

A FRAMEWORK FOR THE ECONOMIC TRANSFORMATION OF CZECHOSLOVAKIA

Jan Svejnar
University of Pittsburgh Pittsburgh, Pa. 15260

December 1989

Prepared as a background for the Policy meeting organized by the Czechoslovakia government at
Kolodeje Castle, February 2-4, 1990.

The paper benefitted from comments by participants in the Comparative and Development Economics Seminar at the University of Pittsburgh. I would especially like to thank Dubravko Mihaljek and Janez Prasnikar for detailed comments on an earlier draft.

A FRAMEWORK FOR THE ECONOMIC TRANSFORMATION OF CZECHOSLOVAKIA

by

Dr. Jan Švejnar

Department of Economics, University of Pittsburgh

I. Introduction

The goal of this report is to contribute to the discussion about the optimal way to transform the Czechoslovak economy from a centrally planned to a decentralized market system. Since there exists no formal theory of such a transition, the approach adopted here is to combine stylized facts about the Czechoslovak economy with theoretical concepts and empirical insights from other economies that have undergone various forms of economic stabilization, adjustment and reform. Since the consistency of any package of reform measures is crucial for the success of a transition, the ideas in this report are presented as a complete framework. However, the report should not be interpreted as a concrete proposal, but rather should be viewed as an illustration of how one might go about constructing a consistent blueprint for transforming the economy.

The report assumes that the goal of the economic transformation is to move the Czechoslovak economy from a relatively inefficient, centrally planned system, marked by a lack of incentives and a distorted structure of prices and quantity allocations, to a more efficient, market-oriented system based on competitive forces. In other words, the assumed goal is to move the economy to a higher-welfare equilibrium with as little transitional cost as possible.

While the Czechoslovak economic situation is lamentable in comparison to that of Western economies, it is still attractive relative to the circumstances of most reforming socialist economies. In particular, as Zieleniec et. al. (1989) document, compared to Western economies, Czechoslovakia has experienced a major deterioration in relative living standards as measured by GDP per capita, productivity, personal consumption, ecological indicators, quality of infrastructure, health standards, access to and quality of education, and other criteria. Yet, compared to most of the reforming socialist (and many middle income developing) economies, Czechoslovakia's economy still has a fairly solid technical structure, significant human capital which could be considerably developed in the near future, limited foreign indebtedness, and so far, also a relatively stable macroeconomic situation.

Although certain problematic signs are already appearing (e.g., the insolvency of some enterprises in the face of shrinking subsidies from the center), the general picture is one of an economy that still more or less successfully operates in a low (welfare) level equilibrium. Depending on the policies pursued by the current and future administrations, the economy could move either towards an equilibrium characterized by higher welfare or enter a troublesome period of a limited supply response at the micro level and a lack of macroeconomic stability.

This report aims to present a relatively consistent as well as economically and socially (desirable framework for economic transformation. The basic argument is that the major challenges for the transformation are microeconomic in nature, but that adherence to sound macro-economic policies is essential if the process is to succeed. The proposed strategy is one of a rapid series of legal, institutional, and economic measures within a consistent, credible, and well-publicized framework.

Section 2, below, identifies the main problems of the present system and points to the problems and opportunities that are likely to arise during the transition. In addition, this section examines the situation in specific markets and the nature and impact of proposed policies. Section 3 discusses the proposed transition policies. Section 4 addresses the question of speed and sequencing of the transformation. Section 5 provides concluding remarks.

II. The Principal Problems

The three principal (and interrelated) problems of the existing system are the extremely limited reliance on well-functioning markets, centralized decision-making, and an ill-defined structure of property rights. From the social welfare standpoint, these systemic features have generated perverse incentives, severely distorted prices, inefficient allocation of resources, rigidities and bottlenecks, and limited technical progress.

The principal problem faced during the transition is how to introduce an efficient market system based on incentives without incurring major costs in terms of runaway inflation, long-term unemployment, and a major deterioration in the still relatively egalitarian income distribution. First, in order to provide a basis for a policy of transition that reflects these objectives, the relevant micro and macroeconomic features of the Czechoslovak economy are very briefly outlined below.

The Microeconomic Situation

As in other economies that have been subject to an extended period of central planning, Czechoslovak factor and product markets are characterized by a variety of price distortions and quantitative restrictions.

The Labor Market. This is a relatively well-functioning market in the sense that households respond freely, albeit to significantly distorted wage-price signals. Unlike in other markets, the supply side behavior is not centralized (either by the government or economically-oriented trade unions) and there is evidence that households tend to optimize in their labor supply and human capital decisions. However, the limited housing market acts as a constraint on labor mobility. On the other hand, the demand side of the market is heavily distorted as labor demand by and large reflects the labor hoarding and rigid behavior of traditional socialist enterprises. Labor demand is perhaps less rigid in the growing sector of collective enterprises, although even here reductions in employment (layoffs) among full-time workers are unlikely because of the communal (labor-management) philosophy.

The principal issues that will be encountered in this market during the transition will be the simultaneous emergence of redundant labor and labor shortages in certain skill categories, adjustment of relative wages in response to market forces as well as to new institutions such as economic trade unions and participatory schemes, and the need to revamp the system of personal income taxes and social security. Related issues will be those of (1) enlarging the opportunities for acquiring human capital, especially in terms of providing superior higher education in key subjects such as economics, business administration, and Western languages, and (2) accommodating with the least social cost the shifts in labor demand that result from the economic restructuring.

The Capital Market. The capital market is characterized by severe financial repression (underdeveloped financial institutions and a low volume of financial assets) and an arbitrary allocation of capital among firms and other users by the center. Interest rates on deposits have been maintained rigidly at low nominal levels and the effective real interest rate charged to firms on capital is zero or negative. The government provides subsidies to loss-making firms in a

system of soft budget constraints. International capital flows have been limited and carefully regulated. The restructuring (introduction) of the capital market will, in many respects, need to be the most far-reaching transformation of the existing system.

Markets for Other Inputs. The allocation of most other inputs has also been arbitrarily directed from the center, with prices bearing little resemblance to the corresponding scarcity values. This has led to a very intensive use of some inputs (e.g., energy) despite high world market prices. Overall, in productive activities not subject to technologically fixed factor proportions, the choice of technique has been arbitrary. The major issue during the transition will be the readjustment of factor use in the direction of allocative efficiency.

The Product Market, Industrial Organization, and Trade. The product market suffers from similar price and quantity distortions as do the factor markets. Price controls are still virtually ubiquitous and the arbitrary nature of prices and transfers makes it impossible to identify departures from optimal behavior on the part of individual firms. In some industries (e.g., food processing), even efficient firms may display low or negative value added as input prices are kept high (to stimulate agricultural production) and product prices are maintained low (to avoid popular discontent).

An important outcome of the centralized system is an industrial structure that is characterized predominantly by state ownership,¹ and a relative paucity of small and medium-sized firms (high concentration). This structure generates limited product variety, lack of competition, and an overall rigidity in industrial production.

About two-thirds of foreign trade has been carried out with CMEA countries (one-third with the USSR alone) under a complicated system of bilateral trade (clearing) agreements based on non-convertible currency. Trade with other countries has been conducted in convertible currencies. All trade has been heavily centralized and subject to various quantitative restrictions. Its pattern was significantly altered after Czechoslovakia became part of the Soviet bloc in 1948 and in many respects it probably does not reflect the country's comparative advantage. Domestic retail trade has also been highly regulated, although in recent years firms and private intermediaries have started to trade outside of the central plan.

The principal issues that will have to be tackled during the reform are (1) how to liberalize foreign as well as domestic trade and international capital transactions and (2) how to restructure trade with CMEA partners.

The Market for Land and Housing. While limited leasing of land is practiced, a market for land is basically non-existent. The real estate market is beginning to emerge, although most housing units are still rented by tenants at controlled prices that are significantly below market equilibrium. Housing costs constitute a relatively small fraction of consumer expenditures for most households, although a significant group of urban residents pay substantial rents for deregulated (black market) housing. The maintenance of housing units is generally poor, and considerable excess demand for housing exists. Raising rents and establishing a housing market would equilibrate the system, improve maintenance, and, as discussed below, contribute to the elimination of a possible monetary overhang.

The Macroeconomic Situation

As in other socialist economies, the principal economic problem in Czechoslovakia has been the slowdown in economic growth. The average annual growth rate of net material product (NMP) has fallen from 5% in the 1970s to a mere 2% in the 1980s. Moreover, both Czechoslovak and outside analysts estimate that because of unreported inflation the real growth

has been close to zero in the 1980s. The basic macroeconomic problem is hence a stagnant economy.

The good news is that in terms of inflation the macroeconomic situation still appears to be relatively stable. Some inflationary pressures are evident, but they seem to be less pronounced than in other socialist economies. Domestic as well as foreign observers (e.g., PlanEcon) are skeptical about the official 1989 inflation figure of 1.5%, but their own estimates of open inflation are only about 4 percent. Similarly, shortages exist in certain commodity categories but overall there are no major signs of a macroeconomic disequilibrium.

The question that naturally arises is whether the perceived macro stability is illusory because of a monetary overhang. Official data, as reported by PlanEcon, show that cash holdings plus household savings deposits increased by 55%, while the official retail price index rose by 21%, between 1979 and 1989. The PlanEcon estimate of the actual retail price increase during this period is 44%. Thus, both estimates of inflation fall well below the increase in cash holdings and savings deposits. In a period of virtual economic stagnation, this discrepancy suggests that the 'velocity of circulation of money has probably decreased, as people have been unwilling or unable to spend their income. This is supported by the finding that, as a proportion of retail sales, cash holdings and savings deposits have risen from 74% in 1979 to 100% in 1989. This evolution also points to the gradual accumulation of a monetary overhang which could result in an inflationary situation if people's expectations shifted. Naturally, the probability of such a change in expectations, and how the surge in demand would be met on the supply side, depends very much on the policies pursued by the government. In this context, it is important to note that a significant part of the savings is concentrated in the hands of a small group of people.

The related issue is one of government fiscal policy. Data on the government budget deficit are at present unavailable to external observers and it is hence impossible to analyze the extent to which the government budget deficit may play a part in the present and future inflationary behavior. However, it is important to note that the centralized system of economic management has meant that government deficits could be financed by borrowing against household deposits and various non-convertible enterprise funds. As McKinnon (1989) indicates, this has been the tendency in the USSR with a consequent loss of macroeconomic stability.

III. Possible Transition Policies

The starting point is hence an economy that is severely distorted (and in some markets undeveloped) at the micro level, but which has so far maintained a (possibly precarious) macro balance. Since the recent inflationary experiences of countries such as Yugoslavia, Poland, Brazil, and Argentina suggest that the economic and social costs of macroeconomic instability are significant, the challenge for Czechoslovakia is how to maintain macroeconomic stability while restructuring the micro foundations and the international trade and finance sector.

There is a strong theoretical as well as empirical case to be made against instituting a set of partial reforms. First, the theory of the second best indicates that instituting partial measures in a highly distorted economy may not improve (and may, in fact, decrease) welfare. Second, even theories developed for circumstances where some fixed distortions cannot be eliminated point to the need for comprehensive and appropriately sequenced reform measures. The experience of socialist countries that introduced partial reforms (Czechoslovakia, Poland, Hungary, Yugoslavia, and the USSR in the 1980s) has not been impressive at the micro

(enterprise) level and it has led to varying degrees of macroeconomic instability. In what follows I therefore focus on the design of a comprehensive package of transition policies.

Since the Czechoslovak economy has relatively undeveloped market institutions and inflexible production units, one cannot expect a rapid, positive supply response to a set of drastic policy measures. In contrast, a negative supply response (enterprise failures and worker layoffs) could result instantly during rapid transition to a strict market system without government subsidies. The lack of institutional base and rigid industrial structure is the principal reason why one cannot expect a relatively rapid reallocation of resources as one did, for instance, during the shock treatment in Chile in the mid-1970s.² The principal challenge in designing the set of transition policies is hence how to minimize the period of restructuring while maintaining macro-economic stability. An important problem that also arises in this context is how to minimize the ability of some individuals (e.g., party officials, managers, etc.) to reap the enormous rents that become available in the distorted system when the central controls are lifted. This aspect of the reform has not been successfully handled in countries such as Poland, Hungary, and post-Allende Chile.

The Legal and Institutional Framework

The first step in the transformation process is the establishment of a clear set of laws on economic activity. Defining the "rules of the game" is essential for reducing uncertainty and providing an environment that is conducive to economic decision making. The laws on enterprise, property rights, banking, taxation, foreign investment, etc. are indispensable elements of a well-designed economic package.

One of the main shortcomings of the existing economic system is its inability to provide strong incentives for achieving economic efficiency. Therefore, in designing the legal framework, it is hence important that the incentive aspect be given considerable emphasis. The drafting of the various bills should be a collaborative process which involves not only lawyers, but also economists who understand the role that incentives should play in the transformed economy.

Experience from other countries indicates that simplicity and clarity are very beneficial features of a legal framework from the economic standpoint. In countries with complex economic laws and regulations, economic agents tend to waste time and other resources to achieve legal compliance. Complex legal systems also induce agents to seek legal exceptions and contribute to unproductive rent-seeking activities and corruption. In sum, whatever the philosophical goals are, it is desirable that they be translated into a clear and simple legal framework.

Microeconomic Issues

Because the household labor supply decisions are free of major distortions, the major microeconomic issues that need to be tackled relate to price policies, enterprise behavior and industrial organization, and the structure and functioning of the capital and labor markets.

Price Policies. Since prices provide a key signal for resource allocation and impose effective constraints on the behavior of economic agents in a decentralized economic system, from the social welfare standpoint it is highly desirable that prices reflect scarcities. In the context of a small open economy, such as Czechoslovakia, the goal should be to align domestic prices as closely as possible with world market prices.

To accomplish this rapidly without a major negative impact on producers and government revenue in the short run, the government could free prices of tradable commodities and convert all trade protection into a relatively simple (possibly uniform) structure of tariffs. The

tariffs would provide temporary protection for domestic producers of importables as they respond to the signals given by world prices and reorient their production activities in general and toward exportables in particular. The policy would also stipulate a well-defined and publicized sequence of tariff reductions over a short (e.g., 2-4 year) period. As for state enterprises, the policy would require that quantity allocations be discontinued (firms would be free to maintain or alter their suppliers), that existing subsidies be recalculated on the basis of existing wages and the new market prices, and that an analogous (2-4 year) time frame be set for their gradual elimination.³ For the transition to be successful, the transition program would have to be made credible, which in practice means that it would basically have to be carried out as specified. Experience from other countries indicates quite overwhelmingly that deviations ("exceptions to the rule") tend to derail the entire program.

The advantages of the proposed gradual program are that (1) it is politically more acceptable than that of a shock treatment, (2) it stimulates a rapid transition to efficient resource allocation, and (3) it generates tariff revenue for the government in the early reform phases when special social and other programs may require additional government expenditures. The transparent and diminishing tariff wall ensures that all economic agents understand the rules of the game and receive the correct signals for investment and other activities related to the reallocation of resources. The recalculated and rigidly diminishing subsidies guarantee that enterprises do not suffer immediate shocks, but also that they are forced to make immediate adjustments toward a system of hard budget constraints.

It is important to stress that from the standpoint of efficiency, it would be preferable to have no tariffs and provide more substantial initial subsidies to enterprises. This would avoid the distortion in consumer choice and provide even more transparent signals to enterprises. The drawback of this approach in the current Czechoslovak conditions is that (1) it might slow down and imperil the process of orienting enterprises from a system characterized by subsidies (and soft budget constraints) to one based on market principles, and (2) it would require that revenue be generated from other sources.

Enterprise Behavior and Industrial Organization. The most important goal under this heading is to stimulate efficient productive activity. China is the only socialist economy that has recently succeeded in this endeavor. Its 1978-89 experience suggests that the first step toward satisfying this goal ought to be the strong encouragement of entry of new firms. Since the most ready response comes from private, collective and communal entrepreneurs, there is a strong need for a pragmatic (non-ideological) approach that would permit all forms of enterprise ownership and control. The limited accumulation of individual wealth and the significant fixed costs associated with large-scale production mean that most of the newly created firms would be small to medium-sized, and operate outside of heavy industry.

The advantages of this policy are that it (1) generates a quick and competitive supply response in product lines that have been frequently ignored by planners and either not served at all or served by only a few (often semi-legal) individuals or firms, (2) provides new and diverse job opportunities in relatively labor- (and often skill-) intensive activities that may at least temporarily generate high incomes for skilled workers and high return to entrepreneurs, and (3) corrects the post-1948 bias toward large enterprises and provides healthy competition for the existing state and collective firms/farms.⁴

In view of their importance, the Czechoslovak government ought to use legal, moral, and economic measures to spur the growth of new firms. Full legalization of diverse forms of ownership and control is crucial for the effective functioning of these firms and hence for the full realization of social benefits through increased competition. Strong moral approval of this form of economic activity by the government is also desirable because the socially beneficial aspects

of this activity may not be widely understood by the population. The economic measures ought to include the availability of capital at competitive interest rates and through relatively simple approval procedures, favorable tax treatment of reinvested income, and the availability of premises for rent or sale.

It is also desirable to encourage foreign firms to bring in capital and start new firms within a well-defined and economically sensible legal framework. The founding of new firms as joint ventures between foreign and domestic entrepreneurs is also desirable from the social welfare standpoint, although the beneficial effect of joint ventures is frequently exaggerated. Experience from Hungary, Poland and other countries also suggests that care should be exercised when infusing foreign capital into existing firms. The main problem encountered in these countries is that existing firms are sold (often by self-interested managers) at prices that may not reflect their market value. This is a sign of incompetence or a lack of control on the part of the relevant governments rather than malevolence on the part of Western investors. Nevertheless, subsequent attempts by the domestic authorities to recontract may negatively affect the working relationship and discourage further inflows of foreign capital.

An important problem faced by Czechoslovakia is how to obtain a relatively high market price in the sale of state property and how to minimize the marketplace disadvantage that Czechoslovaks may face vis a vis foreigners in terms of initial economic conditions, namely wealth. Thus, the goal is to attract foreign investment in a way that meets international norms and maximizes the benefits for all Czechoslovak citizens.

One appealing way to handle the above problems is first to augment the wealth of the population by distributing a part of ownership of firms/farms directly to the population at large, analogous to earlier privatization schemes in Canada and Chile.⁵ One simple way that such a scheme could work is as follows:⁶ each non-private production unit would be declared a joint stock company with a given number of shares. The shares would be automatically held by a government trust fund, thus preventing the sale of assets by self-interested individuals or groups. The fund would then allocate a proportion of shares from each firm for distribution to citizens' accounts in the form of individual diversified portfolios.⁷ Another part of the portfolio could be allocated to other uses (e.g., to a pension fund, health benefits, unemployment insurance, or local governments) and part would remain under central government control. The shares of some companies held by the government trust fund could then be made available for sale to foreign and domestic investors.

Theory as well as empirical evidence indicate that from the seller's standpoint the preferred form of sale of common value assets is an auction. For instance, the sealed bid auction is a standard procedure used in Western countries and there is no reason for not relying on it in the present context. Provided the number of bidders is significant (i.e., at least 3-4), this type of auction generates higher revenue than other schemes and it avoids subsequent recriminations on the part of the sellers about the negotiated price.

Organizers of recent British privatization schemes suggest that restructuring of firms (eliminating redundant labor, etc.) prior to sale is a desirable feature that increases the sale price. The benefit of this approach, of course, hinges on whether or not the government can be more efficient than the private management in undertaking the restructuring. Comparing the two sale prices without comparing the relative costs of restructuring is not a correct approach.

Apart from obtaining a "fair" price for social assets, the above scheme has the advantages that it (1) contributes to the much needed development of a stock market, (2) ensures that all individuals in the society benefit by receiving some return on capital rather than just labor income, and (3) is likely to be considered a fair measure.

In the short run, most existing firms will necessarily be operated as state enterprises. In order to increase their efficiency, it would be desirable to undertake restructuring when needed and to introduce a system of appropriate incentives. The decentralization of economic decision-making implies that the rigid system of centralized quantity allocations should be replaced by one based on significant managerial autonomy and the competitive price system outlined above. The firms would start from an initial situation where some would require subsidies, while others would generate (taxable) profits. As mentioned earlier, the transition strategy ought to be based on a well-defined schedule of gradual elimination of subsidies to the enterprises. Exceptions could be firms that are given a special social mission that is not rewarded by the market (e.g., maintaining operations in remote areas, providing subsidized public transportation, etc.). Experience from other countries indicates that it is desirable to keep the number of such enterprises limited and to define very clearly ex ante the amount of subsidy that is allocated for the specific social mission. All other subsidies should be gradually eliminated as in other firms. The government would also be expected to regulate firms that are natural monopolies and where profit maximization is socially undesirable.

The state enterprises also ought to operate under a well-defined system of supervisory authority (e.g., an external board of directors) that would make management accountable for its decisions and enterprise performance. Managerial remuneration ought to be tied closely to enterprise performance both in the short run (profit sharing) and in the long run (remuneration in the form of blocked shares).

Finally, one should stress the need to establish a standard accounting system in all firms in order to facilitate control, transactions and tax collection. Experience from the rapidly growing economies in the Far East also suggests that the transmission of managerial know-how (e.g., through "participative management") be clearly stipulated in the firms with foreign management.

One argument that frequently surfaces in Czechoslovakia is that large firms need to be broken up and that the government ought to channel investment into areas of comparative advantage, i.e., principally machine-building and light industry. The comparative advantage argument is usually based on Czechoslovak experience between the two World Wars. Since no studies of optimal size and comparative advantage to this author's knowledge have been carried out in Czechoslovakia, these arguments ought to be considered highly questionable. First, economies of scale require many producers to operate on a scale that exceeds the size of the Czechoslovak producers (e.g., in automobiles, aircraft, etc.). Second, the historically-based ideas about comparative advantage precede the advent of Japan, South Korea, Taiwan, Brazil and other major producers on world markets. The difficulties that the Poles experienced in competing with these producers on world markets in the 1970s ought not to be underestimated. The advantage of the framework proposed in this report is, of course, that the signals about comparative advantage and optimal scale of production will be provided by the price system in the context of modern (world) technology. The decision on restructuring, spinoffs, etc. is best left to the management and the board of directors, who in the case of state enterprises are under the direct or indirect control of the government.

The Capital Market. The creation of an effective capital market is one of the greatest challenges during the transformation of socialist economies. In Czechoslovakia, most capital until now has been allocated centrally, with interest rates playing a minimal role. The Central Bank is not an independent institution and commercial banking, while developing recently, is still rudimentary. Capital allocation has therefore been arbitrary.

The basic step toward the establishment of a well-functioning capital market will be the creation of a competitive network of commercial banks and a stock market. The Hungarian and Yugoslav experience shows that commercial banks have to be carefully capitalized and their

initial conditions should not be linked to the performance of firms that may be initially placed in their portfolio. In particular, one must be careful not to saddle commercial banks with the task of phasing out enterprise subsidies (and permit their recycling in the form of debt) or allow enterprises to influence the banks' lending policies. Czechoslovakia has already embarked on the process of launching commercial banking (e.g., the creation of branches of Czech and Slovak State Banks and the operations of Živnobanka), but the steps taken so far are too limited to generate a competitive banking system. The banks will have to be sufficiently capitalized and they will have to adopt standard project appraisal and evaluation principles for their lending operations.

As Williams (1989) indicates, the basic self-regulatory, oversight and operating structure of stock markets is similar in most countries and the basic principles could be replicated in establishing the Czechoslovak stock market as well. The aforementioned distribution of diversified portfolios of shares among the citizens would naturally give rise to trading activity, whose efficiency would be significantly enhanced by the presence of a stock market. The listing of firms on the stock market would also generate additional disclosure of information about the firms and provide signals to investors. One area that ought to be carefully designed is margin requirements. To the extent that they are related to the probability of speculative bubbles around new issues of shares, the practice could be dangerous in a new market full of new issues.

The fundamental question that will have to be addressed by the Czechoslovak government is how to organize the participation of Western banks and investors in the Czechoslovak capital market. There is no reason to limit the role of foreign commercial banks that would operate according to an appropriately designed banking law. The goal should be to bring as many banks in as possible to create a competitive banking sector. As far as the trading of foreign investors on the stock market is concerned, however, the laws and regulations will have to weigh the tradeoff between bringing in foreign capital and raising stock prices (thus benefitting the Czechoslovak nationals), and the possibility that a significant inflow of investment funds could transfer control over a large part of the Czechoslovak economy to foreign hands.

The Labor Market and Industrial Relations. Labor and especially human capital is the principal asset of the Czechoslovak economy. As in the rapidly growing Far Eastern economies, if appropriately deployed, labor input could serve as the engine of economic growth. The issue is how best to design labor laws and institutions in order to provide the labor force with appropriate protection while also introducing the much-needed incentives for effort and quality work.

If historical evidence is any guide, the industrial relations system will be characterized by the emergence of economically-oriented trade unions and some form of worker participation in management (e.g., through workers' councils or board participation) in large firms.⁸ If appropriately organized, these institutions may play a positive social as well as economic part. By reducing industrial conflict, both institutions could contribute to greater worker identification with the firm and thus increase labor productivity. The productivity effect is presumably both direct, stemming from the identification with the workplace, and indirect, stemming from lower quits by workers and hence a greater accumulation of firm-specific human capital over time. Within a framework based on flexible prices, there appears to be some advantage if collective bargaining is at least to some extent firm-specific, rather than completely industry-wide. Similarly, during the transition period, it may be preferable to rely on short-term (e.g., six-month) rather than long-term (e.g., three-year) contracts.

Empirical evidence from Western countries (e.g., Blinder ed., 1990) suggests that it might be desirable to combine participation with appropriately designed profit sharing and

worker ownership schemes. The findings about the effectiveness of these schemes are sensitive to the nature of their design, however, and it might be preferable to make their establishment a bargaining issue rather than a legal requirement. A system based on partial profit sharing as opposed to simply fixed wages also has the advantage that outside shocks and business cycles tend to result in earnings variation rather than layoffs and unemployment. However, significant forms of firm-specific worker participation in management tend to give rise to the insider-outsider problem and make the hiring of new workers a more cumbersome decision. The economy then has to rely more on firm entry and exit rather than labor mobility in reallocating resources. Experience from large Japanese firms suggests that this is a viable option, provided worker mobility within firms is significant.

The ability to limit strikes and other forms of industrial conflict will be an important component of a successful transition program. The remarkable feature of post-World War II reconstruction in a number of West European countries was the social compact between unions and firms not to strike. Perhaps such an agreement could be struck in Czechoslovakia during the transition period as well. The agreement could designate some innovative conflict resolution procedure, such as final offer arbitration, as a binding outcome in cases of impasse. The advantage of a system that forces the arbitrator to select the final offer of the union or management, rather than splitting the difference, is that it provides a strong incentive for parties to settle without resorting to arbitration. The system has worked well in the public sector of several states in the U.S.

The success of a decentralized competitive system, based on autonomy of management, requires that managers be selected on merit and be given strong incentives to run firms efficiently. The best incentives in this respect are those that induce the most capable individuals to seek managerial posts and align the reward structure with the objective function of the firm. The supervisory board must also have the power to fire unsuccessful managers.

One of the most challenging tasks during the economic transition will be the reallocation of labor across firms, sectors, regions, and occupations. Within the overall strategy outlined in this report, this task will be facilitated by a number of features. First, competitive price signals will appear instantly, while the reallocation and retraining of workers can be a gradual process because subsidies would be phased out during a period of 2-3 years. Second, the major effort to stimulate the creation of new firms will result in new demand for labor. Third, the wealth effect connected with the distribution of shares will induce households (especially women) to substitute leisure for work and thus reduce the supply of labor to the economy. Fourth, if a significant component of total worker earnings is in the form of a profit share or if workers exercise some control over wages and employment, the reallocation of labor will be moderated as earning flexibility will absorb some of the impact that would otherwise be borne by adjustment in employment. As these points indicate, the transition strategy delineated in this report imposes economic and psychic costs of adjustment that are considerably less than those present in a one-shot adjustment process as we can see it for instance currently in Poland.

Issues Related to land and Real Estate. The creation of a well-functioning market in land and real estate should be an integral component of the overall strategy since both assets are important factors of production and consumption. However, they differ in a number of respects from other commodities and their marketization should be carefully designed. First, the total supply of land is basically fixed and the enormous wealth differential between Czechoslovak citizens and their more affluent neighbors could result in a major (and hard to reverse) transfer of ownership from domestic to foreign hands. To the extent that this is deemed undesirable (as it is, for instance, in Switzerland), some restrictions on land ownership by foreigners should be

imposed. This policy is totally consistent with the encouragement of long-term leases or even purchases of limited plots of land for entrepreneurial activities by foreign investors.

Second, if the current allocation of land and state housing is the result of arbitrary state actions, rather than a broadly (democratically) approved historical evolution, then the ex ante fair situation is one that does not start from the current distribution of these assets. One way to tackle the problem is to include land and real estate in the diversified portfolio of other assets that the state in part distributes to the population at large. Another possibility is for the state to claim these resources and auction them off to its citizens. Finally, an option that can be used alone or in combination with the other two is to tax the rent elements in these properties.

Macroeconomic Issues

At present, the main macroeconomic issue is how to reform macroeconomic institutions and formulate a supportive policy for the microeconomic transformations without destabilizing the macrostructure. If the government does not succeed in maintaining macroeconomic stability, many of the microeconomic reforms will be much harder to implement. In particular, in highly inflationary environments, economic agents tend to become preoccupied with monetary-financial phenomena at the expense of real economic activities and economic performance suffers.

Fiscal Policies and Taxation. The main task in the fiscal area will be to create a system of government revenue generation and expenditures that allows the government to maintain macro balance, while at the same time promoting economic efficiency and maintaining an acceptable distribution of income. The simultaneous achievement of efficiency and distributional objective is generally difficult to achieve in practice, and the problem is even more complicated during a major economic transformation. At the macro level, the government will face the problem of losing some control over its most important revenue sources (especially direct and indirect taxes on enterprises within a centralized price system) and, at the same time, incur new expenditures associated with the transition. At the micro level, the government faces the task of designing a tax system that is consistent with the efficiency orientation of the reform as well as equity consideration. The nature of the reform also implies that the fiscal system should operate through established rules rather than administrative discretion. In this context, the major macro problem encountered during reforms of centralized economies has been that government revenues tend to fall, the government is unable to reduce expenditures accordingly, and then unsuccessfully attempts to bridge the revenue shortfall through a variety of ad hoc taxes, surcharges and fees (usually on enterprises). The resulting growth in government deficit then frequently leads to a loss of macro stability and the financing of government deficit through inflationary increases in money supply.

A reasonable fiscal approach that is consistent with the other elements of the reform package outlined in this report is one based on a combination of direct taxes (enterprise income tax/subsidy, resource tax, and a negative personal income/wealth tax) and indirect taxes (value-added tax --VAT, excise taxes on specific commodities, and possibly sales tax and tariffs).

The enterprise income tax should be targeted as much as possible to the economic (as opposed to accounting) profit of the enterprise, thus making the tax non-distortionary (lump sum) in nature. This is especially desirable in Czechoslovakia, where it is difficult to obtain an accurate valuation of the capital stock and accounting profit may contain the return on capital. By the same token, the temporary subsidies given to enterprises during the transition should also be lump sum. The rate of the enterprise income tax ought to be kept as low as possible in order to stimulate the growth of new enterprises and entrepreneurial activity in general.

The resource tax is designed to capture the value of natural and other resources that are not directly valued through the price system. The tax should be levied on all resource-using enterprises and, as mentioned earlier, it should also cover rural and urban uses of land and structures.

The design of a personal income tax is a crucial element of the reform package, since the system of personal income taxes is relatively underdeveloped and the reallocation of labor may bring about temporary fluctuations in personal income for a significant number of individuals. A system of negative income tax together with a simple progressive tax at higher income levels is appealing because (1) it provides a minimum guaranteed income to each household, (2) unlike other welfare schemes it retains an incentive for the unemployed and low wage earners to search for (better) work, and (3) it is fully integrated within the tax system and thus relatively easy to administer.⁹ In sum, the negative income tax is in many respects superior to alternative welfare schemes.

A simple value-added tax with a unified structure would complement the price liberalization aspect of the reform and have a number of desirable features. In particular, it would minimize price distortions, not discriminate against investment, and serve as an important source of revenue. To the extent that Czechoslovakia intends to apply for membership in the EEC, an additional advantage of a VAT is that it is in line with current practices of EEC members.

Excise taxes on tobacco, alcohol and luxury goods are generally accepted taxes on commodities the use of which society tries to discourage. They are easy to administer, yield needed revenue, and enhance equity to the extent that their consumption is concentrated in higher income groups. Taxes on gasoline and diesel are natural instruments to charge for the use of roads. If selective excise taxes are socially undesirable and additional tax revenues are needed, a uniform and comprehensive sales tax may be a good instrument.

As mentioned earlier, tariffs could represent an important source of revenue as well as temporary protection for the restructuring enterprises. Simple (transparent) and decreasing tariffs have been used successfully in a number of developing countries during periods of structural adjustment. If the distortion brought about by these tariffs is not substantial, their temporary use may be desirable. In this case, in order to equalize the effective rates of protection, intermediate goods import ought to be subject to the tariff and domestically-produced intermediate goods should also be taxed at the same rate.

An obvious but important task of the authorities is to minimize tax evasion within the new system. To this end, it will be desirable to reallocate human resources within the civil service and set up modern accounting and statistical technology.

Another basic point which should be stressed is the need for clear rules for financing possible government deficits within the new system. Experience from other countries suggests that the government should not be permitted to rely on extra-budgetary expenditures financed by central bank credit. The preferable method of financing is through the sale of treasury bills and loans from independent commercial banks. It should also be noted that in a situation where the government budget accounts for an overwhelming portion of the GDP, even small-percentage deficits have a major impact on the economy.

Central Bank, Monetary Policy and the Exchange Rate. Experience from Western countries suggests that the most important task in this area is the creation of an independent central bank, whose governors would be appointed for staggered terms and stand accountable to the parliament. In view of the experience of other reforming countries, the most important and

difficult task of the central bank will be the pursuit of a relatively tight monetary policy (including an active interest rate policy) during the transition. The experience shows that as government revenues fall and insolvent enterprises face bankruptcy without further subsidies, the temptation to delay difficult choices by printing money and generating inflation is strong. Hungary, Poland, Yugoslavia and many other countries provide recent examples of this phenomenon. In the Czechoslovak case, it is worthwhile to recall the successful measures adopted in this context in 1919 by Czechoslovakia's first Minister of Finance, Dr. Alois Rašín. With hyperinflation raging in Germany, Austria, Hungary, and Poland, Rasin restricted the notes in circulation by stamping (and hence recognizing as Czechoslovak debt) only those Austro-Hungarian notes which were then circulating within the country and he also quickly moved to establish a statutory limit on the total government note circulation. Perhaps this historical legacy will help the Czechoslovak government exercise similar monetary prudence in the future.

The gradual and clearly defined schedule of eliminating subsidies to firms provides a cushion against the pressure that is likely to be exerted on the central bank. Moreover I note that tight monetary policy need not reduce domestic economic activity if reduced domestic demand can be offset by rising exports, an option that is not unrealistic for a small country like Czechoslovakia. With a realistic exchange rate, such a rise in export activity should occur. However, if it is deemed desirable to create an ultra-export biased system (e.g., the Soviet market collapses), it may be reasonable to accord export activities favorable tax treatment. The Korean experience suggests that such an ultra-export biased system is consistent with rapid export and GNP growth.

The two issues that naturally arise in this context are those of the foreign exchange regime (fixed vs. flexible) and of currency convertibility. The two issues can in principle be treated separately, although, in the context of the transition program presented in this report, they are closely related. Whether the optimal exchange rate regime is a fixed or flexible one depends on whether one views the exchange rate as a factor price, a derived price of tradables, or an asset. The first two views would call for a flexible exchange rate, while the third view would prefer a fixed rate.

Viewing the exchange rate as a factor price is probably most appropriate in the case of a rapidly transforming socialist economy. Trade will shift from being regarded as a residual activity to being the engine of growth, an activity that transforms domestic factors, goods and services into foreign ones and vice versa. In order to do this efficiently, prices should reflect relative scarcities and a flexible exchange rate is needed. A flexible exchange rate also stimulates restructuring toward export industries, eliminates the need for subsidizing export activities (except in the case of the aforementioned ultra-export bias), avoids balance-of-payments problems, and eliminates the need for management of scheduled depreciations. In sum, there are strong reasons for establishing a flexible exchange rate and the only serious drawback is that it may be subject to fluctuations that make accurate business planning difficult. If this is deemed to be a serious problem, the authorities could first allow the exchange rate to float and find its initial equilibrium value, and subsequently engage in interventions that would limit the amplitude of fluctuations.

Convertibility of the crown is a form of liberalization of the capital account. Contrary to a popular myth circulating in Czechoslovakia as well as in other East European countries and the USSR, convertibility of domestic currency could be achieved instantly. The question is whether this is desirable or not from the social welfare standpoint.

Arguments against convertibility focus on possibly destabilizing outflows and inflows of hot money, reflecting agents' speculation about a variety of factors, including the credibility of the government's programs. Examples of instability include situations with convertibility in the

presence of a significant monetary overhang, low level of foreign exchange reserves, or an inconsistent economic program on the part of the government.

Arguments for convertibility stress that it is needed for capital inflows and technology transfer by foreigners. These inflows and transfers are desirable because they modernize the economy, help reallocate resources in the economy, and reduce the adjustment cost (in terms of unemployment, etc.) of the economic transition. They also point out that flexible exchange rates will not generate efficient allocation of resources if domestic agents are not free to purchase commodities at equilibrium prices on both domestic and foreign markets.

An intermediate position argues for a gradual introduction of convertibility, for instance, first for foreign firms and investors, then for trading companies and, once there is no danger of a monetary overhang, for domestic firms and citizens. Since the transition strategy outlined in this report stresses efficient (re)allocation of resources on the basis of free prices, the preferred exchange rate policy would be one of a flexible exchange rate together with either immediate convertibility or gradual but rapid (e.g., one year) introduction of convertibility.

To the extent that the CMEA countries switch to a similar policy of currency convertibility, the above exchange rate and trade policies would apply vis-a-vis them as well. At present it appears that Hungary and Poland intend to move in this direction in the near future. In view of the recent patterns of specialization, a free trade area among Czechoslovakia, Hungary, and Poland could be a beneficial arrangement. Trade with countries that are unlikely to switch to currency convertibility (e.g., the Soviet Union) would either continue to be governed by clearing agreements or by decentralized hard-currency transactions. In view of the Czechoslovak reliance on trade with the CMEA and the costs of adjustment inherent in a rapid reorientation to other markets, the best short- and medium-term strategy is to maintain its presence in the CMEA markets, while intensively exploring alternative outlets. Since Czechoslovak managers know the CMEA markets considerably better than their Western counterparts, Czechoslovak firms ought to carve out an important niche as intermediaries in the overall East-West trade and investment activities. Finally, it should be stressed that the policy of liberalizing foreign trade and relying on world prices is fully compatible with aggressive attempts by Czechoslovakia to obtain most-favored-nation treatment, negotiating favorable quotas into the EEC, U.S. and other countries in product categories where import quotas exist, and practicing standard anti-dumping policies.

As was mentioned in Section 2, household cash holdings and deposits appear to have increased substantially over time. A sudden decision by households to liquidate these holdings could result in a collapse of the overhang and, unless additional commodities and financial instruments are available, it could generate significant inflationary pressures and capital flight in the presence of currency convertibility. An important task of the government will be to prevent this from happening. A variety of policies are available, including an active interest rate policy on deposits (making savings attractive), creating new financial instruments, selling housing, shares of enterprise and other property, and, if need be, converting part of the deposits and/or cash holdings by medium-term government bonds.

Labor Reallocation, Schooling and Transportation

The gradual transformation of the economy will entail substantial reallocation of labor across sectors, occupations, and regions. To facilitate this desirable mobility, the government will need to establish appropriate institutions and structures. The sectoral and occupational mobility will necessitate training, while regional mobility will require a well-functioning housing market and more comprehensive and modern transportation and telecommunications systems. All three types of mobility will be greatly facilitated by the public provision of information.

The job information and (re)training activities can be provided by existing as well as new government institutions, existing and new enterprises, and private manpower and training agencies. A multi-pronged system is desirable to ensure that maximum information is available and that diverse and competitive training possibilities exist. The government should play a catalytic role by running some of these agencies and by providing incentives for the private ones. For example, government agencies at the central as well as local level should possess computerized information about advertised vacancies and provide referral services to job seekers. Private manpower agencies should be encouraged to enter and provide similar services for a fee.¹⁰

Government-sponsored retraining can be provided through public training centers, by contracts with existing enterprises, or by contracts with new, private training organizations. Private training organizations should also be allowed to provide training to paying participants outside the government channels. Since Western experience with various job training schemes is mixed,¹¹ it would make sense to assign some trainees across different training schemes at random in order to evaluate the relative effectiveness of different schemes. However, the majority of dislocated workers should be issued vouchers which they could use in the training program of their choice. Training institutions should be rewarded for training as well as for successful placement of the trainees.

While reallocating existing employees will be an important task, the gradual (2-4 year) transition means that a significant part of the mobility could be inter-generational (rerouting of new hires).¹² With selective hiring freezes and accelerated retirement in the shrinking enterprises, the process of reallocating labor can be in large part transformed into one of reformed training of apprentices and students. This type of human capital investment in both will have a long-term return and it should be well-organized and modern in nature. It represents one of the most important ways of bridging the economic gap between Czechoslovakia and the West.

Most analysts expect that the transition will require expensive subsidies to economically declining regions together with geographic relocation of labor. The relocation process is expected to affect entire households and be economically and socially very costly. However, in the case of a small country such as Czechoslovakia, the need for geographic relocation of households may be significantly reduced if the government undertakes a major initiative to expand and modernize the transportation and communications network. Such an initiative would enable many workers to commute to new jobs from existing locations and obviate the need to uproot entire families. The modern transportation/communications network would also confer a major indirect benefit on general economic activity and help attract foreign business.

Foreign Assistance

Czechoslovak economic prosperity, which is a prerequisite for democracy and political stability, is of major interest to Western countries. As a result, Western countries will be willing to provide assistance for economic reconstruction. This assistance will be needed despite the fact that with a foreign debt of \$7 billion, Czechoslovakia is not a highly indebted country. The worst economic legacy of the 42 years of Communist rule is the poor state of the infrastructure, ecology, managerial know-how, and technology. Some of these problems (e.g., the obsolete technology) can be, to a large extent, overcome through trade and private capital inflows. However, projects related to infrastructure development, ecological renovation, increasing the safety of nuclear power plants, health care, and some aspects of training are primary candidates for financing with foreign assistance. These projects should be attractive to Western governments, foundations and multi-lateral organizations because (1) they can be clearly targeted to areas of visibility and need, (2) their costs and benefits can be calculated in a

standard framework, and (3) their realization will have strong positive externalities on neighboring countries.

Civil Service Reform

A prerequisite for successful design and implementation of the economic transformation is a fundamental reform of the existing government bureaucracy. This will not be a simple task, because overall the bureaucracy is excessive, but in some areas (e.g., tax collection) the bureaucracy is deficient. Moreover, in some areas (e.g., foreign trade) the goal of depoliticizing civil service may conflict with the goal of maintaining the highest level of professional capacity. Experience with civil service reforms in other countries indicates that this is a difficult task even in much simpler circumstances. In the Czechoslovak case, a successful reform will require both an organizational restructuring and a thorough functional review.

Within civil service reform, an important component should be the strengthening of the statistical office. A close monitoring of the macro and micro developments will be essential for diagnostics and for fine tuning of the policy instruments.

IV. Sequencing and Timing

The gradual nature of some of the proposed measures brings up the question of optimal sequencing and timing. Within the framework outlined in this paper, one can think of a number of sequencing and timing scenarios. The one presented here consists of three phases.

Phase 1 This would be the preparatory phase in which activities of the following type would take place:

- the relevant laws would be passed, regulations and decrees would be prepared, and institutions consistent with these laws and regulations would be established and staffed. The laws would delineate the general "rules of the game" for ongoing and future economic activity, while the regulations would define the precise modalities (the tax rates, levels of tariffs, the allocation of shares to individuals, etc.). The new and reformed institutions (banks, the stock market, trade unions, etc.) would be established accordingly.
- the diversified portfolio of stocks would be allocated to individuals through a computerized system but it would not yet be distributed.
- enterprises and their new supervisory authorities would prepare enterprise accounts according to the new (standard) accounting system, appoint members of the boards of directors, select managers, sign industrial relations agreements related to issues such as arbitration and methods of payment, negotiate voluntary contracts about future deliveries with suppliers and clients, start credit negotiations with banks, and intensify national and international market research.
- the executive branch of the government would carry out civil service reform and undertake preparations for the launching of the transition --i.e., improve its technological preparedness and set up computer programs for calculations of subsidies, taxes, etc.
- the transition program would be clearly designed and publicized so that economic agents could form accurate expectations and initiate actions accordingly.

Phase 2 In the second phase, the principal measures would be simultaneously put into effect. Prices and the exchange rate would be liberalized, enterprises would start operating on the basis of price rather than quantity signals, initial subsidies (taxes) would be calculated and allocated (levied), and new firms would enter the market. In this relatively short (perhaps 3-4 month) phase, the new system would essentially be put into effect and the first diagnostic of legal and institutional shortcomings could be carried out and corrective actions could be adopted.

Phase 3 Phase 3 would contain the (2-4 year) transition period, during which subsidies would be gradually reduced, labor and other resources would be reallocated according to demand, transportation and other priority projects would be undertaken, the stock market would become functional, selected enterprises would be gradually auctioned, etc. The transition would be finished once the system based on subsidies was basically eliminated and enterprises became fully autonomous units.

V. Concluding Remarks

(The framework described in this report is naturally only one example of how one might approach the issue of designing a transformation blueprint for the Czechoslovak economy. It focuses on how to design a set of optimal and internally consistent measures. The optimality is reflected in the underlying goal of maximizing the economic and social gains of the transition, while minimizing the economic and social cost of adjustment. The framework aims at creating competitive markets and strong incentives. At the same time, it takes into account the socialized nature of the economy and the implicit desire of the population to maintain certain (efficient) welfare institutions.

NOTES

1. The economic impact of the cooperative form of ownership outside of agriculture has been increasing rapidly, but from a small base. Private firms are now permitted, but are still subject to heavy taxation and have very limited access to capital. Joint ventures with foreign firms exist on a small scale.

2. It should be noted that even in Chile, the transition was not instant and costless from the social standpoint. Numerous bankruptcies occurred and the severity of the social impact was such that the government was forced to implement job programs.

3. The Czechoslovak Ministry of Finance keeps detailed records of all enterprise subsidies and the recalculation of subsidies would not be a major task.

4. The Chinese experience is quite instructive. The number of non-state enterprises jumped from 1.5 million to 15 million between 1978 and 1986. By 1986, employment in these firms reached 80 million and the firms produced over one-third of China's industrial output. Since the mid-1980s they also started to compete effectively with many state enterprises.

5. See, e.g., Hinds (1989).

6. The scheme proposed by Rybacek (1989) contains some similar elements.

7. The distribution could be egalitarian, proportional to age, or according to some other social choice rule. To get around the problem of having to create a large number of shares, the practice could be to create a number of partially diversified mutual funds, giving individuals a portfolio of these funds rather than of the underlying shares.

8. See, e.g., Svejnar (1978).

9. A hypothetical example of such a scheme would be one in which each household of a given size is guaranteed a monthly income equal to 1500 crowns if its earned income falls below this level, earned income up to 1500 crowns is taxed at a 50% rate (thus giving a family earning 1500 crowns a total income of $1500 + 0.5 (1500) = 2250$ crowns) and income above 2250 crowns is taxed at a standard income tax rate.

10. The fee is usually charged only when a placement is made and it is borne by the employer.

11. The main problem in evaluating the effectiveness of the North American and West European programs is that trainees are not assigned at random. The lack of random assignment then makes it difficult to assess whether the subsequent job performance is due to the training or to non-random allocation of trainees to different programs.

12. With the relatively aged population structure, many enterprises may experience an annual turnover rate of over 5% of the labor force.

REFERENCES

Blinder, Alan ed. (1990), Paying for Productivity, Washington, D.C.: Brookings Institution.

Hinds, Manuel (1989), "Issues in the Introduction of Market Forces in Eastern European Socialist Economies," World Bank, mimeo.

McKinnon, Ronald (1989), "Stabilizing the Ruble," paper presented at the 1989 Meetings of the American Economic Association, Atlanta.

Rybáček, Ludvik (1989), "Chceme změnu?" Somerset, N.J., mimeo.

Svejnar, Jan (1978), "Workers' Participation in Management in Czechoslovakia," Annals of Public and Cooperative Economy, 49 (2), 177-202.

Williams, William (1989), "Recommended Design for a Comprehensive Securities Law," New York, N.Y., mimeo.

Zieleniec, Jozef et. al. (1989), "Československo na rozcestí," Praha: Ekonomický Ústav ČSAV.