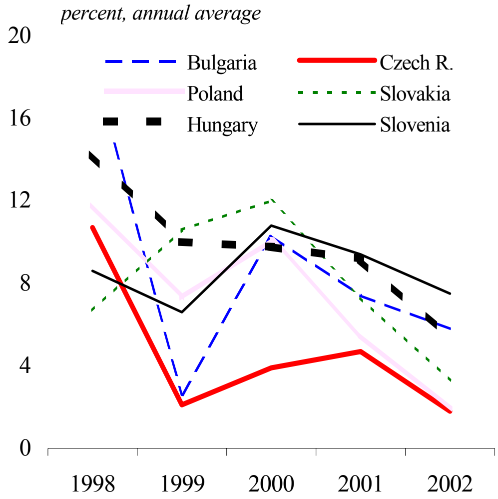
With the ROL/USD exchange rate representing a key monetary policy transmission channel, its steady evolution in the considered period, helped by the depreciation of the US dollar on international markets and by the forex market (including exchange houses) surplus represented an antiinflationary anchor. Nominal exchange rate stability induced a substantial appreciation in real terms (by 9.9 percent from 2001 H2, on average).

Even though the euro was not yet the reference currency on the foreign exchange market, the strengthening of the euro against the US dollar on the international markets left its mark on the domestic market, not only by impacting domestic prices via excise duties and imports of commercial goods – but also by the public's stronger preference for the euro – also illustrated by the option to express in euro prices that had previously been stated in US dollars (for instance, transactions in real estate and motorcars).

Compared to the same year-earlier period, in 2002 Q1, local currency witnessed a stepped-up real appreciation against the euro (10.8 percent), yet – as a result of the consolidation of the euro on international markets – this trend alleviated markedly starting with Q2, so that, in 2002 H2, the ROL depreciated against the euro by 1 percent in real terms. As concerns the evolution of the ROL against the euro in 2002 H1 and H2, it can be noticed that the depreciation concentrated in H1, while H2 brought about a slight real appreciation (-3.4 percent and +0.5 percent[37] respectively, real values). Against a basket consisting of 60 percent EUR and 40 percent USD, in the reported period the ROL appreciated by a real 3.3 percent year on year.

Inflation Rate in CEFTA Countries

percent, annual average



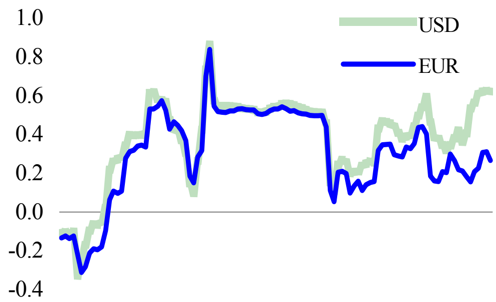
Source: central banks

Euro Exchange Rate against US dollar

USD/EUR

Source: ECB

Moving Correlation Coefficients (r_t) between ROL Depreciation and Inflation Rate



Note:

$$r_t = \frac{\sum_{i=t-29}^{t}(x_i - \bar{x})(y_i - \bar{y})}{30 \times \sqrt{\frac{\sum_{i=t-29}^{t}(x_i - \bar{x})^2}{30}} \times \sqrt{\frac{\sum_{i=t-29}^{t}(y_i - \bar{y})^2}{30}}}$$

where: r_t = correlation coefficient for month t;

x = ROL depreciation;

y = inflation rate

[36] Average weighted by each country's contribution to 2002 CEFTA GDP.

[37] June 2002/December 2001 and December 2002/June 2002, respectively.

Impact of exchange rate on inflation rate

Over the past several years exchange rate was the variable which had the swiftest and strongest impact on inflation and inflation expectations, the relevance of this transmision channel of monetary policy being enhanced by the fact that net foreign assets represent the main source of money creation*.

The relation between exchange rate and inflation rate can be highlighted by an error correction model (ECM). The specification of ECM consists of two equations: a co-integration equation for the long-term equilibrium relation between the variables used and an equation for the short-term development of the dependent variable due to the variation of independent variables and the disruption of equilibrium.

The ECM using as variables the consumer price index and the ROL/USD nominal exchange rate has the following specification:

$$IPC_t = \beta + \chi ER_t + u_t$$

(equilibrium equation);

$$\Delta IPC_t = \alpha + \lambda u_{t-1} + \delta \Delta ER_t + \phi \Delta IPC_{t-1} + v_t$$

(short-term development equation);
where:

IPC – consumer price index (in logarithm);
ER – ROL/USD nominal exchange rate (in logarithm);
u, v – residual terms of regression equations;
Δ – first difference operator;
α, β – constants;
χ – long-term elasticity coefficient of prices in terms of exchange rate;
λ – error correction coefficient;
δ – coefficient showing how much of the ROL depreciation against the USD turns into inflation;
ϕ – inflation persistence coefficient.

The estimates of the two equations for January 1999-December 2002 are shown in the tables below:

Dependent Variable: IPC
Method: Least Squares
Sample: 1999:01 2002:12
Included observations: 48

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.710196	0.173946	4.082846	0.0002
ER	1.095097	0.017261	63.44186	0.0000
R-squared	0.988700	Mean dependent var		11.74036
Adjusted R-squared	0.988455	S.D. dependent var		0.347841
S.E. of regression	0.037375	Akaike info criterion		-3.694839
Sum squared resid	0.064258	Schwarz criterion		-3.616872
Log likelihood	90.67612	F-statistic		4024.871
Durbin-Watson stat	0.262000	Prob (F-statistic)		0.000001

* *Dorina Antohi, Ioana Udrea, Horia Braun – Monetary Policy Transmission Mechanism in Romania, Occasional Papers No. 3, National Bank of Romania, 2003*

Dependent Variable: D(IPC)

Method: Least Squares

Sample (adjusted): 1999:02 2002:12

Included observations: 47 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.011027	0.002985	3.694337	0.0006
RESID (-1)	-0.076109	0.040222	-1.892219	0.0652
D (ER)	0.344164	0.065344	5.266935	0.0000
D (IPC(-1))	0.233688	0.115920	2.015950	0.0501
R-squared	0.544874	Mean dependent var		0.025056
Adjusted R-squared	0.513121	S.D. dependent var		0.013004
S.E. of regression	0.009074	Akaike info criterion		-6.485529
Sum squared resid	0.003541	Schwarz criterion		-6.328069
Log likelihood	156.4099	F-statistic		17.15977
Durbin-Watson stat	2.012084	Prob(F-statistic)		0.000001

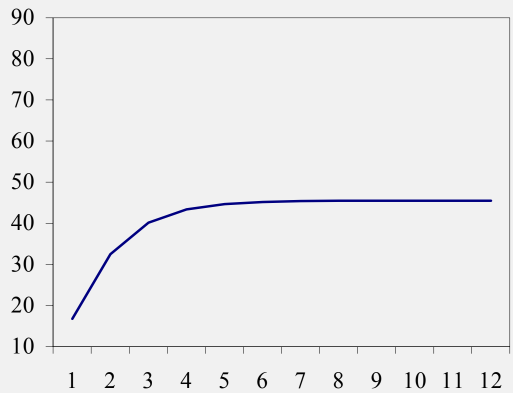
where:

IPC – consumer price index (in logarithm);
ER – ROL/USD nominal exchange rate (in logarithm);
D(IPC) – inflation rate;
D(ER) – exchange rate development;
resid – residual term of the co-integration equation.

Error correction coefficient resulting from the estimation suggests a swift adjustment of prices to exchange rate shocks. Moreover, the model shows that about 34.4 percent of the inflation rate development is explained by the exchange rate development.

According to variance decomposition of a bivariate VAR model between inflation rate and exchange rate development for the same period, inflation rate fully adjusts to an exchange rate shock after 4-5 months and around 45 percent of inflation rate change is due to exchange rate change.

Percent determined by exchange rate change

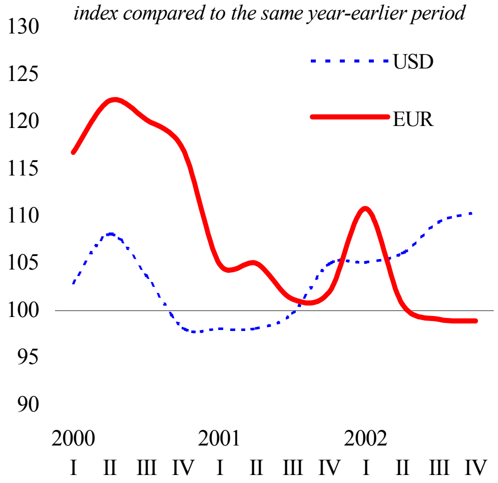


3. Monetary policy

3.1. General features

Developments of ROL Exchange Rate *)

index compared to the same year-earlier period

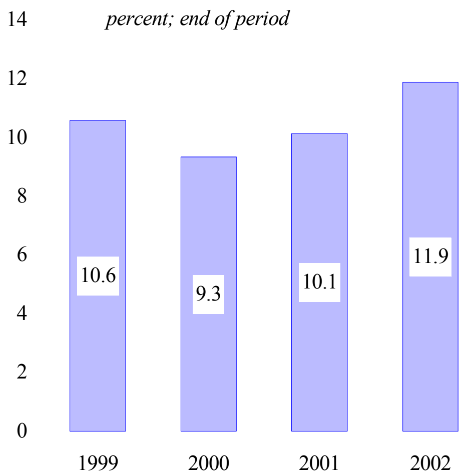


**) appreciation (+), depreciation (-) in real terms*

Source: NIS, NBR

Non-government Credit (Share of GDP)

percent; end of period



Source: NIS, NBR

The sped-up disinflation in the latter half of 2002 echoed in a drop to 17.8 percent in the annual rate of increase in consumer prices (December/December), well below the 22 percent inflation target. Behind this overperformance stood the enhanced coherence of macroeconomic policies, as the pressure arising from the hike in regulated prices was stuck at the level recorded in 2002 H1.

Tighter macroeconomic policies helped put a brake on price increases and mitigated inflation expectations, thereby limiting the effect of administered price adjustment to spread to market-driven prices. Income policy gained in firmness, leaving the real increase in whole-economy gross average wage to remain at manageable levels, still below the productivity gains detected for most industrial sub-sectors. Drawing on improved competitiveness in a better-than-expected external environment[38], Romanian exports grew at a noticeably faster pace compared to the same year-earlier period while the increase in imports – albeit accelerating as well – was slower than that of exports. Moreover, the compression of public spending (interest on public debt in particular) helped to achieve a remarkable performance in the consolidated budget deficit, which stood at 2.6 percent of GDP for 2002 as a whole, 0.4 percentage points below the originally programmed figure.

During the second half of 2002, the exchange rate policy was more consistently oriented towards upholding disinflation, as the National Bank of Romania showed willingness to allow a noticeable strengthening of the local currency. Thus, the domestic currency appreciated against the US dollar by 7 percent in real terms[39], almost twice as much as in the first half of 2002, while against the euro, it gained 0.5 percent after having weakened by 3.4 percent in 2002 H1.

Furthermore, against the background of stepped-up economic growth and the improved macroeconomic stabilisation, bank intermediation built up steam, providing a larger scope for the monetary authority's interest rate. The central bank's interest rate policy was calibrated so as to keep interest rates on time deposits in the real positive territory, in an attempt at fostering

[38] EU demand for Romanian merchandise was running high, despite the limp growth in euro-zone aggregate demand.
[39] December 2002/June 2002.

saving in ROL. On the other hand, central bank's actions targeted lending rates, which were assigned the role of ensuring a rate of increase in domestic credit in line both with the inflation target and the projected economic growth.

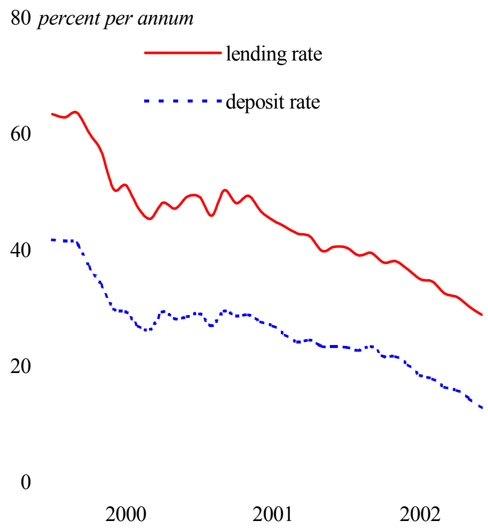
As a result, in the latter half of 2002, the National Bank of Romania accelerated the downward adjustment of its own interest rates amid overall improvement of the economy. The central bank kept to its gradual rate-cutting approach, conditional on the progress in strengthening disinflation. After lowering by 8 percentage points the maximum interest rate accepted on 3-month deposits July through November, in the final month of 2002 this interest rate was temporarily frozen in response to the slim slowdown in disinflation towards year-end. Given the firmly downward trend in interbank interest rates and their lower volatility, the National Bank of Romania moved to cut interest rates on its standing facilities; thus, the interest rate on the lending facility was brought down from 65 percent to 45 percent while the interest rate on the deposit facility was cut from 6 percent to 5 percent.

In the second half of 2002, interest rates on bank-to-bank transactions were generally in step with the trend in central bank's interest rates. The accuracy and the lag relative to taking on the latter trend depended both on the extent to which autonomous liquidity factors affected monetary control and on the banks' behaviour. As from August, the more flexible required reserve mechanism – providing banks with larger room for manoeuvre in reserve management – caused interbank market rates to grow less volatile.

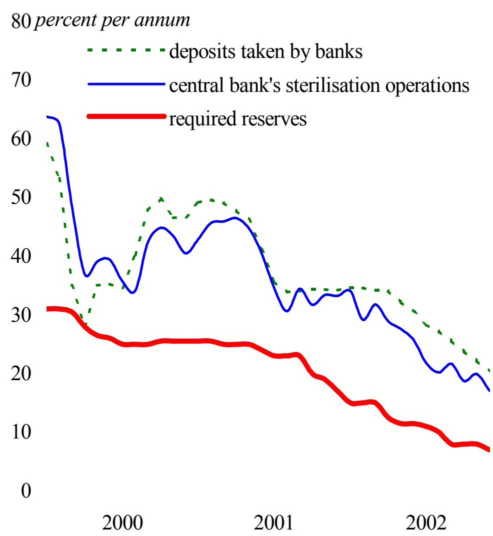
The changes the National Bank of Romania brought to its operational framework in 2002 H2 paved the way for better conveyance of monetary policy stimuli. The overriding change referred to the required reserve mechanism and addressed, besides the increase in the efficacy of the monetary transmission mechanism, further harmonisation of monetary policy tools of the National Bank of Romania with those the European Central Bank resorts to. Starting 24 November, the National Bank of Romania lowered the required reserve ratio on ROL deposits to 18 percent and upped the required reserve ratio on foreign-exchange deposits to 25 percent. What the central bank envisaged by the aforesaid move was to bolster restoration of credit and interest rate channels and to make foreign exchange borrowings less attractive, by influencing their relative costs.

At the end of 2002, the performance of major monetary parameters was in line with the levels deemed cautious from the

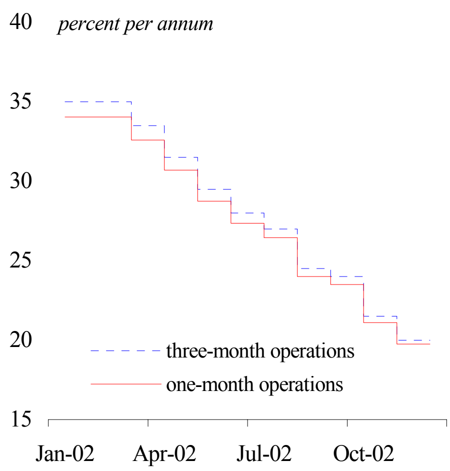
Interest Rate Applied to Non-Banks



Interest Rates on the Interbank Money Market and on Required Reserves



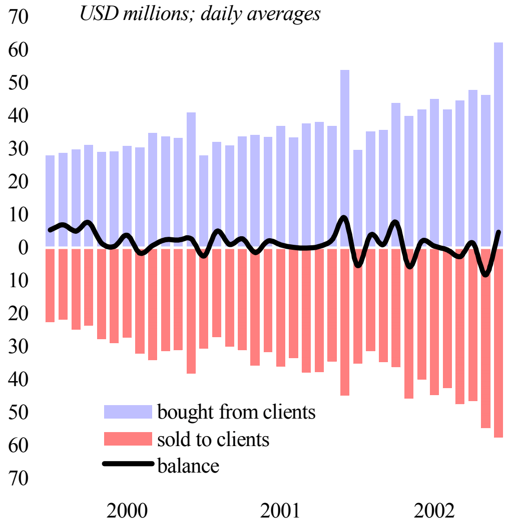
Indicative Rate Set by the Monetary Policy Committee for 1- and 3-month Sterilisation Operations



perspective of a monetary stance oriented to disinflation in particular.

3.2. Conditions surrounding monetary policy implementation

Customer Demand and Supply on FX Market



In 2002 H2 too, the most important challenge confronting monetary policy was the oversupply of foreign currency on the forex market (including the exchange bureaux segment). The narrowing of the trade gap and the increase in current transfers from non-residents – especially remittances from individuals working abroad – pushed the foreign currency surplus sharply higher. Concurrently, on world markets, the single European currency strengthened further against the major currencies. As a result, the domestic currency tended, almost uninterruptedly, to post a nominal appreciation versus the US dollar while the pace of depreciation against the euro lost momentum. In order to stem excessive appreciation of the local currency, an outcome not at all desirable as far as external competitiveness was concerned, the central bank had to intervene in the currency market, thereby consolidating its buyer position; net purchases in 2002 H2 came in at USD 937 million, above the 2002 H1 figure (USD 835 million).

The same as in the first half of 2002, monetary policy enjoyed the support of the narrowing of the budget deficit, as well as its financing strategy and public debt management.

The Ministry of Public Finance made a more extensive resort to external financing sources, which enabled both repayment of external public debt and foreign-exchange-denominated domestic debt maturing in 2002 H2 and the defrayal of running expenses. Even under such circumstances, the net absorption by the Treasury (10.3 percent above the level recorded in 2002 H1) benefited central bank's monetary control. It is noteworthy that external public and publicly-guaranteed debt servicing was tantamount to over USD 330 million, the redemption of maturing government securities in the National Bank of Romania's portfolio amounted to ROL 4,547 billion while interest payments on National Bank of Romania's stocks along with forex-denominated domestic public debt payments added up to about USD 64 million.

Growing investor interest in long-term, low-risk investments, spurred also by expectations of further decline in money market yields, prompted cuts in average interest rates on newly-issued government securities. The fall in the average interest rate on Treasury bills was still faster than the drop in the average interest rate on National Bank of Romania's sterilisation operations, with the correlation between these rates weakening towards the end of the year. Nonetheless, the fastest rates of decline were detected for the average interest rates on 24- and 12-month government securities, i.e. 11.8 percentage points and 11.6 percentage points respectively, hinting at upbeat expectations on disinflation in the medium term.

In addition, monetary control was occasionally rendered difficult by banks' fluctuating demand for reserves – particularly the decrease in demand amid the curtailment in the required reserve ratio on ROL deposits – and the manner in which banks chose to adjust liquidity management to the new features of the required reserve mechanism.

Conversely, the improvement in the operation of main financial markets during 2002 H2 made the conveyance of monetary policy signals easier.

In the latter half of 2002, the interbank market continued to gain in depth, albeit more slowly than in the first. Volumes traded on the deposit market rose by almost one-fourth against the first half of 2002, fuelled yet again by the National Bank of Romania's sterilisation operations, which posted a more than 80 percent uplift. Interbank operations only grew by 8 percent, but the resources raised by banks from the interbank market seemed to have also been channelled towards very short-term lending.

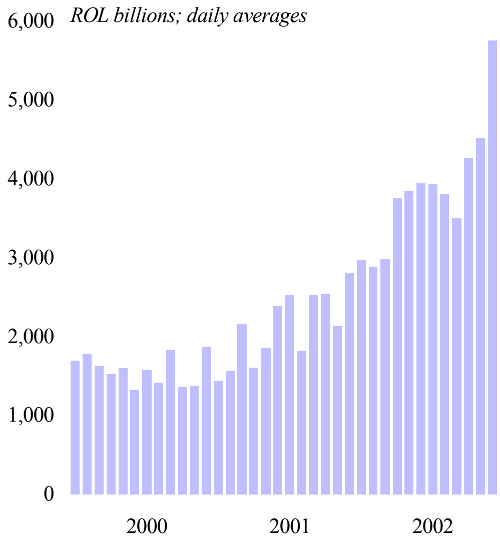
The main positive development in terms of interbank market operation derived however from the noticeable reduction in interest rate volatility, which followed the alteration of the required reserve mechanism, when yields became far less sensitive to short-term swings in liquidity.

Over the period, interest rates on interbank transactions tracked the trend of interest rates on sterilisation operations and that of yields on government securities. Average interest rates applied by banks to non-government non-bank customers entered a steeper downturn, their changes nearing or even outrunning at times the extent of the adjustment of National Bank of Romania's rates[40].

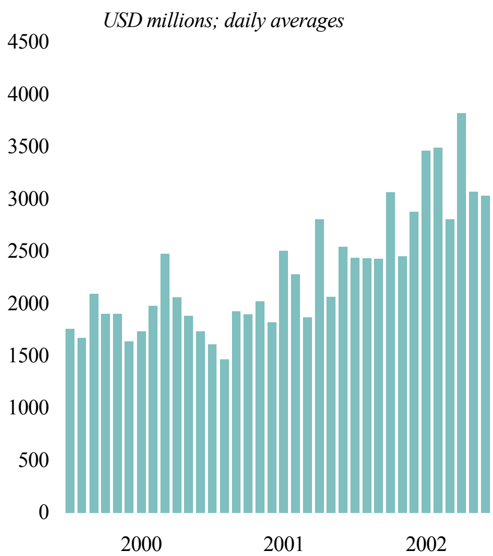
The foreign exchange market continued to be the most liquid financial segment. The market gained in depth due mostly to the noticeable increase in current account transactions and, to a lesser extent, to financial transactions with foreigners. In addition, participants' interest in forex transactions was spurred by the relatively sharp declining trend in yields on ROL-

[40] For comparability purposes, interest rates were compounded according to maturity.

Transactions on Interbank Money Market



Transactions on FX Market



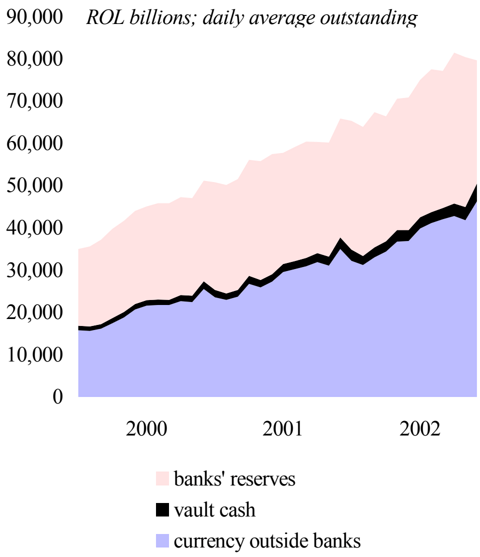
denominated saving tools, as well as by the movements in the EUR/USD rate[41] on world's markets. Under the circumstances, interbank market turnover reached a record high (average daily traded volumes picked up 25 percent compared with 2002 H1) whereas foreign exchange supply rose by 39 percent and the demand for foreign exchange leapt 42.2 percent over the same year-earlier period[42].

Unlike the first half of 2002, the interbank forex market finished the latter half of 2002 on a deficit equalling USD 110.7 million, well below the individuals' oversupply on the exchange bureaux market, which ran at USD 835.7 million.

The persistent uncertainties surrounding the developments in the EUR/USD rate on foreign markets and the particular stance the National Bank of Romania adopted as regards its intervention in the currency market caused the ROL/USD rate volatility to remain within the parameters seen in the previous 6-month period. In year-on-year comparison, the ROL/USD rate displayed rising volatility, and the same happened to the bid-ask spread arising from banks' quotes, which was seen as yet another deterrent to short-term capital inflows.

3.3. The mix of monetary policy tools

Monetary Base



In the latter half of 2002, reserve money[43] saw a buoyant growth, rising as much as 4.3 percent in real terms; leaving aside the effects from adjustment of required reserve ratio on ROL-denominated deposits, the real rate of increase in reserve money would have reached 12.7 percent. The upsurge in central bank's average net foreign assets[44] (by USD 476 million) continued to be the driver of reserve money.

The change in the required reserve mechanism combined with stepped-up sterilisation operations and the favourable impact of autonomous liquidity factors caused monetary control to improve noticeably compared with the same year-earlier period. As a result, the spread between the average balance of banks' reserve holdings with the National Bank of Romania and the required reserves narrowed significantly.

[41] The EUR/USD rate posted fluctuating developments, as the euro peaked in July and August and subsequently entered a relatively steady strengthening trend in the final two months of 2002.

[42] Foreign exchange supply advanced 25 percent and the related demand grew by 26.3 percent from 2002 H1.

[43] December 2002/June 2002 (daily average).

[44] As defined by the IMF.

The major types of central bank operations that had a great impact on liquidity were the following:

1. Interventions in the foreign exchange market consisted mostly of purchases of foreign currency, aimed at precluding too strong an appreciation of the exchange rate of the ROL in relation to the EUR/USD basket. Following the settlement of central bank's net purchases, approximately ROL 31,000 billion were injected into the banking system, thus outrunning the first-half figure.

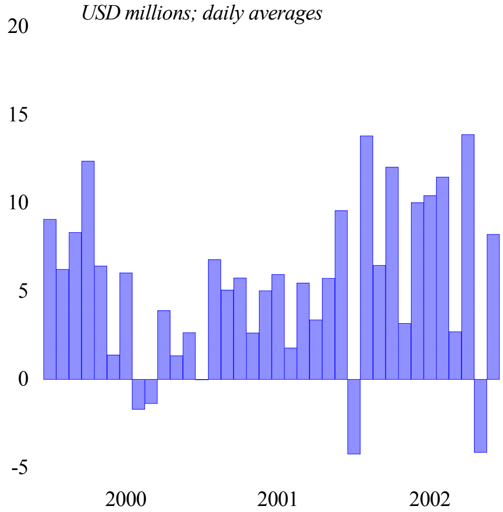
2. Open-market operations aimed at mopping up excess liquidity. In order to offset the detrimental impact on liquidity of its interventions in the forex market and that of the weaker demand for reserves owing to the cut in the required reserve ratio on ROL-denominated deposits, the National Bank of Romania made increased resort to deposit-taking and reverse agreements. Hence, the average daily volume of fresh transactions increased 1.6 times versus 2002 H1 while the average daily balance of sterilisation operations rose 1.5 times, taking the ratio between the latter and the average of banks' reserve holdings with the central bank to a record high of 2.2 in December. The diminution of central bank's stock portfolio called for increased resort to deposit-taking, whose prevailing share in the average daily balance of NBR's operations reached 95.8 percent against 92.3 percent in 2002 H1. The National Bank of Romania took chiefly 3-month deposits; their share in the average balance of NBR's operations ranged from 82.6 percent to 88 percent, narrowing from the preceding 6-month period. Average maturity of transactions contracted from 56 days to 50 days.

The central bank continued to gradually lower the ceiling of interest rates on sterilisation operations. Thus, the maximum interest rate accepted on 3-month deposits was cut every month (except for December) in a range from 0.5 to 2.5 percentage points[45]; August and October witnessed the sharpest curtailments. As a result, the average interest rate on soaking-up operations declined July through December by 8.7 percentage points to 19.6 percent.

3. Operations aimed at bridging temporary liquidity requirements. The change in the regulation on required reserves – effective August 2002 – led to an out-of-the-way

Net Interventions* by the NBR in the FX Market

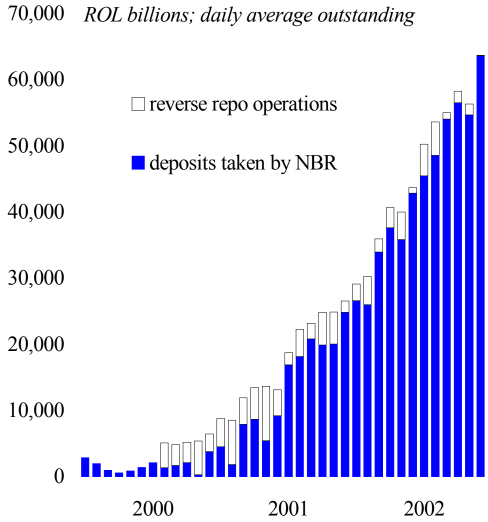
USD millions; daily averages



**) purchases (+), sales (-)*

Sterilisation Operations

ROL billions; daily average outstanding

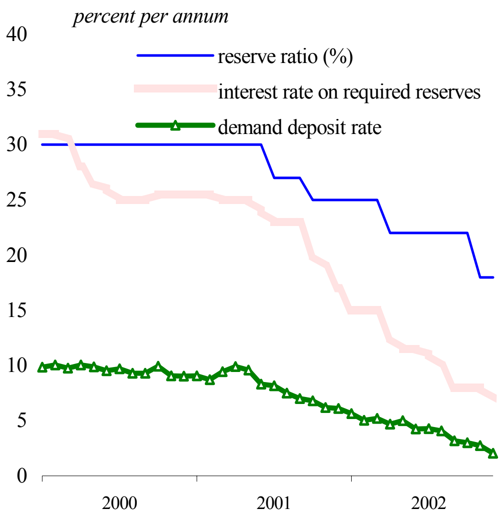


[45] Maximum interest rates accepted for other maturities were reduced accordingly.

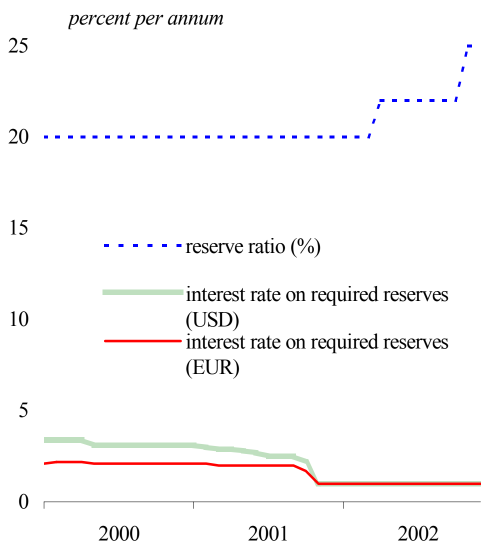
event, i.e. three maintenance periods in one month[46]. Given the circumstances, banks adopted an extremely cautious stance towards liquidity management, which caused short-term interest rates to become increasingly volatile. In order to ensure smooth enforcement of the new regulation, the monetary authority performed a repo transaction with one-week maturity, thereby accommodating the one-off increase in banks' demand for reserves. More precisely, the reverse agreement concluded by the National Bank of Romania amounted to ROL 410 billion, at a simple average interest rate of 31 percent.

Required Reserve Ratio and Interest Payable on Required Reserves

ROL



Foreign Currency



4. Maturities of some special credit lines. In 2002 H2, two events had a beneficial impact on liquidity control. Thus, the credit line opened in favour of Banca Agricolă[47] reached maturity (causing an outright absorption worth ROL 861 billion in August) and the loans granted to the Bank Deposit Guarantee Fund were partly repaid (October and November saw repayment of ROL 337 billion and ROL 300 billion respectively).

5. The change in the required reserve ratio and the related mechanism. In an attempt at reinforcing efficacy and flexibility of the required reserve mechanism, the National Bank of Romania brought drastic changes to the major features of this monetary policy tool. The overriding changes were the following: (i) a greater number of institutions subject to reserve requirements by including credit co-operatives[48], (ii) removal of the daily maximum level of required reserves; (iii) lengthening of both observance and maintenance periods to one month; (iv) introduction of the possibility to differentiate between required reserve ratios depending on the residual maturity of the items included in the calculation base; and (v) imposition of a penalty rate for failure to meet the required reserves instead of carrying forward the reserve shortage, as stipulated previously.

In the wake of enforcement of these measures, banks' reserves with the National Bank of Romania became more volatile while the fluctuation corridor of interbank rates narrowed. Hence, the central bank's efficacy in weighing on the behaviour of interbank rates increased (inclusively through accommodation

[46] The first two maintenance periods were subject to Regulation No. 4/1998 (1-15 and 16-23 August respectively) while the third (24-31 August) was part of the first maintenance period (24 August - 23 September) subject to Regulation No. 6/2002.

[47] The line of credit was opened to underpin the bank's restructuring ahead of privatisation; subsequent to the merger of Banca Agricolă and Raiffeisenbank Romania, liabilities to the National Bank of Romania were taken over by the newly-established entity, Raiffeisen Bank.

[48] Credit co-operatives are exempted from setting-up reserves during a 6-month grace period from the date of being licensed.

by the central bank of the maturity of its operations according to the features of each maintenance period).

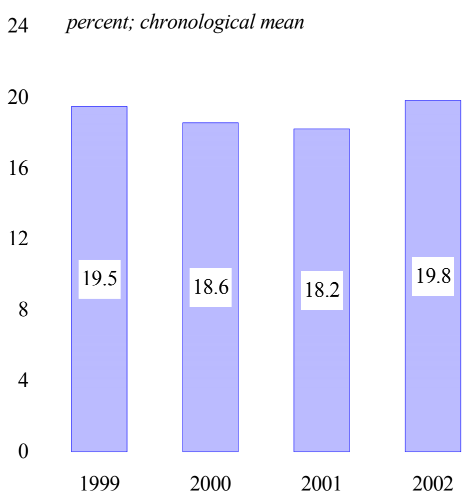
As from 24 November, the National Bank of Romania lowered the reserve ratio on ROL-denominated deposits from 22 percent to 18 percent. Following this action – the biggest reduction since this monetary policy tool was introduced – more than ROL 6,700 billion were released into the system; the central bank soaked up the amount via open-market operations. Concurrently, the National Bank of Romania upped the reserve ratio on foreign-exchange-deposits to 25 percent, in a move designed to curb the rate of increase in forex loans.

6. Standing facilities. Banks made further recourse to central bank's standing facilities; most of such actions were caused by incidental factors (introduction of the new regulation on required reserves) or seasonal factors (the end of the year). The adoption of a cautious stance is evidenced by the prevalence of resort to the deposit facility[49] whereby nineteen banks made O/N deposits for amounts ranging from ROL 4 billion to ROL 400 billion. Alternatively, the marginal lending facility was resorted to only once, in November, when a bank borrowed ROL 120 billion.

3.4. Main monetary developments

The money stock, as measured by M2 monetary aggregate, advanced by a real 15.2 percent in 2002 H2. Monetisation of the Romanian economy, albeit still relatively weak, experienced a revival, as reflected by the increase of broad money as a share in GDP. This ratio, calculated on the basis of the annual average of M2, reached a 10-year high[50] of 19.8 percent while the share of end-of-year M2 in GDP was the highest in four years, i.e. 24.7 percent. Although in 2002 H2 broad money rose somewhat slower than in previous years (3.7 percent a month on average), the declining monthly inflation rates caused broad money to post the highest growth rate in real terms over the last four years (2.4 percent a month on average). The pseudo-monetary aggregate M2T moved up 12.1 percent in real terms, its slowdown pinpointing lower budget deficit financing via non-banks – the stock of government paper outstanding with non-banks dropped 2.3 percent, due chiefly to foreign-exchange-denominated securities.

Broad Money (M2)
(Share of GDP)



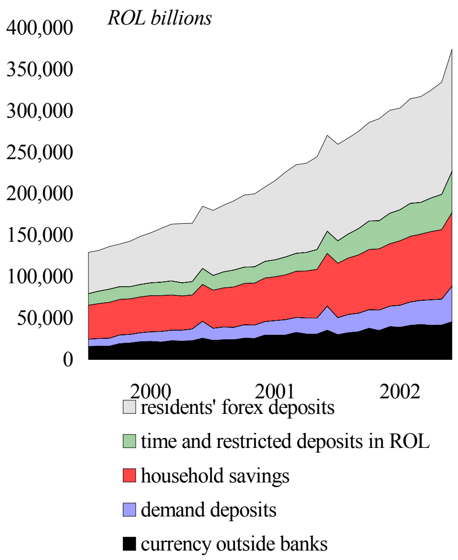
Source: NIS, NBR

Quasi-money expanded by 11.9 percent in real terms as a result of increases in all its constituents. Thus, household saving in ROL went up by a real 9.2 percent, driven by higher wage

[49] 65 times in 2002 H2 compared with 49 times in 2002 H1.
[50] Except 1996.

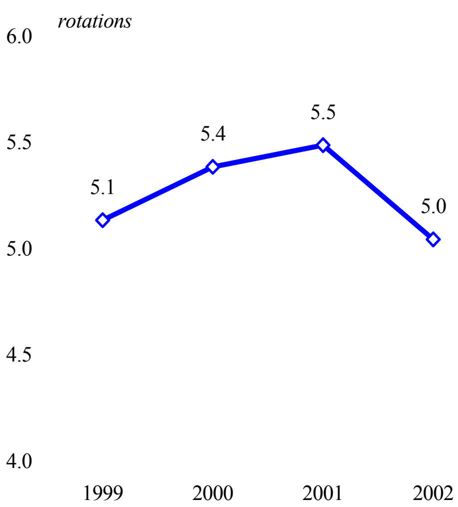
earnings, the developments in the ROL/USD exchange rate, as well as by lower yields on ROL-denominated Treasury certificates, the stock of which rose by a meagre 2.2 percent in 2002 H2 from 23.7 percent in 2002 H1. The share of savings in ROL in total household deposits with banks followed an upward path ever since the beginning of the year, reaching a monthly average of 55.3 percent in the second half of 2002 versus 53.1 percent in the first. Corporate time deposits in ROL[51] leapt 26.1 percent in real terms.

Broad Money



Average interest rates on time deposits exhibited a marked fall, shedding 7.9 percentage points in 2002 H2 compared with 4.3 percentage points January through June 2002. This evolution was attributed, on the one hand, to lower yields on investments offered to banks by the National Bank of Romania and the Ministry of Public Finance. On the other hand, the average interest rate on Treasury certificates for individuals, the alternative saving instrument, slid as well, at a much faster pace (by 9.6 percentage points); moreover, during the reported period what the public authority had on offer were chiefly 6-month certificates. These reasons were behind the flagging household interest in investing in certificates and their decline in 2002 H2 (by 5.2 percent in real terms compared to a 13.2 percent rise in 2002 H1).

Money velocity



Source: NIS, NBR

Forex deposits climbed 17.8 percent (when expressed in US dollars) led by both forex deposits of individuals (up 7.6 percent) and forex deposits of businesses (43.4 percent, mainly as a result of the developments over the final two months of last year). Forex deposits of individuals featured greater stability, rising 1.2 percent on average compared with a 0.1 percent uptick in 2002 H1. Government securities denominated in foreign exchange outstanding with non-banks came off 20.2 percent (when expressed in US dollars). As for businesses, among the reasons behind the increase in forex deposits were also the receipts from exports, net purchases from the currency market and the borrowings from both local and foreign banks[52].

Narrow money – M1 – rose 27.2 percent in real terms, but its share in broad money remained at levels similar to those recorded in 2000 H2 and 2001 H2, i.e. 22.3 percent (monthly average). In real terms, demand deposits leapt by 60 percent whereas currency in circulation went up 6.7 percent. The latter monetary indicator bore the hallmarks of seasonal factors (payment of holiday entitlements in August, quarterly

[51] Including deposits of non-classified entities, restricted deposits, and certificates of deposits.

[52] In December 2002, "Termoelectrica" and "CFR Marfă" issued bonds on the international capital market, amounting to USD 200 million and EUR 100 million respectively.

indexations of pensions and other social security benefits, outlays occasioned by preparations for the cold season, end-of-year bonuses) and incidental factors (foreign-exchange net sales by individuals at exchange bureaux, allotments for various farming requirements, payments to depositors of Banca Turco-Română handed out by the Bank Deposit Guarantee Fund).

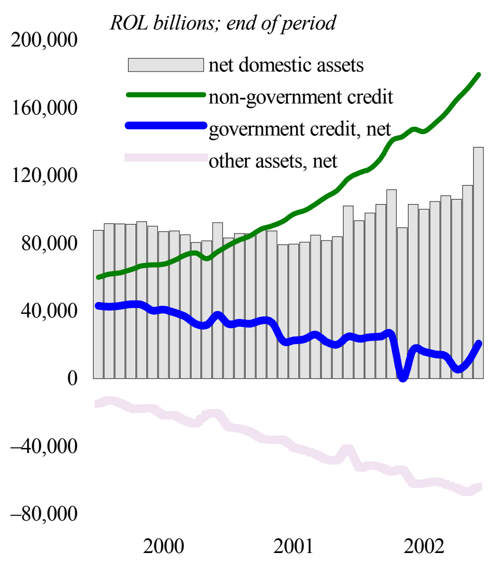
The slowdown in money velocity, calculated for both end-of-year broad money (four rotations, the lowest figure in four years) and the annual average of M2 (five rotations, the second-best yearly low from 1996 onwards), hints at disinflation gains and the alleviation of inflation expectations of economic agents.

The monetary expansion July through December 2002 can be ascribed to the developments in both of its counterparts. Within net domestic assets, up 23.1 percent in real terms, net domestic credit posted the highest growth, i.e. 13 percent in real terms. The developments under "Other net assets" had a dampening impact on broad money, but they made themselves felt only marginally.

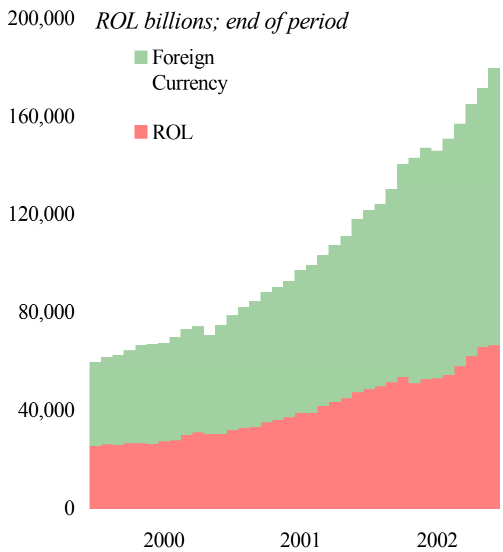
As at end-2002, government credit, net, was 12.1 percent higher in real terms than its June 2002 level. The pick-up in this aggregate was driven by foreign-exchange-denominated government deposits whose credit balance was 41.6 percent lower (when expressed in US dollars), in spite of their being fuelled by large amounts derived from foreign borrowings[53]. An opposite effect had the widening balance of the Treasury's General Account (190.9 percent) and the setback in the stock of government securities outstanding with banks[54] (3.5 percent), causing the banks' net claims on the government to slide.

In 2002 H2, non-government credit posted a real increase of 13.1 percent, leading to a 4-year high in the level of financial intermediation (11.9 percent[55]). Bank loan portfolio kept improving thanks to the growth of current loans and the decrease of overdue loans. Economic growth and the downtrend in nominal bank rates were the main drivers of the real 17.2 percent jump in ROL-denominated government credit. With foreign-exchange-denominated bank credit up by 19.4 percent (when expressed in US dollars), the share of forex loans in total non-government credit was still high (62.8 percent a month on average versus 61.7 percent in 2002 H1).

Net Domestic Assets



Non-Government Credit

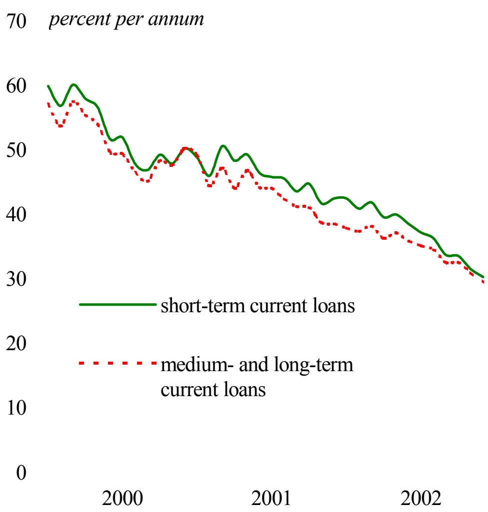


[53] Amounts disbursed under PHARE (EUR 104 million in July 2002), SAPARD (EUR 37.5 million in August 2002), and PHARE II (EUR 169.9 million in October 2002).

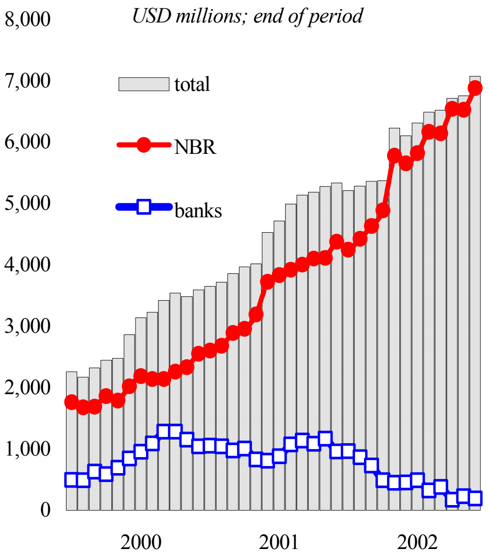
[54] Mainly as a result of redemption of the government securities issued in 1997 for the restructuring of Banca Agricolă and Bancorex (in September and November 2002).

[55] End-of-year balance on non-government credit/GDP percentage ratio.

Lending Rates to Non-bank Clients



Net Foreign Assets



Against the backdrop of the sharp fall in average rates on short-term current loans, at a pace of decline twice as fast the figure seen in 2002 H1 (against June they sunk 8.2 percentage points[56] compared with 3.9 percent in 2002 H1), short-term loans in ROL surged by a real 7.7 percent after dipping by 0.6 percent in 2002 H1 whereas the growth rate of short-term loans in foreign exchange saw a slowdown, i.e. 20.1 percent from 26.5 percent in 2002 H1[57].

After edging down by only 2.6 percentage points in the first half of the year, interest rates on medium- and long-term current loans shrank 6.4 percentage points. The borrowers' interest in ROL-denominated, medium- and long-term loans was more than self-evident – while ROL-denominated loans soared 66.4 percent in real terms in the latter half of 2002 versus 9.5 percent in the first, forex loans (when expressed in US dollars) picked up 20.1 percent in 2002 H2 as against 30.7 percent in 2002 H1. Therefore, the weight of ROL-denominated loans in the medium- and long-term current loan stock averaged out at 24.3 percent in 2002 H2, up from 20.5 percent in 2002 H1.

Net foreign assets of banks swelled by 15.8 percent over end-June 2002 (when expressed in US dollars). The central bank was solely accountable for the increase (21.7 percent in US dollars equivalent), mostly as a result of net purchases from the foreign exchange market and the amounts granted by the World Bank to the Ministry of Public Finance. The release of the second and the third tranches[58] under the stand-by arrangement agreed with the IMF added to the factors boosting the central bank's foreign currency reserves.

[56] Simple interest rates on the average balance of banks' loans granted for the related maturities.
[57] Calculations based on USD-expressed figures.
[58] Tantamount to SDR 82.7 million (approximately USD 109 million).

4. Outlook for inflation developments

In the first five months of 2003, disinflation carried on, as confirmed by the developments in the consumer price index (104.8 percent, down 3.2 percentage points from the same year-earlier period).

Monthly forecasts for June - December 2003 were predicated on the following assumptions:

– lowering food prices provide that normal weather conditions are in place and not overlooking seasonal and historical developments;

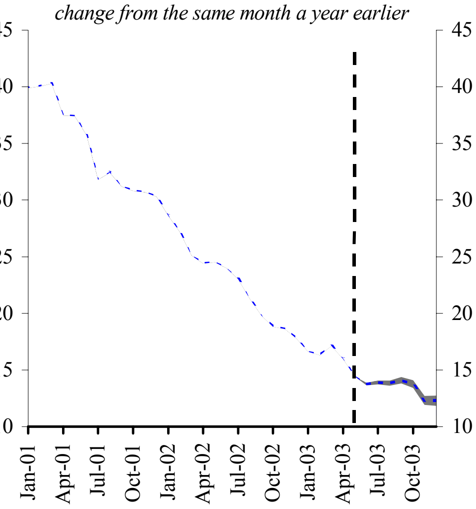
– annual real appreciation of roughly 4 percent of the local currency against the currency basket (in which the EUR and the USD hold 60 percent and 40 percent respectively) so as to strike a balance between domestic and foreign purchasing power of the ROL;

– adjustment in energy prices consistent with the programme agreed with the International Monetary Fund in October 2001 and extended to October 2003, as follows:

  - for electricity, the producer price set by Termoelectrica will be maintained at USD 39/MWh (effective 1 April 2002). Another adjustment of the price in ROL is envisaged for 1 July 2003;
  - for heating, the nationwide reference price (USD 20/Gcal) set on 1 July 2002 is to remain in place. Another adjustment of the price in ROL is envisaged to take effect as from 1 July 2003, allowing for depreciation of the local currency over the period July 2002 – June 2003. Since the increase in the price of heating affects consumer prices no later than the beginning of delivering such a utility to consumers, the impact of the July hike will surface in October and November (assuming that heating will be delivered to consumers starting 15 October);
  - for the unified price of natural gas at the end user, on 1 July 2003 the price in USD is to be raised from USD 90 to USD 93 per 1,000 m^3 whereas the price in ROL will additionally reflect the depreciation recorded in March-June 2003;
  - for all the above-mentioned products (electricity, heating, natural gas), the prices in USD set on 1 July remain in force in the latter half of 2003, and potential corrections of the prices in ROL will take into account the depreciation of the local currency; and

Inflation Forecast for June - December 2003

change from the same month a year earlier



- the adjustment of other administered prices in keeping with legal provisions (on a quarterly or monthly basis, as the case may be, conditional on exchange rate or inflation developments).

In view of the developments registered so far in 2003 and the assumptions underlying the inflation forecasts for the period until the end of the year, we consider that the inflation trend will be indicative of further disinflation.

Under normal weather conditions, during summertime, monthly inflation may stay below one percent (favourable food price developments should offset the effects of steeper utility prices), and their slight increase towards the end of the year will be attributed to the adjustment of the nationwide reference price for heating and to seasonal factors.