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Output Decline and Government Expenditures
In European Transition Economies

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Abstract

This paper discusses the role of government expenditure policies in the decline in aggregate output in European transition economies. It is argued that there is little evidence for the hypothesis that more expansionary expenditure policies would have helped to mitigate the output decline. While measurement problems allow for very preliminary conclusions, it appears that government expenditures were, generally, not a binding constraint for output. In those cases where it could be argued that government expenditures were a binding constraint, they were usually not the only one. Government expenditure levels still remain on the high side, at least when compared with European market-based economies, and there exists few reasons for pursuing expansionary expenditure policies to lift European transition economies out of the "transitional recession." While raising expenditure levels per se is an unappealing policy choice, a further reordering of expenditure priorities is desirable. In particular, increases in the share of government expenditures on capital--human and physical--are needed to improve long-run output potential.

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Summary

This paper discusses the role of expenditure policies in the decline in aggregate output in European transition economies. It considers three main questions. First, it asks whether actual changes in the level and composition of government expenditures in European transition economies were largely the result of policies or of transition-induced exogenous factors. Second, the paper asks whether government expenditure policies contributed significantly to the measured output decline, and if so, whether this was attributable to specific expenditure components. Third, it asks whether there were more desirable alternatives to the expenditure policies that have been undertaken.

As regards the first question, the paper notes that transition economies showed a clear tendency to reduce the overall extent of government intervention in the economy, even though this did not necessarily manifest itself in a reduction in government expenditures. It contends that, to a large extent, the changes in the level and composition of government expenditures were an inevitable result of transition and reform. For example, reductions in producer subsidies and increases in transfers to households were inevitable once the transition got under way. But the paper finds that policymakers had some degrees of freedom for making expenditure policy choices and safeguarding fiscal sustainability.

As regards the second question, the paper observes that various measurement problems allow for conclusions of a very preliminary nature. Overall, insufficient evidence is seen for concluding that government expenditures made more than a small contribution to the decline in aggregate output. The paper suggests that, generally, government expenditure constraints were not "binding" in determining the pattern of output decline. For example, sectors that were severely input-constrained by the collapse of the Council for Mutual Economic Assistance could not have responded to increased government demand. Only in few cases could it be argued that credit tightening and producer subsidy reductions were brought about too rapidly.

As regards the third question, the paper finds it difficult to make a general case that a different set of expenditure policies by itself would have helped to mitigate the output decline. Also, government expenditure levels in European transition economies are seen still to be on the high side, at least when compared with European market-based economies. As for the future, the paper detects few reasons for pursuing expansionary fiscal policies as a way of lifting European transition economies out of the "transitional recession," even when abstracting from possible adverse macroeconomic consequences. Nevertheless, it states a further reordering of expenditure priorities is desirable. In particular, increases in the share of capital expenditures--human and physical, including operations and maintenance outlays--are recommended for improving long-run output potentials.

I. Introduction

The factors that underlie the decline in aggregate output in European transition economies have been analyzed in great detail. 1/ Recent studies have identified various major external and domestic factors that contributed to this output decline, and, in this context, has also taken up fiscal policy issues. However, fiscal developments have often been cast as a reactive element, where declines in aggregate output resulted in government revenue declines, and the need to control budget deficits for the purpose of achieving macroeconomic stabilization objectives, necessitated strict government expenditure controls. 2/ Taken to the extreme, this view has culminated in the claim that there exists a "vicious circle" of transformation. As a result, there has been a renewed interest in a Keynesian-style fiscal stimulus, which is advocated, however cautiously, as an obvious remedy for overcoming the recession quickly (Kornai (1993), Vienna Institute for Comparative Economic Studies (1993)). Indeed, it may be argued that some governments in European transition economies have already begun to make expansionary fiscal policies an explicit part of their policy agenda. For example, the current coalition government in Poland, at least in its rhetoric, sees a need for a "temporary and non-inflationary" increase in the state budget deficit.

This paper studies three basic questions on government expenditure policies in European transition economies. First, we ask whether actual changes in the level and composition of government expenditures in European transition economies were largely the result of expenditure policies or of broader transition-induced exogenous factors. Second, we ask whether actual expenditure policies contributed significantly to the measured output decline, and, if so, whether this was attributable to specific expenditure components. Third, we ask whether there were more desirable alternatives to the policies that have been undertaken, and what the output declines would have been under these alternatives? The analyses presented here can only be seen as a first step. A final verdict on the questions raised here will have to await more detailed and careful analyses and evaluations of the available quantitative evidence.

For the purpose of this paper, the group of European transition economies comprises Bulgaria, former Czechoslovakia and its two successor republics, Hungary, Poland, and Romania. Section II briefly reviews the evidence on the output decline in these economies, and the key factors that have been cited in the literature as underlying this decline. Section III provides an overview on the channels by which government expenditures may

1/ See, for example, Borensztein, Demekas, and Ostry (1992); Borensztein and Ostry (1992); Borensztein (1993); Borensztein, Demekas, and Ostry (1993); Calvo and Coricelli (1993); or Commander and Coricelli (1992).

2/ See, for example, Holzmann (1992) or Gordon (1992) for examples of this literature. However, there are also many exceptions. See, for example, Bruno (1992), Chu and Holzmann (1992), and Tanzi (1993).

affect aggregate output, and discusses various problems related to measuring economic activity in transition economies. Section IV describes recent changes in government expenditures in European transition economies, and reflects on the changes in the level and composition of government expenditures as possible causes and contributing factors underlying the developments in output. Section V provides concluding observations.

II. Magnitude and Causes of Output Decline: An Overview

1. Magnitude of output decline

The record of the decline in aggregate output in European transition economies is well known. All European transition economies experienced steep output declines during 1989-92. In 1991 alone, real GDP declined by between 8 and 16 percent (Table 1). In some cases, this was preceded by substantial declines in 1990 and a prolonged period of stagnation. During 1989-92, the cumulative declines in GDP amounted to almost 20 percent in Hungary and Poland, between 20 and 30 percent in former Czechoslovakia and Bulgaria, and over 30 percent in Romania. Poland experienced the smallest cumulative decline in output, and, in 1992, became the first European transition economy to record positive economic growth.

The declines in GDP were exceeded by those of industrial output, which ranged from 22 percent to 26 percent in 1991 alone, implying that output declines in the agricultural and service sectors were most likely below average. The 1992 experience differed significantly across the various transition economies. While Bulgaria, former Czechoslovakia, and Romania, continued to register declines in the 12-17 percent range, Poland and Hungary managed to reverse the strong 1991 declines: Hungary registered a 3 percent increase in industrial output, but the continued decline in real GDP indicates that other sectors were lagging; in Poland, industrial output grew by 12 percent in 1992, though value added in industry increased by only 3 percent. For the case of Poland, Hume and Pinto (1993) have noted that state-owned enterprises, many of them in heavy industry branches, are among those leading the economic recovery, thereby giving added weight to the sustainability of reform.

2. Causes of output decline

Whether or not the output decline came initially as a surprise, it was clearly surprising that the magnitude of the decline was fairly similar across European transition economies, particularly since starting positions and approaches to transformation differed significantly. Kornai (1993) has pointed out that output has fallen in both Poland and in Hungary, where the speeds of reform were substantially different; it has fallen in countries with high external debt, like Bulgaria, Hungary, and Poland, and in countries with moderate or no external debt, like former Czechoslovakia and Romania. What are the common factors behind these rather similar results?

Table 1. Transition Economies: Basic data

	1988	1989	1990	1991	1992
(Annual percentage change, unless indicated otherwise)					
Bulgaria					
Real GDP	3	-1	-9	-12	-6
Industrial output	2	--	-13	-19	-7
Real average wage <u>1/</u>	8	3	6	-39	11
Unemployment <u>2/</u>	--	--	2	11	15
Former Czechoslovakia					
Real GDP	3	5	--	-16	-9
Industrial output	2	1	-4	-24	-12
Real average wage <u>3/</u>	2	0	-6	-25	11
Unemployment <u>2/</u>	--	--	1	7	5
Hungary					
Real GDP	--	--	-4	-12	-4
Industrial output	-2	-16	-4	-24	3
Real wage bill	11	--	-2	-12	-4
Unemployment <u>2/</u> <u>4/</u>	--	1	2	8	12
Poland					
Real GDP	4	--	-12	-8	1
Industrial output	...	-7	-20	-22	12
Real wages <u>1/</u>	36	-18	-19	-8	-4
Unemployment <u>2/</u>	--	--	6	12	14
Romania					
Real GDP	-1	-6	-6	-15	-15
Industrial output <u>5/</u>	5	-12	-14	-24	-17
Real average wage <u>1/</u>	5	10	-24	3	-8
Unemployment <u>2/</u>	--	--	--	3	8

Sources: Data provided by the national authorities and IMF staff estimates.

1/ Based on year-end nominal data deflated by the CPI.

2/ In percent of the civilian labor force at year-end.

3/ Based on annual average nominal data deflated by the CPI.

4/ Data for 1988-89 are for the fourth quarter.

5/ Based on fourth quarter data.

Table 2. Factors Underlying the Output Decline
in Transition Economies.

External factors

- Collapse of CMEA arrangements
- Import price increases, particularly for energy and raw materials
- Weakening demand in Western Europe and the United States

Domestic factors

- Severe credit constraints and weakness of financial sector
- Reductions in producer subsidies
- Emergence of positive real interest rates
- Wage developments
 - Increases in product wages and unit labor costs
 - Reductions in real wages due to incomes policy
- Enacting of bankruptcy laws
- Uncertainties impacting enterprise confidence and planning
- Relative price changes
- Reductions in government demand

Other factors

- Reduced incentives to overstate output
 - Disruptions in coordination
 - Management "shock"
 - Statistical problems of capturing private sector activity
-

Sources: Recent literature on the output decline in transition economies.

Recent studies have identified a number of key external and domestic factors underlying the massive declines in output (Table 2). ^{1/}

In general, the available literature on the factors underlying output developments in European transition economies has stressed the importance of economy-wide factors over specific sectoral factors; it has suggested that little structural reform has occurred, with Hungary possibly being the one exception. For example, while Borensztein (1993) has noted that initial

^{1/} Instead of using a "domestic-external" dichotomy, a "supply-demand" dichotomy could be used instead (see, for example, Bofinger (1993)).

output declines in the order of 20 percent appeared too large to be explained by macroeconomic forces alone, the empirical work by Borensztein, et al. (1992, 1993) has suggested that the bulk of the variance in output in three European transition economies (Bulgaria, former Czechoslovakia, and Romania) was accounted for by economy-wide factors, rather than sector-specific or industry-specific factors, implying that not much "structural change" (or reallocation of resources across sectors) has taken place. This research also showed that supply disturbances predominated in Bulgaria and former Czechoslovakia, while in Romania the relative importance of supply and demand shocks seemed to vary over time. Energy prices, in particular, were shown to have exerted a large effect on the supply of industrial output.

Research on other countries has been much in the same vein. For Poland, Borensztein and Ostry (1992) have argued that, overall, there was little evidence for structural change. Still, their results suggest that structural change has started to be underway in Poland's industrial sector. As in Romania, demand and supply shocks varied considerably over time. For the supply side, energy prices and credit conditions had significant effects, although they were not as large as expected. Research by Commander and Coricelli (1992) has tended to support these conclusions for the case of Poland, but has suggested that in Hungary structural change appears to have played a larger role.

Given the weakness of the banking sector in all European transition economies, bank restructuring and recapitalization have become a top priority. It would seem possible the output decline was adversely affected by existing financial market conditions. Survey data available from Hungary, for example, suggests that during the transition, as the economy moves from a supply constrained "seller's market" to a demand constrained "buyer's market," input shortages (labor, raw materials, semi-finished goods, etc.) virtually vanish while demand and financing constraints become more prevalent (Kornai (1993)). Calvo and Coricelli (1993) have suggested that credit constraints in transition economies were an important contributing factor to the observed output decline, but they acknowledged that this does not necessarily imply that a more expansionary credit policy would have effectively helped to avoid the output decline.

In general, research findings at the "macroeconomic level" have contrasted somewhat to findings at the "microeconomic level." Based on evidence from Poland, Hume and Pinto (1993), for example, have suggested that state-owned enterprises have been more responsive to the new economic realities than widely believed. This research indicates that the maintenance of disciplined macroeconomic policies was able to bring about a systematic supply response by providing the right environment for increasingly competitive activities.

However, this still leaves open the question as to the relative importance for output of the various ingredients that make up a disciplined macroeconomic framework. The problem is compounded by the fact that

different factors appear to have been binding constraints at various times and for various sectors. It seems also conceivable that two or more factors constrained output simultaneously. Hence, it may be impossible clearly to identify the binding constraints on output in a given sector at a given time. In general, it would seem plausible that external supply-side (e.g., the increase in energy and raw material prices and reduced supply of raw materials resulting from the collapse of CMEA arrangements) and demand-side (e.g., reduced demand arising from the collapse of CMEA arrangements) factors limited the production of a variety of industrial outputs, and that domestic supply-side factors (e.g., the credit contraction, and the reduction in producer subsidies) reinforced this effect. It would also seem plausible that reductions in government demand tended to accelerate the output decline from the demand side.

Finally, there are a number of other, largely institutional factors, that may have contributed to the output decline. Winiecki (1991) has argued that the abolition of central plans reduced incentives for state-owned enterprises to use "pripiski" (or "write-ins") artificially to inflate output so as to meet or exceed central plan targets. With reduced incentives to cheat, measured output necessarily had to fall. Kornai (1993) has suggested that there may have existed a temporary coordination failure, or "coordination no-man's land," where, in a situation of neither plan nor market, the previous mechanism of coordination through bureaucrats had not yet been fully replaced by the new mechanism of coordination through markets. Related to this is the proposition of a "management shock," where managers were initially unable to cope with a situation in which, from one day to the next, they were forced to make decisions independently. Also, the growing private sector of European transition economies has been escaping measurement to a significant extent, and, as a result, the magnitude of the output decline may be significantly overstated.

III. Government Expenditures and Output: General Remarks

1. Short-term and longer-term considerations

Before the onset of the transition, the public sector had dominated economic activity in all transition economies. Even general government expenditures had been usually quite high compared with market-based economies (Table 3), reflecting the government's dominant productive, allocative, and redistributive role, which had been complemented by state ownership of productive resources. During the reform, in all transition economies, the government's direct influence over the economy was reduced to varying degrees.

To some extent, the general functions of government and the types of channels by which government expenditures affect output may not appear to differ according to the principles by which economic activity is organized, that is, whether the economy is market-based or centrally-planned. However,

Table 3. General Government Expenditures and
Value Added in the Public Sector

(In percent of total value added)

	General government expenditures 1/	Value added in the public sector 2/
<u>Transition economies</u>		
Former Czechoslovakia	72	97
Hungary	61	65
Bulgaria	61	92
Albania	57	...
Poland	49	82
Romania	43	...
<u>Market-based economies</u>		
France	48	16
Germany	48	11
United Kingdom	41	11

Sources: Data provided by the national authorities, Milanovic (1989), and estimates by the authors.

1/ In 1989. The quality of the data may differ. In Hungary, for example, expenditures are likely to be overstated because the fiscal accounts for that year could not be fully consolidated, with the result that some expenditures (amounting to possibly as much as 7-8 percent of GDP) are double counted; in Romania, on the other hand, expenditures are likely to be understated since various extra-budgetary transactions were not captured.

2/ In the early- to mid-1980s.

the impact of different types of government expenditures on economic activity differs drastically depending on the economic system, as does the extent to which various channels are used. The effects of government expenditures on aggregate output are usually more uncertain in transition economies than in market-based economies, since institutional arrangements, accounting standards, general policy rules, and policy measures are all undergoing rapid change. In the short run, government expenditures affect actual output; in the long run, they affect the level and composition of potential output. Table 4 summarizes the major channels by which government expenditures might contribute to a decline in aggregate output.

Table 4. Government Expenditures and Output Decline
in Transition Economies.

Short-term considerations

Government expenditures may adversely affect actual output via:

- Reductions in factor income payments
 - Wages and salaries for government employees
 - Interest payments
- Reductions in producer subsidies
- Reductions in direct government demand
 - Government purchases of goods and services
 - Capital spending
- Reductions in expenditures with income transfer characteristics
 - Social security payments
 - Consumer subsidies

Longer-term considerations

Government expenditures may adversely affect potential future output via:

- Reductions in physical capital spending
 - Reductions in human capital investments
-

First, there is the government as a producer of goods and services. In national income accounts, government output is measured by the factor incomes it pays, the major items being the government wage bill and interest payments.

Second, there are government payments of producer subsidies. These are often aimed at keeping loss-making and possibly non-viable enterprises in operation, but they may also be used to facilitate enterprise reform and restructuring. Reductions in producer subsidies generally cause reductions in enterprise output, particularly when they affect loss-makers. This may have a ripple effect, where output reductions in enterprises that receive government transfers lead to output reductions in other enterprises. Potentially, reductions in producer subsidies may also amplify other factors that adversely affect the supply side, including external factors (i.e., increases in energy and raw material prices) as well as domestic factors

(i.e., increases in interest rates and unit labor costs). Sometimes, however, reductions in budgeted producer subsidies may be offset by increases in subsidized central bank credits for the same purpose, thereby replacing fiscal operations by quasi-fiscal operations that are, at best, only indirectly reflected in fiscal accounts. In some cases, enterprises may also try to mitigate the effects of producer subsidy reductions by increasing tax arrears and interenterprise payment arrears.

Third, there are the government's direct contributions to aggregate demand, the major items being government purchases of goods and services and capital spending. Reductions in the government's direct demand have an immediate negative impact on aggregate output, and, indirectly, may also reinforce other adverse effects on output from the demand side.

Fourth, the government makes payments with income transfer characteristics, i.e., consumer subsidies and social expenditures, that influence household demand for goods and services. Income transfers affect household demand and thereby exert an indirect impact on aggregate output. In practice, a single expenditure may affect output through more than one channel. Transfers to finance unemployment compensation, for example, do not only affect household demand, but may also affect the pace of enterprise restructuring.

Longer-term considerations concern the impact of reductions in government expenditures on potential aggregate output, investment, and employment. This may come about through reductions in spending for both physical and human capital investments.

In transition and market-based economies alike, government investments into physical capital are concentrated in infrastructure (such as hospitals, schools, transportation, telecommunications, water supply and sewage, and energy). Even when ignoring the recent empirical findings suggesting that public capital spending has a significant positive impact on the economy by increasing private sector output and productivity, private sector investment, and overall employment, there is a strong need for public capital spending in European transition economies.

However, in all European transition economies, financing constraints and the need to control fiscal deficits have imposed limits on government spending for physical capital investments. There exists an additional need to revise capital spending plans that grew out of central planning, and to tailor them to the changed needs of a market-based environment.

In contrast to many market-based economies, human capital investments (health, education, etc.) in European transition economies were almost exclusively provided by the government: there was no significant amount of private sector involvement in human capital investments apart from job-related training activities that were carried out by private enterprises. Human capital investments underwent much qualitative change during the transition, and, if anything, these changes should help to adapt

skills to the requirements of a market-based environment. To some extent, cutbacks that were made were justified on the basis that they abolished skill training that was no longer in demand, and which in a market-based environment is often provided by enterprises, such as job-specific vocational training.

In general, sound decisions on public capital spending can only be made on the basis of cost-benefit analyses. Given the extensive changes in pricing (of inputs and outputs) that have accompanied the transition, it makes good economic sense to reevaluate the scope and content of public investment programs; a downturn in public capital spending should not be worrisome per se.

2. Measurement problems

The analysis of the effects of government expenditures on output is hampered by a number of factors. Measurement problems for national income and fiscal accounts exist everywhere. However, these common measurement problems are compounded in transition economies because of a severely distorted structure of relative prices, sometimes high inflation, a growing private sector that is not adequately captured in the national statistics, and institutional arrangements that often do not clearly distinguish between the government and the rest of the public sector, and, in addition, are undergoing rapid change.

Four examples may illustrate these problems. First, food prices in many transition economies were kept at artificially low levels through large consumer subsidies. Increases in relative food prices frequently reflected a reduction of consumer subsidies, not an increase in value added. Second, there was a proliferation of in-kind wages and benefits, and, as a result, money wages were low. Increases in wage expenditures frequently reflected a monetization of in-kind benefits rather than an increase in government value added. Third, there existed a distorted interest rate structure, with real interest rates that were substantially negative. Increases in interest payments frequently reflected financial market reforms that resulted in interest rates that were more market-oriented. Finally, there was the problem of the quasi-fiscal operations of central banks. Increases in government expenditures frequently reflected a shifting of some of the central bank's quasi-fiscal operations to the fiscal accounts (where they belong), and did not necessarily imply that the actual extent of government intervention in the economy and its impact on output had increased.

The problem of measuring government expenditures in transition economies is also compounded by four other factors.

First, with high inflation and high nominal interest rates, a large share of interest payments represented amortization of government debt because it compensated creditors for the erosion in the real value of their assets. In theory, it is possible to remove this implicit inflation-induced amortization from the calculation of the fiscal deficit (Blejer and Cheasty

(1992)). In practice, however, it may often not be clear to what extent domestic interest payments should be considered as constituting amortization payments. This problem is particularly pronounced when real interest rates are sharply negative.

Second, many transition economies had a stock of explicit or implicit contingent liabilities, for example, in the areas of the environment, housing, and bank guarantees for loans to state-owned enterprises. Ignoring these contingent liabilities meant underestimating the current extent of the government's role in allocating resources in the economy, and potential expenditure levels that, under current policies, may prevail in the future.

Third, during central planning it was not really meaningful to speak of "fiscal" policy and "public" finance since these concepts imply the existence of "private" finance, and thus a significant private sector (Tanzi (1993)). As part of the transition, the dividing lines between the government, the financial sector, state-owned enterprises, and the private sector needed to be redefined, and, as a result, large blocks of assets and liabilities tended to get reshuffled in the early years of transition. Privatization and government involvement in the problem of the banking system's bad debt were two of the most visible manifestations of this reshuffling.

Finally, sizable reforms of intergovernmental fiscal relations in many transition economies often led to a situation where expenditures were shifted out of the budget. As suggested by Bird and Wallich (1993), this was part of a strategy of pushing expenditure responsibilities to subnational or extrabudgetary levels in the hope that the necessary cost cutting would be done there. Generally, this tended to obscure the true fiscal policy stance.

IV. Government Expenditures and Output in Transition Economies

This section elaborates on the three main questions posed in the introduction, using data for the 1988-92 time period.

1. Expenditure levels

Governments in European transition economies moved relatively swiftly to establish market-oriented rules, including the laws aimed at ensuring property rights, competition policies, and private economic activities. These reforms went hand-in-hand with a reordering of spending priorities.

All transition economies faced a two-pronged fiscal problem at the outset of the transition. To create room for private initiative, governments had to reduce the extent of state intervention in the economy. This meant reducing the size of government, raising revenues in a less distortionary fashion, and improving the expenditure mix. At the same time,

the fiscal deficit had to be kept within the limits that were compatible with macroeconomic stabilization objectives.

Accounting problems aside, transition economies showed clear tendency of reducing the overall extent of government intervention. Given high starting levels, reducing government intervention was one of the basic premises for successfully establishing a market-based economy. Reductions in government intervention manifested themselves through changes in institutional arrangements, as well as through reduced shares of government output and employment, but not necessarily through reduced government expenditures and budget deficits. In this sense, it was not reductions in government expenditures per se, but reductions in the extent of government intervention in the economy that, since it was not instantly and fully replaced by private sector coordination, contributed to what Kornai (1993) has termed the "transitional recession."

Still, the behavior of government expenditures in European transition economies was not uniform. If 1990 is considered the first full year of transition, all economies experienced some initial expenditure reductions in this first year, with declines of 1 percentage point of GDP in Bulgaria, 4 in Romania and Hungary, 9 in Poland, and 10 in former Czechoslovakia (Table 5). In general, expenditure reductions can only to a limited extent be interpreted to reflect fiscal "adjustment" or "tightening."

While simultaneous reductions in real GDP and the government expenditures to GDP ratio implied that real government expenditures declined even more than GDP, traditional countercyclical policy considerations were ill-suited for transition economies: a transition is not a cyclical downturn within a regular business cycle and therefore requires different policy prescriptions. In particular, given high starting levels of government expenditures, it would be unreasonable to expect real government expenditures to increase during the transition from a centrally-planned economy to a market-based economy, independent of the behavior of GDP.

For analytical purposes, European transition economies can be thought of as falling into two categories. Countries in the first category, namely Bulgaria and former Czechoslovakia, experienced at least 2 years of declining government expenditures during 1990-92, and reduced, relative to GDP, government expenditures from their pre-transition levels. Countries in the second category, namely Hungary, Poland, and Romania, experienced only one year of declining government expenditures during 1990-92, and did not reduce, relative to GDP, government expenditures from their pre-transition levels. ^{1/}

In Bulgaria, general government expenditures declined from 61 percent of GDP in 1989 to 43 percent in 1992; in former Czechoslovakia, they declined from 72 percent to 60 percent of GDP over the same time period.

^{1/} See Appendix.

Table 5. Government Expenditures and its Components (in percent of GDP)

	1988	1989	1990	1991	1992
<u>Total government expenditures</u>					
Bulgaria	64	61	60	46	43
Former Czechoslovakia	72	72	62	55	56
Hungary	62	61	57	59	63
Poland 1/	48	49	40	48	50
Romania	39	43	39	41	48
<u>Factor incomes</u>					
Bulgaria	7	8	11	12	12
Former Czechoslovakia	7	7	7
Hungary	10	11	11	13	15
Poland	4	7	6	9	12
Romania	5	5	6	8	8
<u>a. Wages and salaries</u>					
Bulgaria	5	5	6	5	6
Former Czechoslovakia	7	7	7
Hungary	8	8	8	9	10
Poland	4	7	6	7	8
Romania	5	5	6	8	8
<u>b. Interest payments 2/</u>					
Bulgaria	2	3	5	7	6
Former Czechoslovakia	--	--	--	1	1
Hungary	2	2	3	4	5
Poland 3/	--	--	--	2	3
Romania	--	--	--	--	--
<u>Producer subsidies</u>					
Bulgaria	16	14	11	4	2
Former Czechoslovakia	...	19	12	8	5
Hungary	8	5	4	3	3
Poland	6	5	3	2	1
Romania	2	2	5	5	...
<u>Direct government demand</u>					
Bulgaria	23	25	20	15	14
Former Czechoslovakia	27	26	25
Hungary	20	19	16	16	17
Poland	9	7	7	8	6
Romania	22	23	14	14	14
<u>a. Purchases of goods and services</u>					
Bulgaria	18	19	17	13	12
Former Czechoslovakia	17	18	18
Hungary	12	12	11	9	10
Poland	4	3	5	6	4
Romania	5	5	6	8	8
<u>b. Capital expenditures</u>					
Bulgaria	5	5	3	2	2
Former Czechoslovakia	10	8	7	6	7
Hungary	8	7	5	6	7
Poland	4	3	3	2	2
Romania	17	18	8	6	6

Table 5. (Concluded)

	1988	1989	1990	1991	1992
<u>Payments with income transfer characteristics</u>					
Bulgaria	12	12	16	14	13
Former Czechoslovakia	...	20	18	16	16
Hungary	20	23	25	27	26
Poland	19	20	15	20	22
Romania	11	14	14	14	...
<u>a. Consumer subsidies</u>					
Bulgaria	2	2	4	--	--
Former Czechoslovakia	4	7	4	--	--
Hungary	5	7	6	4	1
Poland	10	8	4	3	3
Romania	3	4	3	4	...
<u>b. Social expenditures</u>					
Bulgaria	10	10	12	14	13
Former Czechoslovakia	...	14	14	16	16
Hungary	15	16	20	23	25
Poland ^{4/}	9	11	11	17	20
Romania	8	10	11	10	10
<u>Other</u>					
Bulgaria	6	3	2	1	3
Former Czechoslovakia	...	1	--	3	4
Hungary	4	4	2	--	2
Poland	10	11	9	9	9
Romania	--	--	--	1	4

Sources: Data provided by the national sources, and estimates by the authors.

^{1/} General government data for Poland in 1992 includes, for the first time, the extrabudgetary units of the local authorities. On a consolidated basis, expenditures by these entities amounted to some 2.4 percent of GDP. Hence, if they are excluded total government expenditures in Poland would have remained constant during 1991-92.

^{2/} Not corrected for inflation (see Blejer and Cheasty (1992)).

^{3/} Before 1991, interest payments were part of other current noninterest expenditures.

^{4/} Defined as total expenditures of the three main social security funds: the Social Insurance Fund, the Social Insurance Fund for Farmers, and the Labor Fund.

While this drop was impressive, it was to some extent an inevitable part of the transition in these two economies; in particular, it did not primarily reflect fiscal tightening, but a correction in the degree of state interference in the state-owned enterprise sector, which was high even by the standards of other transition economies.

To a large extent, the drastic reductions in government expenditures in Bulgaria and former Czechoslovakia were due to strong reductions in producer subsidies. Budgeted subsidies were high in all European transition economies, but in Bulgaria and former Czechoslovakia the bulk of all subsidies were producer subsidies that went to state-owned enterprises, while in Hungary, Poland, and Romania, the bulk of all budgeted subsidies were consumer subsidies. ^{1/} In 1989, budgeted producer subsidies amounted to 14 and 19 percent of GDP in Bulgaria and former Czechoslovakia, but only to 5 percent of GDP in Hungary and Poland, and 2 percent of GDP in Romania. A large part of producer subsidies were cross-subsidies. Cross-subsidies were funds provided predominantly to unprofitable state-owned enterprises, often on a discretionary basis, and simply constituted the counterpart to punitive taxes levied on their more profitable counterparts. The need for these cross-subsidies was particularly high in Bulgaria and former Czechoslovakia, where value added in the state-owned sector amounted to over 90 percent, and significantly exceeded the levels of other European transition economies.

To establish a market-based economy, it was important to liberalize prices, impose a hard budget constraint on state-owned enterprises, and to introduce a modern system of taxing enterprise profits. As soon as the transition got underway, both the scope and the need for cross-subsidies and profit remittances to the budget were reduced. Making changes was relatively easy for three principal reasons: first, at least from a long-run perspective, the system of cross-subsidies and punitive profit taxes was at best a zero-sum game; second, revoking these subsidies was not perceived as revoking entitlements; third, at least over the short run, some state-owned enterprises compensated for the reduction in producer subsidies by increasing tax arrears and/or interenterprise arrears. Hence, it should not come as a surprise that the two countries with by far the highest pre-transition level of general government expenditures, value added in the public sector, and producer subsidies, were also the only ones that reduced government expenditures significantly during the transition.

^{1/} In addition to budgeted subsidies, there were substantial subsidies that were not budgeted. These resulted from quasi-fiscal operations of central banks or were implicit, as, for example, is the case with excessive procurement prices or discretionary tax reliefs. For Romania in 1992, for example, Blanchard, Commander, and Coricelli (1993) estimated that, even after various subsidies were made explicit, subsidies arising from quasi-fiscal operations alone still amounted to about 9 percentage points of GDP.

In Hungary, Poland, and Romania, the level of government expenditures relative to GDP, after declining in 1990, increased during 1991-92. The initial declines occurred for different reasons, but in all three countries they went hand-in-hand with a surplus in the overall fiscal balance during that year.

In Hungary, the reduction in government expenditures by 4 percentage points of GDP in 1990 reflected relatively even cuts in most expenditure categories, even though social expenditures increased by 4 percentage points of GDP, and interest payments by 1 percentage point.

In Poland, the reduction in government expenditures by 9 percentage points of GDP in 1990 was driven by a strong reduction in subsidies (6 percentage points of GDP), mostly consumer subsidies. With the freeing of most consumer prices in January 1990, the extensive system of subsidizing consumer products was no longer viable. The general government surplus of 3 percentage points of GDP was not only due to expenditure restraint but also to an unexpected windfall in enterprise income taxes. These increased by 6 percentage points of GDP when historical cost accounting within the highly inflationary environment that characterized Poland in 1990 resulted in taxing paper profits.

In Romania, general government expenditures declined by 3 percentage points of GDP in 1990, largely on a reduction in capital expenditures, which fell by almost 10 percentage points of GDP. Virtually all other expenditures increased relative to GDP, notably producer subsidies (3 percentage points of GDP), and wages and salaries (2 percentage points of GDP). The strong increase in producer subsidies occurred for two main reasons: first, with little change in subsidization policies and GDP declining, subsidies naturally had to increase relative to GDP; second, some of the subsidies that were previously hidden were made explicit.

During 1991-92, all three countries experienced increases in government expenditures relative to GDP. However, it is not clear to what extent these increases prevented further declines in real GDP. At least from a cross-country perspective the evidence is inconclusive: Poland, the country with the seemingly steepest increase in government expenditures during 1991-92 (10 percentage points of GDP), also experienced the smallest decline in real GDP (-7 percent) during that period. ^{1/} At the same time, Romania, which experienced a similarly steep increase in government expenditures during that time period (9 percentage points of GDP), was the country with the steepest drop in real GDP (-30 percent).

It is possible that these vastly different results for Poland and Romania reflected problems of measuring GDP and actual government

^{1/} It is possible that Poland's 1990 GDP is underestimated. If this is the case, the decline in GDP and the increase in government expenditures (relative to GDP) during 1991-92 would in reality be less pronounced.

expenditures. Another possibility is that the binding constraints in these two economies were very different. For example, during 1991-92, credit constraints were probably much more severe in Romania than in Poland, as reflected in the massive increase in inter-enterprise arrears that occurred in Romania during 1991 (Clifton and Khan (1993)). If it could be assumed that credit constraints were binding in Romania while they were not binding in Poland, the same overall increase in government expenditures could have had substantially different "multiplier" effects. Hence, changes in the level of budgeted government expenditures alone, without taking into consideration the binding constraints that existed in an economy, may not provide a forceful explanation for the behavior of aggregate output.

2. Expenditure composition

In this section we argue that changes in the composition of government expenditures had but a small effect on the decline in aggregate output in European transition economies, and that, generally, it were not government expenditures that constrained aggregate output or determined the magnitude of the output decline. Even in cases where it could be argued that government expenditure constraints were binding, they were usually not the only binding constraints. For example, sectors that were severely input-constrained--for example by the collapse of the CMEA--could not have responded to impulses from government demand. While it has been argued that credit tightening and the imposition of hard budget constraints for state-owned enterprises were brought about too rapidly, it is difficult to make a general case that a different set of expenditure policies, per se, would have mitigated the output decline. Indeed, evidence from Poland suggests, for example, that consistency in applying a hard budget constraint (i.e., maintaining a "no bailout" policy) helped to establish the credibility of Poland's reforms, which in turn yielded improvements in manufacturing output, efficiency, and resource allocation (Pinto (1993)).

In addition, government expenditures in European transition economies still remain on the high side, at least compared to European market-based economies. As a result, there exist few reasons to pursue expansionary fiscal policies as a way to lift European transition economies out of the transitional recession, even when abstracting from possible adverse macroeconomic consequences. However, a further reordering of expenditure priorities is desirable. In particular, increases in the share of government expenditures on capital--human and physical--may be needed for improving long-run output potential.

The expenditure mix that was inherited by the governments of European transition economies was clearly inappropriate for the needs of a market-based environment, and therefore had to be changed. For analytical purposes, we continue to use the four main categories of government expenditures that were outlined above: factor income payments that constitute a part of GDP, producer subsidies, direct government demand, and expenditures with income transfer characteristics. Table 2 shows magnitudes of these expenditure components in European transition economies.

There are two major government expenditure items that constitute factor incomes: wages and salaries, and interest payments. In all transition economies, with the exception of former Czechoslovakia, spending on factor incomes increased significantly relative to pre-transition levels, fueled by increases in both wages and salaries and interest expenditures. The increase during 1989-92 was remarkably uniform across European transition economies, amounting to 4 percentage points of GDP everywhere, except in former Czechoslovakia, where no data are available. There were probably two main causes for these increases: first, government wage policies that had to be carried out with a view toward preventing a brain drain from the civil service, and the difficulties encountered with civil service reform in the light of rapidly increasing unemployment; second, financial reforms that resulted in market-oriented domestic interest rate policies and made real interest rates positive for the first time in recent history.

Though still low relative to GDP, at least when compared with Western industrial economies, wages and salaries in European transition economies increased from 5-8 percent of GDP in 1989 to 6-10 percent in 1992. Particularly in Hungary and Poland, and, even though there are no data available, probably also in former Czechoslovakia, some real wage increases in the government sector were necessitated by increased competition for qualified labor by the enterprise sector.

Overall, only a small part of the increased wage expenditures reflected an increase in government value added; much of it was simply a monetization of in-kind benefits that did not increase the government's actual value added. In general, wage expenditures are always difficult to reduce; in practice, it may even happen that reductions in the productivity of government employees and decreases in their value added coincide with increased wage expenditures.

In countries with low levels of domestic and foreign debt, such as former Czechoslovakia and Romania, interest payments were not be a major expenditure factor. In contrast, in Bulgaria, interest payments increased from 3 percent of GDP in 1989 to 6 percent of GDP in 1992. In Hungary and Poland, interest expenditures grew, reaching 5 and 3 percent of GDP in 1992, respectively. ^{1/} In part, the observed increases in interest payments that occurred in all European transition economies reflected financial market reforms, requiring the government to offer competitive interest rates for its borrowing operations. As discussed before, part of the increased

^{1/} In countries that have not been making full payments on their external debt, notably Poland and Bulgaria, interest payments are bound to increase significantly once the external debt restructuring exercises are completed.

interest payments could be considered to constitute amortization of debts rather than interest payments. 1/

As regards producer subsidies, there seems to exist at least some evidence that reductions affected the output decline in European transition economies. In former Czechoslovakia, for example, annual declines in real GDP averaged a steep 8-9 percent during 1990-92. At the outset of transition, former Czechoslovakia was the country with the highest level of government expenditures, amounting to 72 percent of GDP in 1989. Since then, total expenditures fell by 16 percentage points of GDP, reaching 56 percent in 1992, largely reflecting a steep reduction in producer subsidies, including cross subsidies, which fell from 19 percent of GDP in 1989 to 5 percent in 1992. Similar conclusions hold for Bulgaria, which experienced average annual declines in real GDP of 9 percent during 1990-92, and underwent a reduction in government expenditures of 18 percentage points of GDP during the same time period.

When comparing Bulgaria and former Czechoslovakia with Hungary, Poland, and Romania, the relationship between producer subsidy reductions and the decline in output is less obvious. In Romania during 1990-92, real GDP and industrial output decreased more than in the other European transition economies. Yet, government expenditures actually increased, largely due to increases in producer subsidies. In fact, Romania was the only European transition economy where producer subsidies increased during 1990-92, though much of this just reflected the fact that previously hidden expenditures were made explicit. Romania's government was not as determined as other governments to reduce these producer subsidies, and it is unlikely that the massive industrial output decline was brought about by fiscal constraints on industry. While the Romanian government's direct demand expenditures declined, and while the increase in producer subsidies gave enterprises little additional liquidity, Romanian enterprises faced a number of other constraints, as suggested by the massive increase in interenterprise arrears.

Leaving aside Romania, where measurement problems are quite severe, the two economies that already started with a significantly lower level of government redistribution through the state budget, Hungary and Poland, were also the ones where the output decline was somewhat smaller than in those economies that started out with a high degree of cross-subsidies, notably Bulgaria and former Czechoslovakia. This would suggest that the extent to which the budget was used as a redistributive instrument, particularly between state-owned enterprises, may have had some impact on the extent of the observed output decline. Still, even if this was true, it is not clear whether it was the withdrawal of producer subsidies per se, or rather the

1/ In general, the considerable interest payments that are to be made by various transition economies may be a constraining factor of growing importance for the expenditure choices the governments of these economies will be able to make.

coordination vacuum of "neither plan nor market" that came about with the reduction in government intervention, that were instrumental in determining the size of the output decline.

However, it would be difficult to argue that the reduction in producer subsidies was completely inconsequential. Since the bulk of producer subsidies went to industrial enterprises, one would expect to see industrial output declines to be strongest in economies that experienced the most dramatic reductions in producer subsidies, namely Bulgaria and former Czechoslovakia. In these two economies, both characterized by a high degree of cross subsidization, annual declines in real industrial output during 1990-92 averaged 13 percent. Producer subsidy reductions clearly had an adverse effect on the financial viability of many enterprises, and contributed to increased lay-offs, cuts in production, and the curtailment of investment plans, while simultaneously resulting in increased tax and interenterprise arrears.

In contrast, in Hungary and Poland, where, starting from a much lower initial level, producer subsidies were reduced by only 2 and 4 percentage points of GDP, respectively, industrial output declines during 1990-92 averaged only 8 and 10 percent of GDP, respectively. Also, some producer subsidies were rather resilient, particularly in agriculture. In some cases, such as fuel and fertilizer subsidies for agricultural producers in Poland, they even staged a comeback. Romania, again, does not fit this general picture: while explicit (budgeted) producer subsidies increased, industrial output still declined by an average of 18 percent during 1990-92.

In general, it is likely that the cuts in producer subsidies reinforced other adverse factors that affected the supply side, including increases in wages and salaries, interest payments, raw materials, and energy. Also, they may have reinforced other domestic demand-side factors, such as reductions in government capital expenditures and purchases of goods and services, which came in addition to external factors, such as the collapse of the CMEA arrangements. This suggests that the reduction in producer subsidies was a likely contributor to the polarization of the enterprise sector, where "successful" and "unsuccessful" enterprises became apparent rather quickly. Nevertheless, it was clearly not the only determinant, and probably not even the major one. ^{1/}

Subsidy accounting is clearly an imperfect science, and, particularly in Romania, changes in budgeted producer subsidies may largely reflect changes in budgeting procedures rather than policy changes and the effects of economic transformation. But there are also other, more fundamental, doubts about the extent to which reductions in producer subsidies affected output. The reduction in producer subsidies itself may not have been a

^{1/} See Pinto, et al. (1993) for microeconomic evidence on the importance of various factors that contributed to the successful adjustment of state-owned enterprises in Poland.

binding constraint if either low-cost credit was expanded or producer prices were liberalized. Clearly, while most producer prices were liberalized as part of the transition, credit conditions have often been fairly tight. It is likely that the reduction in subsidies had an adverse impact on production when it affected enterprises that operated with liberalized output prices, were not credit constrained, and not much affected by the loss of CMEA markets. Still, to the extent that it affected enterprises that faced some or all of these other constraints, the reduction of producer subsidies alone did probably not have a significant impact on the magnitude of the output decline.

As regards government expenditure components that constitute direct government demand (i.e., purchases of goods and services, and capital spending), 1/ all European transition economies registered declines. The declines were most dramatic in Bulgaria and Romania, where, during 1990-92, they amounted to 11 and 9 percentage points of GDP, respectively; in Hungary and Poland the declines amounted to only 2 and 1 percentage points of GDP, respectively. While direct government demand decreased everywhere, in Poland and Romania government spending on goods and services actually increased, even though the increases were relatively small, and did not exceed 3 percentage points of GDP during 1990-92.

All European transition economies reduced capital spending. Reductions were particularly dramatic in Romania, where capital expenditures dropped from 18 percent of GDP in 1989 to 6 percent in 1992. These reductions may have had a dampening effect on production in various industries, particularly in capital-goods industries. Notwithstanding the general reductions in capital expenditures relative to current expenditures, there are also definitional problems: to some extent, the distinction between purchases of goods and services and capital expenditures remains fuzzy as anything can be called a "capital expenditure," and definitions across countries are not uniform.

As regards government expenditures that have income transfer characteristics, all European transition economies, with the exception of former Czechoslovakia, experienced increases. However, the two main components of income transfers, i.e., consumer subsidies and social expenditures, behaved very differently.

Budgeted consumer subsidies were reduced everywhere, with Romania being the sole exception. In 1989, before the onset of the transition, consumer subsidies in former Czechoslovakia, Hungary, and Poland amounted to 7-8 percent of GDP. This was much higher than the levels observed in

1/ The large disparities in the levels of direct government demand across countries that are shown in Table 5, reflect, to some extent, differences in the way these expenditures are classified. In Poland, for example, a part of "other" expenditures may also constitute direct government demand, particularly purchases of goods and services.

Bulgaria (2 percent of GDP) and Romania (4 percent of GDP). Before the transition, it was generally not money that was scarce, but goods that consumers were able and willing to purchase. In an environment with severe supply constraints, direct or indirect support of the purchasing power of consumers was of little use. In the late 1980s these supply constraints were probably more severe in Bulgaria and Romania, where consumer subsidies were accordingly lower.

When prices were liberalized, consumer subsidies were dramatically reduced in most transition economies. Still, a number consumer subsidies continued to be in effect in many European transition economies, including items like housing, utilities (e.g., heating and hot water), and basic consumer goods (e.g., bread and milk). Also, public transportation services usually continued to be subsidized, even though a pollution tax for private transportation might be a better policy option. Often, these remaining consumer subsidies were provided in the form of prices that were administered below market-clearing levels; this made them difficult to detect as their cost was not directly reflected in the budget. But they were not without cost: often, transport companies operating with administered output prices had significant tax arrears and required equity injections and other support by the state.

Social expenditures and consumer subsidies both transfer income to households. The experience of European transition economies suggests that, to some extent, consumer subsidies and social expenditures were substitutes: everywhere but in Romania consumer subsidies were significantly reduced, while social expenditures increased substantially. The overall result was that, during 1990-92, all these economies registered increases in income transfer payments, with the exception of former Czechoslovakia, which registered a decline.

It is surprising that social expenditures in both Hungary and Poland, where the speeds of reform differed, increased much more rapidly than elsewhere: during 1990-92, social expenditures increased by 9 percentage points of GDP in both Hungary and Poland, while increases amounted to 3 percentage points of GDP in Bulgaria and former Czechoslovakia, and 1 in Romania.

This suggests that social expenditures were an "automatic" stabilizer: as the transition got underway, social expenditures increased everywhere and regardless of the speed of transition, and helped to keep up consumer demand. Given that much of the increase in social expenditures happened during 1991-92, the quantitative importance of this stabilizer increased when reform efforts intensified and the social costs of transition became more apparent. Much of the increases in social expenditures resulted from increases in pension expenditures and newly introduced unemployment benefits. The increase in pensions and unemployment payments and the simultaneous reduction in consumer subsidies would also suggest that large parts of the transition-induced social costs were borne by permanent social security arrangements rather than by more temporary social assistance schemes. In Hungary, for example, budgeted consumer subsidies were reduced

from 7 to 1 percent of GDP during 1989-1992, while during the same period social expenditures increased from 16 to 25 percent of GDP. In Poland, budgeted consumer subsidies were reduced from 8 to 3 percent of GDP during 1989-92, while during the same period social expenditures benefits increased from 11 to 20 percent of GDP.

Even though, during 1989-92, unemployment went from virtually zero to double digits in both Hungary and Poland, increases in unemployment benefit payments were surpassed by increases in pension payments, largely caused by a retirement "boom." Poland, for example, registered a 36 percent increase in old-age (including early retirement) pensions during the December 1989 to December 1993 time period, and a somewhat smaller, but still pronounced, increase in disability pensions (Maret and Schwartz (1993)). The public's expectations of universality die hard: even the government of former Czechoslovakia, probably the most outspokenly market-oriented government of all European transition economies, provided universal income support to compensate for the removal of retail subsidies on food in 1990 (Schwartz, Stone, and van der Willigen (1994)).

While the process of transformation required creating new safeguards in the form of cost-effective social safety nets, these often came as additions to the old system, leaving the old system still in dire need of reform. The exact extent to which increases in transfers to households helped to maintain the demand for certain goods and services--and thus helped to maintain their production--was unclear. The increase in social expenditures counteracted declines in real wages (due to deteriorating economic conditions) and in income from consumer subsidies (due to price reform), and was probably spent largely on basic consumer goods (e.g., foodstuffs).

While some efforts were made to increase the cost-effectiveness of social expenditures, much of the reform remained piecemeal. This resulted in inefficiencies and waste, and, to the extent that benefits were regarded as long-term entitlements that could be revoked, also may have retarded incentives for household savings. Social expenditures in European transition economies continued to have much of the universal "from the cradle to the grave" characteristics of the former planned economies.

3. Longer-term considerations

In general, the transition from plan to market brought about drastic reductions in capital expenditures, for both physical and human capital. This may have affected potential future output levels.

Capital expenditures decreased in all transition economies, with the exception of Hungary. Large parts of the investment plans conceived under central planning were unsuitable for a market-based environment, and simply had to be scrapped. It has often been argued that the levels of capital expenditures that now prevail in many transition economies appear to be on the low side of what would be desirable from a long-run perspective,

especially in the light of the fact that private sector responses may not be fast enough (Chu and Holzmann (1992)).

Since it takes time to conceive new investment plans, the declines in government capital formation may just be of temporary nature and should not be worrisome as such. Still, the reductions in capital expenditures included, inter alia, maintenance expenditures for basic infrastructure, and expenditures on health and education. The impact of these declines was not immediately obvious, largely because the stocks of physical and human capital that were created before the outset of the transition were still being utilized, and because reductions in infrastructure spending usually affect aggregate output with a relatively long lag.

While it remains to be seen to what extent the reductions in capital spending during the last 2-3 years will affect long-run output, it seems likely that, without increases in capital expenditures during the next few years, a deterioration in economic infrastructure, and the health and education systems, may be ahead. This is likely to have a significant impact on private sector productivity and output as well.

V. Summary and Conclusions

In this paper we have considered three main questions. First, we asked whether actual changes in the level and composition of government expenditures in European transition economies were largely the result of policies or of exogenous factors. Second, we asked whether expenditure policies contributed significantly to the measured output decline, and if so, whether this was attributable to specific expenditure components. Third, we asked whether there were more desirable alternatives to the government expenditure policies that have been undertaken, and what the prospects for economic recovery would have been under these alternative policy scenarios.

In trying to address these questions, this paper has discussed four main channels by which changes in the level and composition of government expenditures can affect aggregate output. First, aggregate output can decline because of reductions in factor income payments by the government. Second, it can decline through reductions in producer subsidies, which, other things being equal, can reinforce the supply-side effects of increases in input prices, including capital, energy, and labor. Third, it can decline through reductions in direct government demand. Finally, it can decline through reductions in expenditures that transfer income to households and thereby affect household demand. In addition, a reduction in government expenditures on physical and human capital can have negative implications for the economy's long-run output capacity and the productivity of the private sector.

As regards the first question, we note that all European transition economies showed a clear tendency to reduce the overall extent of government intervention in the economy, which, given high starting levels, was one of the basic premises for successfully establishing a market-based economy. These reductions in government intervention manifested themselves in changes in institutional arrangements, and reductions in the share of government output and employment, but not necessarily in reductions in government expenditures and budget deficits. In this sense, it would appear plausible to assert that it was not government expenditures per se that contributed significantly to the transitional recession, but rather the reduction of government intervention and coordination in the economy, as it was not instantly and fully replaced by the private sector. We have argued that, to a large extent, changes in the levels and composition of government expenditures were an inevitable result of the transition. For example, reductions in producer subsidies and increases in transfers to households were inevitable once the transition to a market-oriented pricing system got underway. Still, generally, policymakers had various degrees of freedom for making expenditure policy choices and safeguarding fiscal sustainability.

As regards the second question, we have noted that various measurement problems only allow for conclusions of a preliminary nature. We found insufficient evidence for concluding that government expenditures accounted for but a small share of the decline in aggregate output. Overall, it seems plausible to conclude that changes in the level and composition of government expenditures acted to reinforce other factors through both supply and demand channels, but, generally, were not a binding constraint for output. Even in cases when they were binding, they were probably not the only binding constraint. For example, sectors that were severely input-constrained by the collapse of the CMEA could not have responded to increased government demand.

As regards the third question, we have argued that it is difficult to make a general case that a different set of government expenditure policies, per se, would have helped to mitigate the output decline. Government expenditures in European transition economies, generally, remained on the high side, at least compared with European market-based economies.

As for the future, there is little reason to believe that more expansionary fiscal policies would be needed to lift European transition economies out of the transitional recession. Indeed, recent proposals that advocate Keynesian demand policies have little merit as they would lead to a further deterioration of fiscal accounts, and, even when pursued on a temporary basis, run the serious risk of destabilizing the transition. Still, governments have various degrees of freedom, and should use these to further reorder expenditure priorities. In particular, increases in the share of capital expenditures--human and physical--are needed to improve long-run output potential and efficiency.

While budget deficits in European transition economies have generally increased, they have not been spinning out of control. However, without

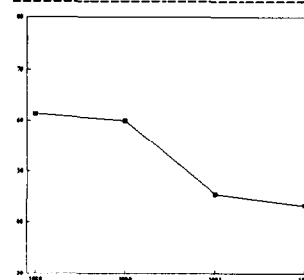
further reform, current fiscal positions are not sustainable. Over the next few years, creating a sustainable fiscal position and a noninflationary financial environment are fundamental for enhancing the confidence of domestic and foreign private entrepreneurs and for making private sector decisions more predictable. Private sector investments and subsequent increases in production should offset the decline in production in state-owned enterprises. Government expenditure policies will be crucial for reinforcing a stable financial environment that will hopefully eventually ensue.

General Government Expenditures in European Transition Economies
(1989-92, in percent of GDP)

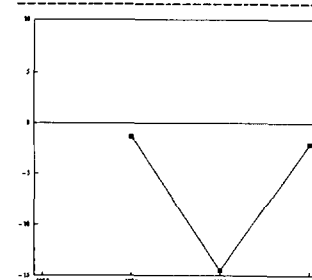
	1989	1990	1991	1992
BULGARIA				
Total expenditures	61.4	60.0	45.6	43.4
Current expenditures	55.9	56.9	43.5	41.0
Wages and salaries (state budget only)	4.7	5.5	5.0	5.5
Purchase of goods & services	19.4	17.0	13.4	11.9
Interest payments	3.1	5.3	6.7	6.2
Social expenditures	10.4	12.0	13.6	12.9
O/w pensions	7.4	8.8	9.5	9.5
O/w unemployment benefits	—	—	0.9	0.7
O/w others	3.0	3.3	3.2	2.7
Subsidies	15.5	14.9	4.2	1.7
O/w producer subsidies	13.9	10.9	4.1	1.7
O/w consumer subsidies	1.6	4.0	0.1	—
Other current expenditures	3.0	2.3	0.8	2.8
Capital expenditures	5.5	3.1	2.0	2.3
Overall balance	-1.4	-8.5	-3.3	-6.3
GDP (billions of leva)	39.6	45.4	131.1	210.0
CZECHOSLOVAKIA				
Total expenditures	72.2	61.6	54.8	56.3
Current expenditures	63.7	54.8	48.7	48.8
Government consumption	25.2	24.6	24.4	26.3
Wages and salaries	7.2	7.0	—	—
Purchase of goods & services	18.0	17.7	—	—
Interest payments	—	0.2	0.5	1.1
Social expenditures	13.6	13.6	16.1	16.4
O/w pensions	—	—	—	—
O/w unemployment benefits	—	—	—	—
O/w others	—	—	—	—
Subsidies	25.0	16.2	7.7	5.0
O/w producer subsidies	18.5	12.0	7.7	5.0
O/w consumer subsidies	6.5	4.2	—	—
Capital expenditures	7.8	6.8	5.5	7.2
Net lending	0.7	0.1	0.6	0.3
Overall balance (excl. stock adjustments)	-2.7	-0.4	-2.0	-3.6
GDP (billions of koruny)	759.5	820.0	978.0	1,024.0
HUNGARY				
Total expenditures	60.9	57.4	58.5	63.1
Current expenditures	54.3	52.8	52.2	56.4
Wages and salaries	8.3	7.6	9.1	10.1
Purchase of goods & services	12.2	11.1	9.3	9.9
Interest payments	2.4	3.0	3.5	4.6
Social expenditures	15.8	19.7	23.2	25.0
O/w pensions	9.1	9.7	11.3	11.6
O/w unemployment benefits	—	—	0.8	2.3
O/w others	6.8	9.9	11.0	11.0
Subsidies	12.1	9.8	7.1	4.4
O/w producer subsidies	5.4	4.3	3.4	3.4
O/w consumer subsidies	6.7	5.5	3.7	1.0
Other current expenditures	3.6	1.6	—	2.4
Capital expenditures	6.6	4.7	6.2	6.7
Overall balance	-1.3	0.5	-2.5	-8.4
GDP (billions of forint)	1,710.0	2,079.5	2,301.5	2,650.5
POLAND				
Total expenditures	48.8	39.9	47.7	50.0
Current expenditures (state budget)	38.5	32.9	40.1	42.3
Wages and salaries	6.9	5.8	7.4	8.3
Purchase of goods & services	3.4	4.5	5.7	4.4
Interest payments	—	0.4	1.5	3.2
Social expenditures	11.2	10.6	17.3	19.9
O/w pensions	8.2	8.1	12.2	14.8
O/w unemployment benefits	—	0.2	1.2	1.7
O/w others	3.0	2.3	3.9	3.4
Subsidies	12.9	7.3	4.6	3.3
O/w producer subsidies	4.5	3.4	1.7	0.8
O/w consumer subsidies	8.4	3.9	3.0	2.5
Other current expenditures	4.1	4.2	3.4	3.2
Capital expenditures (state budget)	3.3	2.8	2.2	1.7
Outside of state budget	7.0	4.3	5.4	6.0
Overall balance	-7.4	3.1	-6.2	-5.9
GDP (trillions of zloty)	96.6	591.5	824.3	1,142.4
ROMANIA				
Total expenditures	42.7	39.3	41.3	47.9
Current expenditures	25.2	31.4	34.9	41.9
Wages and salaries	4.5	6.4	7.9	8.2
Purchase of goods & services	5.4	6.2	7.5	8.3
Interest payments	0.1	—	—	0.1
Social expenditures	9.5	10.8	10.2	10.2
O/w pensions	6.6	8.0	7.9	7.7
O/w unemployment benefits	—	—	0.3	0.8
O/w others	2.9	2.8	2.0	1.7
Subsidies	5.7	8.0	8.6	11.4
O/w producer subsidies	1.5	4.7	4.5	—
O/w consumer subsidies	4.3	3.3	4.1	—
Other current expenditures	—	—	0.7	3.7
Capital expenditures	17.6	7.9	6.4	6.0
Overall balance	8.4	1.2	0.7	-7.4
GDP (billions of lei)	798.0	843.5	2,062.7	5,450.0

Total General Government Expenditures
(1989-92, in percent of GDP)

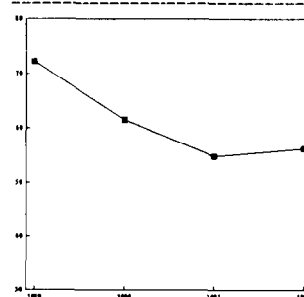
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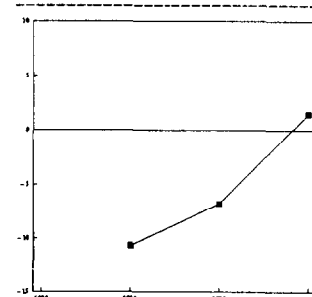
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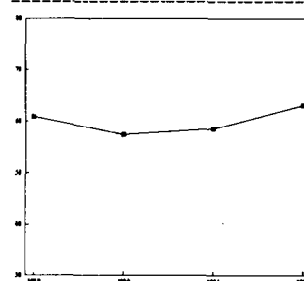
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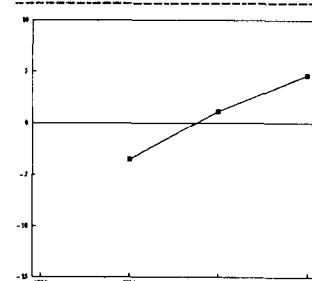
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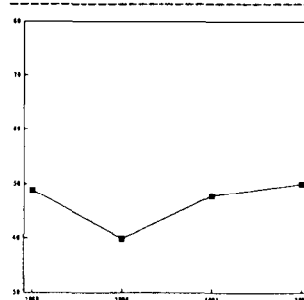
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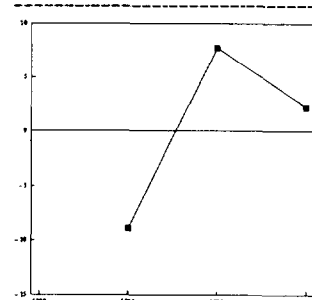
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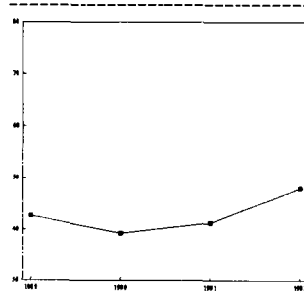
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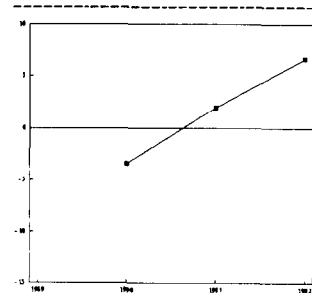
POLAND



ROMANIA



ROMANIA



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