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FISCAL IMPLICATIONS OF THE TRANSITION FROM PLANNED TO MARKET ECONOMY

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ABSTRACT

The transition from a centrally planned to a market-based economic system should change fundamentally the roles of government and public enterprises in the East-Central European countries of Hungary, Poland, and the Czech and Slovak Federated Republic (CSFR). The size of government should diminish, and that of the private sector increase, as subsidies, which are difficult to justify at market prices, are phased out. Taxes in centrally planned economies tend to be highly distortionary relative to those in market economies, making a restructuring of the tax system desirable to improve efficiency and growth prospects. These changes, in combination with competitive pressures and the objective of eventual membership in the European Community, should cause expenditure and tax systems in East-Central Europe to resemble the Western European model. This paper attempts to establish the extent to which these systems are moving towards the Western European model, and the structure of taxes and expenditures likely to result. It also identifies risks to the reform process resulting from pressures on budget balances during the transition, as tax revenues decline and countries are reluctant to phase out subsidies to unprofitable enterprises.

Fiscal Implications of the Transition from Planned to Market Economy

R. Sean Craig and Catherine L. Mann[1]

I. Introduction

Fiscal reform in Central and Eastern Europe is an integral part of the transition from planned to market economy. The transition should change fundamentally the roles of government and public enterprises: first, making possible a reduction in the size of government through the elimination of subsidies that make up a large part of public expenditures. Second, many existing taxes become highly distortionary with the transition to a market economy, making it desirable to replace them with more efficient taxes. Economic reforms should contribute to a restructuring of expenditures and tax systems in Central and East European countries that will cause them to resemble more closely the Western European model. However, the transition will create additional demands on government expenditures exerting pressure on fiscal balances. There is a risk that these financial pressures could curtail this restructuring.

Tax and subsidy systems in centrally planned economies (CPEs) are to a large extent incompatible with a market economy. In market economies governments levy taxes directly to finance expenditures. In contrast, governments in the CPEs specify tax and subsidy rates, but public enterprises collect most tax revenues and provide many social services. These administrative functions of public enterprises are

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1. The authors are staff economists in the International Finance Division at the Federal Reserve Board, though Catherine L. Mann is currently visiting the Council of Economic Advisors. This paper should not be interpreted as reflecting the views of the Board of Governors of the Federal Reserve System or its staff.

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financed directly by subsidies or indirectly by setting prices so as to generate the necessary enterprise income. Economic reforms will make it difficult for enterprises to perform these functions, as price liberalization eliminates the indirect subsidy, and privatization and the development of a private sector force enterprises to focus their attention on production and profit.

As reforms are instituted, Eastern and Central European governments will probably have to assume increased responsibility for the direct provision of social services which would worsen budget balances. The existing tax structure tend to become highly distortionary with price liberalization, making it desirable to introduce more neutral taxes. Revenues may decline while this new tax regime is being put into place. The phasing out of subsidies, which are difficult to justify at market prices, will allow some reduction in expenditures. However, these reductions may lag behind the increased demands for social services, especially if governments are reluctant to close or restructure unprofitable public enterprise. As a result, overall expenditures could rise temporarily.

This paper analyzes how the transition to a market economy is likely to influence the structure of expenditures and taxation in Eastern Europe. First, using a comparison of fiscal systems in Eastern and Western Europe it attempts to characterize the structure that is likely to result. Then, through a detailed examination of the fiscal reform process in Hungary, Poland, and the Czech and Slovak Federated Republic (CSFR), it attempts to gauge the extent to which their fiscal systems are evolving towards the Western European model.

The next section describes the main features of the fiscal system in CPEs, focusing in particular on the role of public enterprises. Sections III and IV consider the factors influencing the restructuring of tax systems and expenditures in East and Central Europe. Section V analyzes in detail the fiscal reform process in Hungary, Poland and the Czech and Slovak Federated Republic (CSFR), in light of the discussion in sections III and IV. Section VI concludes with some discussion of the risks and challenges of fiscal reform in Eastern Europe.

II. Characteristics of The Fiscal System in a Planned Economy

Taxes and expenditures have no independent impact on resource allocation in CPEs, rather, their principle function is to provide the financing necessary to support the resource allocation determined by the central plan. Tax revenues are largely determined by the prices and wages set in the central plan and, consequently, can be altered through price adjustments. The structure and level of expenditures are also influenced by the financing requirements of the central plan, as a large share of expenditures are subsidies to public enterprises (roughly 15 percent of GDP[2] in Eastern Europe before the recent reforms).

Subsidies in CPEs are necessary to finance the losses incurred by some enterprises at the prices set in the central plan. The predominance of subsidies reflects the interdependence of the central government and public enterprises. Central government exerts management control over enterprises, insuring consistency with the central plan, while enterprises provide social services and administer taxes--functions normally performed by general government in market economies.

2. When GDP data are not available Net Material Product (NMP) is used.

In addition to direct budgetary subsidies, there are substantial non-budgetary subsidies, such as tax preferences or exemptions, and low interest rates on loans provided by the state monobank, that have an indirect impact on budget balances. With fiscal reform and liberalization of goods and credit markets these non-budgetary subsidies often become budgetary expenditures[3], increasing the size of the necessary fiscal adjustment.

CPEs rely primarily on four types of taxes: turnover taxes, trade taxes, profit taxes, and wage taxes. A turnover tax on a good equals the difference between its wholesale and retail prices set in the central plan. It can be negative, in which case it is a subsidy maintaining the price of certain goods below the cost of production. Similarly, trade taxes equal the difference between the export or import price of a good and its domestic price. Reliance on these taxes results in a fragmented tax structure with many tax rates. However, in a planned economy this structure does not distort resource allocation. Revenues from the turnover tax are collected from public enterprises making the tax relatively simple to administer. Individuals are not taxed directly in CPEs, instead wage income is taxed using a payroll tax administered by public enterprises.

Public enterprises in CPEs also provide profit tax revenues. However, these profits are arbitrary as they are determined by the prices set in the central plan, and are unrelated to factors like productivity or competitiveness that determine profitability in a market economy. The confiscatory rates at which profits are often taxed reflects the fact

3. This point is made by Robert Holzmann in "Budgetary Subsidies in Centrally Planned Economies in Transition," IMF Working Paper, January 1991.

that profits in CPEs have no incentive effects, and are regarded primarily as a source of tax revenue. Also, the profit tax is often not parametric, in that tax rates are determined ex-post based on realized profits.

III. The Tax System and the Transition to a Market Economy

The transition to a market economy makes comprehensive tax reform necessary for several reasons: First, the dependence of tax revenue on official prices in CPEs means that price liberalization will cause large changes in tax revenues. Second, the taxes typically used in CPEs tend to be distortionary relative to those found in a market economies, and are likely to inhibit growth. Finally, the emergence of a private sector and competitive pressures on public enterprises is likely to make existing systems of tax administration not viable.

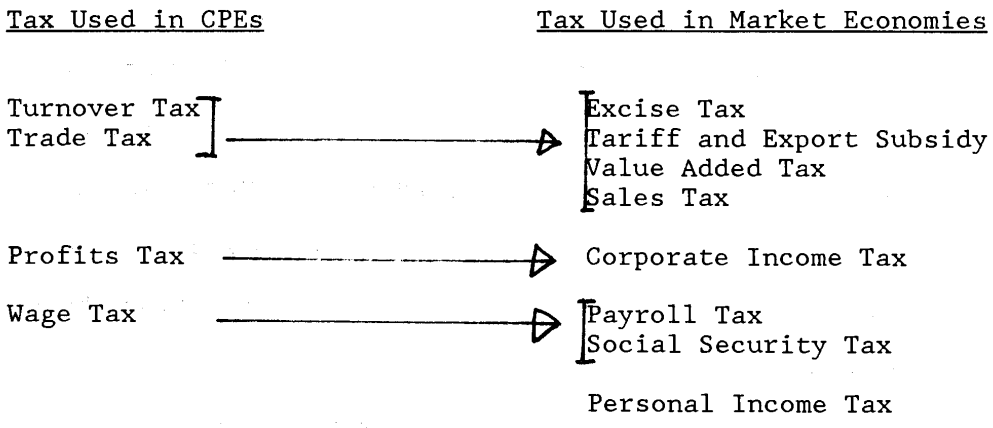
In many cases there exists a clear analog between specific taxes in centrally planned and market economies, reflecting the comparability of tax bases in the two economic systems. This linkage between specific taxes in the two economic systems serves as the basis for a model describing tax reform during the transition to a market economy. In practice, tax reform in Eastern Europe usually involves shifts from specific taxes used in CPEs to their market economy analogs, since this preserves the tax base and makes the impact on tax revenues more predictable. Tax reforms are typically implemented in stages with taxes being replaced one at a time, making it relatively easy to identify this linkage between specific taxes in the two economic system.

Chart 1 summarizes the linkage between specific taxes in centrally planned and market economies based on the comparability of tax

bases. Turnover and trade taxes in CPEs, and excise, sales, and value-added taxes in market economies all tax transactions. The profits tax and corporate income tax are, in principle, similar in that they tax enterprise profits. The wage tax in CPEs is analogous to the payroll and social security tax. The Chart also shows that certain taxes in market economies, such as the personal income tax, have no clear analog in CPEs.

CHART 1

Pattern of Tax Reform in Eastern Europe



A separate issue is the effects of reforms on the revenue raising capacity of new and existing taxes. Certain taxes that yield substantial revenues in CPEs, such as the profits tax, yield relatively low levels of revenue in market economies. Factors such as the distortionary impact of different taxes, the extent of international tax competition, and the objective of greater integration with the European Community (EC), influence tax rates and how much revenue can be raised from specific taxes. This issue will be addressed in more detail below, where a comparison with tax systems in EC countries is used to help

predict how the structure of tax rates and revenues in Eastern European countries are likely to change as the result of the transition to a market economy.

Evidence on the extent to which tax competition and increasing integration might contribute to a convergence of tax rates can be obtained through an examination of the EC experience. Table 2 shows that within the EC the convergence of tax rates has been substantial in recent years. However, as Table 3 shows, convergence of tax revenue shares has been less pronounced for a group of four countries, probably because of the persistence of differences in tax bases. Efforts underway to harmonize excise, value added and corporate income tax bases and rates should lead to further convergence.

1) *Turnover and Trade Taxes*

The turnover tax becomes highly distortionary with the transition to a market economy, due to the fragmented rate structure common in CPEs, although it remains capable of yielding substantial revenues. Despite steps by Central and East European countries to unify this rate structure, it remains distortionary relative to the Value Added Tax (VAT) that is widely used in market economies, due to its narrower tax base. Hungary has already replaced its turnover tax with a VAT: however, the base of this tax is relatively narrow due to the large number of exemption. Poland and Czechoslovakia have announced plans to introduce a VAT.

In the EC revenues from goods and service taxes average 13 percent of GDP, with 7 percent coming from the VAT, significantly less than the roughly 21 percent of GDP raised by the turnover tax in Eastern

Europe, as Table 2 shows. The EC has recently reached a consensus on a minimum VAT standard rate of 15 percent. Competitive pressures, are expected to lead to some convergence towards this minimum rate within the EC. In Hungary, Poland, and the CSFR, the goal of eventual EC membership is likely to constrain the share of revenues that can be raised using the VAT as they attempt to harmonize their tax systems with the EC.

2) *The Profit Tax*

CPEs are able to raise substantial revenues from the profit tax by setting output and input prices so as to generate high rates of profit, which are then taxed at high, sometimes confiscatory, rates. Price liberalization will greatly reduce these revenues from their current levels of between 7 and 18 percent of GDP, as many public enterprises in Eastern Europe are likely to become unprofitable at market prices. Another feature of the profit tax in CPEs is that it uses an arbitrary definition of profits that typically exceeds the economically relevant definition of profits, thus rasing the effective tax rate[4]. This suggests that fiscal reform should include a reform of accounting practices.

The high profit tax rate and the nonparmetric nature of this tax was thought to be justified by state ownership that gave the government both a tax and an equity claim on public enterprise profits. However, with the transition to a market economy the distinction between revenues resulting from a government ownership of public enterprises and revenues from taxation of profits becomes important due to the impact on

4. Vito Tanzi makes this point in his article "Tax Reform in Economies in Transition: a Brief Introduction to the Main Issues" IMF Working Paper, April 1989.

resource allocation. As owner, the government presumably has an interest in enhancing the value of public enterprises by allowing them to retain earnings for investment in order to ensure future revenues.

As tax collectors, governments seek to raise revenue in the least distortionary way (while satisfying other objectives such as equity). The profits tax is a relatively distortionary tax that adversely affects investment, output, and the formation of new firms. Futhermore, a high tax rate relative other countries discourages the location of investment in the home country. The low share of revenues, roughly 3 percent of GDP, raised by the profits (or corporate income) tax in the EC probably reflects an awareness of these distortionary effects. It also indicates the extent to which profit tax revenues will have to decline in Eastern Europe to avoid discouraging foreign investment. Several Eastern European governments have already reduced corporate tax rates or offered various tax incentives to attract foreign investment.

3) *Wage and Income Taxation*

The taxation of wages in CPEs, using the payroll and social security taxes raises revenues of between 15 and 33 percent of GDP, as Table 3 shows. This is significantly more than the average of 11.4 percent raised by the social security tax in the EC (payroll taxes provide negligible revenues in most EC countries). In a market economy, the wage tax is relatively distortionary due to its narrow tax base that excludes non-wage income and income earned by the self employed. Exclusion of these sources of income also makes it a relatively regressive tax.

The social security tax differs from the payroll tax because social security tax revenues go into a separate system of accounts within general government to finance pension benefits. To the extent that social security taxation is regarded as a form of obligatory saving, because pension benefits are linked to tax payments, its distortionary impact will be lessened. This may be one reason why market economies tend to use wage taxation exclusively for social security, and rely instead on the less distortionary personal income tax (that includes non-wage income in its tax base) for general revenues.

Revenues from the personal income tax in the EC average 11 percent of GDP, but vary widely from 5 to 27 percent of GDP. Only Hungary has a personal income tax, which yielded revenues of 5.5 percent of GDP in 1989. Both Poland and CSFR have legislation implementing personal income taxes in the next two years. Given their already relatively heavy dependence on profits, wage, and transaction taxes, the income tax is likely to be their main source of additional revenues. However, in the short run, adoption of this tax will be delayed by the need to develop the necessary administrative apparatus.

IV. Expenditures and the Transition to a Market Economy

Due to their common heritage, the societies of Eastern and Western Europe are similar in many important respects, despite the effects of forty years of communism. Similarities in demographic structure, educational attainment, level of urbanization, and the relative size of the agricultural sector suggest that levels of public expenditures are likely to be similar in many categories following the transition to a market economy. Consequently, an examination of the

structure of expenditures in the EC could provide a basis for conjectures about the eventual size of the public sector and structure of expenditures in East-Central Europe. This linkage between expenditure categories in Eastern and Western Europe is reflected in Table 5, which shows that levels of expenditures on social security, health, and education, are already quite similar, despite the differences between the two economic systems.

The relatively high old-age dependency ratios and generous publicly funded pensions systems in Eastern and Western Europe are reflected in high level of expenditures for social security, equal to 10 percent of GDP in the EC and 13 percent in Poland and the CSFR, as shown in Table 5. These common demographic features are also reflected in the demand for public health services. Expenditures on health are 5.4 percent of GDP in Western Europe and 4.7 percent of GDP in the CSFR. Broadly similar levels of expenditure on education, of 4.7 percent, 4.1 percent, and 5.5 percent of GDP in the CSFR, Hungary, and the EC, respectively, support the comparable levels of educational attainment in Eastern and Western Europe.

Expenditures on housing differ because in Western Europe housing is provided by the market, while in Eastern Europe it has often been provided, or financed, by the state, reflecting restrictions on private property. In Western Europe public housing expenditure is primarily targeted to the poor, and is relatively low as share of GDP, about 2 percent (although in France, public housing expenditures are 3.6 percent of GDP). In East-Central Europe, direct expenditure on housing is roughly 4 percent of GDP in Hungary and the CSFR and 2.5 percent in Poland. However, there are also substantial indirect expenditures in the

form of housing expenditures by public enterprises and subsidized mortgages provided by the state monobank that are difficult to measure. These expenditures are likely to decline as East-Central European countries move to privatize housing.

In CPEs there is little direct expenditures on official unemployment compensation or other forms of direct income maintenance, due to the combined effects of guaranteed employment and an egalitarian wage structure. This is the result of the employment and wage policies of public enterprises supported by direct and indirect subsidies (provided through the official structure of prices and wages). As a result, it is difficult to determine the resources devoted to income maintenance in CPEs, as they are hidden or cannot be distinguished from other types of subsidies to public enterprises. With the transition to a market economy this system will no longer be viable. Public enterprises will be forced by competitive pressures to layoff redundant workers and set wages and prices according to market conditions, making it necessary for governments in Eastern Europe to provide income maintenance directly. As a result, expenditures on unemployment compensation and other forms income maintenance (exclusive of social security) could approach the EC level of 7.4 percent of GDP. The substantial adjustment costs associated with the transition to a market economy will also contribute.

The most important potential source of expenditure reduction in Eastern Europe is subsidies to public enterprises and consumers, roughly 13 percent of GDP. Increased expenditures on income maintenance programs should allow some reduction in the subsidies to public enterprises used to finance these programs. However, in the near term, subsidies are likely to remain high relative to the EC average of 1.4 percent of GDP,

due to the substantial enterprise restructuring that must occur. In order to limit increases in unemployment, governments in Eastern Europe could maintain subsidies to enterprises, and delay privatization or the liquidation of unprofitable public enterprises.

It is impossible to predict with any degree of precision the eventual size and composition of government spending. However, a comparison of categories of expenditures in Eastern and Western Europe does provided an indication of long-run levels of expenditure that could result. Government in Eastern European countries should contract in size as the private sector expands and reforms lead to large reductions in subsidies. Reductions in expenditures on defense and government investment could also contribute. On balance, expenditures in East European could stabilize somewhere between 45 and 55 percent of GDP, compared to the 1989 levels of 51 percent, 61 percent, and 77 percent for Poland, Hungary, and CSFR, respectively.

V. The Fiscal Reform Process in Eastern Europe

The countries of Hungary, Poland, and the CSFR are implementing comprehensive fiscal reform programs that are similar in many important respects. Examination of the transition thus far suggests that the success of fiscal reforms is likely to depend on the implementation of complementary reforms in other sectors. For example, price liberalization allows the government to remove consumer subsidies, but could cause producer subsidies to expand unless financial discipline is imposed at the firm level. The replacement of high and often confiscatory profit taxes with a corporate income should encourage private sector growth only if there is progress in reducing the subsidies

and monopoly power that give some public enterprises an unfair competitive advantage.

There is considerable variation in the pace of fiscal reform in Hungary, Poland, and the CSFR and, therefore, in the extent to which these reforms are reflected in their fiscal accounts. Tax reform in Hungary was implemented beginning in 1988, earlier than in the other countries. However, reforms of expenditures were mostly implemented in 1990 and have had a limited effect on expenditures as a result. Poland's fiscal reform program, introduced at the beginning of 1990, cut the share of government expenditures significantly, and succeeded in balancing the budget in that year. In 1991, the budget balance has come under pressure as the slow pace of industry restructuring has kept producer subsidies high. Comprehensive tax reform able to offset revenue losses from existing taxes will not be implemented until 1992. Identifying the extent of fiscal reform in Poland is complicated by the extensive use of off-budget funds. Consolidation of the accounts of these funds with those of central and local government significantly alters the measured size and structure of government. The CSFR was the only one of these three countries to begin the reform process in fiscal balance. Expenditures reforms are being implemented, and tax reforms have been legislated for 1991 and 1993; consequently, most of these changes are not yet reflected in the fiscal accounts.

The next three sub-sections considers the reform programs in Hungary, Poland, and the CSFR, and examine whether they are moving towards tax and expenditure systems resembling the West European model outlined earlier in this paper. For each country, the expenditure side is examined first, with particular attention to subsidies and social

benefits. Then, changes in tax systems are reviewed. An important theme is the interrelationship between fiscal and other reforms.

i) The Hungarian Experience

Hungary's fiscal accounts are shown in Table 6. Maintaining a balanced fiscal position during the 1980s has been difficult as increased subsidies and transfers exerted pressures on Hungary's fiscal balance. However, Hungary's ability to raise tax revenues, due in part to tax reforms, has kept the fiscal situation from serious deterioration. A reduction in the share of government in GDP towards the EC average could be achieved through a further reduction in subsidies concomitant with additional moves to a market economy. However, during the transition period expenditures may be difficult to control in other budget areas, such as social benefits.

In the late 1980s, Hungary increased the pace of economic reforms. In 1990, it implemented a comprehensive price reform that largely eliminated the network of taxes and subsidies associated with price controls. As a result, there was a steady decline in central government subsidies as a share of GDP from an average of 16 percent before 1988 to 9.7 percent in 1990. Direct subsidies to consumers as a share of total expenditures fell from around 10 percent in the mid 1980s to 4 percent in 1990. The producer subsidy share fell from about 3 percent in the early 1980s to 0.7 percent in 1990.

Trade subsidies to producers remain substantial despite the effects of recent steps to liberalize trade. In 1989, thirty percent of imports and 70 percent of production were still affected by trade and exchange restrictions. Trade liberalization and a devaluation of the

forint, in 1990, reduced trade subsides from 11 percent of expenditures in 1988 to 6.6 percent in 1990.

Incomplete reforms in housing finance contributed to an increase in indirect subsidies to consumers. Home mortgage subsidies accounted for 7.1 percent of expenditures in 1990 (37 percent of subsidies alone), up from about 1 percent in the early 1980s. The high level of expenditures for home mortgages is a good example of how financial liberalization can make fiscal stabilization more difficult. Historically in Hungary, home mortgage interest rates were low and fixed. The switch to market-clearing interest rates created an inconsistency between the fixed-return asset side of the banking balance sheet and the variable-rate deposit side. The government insulated the nascent banking system from this inconsistency by taking the stock of housing mortgages onto its own balance sheet. Efforts to tax holders of the below-rate housing mortgages have been struck down by the Constitutional Court leaving the state with an unfinanced liability.

The shift in responsibility for social welfare to government from public enterprises is reflected in increased government expenditures, on social security and other social benefits. These expenditures, which were roughly 20 percent of total expenditures until 1988, rose to 30.2 percent of total expenditures in 1990. Hungary's social expenditures, at about 18 percent of GDP, approximates the EC average. However, increased expenditures on unemployment and retraining over the next several years could increase them temporarily.

Comprehensive tax reform was implemented beginning in 1988 when personal income, social security, and value-added taxes were introduced. In 1989, sector-specific corporate income tax rates were unified at a 50

percent tax rate. As a result, Hungary's tax system has come to increasingly resemble that of Western Europe.

The tax burden has shifted towards individuals from enterprises, and to consumers from producers. The share of enterprise profit tax in the income tax revenues fell after the tax reform from 96 in 1987 to 74 percent in 1990. While essentially revenue neutral, the shift to the VAT increased the share of goods and services taxes paid by consumers to 61 percent in 1990 from 53 percent in 1987. The share paid by producers decline to 20.5 percent in 1990 from 25.3 percent in 1987.

The tax reforms explicitly put social security on the government balance sheet--both on the expenditure side (noted above) and on the revenue side. Social security contributions, raised using the payroll tax, rose as a share of total revenues from around 24 percent of total tax revenues in the mid 1980s to 33 percent in 1990. Total employer contribution increased, despite a small decline in the share of enterprise contributions, to 67 percent because the government began contributing for its own employees.

ii) The Polish Experience

Poland's fiscal accounts, shown in Table 7, reflect the impact of reform programs implemented over the last decade. In the mid-1980s, piece-meal reforms at the enterprise level, without complementary reforms at the retail level, expanded consumer subsidies contributed to large fiscal deficits. The 1990 shock program was comprehensive, but slow structural adjustment in the enterprise sector reduced profit tax revenues and limited reductions in producer subsidies. The introduction of an income and Value-added tax is planned for 1992.

The piece-meal reform efforts of the mid-1980s gave enterprises greater freedom over inputs and wages, and partial price decontrol at the producer level was implemented. Producer subsidies as a share of expenditures fell from around 16 percent in the mid 1980s to 9 percent in 1989. However, prices at the retail level were not liberalized, and consumer subsidies rose sharply. Consumer subsidies represented 2/3 of total subsidies in 1989.

The 1990 shock program was more comprehensive and was designed to significantly alter the structure of subsidies and transfers in Poland. With almost complete price liberalization, subsidies (producer and consumer) as a share of total consolidated expenditure fell from 25.5 percent in 1989 to 17 percent in 1990. Consumer subsidies fell to 9 percent of expenditures as a result of the 1990 reforms, from 20.4 percent in 1988. They fell relative to producer subsidies which were also 9 percent of expenditures in 1990. Subsidies on foodstuffs as a share of total consumer subsidies fell to 8 percent from shares well above 40 in 1988 and 1989. As in Hungary, indirect consumer subsidies through housing is now the most important subsidy, accounting for 66 percent of total consumer subsidies in 1990 as against an average 30 percent over the 1980s.

Enterprise restructuring and privatization have proceeded slowly, limiting progress on reducing producer subsidies. Between 1989 and 1990, producer subsidies increased more than 10 percentage points to 47 percent of total subsidies. Coal subsidies (46 percent of enterprises subsidies) and transfers to loss-making enterprises (29 percent of enterprise subsidies) were the most important components.

Transfers, particularly social insurance transfers, increased with the implementation of the 1990 reform program as enterprises ceased to provide many social services, and as the government tried to reduce the human cost of the transition. Transfers as a share of total expenditures increased to 26.8 percent in 1990, from 21 percent in 1988. In addition, state spending on social benefits as a share of GDP jumped 50 percent in one year to 16.5 percent in 1990. At 17 percent of GDP, social insurance transfers are comparable to the Western European level.

Poland's fiscal accounts are fragmented due to the extensive use of the extra-budgetary funds (there are roughly 33 such funds). Consequently, any analysis of fiscal adjustment in Poland on a consolidated basis must consider the financial balance of these EBFs. These funds account for a bit less than half of consolidated revenues and expenditures, and finance a range of activities including social insurance, housing, research and development, and cultural activities. Most social programs operate through EBFs. The largest funds, the Social Insurance Fund, the Social Insurance Fund for Farmers, and the Fund for Occupational Activation (unemployment training) accounted for about two-thirds of the total expenditures of EBFs.

Before the start of reforms, the accounts of the EBFs were roughly in balance, if the transfers from the central government to the EBFs of roughly 8 percent of consolidated government spending are included. The increased demands on these funds associated with the 1989 and 1990 reforms resulted in a jump in state transfers to the EBFs to 14.7 percent of consolidated expenditures in 1990 (representing 9.1 percent of GDP). In 1989, the EBFs registered a deficit equal to 6.7 percent of GDP, accounting for the entire consolidated deficit for that

year of 6 percent of GDP. In 1990, while the consolidated government balance registered a surplus of 4.2 percent of GDP, the deficit of the EBFs was 3.3 percent of GDP. Clearly, exclusion of EBFs from the government accounts leads to a significant understatement of the actual budgetary imbalance.

During the 1980s, the share of enterprise tax revenues (from taxes on profits, dividends, excess wages, and foreign trade) in total consolidated revenues more than trebled to reach 37 percent in 1990. In 1989, Poland implemented a partial reform of enterprise taxation that altered tax rates, but maintained the essential features inherited from central planning. Specifically, the enterprise profit tax was changed from a flat 65 percent tax on profits to a combination of a 40 percent tax rate on profits, and a dividend tax rate tied to the National Bank of Poland's refinancing rate. This "dual" system of profit taxation reflected the distinction between the government's tax and equity claims on public enterprise profits. One indication of how little Poland has moved towards reducing the distortions inherent in the tax system is that enterprises account for most government revenues through "profit" taxes yet also account for the greatest share of government subsidies.

An important reason for the 1989 tax reform was to offset the drop in revenues from enterprise taxation, which fell from 24.8 percent of total revenues in 1988 to 19.5 percent in 1989. There were several reasons for this decline: first, the low penalty on tax arrears that made it advantageous for firms to not pay. Second, due to programs granting enterprises tax relief for exports (equal to 8.3 percent of total revenues in 1989). Third, the Tanzi effect (where, in an inflationary environment, the real value of the tax revenue falls on account of

collection lags) caused the share of tax revenues from enterprises to drop.

Poland does not tax individuals or consumers directly, and wage taxes provide less than 10 percent of total government revenues. However, a personal income tax, scheduled for implementation in 1992, may shift the tax burden towards consumers.

Poland's dependence on the turnover tax fell during the 1980s. The 1989 tax reforms tried to reduce further the distortions due to turnover taxes by reducing the number of turnover tax rates from 400 to 100. Revenue from the turnover tax fell to 13.8 percent of total revenues in 1990 compared to more than 20 percent during the 1980s, reflecting both this change in the tax structure and the decline in economic activity.

To maintain revenues, Poland has raised tariffs on a number of agricultural products. While these trade taxes may given the government some leeway to reduce direct producer subsidies, they may also be difficult to remove.

iii) The CSFR Experience

The CSFR did not experiment with reforms during the 1980s and, hence, its fiscal accounts (shown in Table 8) are much closer to the planned economy model. The main sources of revenues in 1990 were the turnover tax, and the wage and enterprise profit taxes, accounting for about 30 percent and 40 percent of total revenues respectively. On the expenditure side, social security and subsidies each accounted for about 20 percent of total expenditures.

Transfers as a share of government spending have been quite stable at 22 percent. However, subsidies to consumers and producers of intermediate inputs, usually in the form of negative turnover taxes, increased steadily as a share of expenditures during the 1980s from 4.6 percent in 1982 to 10.5 percent 1990. Direct subsidies to enterprises increased several percentage points to 7.8 percent of expenditures. These increases reflect, in part, efforts to insulate domestic producers and consumers from a general worsening of the terms-of-trade experienced by the CSFR in the 1980s.

The largest government expenditure category is social security, accounting for about 20 percent of spending and 15 percent of NMP. While these figures compare favorably with Western Europe, it is likely that expenditures on social benefits will rise during the transition, as in Hungary and Poland. Since the overall level of government spending in the CSFR, at 72 percent of NMP, is well above the West European average, significant changes in the structure of Government spending will probably be necessary.

Fiscal reforms have been more substantial on the revenue side. Changes instituted in 1989, consolidated in 1990, and formalized in 1991 legislation have altered the tax system in a direction broadly consistent with the EC model. A good example is social security. The payroll tax, which finances social security, was increased from 20 percent to 50 percent of wages in 1989. As a result, its share of total revenue rose from an average of 10-11 percent in the 1980s to over 20 percent in 1989 and 1990.

Profit tax rates were reduced in 1990 and 1991, to a rate of 55 percent in 1991 from between 75 to 85 percent rates prior to 1989. As a

result, enterprise tax revenue as a share of total revenue has declined from an average of 30 to 33 percent in the 1980s to 24 percent 1990.

The relative importance of enterprise, labor, and consumer taxation was little changed by the partial 1989 reforms. Wage taxes withheld by enterprise have remained stable as a share of total revenue at around 11 to 12 percent of total revenue. Turnover tax revenues have also remained stable at about 30 percent of total revenues. A personal income tax and value added tax have been legislated for implementation in 1991 and 1993, respectively. This should increase the revenue base, alter the relative importance of the different revenue sources, and remove some of the burden of tax administration from enterprises.

As the CSFR embarked on its comprehensive reform program in January 1991, it imposed a 20 percent import surcharge on a range of consumer goods. Government officials indicated that the surcharge was designed to protect the balance of payments in conjunction with a move to a convertible currency, as well as to increase tax revenues.

V. Conclusion: Risks and Challenges of Fiscal Reform

Failure to implement fiscal reform in Eastern Europe reforms would leave in place a highly distortionary tax system. New taxes such as the VAT and income tax are necessary to offset revenue losses as price liberalization reduces profit tax revenues, and to reduce the distortionary impact of existing taxes such as the turnover tax and payroll tax. On the expenditure side, price liberalization will allow a reduction in subsidies, which will be partially offset by an increase in expenditures on social services as government takes over provision of

these services from public enterprises, and attempts to cushion the transition to a market economy.

In the near term, fiscal reforms will be influenced by the need to maintain budget balance as economy-wide reforms, such as price liberalization and privatization, cause large changes in both expenditures and revenues. If not controlled, fiscal imbalances could threaten the entire reform program. Also, the apparatus necessary to administer the new taxes takes time to introduce, forcing greater reliance on existing taxes in the short-term, and creating the risk that tax reforms efforts may stall as temporary revenue measures are made permanent.

The Hungarian, Polish, and CSFR, fiscal reform programs have sought to maintain budget balance through large cuts in subsidies and tax restructuring. This process has been made more difficult by declines in economic activity and problems implementing and administering new taxes that have tended to reduce tax revenues. At the same time, most governments are being forced to expand social spending and to delay structural reforms of enterprise and labor markets are taking longer than anticipated, and to avoid undermining the social consensus for reforms. While these governments have not resorted to increased use of the distortionary turnover taxes, reliance on trade taxes has increased. A major challenge facing these governments will be to use the revenues from the introduction of income and value-added taxes to phase out these distortionary trade tax rather than to satisfy demands for additional expenditures.

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TABLE 1

Convergence of Tax Rates Within The European Community
(in percent)

Country	value added tax rate		corporate income tax rate		personal income tax rates top rate			lowest rate
	When Introduced*	1991	1986	1990	1986	1990	1986	1990
Belgium	18 (1971)	19	45	43	72	55	24	25
Denmark	10 (1967)	22	50	20	45	40	20	22
France	13.6 (1968)	18.6	45	37	65	57	5	5
Germany	10 (1968)	14	56	50	56	53	22	19
Italy	12 (1973)	19	36	36	62	50	12	10
Netherlands	12 (1969)	18.5	42	40	72	60	19	7
Spain	12 (1986)	12	35	35	66	56	8	25
United Kingdom	10 (1973)	17.5	35	35	60	40	29	25
EC average		15.5	39.1	36	55.3	46.3	15.4	15.3

Note: central government income tax rates and standard VAT rates reported
Source: IMF, OECD, country sources.
* The VAT is a relatively new that some countries have only introduced recently. Consequently, the table reports the tax rate for each country with the year of its introduction shown in parenthesis.

TABLE 2

Trends in the Structure of Taxation in Selected European Countries
(percent of total tax revenue)

Category of Tax Revenue	Germany		France		Italy		Denmark	
	1975	1988	1975	1988	1975	1988	1975	1988
Total percent of GDP	35.7	37.4	36.9	44.4	26.2	37.1	41.4	52.1
Personal Income	30.2	28.9	12.3	12.1	15.2	26.8	55.9	51.0
Corporate Income	4.5	5.3	5.2	5.2	6.3	9.4	3.1	4.4
Social Security	33.5	37.4	40.6	43.3	45.9	33.3	1.3	2.2
Payroll	0.8	0	1.9	1.8	0	0.5	0	0.3
Property	3.9	3.1	3.4	4.8	3.3	2.5	5.9	4.6
Goods and Services	27.1	25.2	33.3	29.4	29.4	28.0	33.6	34.1
of which: VAT and sales	17.1	15.6	25.5	19.7	14.3	15.2	16.9	19.4

TABLE 3

Comparison of the Structure of Taxation in Eastern Europe and the European Community
(percent of GDP)

Category of Tax Revenue	CFSR	Poland	Hungary	EC unweighted average	High EC Country	Low EC Country
Total	61.1	48.3	54.3	40.8	52.1 Denmark	32.8 Spain
Personal Income	--	--	5.5	11.2	26.6 Denmark	5.4 France
Enterprise Income 1/	17.7	8.5	7.0	3.0	4.0 U.K.	1.6 Ireland
Social Security	14.8	11.2	17.1	11.6	20.4 Neth.	1.2 Denmark
Payroll 2/	7.3	3.4	15.9	0.4	1.8 France	0
Property	1.2	0	6.2	4.5	12.7 U.K.	2.4 Belgium
Goods and Services 3/	19.7	22.7	21.6	13.1	17.8 Denmark	9.4 Germany
of which: VAT and sales				7.3	10.1 Denmark	5.6 Spain

1/ Corporate Income tax in EC, Enterprise profit tax in Eastern Europe.
2/ Wage tax in Eastern Europe.
3/ Turnover tax in Eastern Europe.
Note: 1988 data for the EC, 1989 data for Eastern Europe. Numbers may not add up to 100 percent due to rounding error.

TABLE 4

Comparison of the Categories of Government Expenditures
in Eastern Europe (1989) and the European Community (1990)
(percent of GDP)

Category of Expenditure	CFSR	Poland	Hungary	EC average	High EC Country	Low EC Country
Total	76.6	51.3	60.7	43.1	57.3 Denmark	35.5 Spain
Consumption	30.0	7.6	20.4	17.8	25.5 Denmark	14.1 Spain
Transfers	26.1	28.7	31.5	17.1	28.0 Nethe.	12 Portugal
Interest Payments	na	3.3	2.4	5.0	10.5 Belgium	2.6 Germany
Capital Expenditure	1.1	4.2	6.5	3.7	5.5 Spain	2.6 U.K.
of which: Investment	na	3.3	5.9	2.4	4.3 Spain	1.7 U.K.

Note: Numbers may not add up to the total due to rounding error.

TABLE 5

Comparison of the Structure of Government Expenditures
in Eastern Europe and the European Community in 1990
(percent of GDP)

Type of Expenditure	CFSR	Poland	Hungary	EC average	High EC Country	Low EC Country
Traditional Public goods	na	na	na	6.2	10.7 Neth.	4 U.K.
Defence	4.6	3.5	na	3.1	4.9 U.K.	2 Denmrk
Merit Goods				12.9	13.8 Denmark	12.1 U.K.
of which:						
Education	4.7	na	4.1	5.5	4.4 Germany	6.8 Denmrk
Health	4.7	na	na	5.4	4.3 France	6.3 Neth.
Housing	3.9	2.5	4.1	2.0	1.0 Neth.	3.6 France
Income Maintenance				17.6	23.9 France	13.2 U.K.
of which:						
Pensions	12.7	12.9	21.0	10.2	13.9 France	6.8 U.K.
Sickness	na	na	na	1.8	5.3 France	0.3 U.K.
Unemployment	na	0.0	na	2.0	2.8 Denmark	1.5 Germny
Other Family assistance	na	na	na	3.4	4.3 U.K.	3.0 Germny &France
Subsidies	13.0	12.9	12.7	1.4	2.5 Denmark	0.9 Neth.
Other, Capital Transactions	na	na	na	2.8	3.2 Denmark	2.2 France

Note: Due to data availability EC includes Germany, France, U.K., Denmark and the Netherlands. EC data for 1988 or 1987. Eastern Europe data for 1989, except subsidies for CSFR is from 1988. Categories are not exhaustive, interest payment are included in Table 1.

Table 6

HUNGARY
Fiscal Accounts

	1982	1983	1984	1985	1986	1987	1988	1989[P]	1990[e]
1. Consolidated General Government									
Revenue % GDP	59.2	60.9	60.8	60.0	61.5	59.1	63.4	59.4	58.0
Expenditure % GDP	61.2	61.9	59.4	61.1	64.6	62.7	63.3	60.7	58.2
Balance % GDP	-2.1	-1.1	1.4	-1.1	-3.1	-3.5	0.1	-1.3	-0.2
2. Subsidies & Transfers % GDP	31.7	35.4	33.2	34.1	35.9	32.4	32.5	31.3	29.1
a) Subsidies % GDP	17.8	18.9	15.7	15.5	15.8	15.6	13.2	12.1	9.7
As a % of expenditures									
Subsidies	34.5	32.9	28.2	27.7	28.6	29.8	25.8	23.4	19.4
Consumer	14.6	13.0	9.8	8.7	10.0	10.4	6.1	5.0	4.0
Producer	4.1	3.5	2.7	2.3	2.6	2.6	2.0	0.7	0.7
Foreign Trade	9.6	8.4	8.6	9.6	10.9	11.7	11.0	7.7	6.6
Housing	1.1	1.3	1.3	1.6	1.4	1.5	3.6	7.9	7.1
b) Social Security & Social Benefit Transfers									
% GDP	11.6	12.0	12.3	12.7	13.0	12.6	15.3	15.8	17.5
% Total Expenditure	19.0	19.3	20.6	20.8	20.2	20.1	24.2	25.9	30.2
3. Taxes % GDP	50.6	53.5	53.4	50.8	53.8	54.7	55.0	50.6	49.6
Taxes % Total Revenue	85.4	87.9	87.8	84.6	87.4	92.5	88.3	85.2	85.6
As a % of Total Revenue									
Income Tax	16.0	17.7	17.6	13.0	16.6	18.9	15.6	16.0	19.2
Enterprise % Income Tax	99.0	96.1	95.8	93.1	96.5	95.7	96.0	81.3	73.9
Payroll (social security)	17.0	17.3	21.9	24.9	23.9	24.4	24.5	31.5	33.0
Tax on Goods and Services	47.4	45.7	38.8	37.7	36.9	37.6	45.6	39.7	36.9
Consumer % Goods & Services	34.9	39.5	42.3	46.2	48.4	53.2	58.8	62.7	61.5
Producer % Goods & Services	45.3	42.8	35.0	26.3	26.3	25.3	26.0	17.9	20.5
Foreign Trade % Goods & Services	13.3	13.7	14.7	15.6	17.7	n.a.	11.9	18.7	17.3

P = Preliminary.
e = Estimate.

Table 7

POLAND
Fiscal Accounts

	1982	1983	1984	1985	1986	1987	1988	1989	1990[e]
1. Consolidated Government (State & Extra Budgetary Funds)									
Revenue % GDP	50.7	48.6	49.8	51.2	50.6	48.0	49.0	45.3	65.9
Expenditure % GDP	53.2	49.5	50.4	51.2	50.9	48.8	49.0	51.3	61.7
Balance % GDP	-2.5	-0.9	-0.6	-0-	-0.3	-0.8	-0-	-6.0	4.2
2. Subsidies & Transfers									
a) Subsidies % GDP	20.7	16.5	17.3	16.6	16.3	15.9	16.0	10.6	10.5
Subsidies % Total Expenditures	38.8	33.3	34.4	32.4	32.0	32.5	32.7	25.5	17.0
Consumer % Expenditure	19.4	16.8	17.3	16.2	18.0	20.4	20.4	16.5	9.0
Producer % Expenditure	19.4	16.5	17.1	16.2	14.0	12.1	12.3	9.0	8.0
b) Transfers: Social Insurance Funds									
% GDP	12.0	12.3	11.9	11.9	10.8	10.4	10.3	10.6	16.5
% Total Expenditures	22.6	24.8	23.6	23.2	21.2	21.2	21.0	25.7	26.8
c) Extra Budgetary Expend. % Total Expend.	13.0	16.8	16.8	18.1	19.4	22.8	24.6	27.1	25.4
Transfers to EBF % Total Expend.	8.5	7.6	7.7	8.6	8.2	8.3	8.6	12.5	14.7
Transfers to EBF % GDP.	4.5	3.5	3.9	4.4	4.2	4.1	4.2	5.2	9.1
3. Taxes									
Tax Revenue % Total Revenue	91.8	95.6	90.6	95.7	95.2	94.3	95.5	91.1	90.6
As a % of Total Revenue									
Profit Tax	27.3	18.8	17.7	21.1	21.8	22.8	24.8	19.5	27.3
Enterprise dividend	--	--	--	--	--	--	--	4.0	5.0
Excess Wage Tax	--	--	--	--	2.6	1.3	3.6	4.0	3.3
Foreign Trade Tax	6.4	5.3	5.1	5.6	5.5	5.1	4.2	n.a.	1.4
Income Tax Relief for Exporters	-0-	1.0	1.2	1.4	1.9	4.2	1.9	8.3	n.a.
Wage tax	7.3	8.0	7.4	7.4	7.6	7.5	7.2	7.9	6.6
Turnover Tax	22.7	28.3	27.4	24.2	23.0	22.1	22.1	20.5	13.8

Table 8

CZECH AND SLOVAK FEDERAL REPUBLIC
Fiscal Accounts

	1982	1983	1984	1985	1986	1987	1988	1989	1990
1. General Government									
Revenue % NMP	66.4	66.8	67.4	69.2	68.8	70.5	71.2	75.1	73.0
Expenditure % NMP	67.0	67.4	67.9	69.8	69.8	71.2	74.1	76.6	72.2
Balance % NMP	-0.6	-0.6	-0.5	-0.6	-1.0	-0.7	-2.9	-1.5	+0.8
2. Social Security & Transfers to Enterprises % NMP	28.5	29.2	30.2	30.4	31.2	31.2	31.4	31.8	n.a.
Social Security % NMP	15.3	15.5	15.0	15.2	15.3	15.2	15.0	15.6	15.4
As % Expend.									
Social Security	22.8	23.0	21.9	21.8	21.9	21.3	20.2	20.3	21.3
Transfers	19.6	20.4	22.5	21.8	22.8	22.5	22.1	21.6	22.4
Negative Turnover tax	4.6	4.6	6.1	6.8	7.2	7.2	6.6	10.4	10.5
Foreign Subsidies	2.2	2.5	3.2	3.2	4.4	4.3	4.1	2.9	2.3
Enteprise Subsidies	8.0	8.3	8.2	6.4	5.6	6.0	6.2	8.0	7.8
3. Taxes									
Tax Revenue % Total Revenue	87.1	86.7	87.9	89.1	86.1	87.2	87.0	90.7	n.a.
As a % of Total Revenue									
Payroll	10.9	11.1	10.6	10.3	10.4	10.8	11.4	24.2	21.1
Turnover	32.0	31.1	30.8	30.5	30.0	28.7	28.8	28.5	29.3
Foreign Trade	5.7	3.7	4.8	3.2	3.2	4.1	5.6	3.7	5.2
Wage	12.7	12.8	12.3	12.0	12.1	12.0	11.8	11.9	11.3
Enteprise Profit	27.8	30.1	31.7	35.3	32.3	33.2	31.2	24.4	22.7

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