Status Report

Economic Reform & Integration Project

ERI

of the

Technology, Economy & Society (TES) Program

P.O. Aven - M.J. Peck
F. Schmidt-Bleek - C.M. Schneider

SR-90-1 July 1990



ECONOMIC REFORM & INTEGRATION PROJECT

ERI

of the

TECHNOLOGY, ECONOMY & SOCIETY (TES) PROGRAM

at the

International Institute for Applied Systems Analysis

in Laxenburg, Austria

1 July 1990

An intermediate report by

P. O. Aven M. J. Peck F. Schmidt-Bleek C. M. Schneider

Status Reports, which summarize IIASA research activities and results, do not necessarily express the views and opinions of the Institute or of the National Member Organizations supporting it.



International Institute for Applied Systems Analysis

A-2361 Laxenburg

Austria



Table of Contents

	Page
Introduction	3
Summary of Discussion on Research Topics	
(ERI Meeting, 11–12 December, 1989)	10
Responses to Soviet Impressions concerning the	
Problematic of Establishing a Market Economy	
(ERI Meeting, 1–3 March, 1990)	19
Research Priorities	42
Notes on the Preparation of the	
First Series of ERI Seminars	46
Schedule	47
ERI Study Group Participants	48



INTRODUCTION

Professor Dr. F. Schmidt-Bleek

BACKGROUND

As countries with centrally planned economies are now attempting to institute economic reforms, consideration of the following interdependent challenges is inevitable:

- introducing market economy measures and reducing sharply inefficiencies in commerce and industry;
- opening the economy to international competition;
- catching up with fast developments in western industry and commerce, driven by the micro-chip (the new industrial revolution);
- introducing economic and technical changes so as to minimize the fast growing conflict between the economic aspirations of all people on the one hand and the limited capacity of the ecosphere on the other hand to assimilate waste from the technosphere due to material and energy intensive technologies (the ecological reform of economies);
- the need to adjust political and institutional structures.

It would seem shortsighted to exclude one or the other of these issues from simultaneous, serious, and urgent consideration because the international developments are rather beyond the control of any single country. How successfully these challenges will ultimately be met determines the internal well-being as well as the international competitive standing of each country, all countries, east as west, north as south.

In spite of apparent similarities among the socialist countries as regards their economies there clearly exist differences in detail, i.e., in available resources, history, domestic market size and socio-cultural settings. These differences need understanding and consideration and when embarking on economic reforms. This is a lesson which the Commission of the European Communities has learned when bringing such diverse countries as Ireland, Greece, and Portugal into the mainstream

of Western Europe.

In approaching economic reforms, questions of timing and priorities will play a major role. It would seem that one step, "big bang" changes may be most efficient. There are such examples in recent history, like for instance the currency and economic reform in the FRG in 1948. It was its economic minister, Ludwig Erhard, who insisted that economic changes are "either/or" events, like pregnancy. However, if not all problems can suddenly and simultaneously be put on the track toward solutions, which ones come first? What are realistic timetables? How can sufficient cooperation by patience among people be secured as there is no way to institute economic reforms without disadvantages or disinheritances to some? Economy by market signals and salary scales reflecting productivity must obviously lead to radically different distributions of income and access to wealth than those favored by planned economies.

THE IIASA PROJECT ON "ECONOMIC REFORM AND INTEGRATION – ERI"

In late summer 1989 we were approached by Academician S. Shatalin of the Soviet Union with the request to consider establishing an activity that could analyze international economic interdependencies and serve as a scientific forum to support economic reforms in the Soviet Union and the other socialist Member countries of our Institute. In our view, meeting the following conditions was essential in order to be successful:

- active interest and readiness for cooperation among scientists and policy-makers, east and west;
- a readiness among contributing scientists to engage in risky, policy oriented research;
- a working approach which would differ markedly from the usual IIASA style in terms of preparation, participation, intensity, and timing;
- sufficient resources, probably beyond the regular IIASA budget.

Visits with high-level policy makers, such as Deputy Prime Minister Abalkin of the Soviet Union; Mr. Attali, Special Advisor to President Mitterand; Mr. Vignon, Director of the "Central Advisory

Group of President Delors, Commission of the European Communities" (Lacroix Group); and Deputy Prime Minister Reichel of the ČSSR convinced us that we could attract major interest and count on support in the policy arena. Academician Igor Makarov Chief Learned Secretary of the USSR Academy of Sciences assured us of intensive interest. The IIASA Council warmly approved the Project late in 1989. We have since then received pledges of financial (hard currency) support by a number of countries, including the USSR, Finland, Bulgaria, the USA, ČSSR, the FRG, and the Commission of the European Communities.

Objectives of the ERI Project

The general aim of the Project can be formulated as *establishing* bridges between eastern and western economic theory and practice, creating conditions for mutually assimilating successful managerial experience, and for possible rapprochement of economic systems.

Two types of objectives are the focus of the ERI Project. Objectives of the first type are connected with actual problems of economic reform in centrally planned economies and mutual East-West institutional adjustments. Objectives of the second type are to produce methodology for East-West comparative analysis. The development of methodological tools is to provide a foundation for applied research, and support the preparation of concrete policy recommendations. In the methodological research, special emphasis will be placed on:

- The construction of non-traditional quantitative indicators for East-West comparative analyses, for the determination of commons and specifics in socio-economic development in East and West, for the determination of reciprocal influence of different development aspects, for the identification of feasible reform strategies and their assessment;
- The elaboration of methodology for international institutional comparisons, including the creation of relevant quantitative measures.

A major meeting in this area will be co-hosted by IIASA and the USSR Academy of Sciences in Sochi on the Black Sea from 15–18 October 1990.

Among the main goals of the Project's applied research are:

- The determination of the most fruitful institutional innovations, the study of accumulated experience in solving social problems, especially in countries where attempts to balance the extent of market regulation were already successful;
- The elaboration of scenarios of different reform options for Eastern Europe, the preparation of recommendations for improving economic legislation in various countries, and for harmonizing the international economic order.

Preparations Toward the ERI Meeting (1-3 March 1990)

In early December 1989 the ERI Project held a scoping meeting at IIASA in Laxenburg to consider:

- which major issues may be best suited for our work in the applied research area; and
- by which approaches could we best assure success for this work.

As a non-economist I am very much indebted to my colleagues from the economic science areas for their concrete support and help. The meeting in December identified the following five major areas of urgent concern:

- A Capital Market and Privatization
- B Labor Market and Employment
- C Opening of the Economy
- D Economic Stabilization
- E Prices and Competition

The participants of the December meeting also advised that work in these areas may best proceed by establishing a Study Group for each, guided by an experienced chairperson and supported by IIASA staff. It was also decided to hold a broader expert meeting early in 1990 in order to define and initiate research in the areas indicated above and prepare the actual research. This represents the 1-3 March ERI Meeting.

Two final observations on the IIASA ERI Project may be in order before turning to the question of what is expected from the March Meeting.

First, the methodological work on indicators for East-West comparisons has begun in the TES Program. The first scoping meeting for this area is planned for 27-29 June 1990. However, this topic will be further elaborated elsewhere.

Second, the work to be put in motion during this meeting can be but a beginning of applied research in this area. No doubt a multitude of opportunities and challenges for additional IIASA involvements in the area of Economic Reform and Integration will surface soon. In fact, IIASA has already proven to have considerable experience in the field of micro-economic issues related to economic reforms, in particular in the area of East-West Joint Ventures. I am certain that in addition to dealing with *Metaproblems* such as now contemplated, IIASA needs to develop studies in areas of more direct practical applications in industry and commerce on the firm level. A bottom-up strategy is needed as much as a top-down. This matter will be pursued further by the ERI Project during the coming months.

What to Expect from the Meeting

Limited time dictates that an intensive concentration on specific topics. It is our hope that the following goals can be accomplished during the three day meeting:

- agree on major study areas;
- agree on study mandates, timings and goals for Study Groups;
- constitute Study Groups, identify chairpersons and participants;
- conducts first substantive discussions in Study Groups and distribute initial specific tasks among experts;
- constitute an ERI Steering Committee.

It would seem reasonable to begin the meeting by revisiting the five major areas previously suggested by the participants of the December 1989 meeting. For this purpose, soviet colleagues have been invited to provide background papers for each topic. In addition, Professor Yasin has written a general paper detailing the views of the USSR State Commission on Economic Reform. The Meeting shall begin with this presentation. Each of the five topics will be discussed in turn, whereby prepared comments follow the soviet presentations, particularly by US scientists.

On the morning of March 3, the participants divide into five parallel sessions under the headings of the five major study areas. As indicated, the Study Group chairpersons are expected chairpersons to condense the previous discussions into study mandates and find agreement on timing, working details and initial distribution of tasks. Each group will be assisted by IIASA staff. Subsequently, chairpersons can inform all participants of the outcome of the parallel sessions during the final Plenary Session.

All participants have been asked to indicate their specific interests in the various topics. By and large the results would indicate a reasonably balanced participation in the parallel sessions. The Study Group chairpersons may, in fact, invite experts later to participate in the actual work leading to the Study Group reports.

The ERI Steering Committee will meet to consider the whole Project, its activity plan, resource needs, and possible future directions. The Steering Committee will consist of the Study Group chairpersons and additional experts from East and West, from academia, administration and industry. Participants will be duely informed of the outcome of the ERI Steering Committee deliberations.

One final word on the participation in this meeting. The ERI Project has attempted to bring together high level experts from all IIASA Member countries. In fact, a few scientists from additional countries are among us. The EEC, ECE, UNIDO and the World Bank are represented here and so is the Commission of the European Communities. This is appreciated and understood as a sign of confidence and willingness to cooperate with IIASA so as to avoid unnecessary duplication of efforts in international fora.

A special word to IIASA's Council. By unexpected coincidence, IIASA Council's Executive Committee met on 27-28 February here in Laxenburg. A good number of the Council Members, and in particular its Chairman, Academician Mikhalevich are among us today. I am very pleased indeed and interpret their presence as a sign of considerable and most welcome interest. As I understand it, most of them do

not intend to participate as experts in the forthcoming discussions, but rather as highly qualified observers who are responsible for IIASA as an international scientific forum with many other important research topics on its agenda.

The ERI Project very much appreciates the willingness of world-renowned experts to come to Laxenburg and work with us on a most exciting project.

Summary of Discussion on Research Topics

Initial ERI Scoping Meeting

11-12 December, 1989

Christoph M. Schneider

It is doubtless that a number of more precisely defined topics must be selected for specific research from under the umbrella of the following rather general titles which were suggested and discussed by international experts meeting at IIASA on the 11–12 December, 1989. This was a scoping meeting in preparation for a more intensive working meeting where the topics will be analyzed by individual Study Groups. This upcoming meeting is to be held from 1–3 March, 1990 at IIASA. The following is a summary of the thoughts, ideas and discussions which were expressed during the first international meeting of the Economic Reform and Integration Project on the 11–12 December, 1989 also at IIASA.

Title: Capital Market and Privatization

Content:

The principles and dynamics of a capital market provide scientists with a wealth of research material. The success of an economic reform depends upon the amount of information available on and the understanding of the existing capital market system. In addition, a concensus must be found with respect to the type of system desired and the variety of implementable policy tools, instruments and processes required in order to achieve the goals of decision-makers should be clearly identified and defined. Capital productivity, efficiency, vintages, investments, accumulation, distribution and allocation are all possible indicators utilized to determine the "health" of a liberalized capital market.

Investigations in this area should include the analysis of the characteristics of, reasons for and effects of disturbances in capital markets, including takeovers. In this light, the role (more precisely, influences and effects) of private investment takes on increasing importance. Business today is going straight to the heart of the economic process where it is not only important to trade, but also directly to the production process.

Changes in the structure of the market economy will occur as a result of the presence of alternative forms of capital allocation. An analysis should review which type of market structure (with monopolies, oligopolies, atomistic producers, or a combination of the three) will best encourage growth of the national product and how such a structure can be introduced or the existing one modified to meet the new specifications. The abundance of pressures on enterprises before, during and after times of reform should be clearly recognized. The possibilities of encouraging local and national initiatives and incentives through a change from an inefficient industrial infrastructure characterized by vertical integration to a better functioning horizontally integrated structure which allows easier entry and improved market conditions deserves substantial consideration in reform politics. Types of ownership, changes in property and propriety rights all become central topics necessary for discussion. The characteristics which enterprises require in order to operate freely and productively in the capital and labour markets must be defined.

Privatization has often been heralded as a cure for the transition of the economic structure as long as such a process is harmonized with moves toward stabilization. The effects of increasing self-management and possibilities of self-financing arise with moves toward decentralization. A functioning financial apparatus can be achieved with a reform of the banking system which would include a reliable analysis of creditworthiness. It is necessary to investigate and describe the links (international supply of goods and finance) of the participants (enterprises) in a planned or strictly regulated economy to the other economies within the world marketplace when discussing privatization. The question of who will be the buyers or agents in the privatization process has considerable significance.

Conflicts arising as a result of the market dictation through state ownership need to be avoided. The replacement of management in the planned economies is not sufficient to turn the decline in productivity around. Instead, a direct replacement of state ownership with another form and structure would present a number of more preferable solutions. Of course, this would influence costs of capital, entry conditions, the size and affordability of capital units, the possibilities of private investment, and still more elements of the capital market. The coexistence of a free market environment and the presence of state sectors or enterprises and the effects each would have on the other and on the whole economy deserves closer consideration.

Title: Labour Market and Employment

Content:

One of the leading questions facing economists and policy-makers of the eastern centrally-planned societies revolves around the problem of establishing a "functional" labour market as it is known in the western economies. In most instances, positive economic growth is initiated when the performance of the factors of production are monitored and improved. This will inevitably cause closer investigation of labour productivity and efficiency and the effect of the former on the total factor productivity. In order to follow such a path of research, methods of measurement, recording and analysis must be specified.

Labour force organization is an essential element of the labour market. Not only during a time of reform are labour mobility and occupational changes important issues for all participants in the work force. These flexible adjustments also influence the macroeconomic make-up of government policies and the microeconomic character of plant-level decisions. In some cases the problem of unemployment will arise, while in others underemployment may cause the dilemmas. The key will be to develop ways to recognize discrepancies in the labour market early and to devise procedures to deal with the disequilibrium situations. This could lead to an analysis of the reallocation of labour (from rather high paying sectors to lower paying sectors, from lower qualified to higher qualified sectors and vice versa), internal and external displacement (within firms, between occupations and/or regions), proper and functional education processes, skill development (training, retraining, continuing education) and motivation and incentives.

The quality of labour and, therefore, also production and final products

is often the result of labour politics. Policies and programs must be developed to deal with social disruption (unemployment, etc.) stemming from the adjustment process, technological change, new demands, and losses associated with political instability and worker dissillussionment. The effects of technological improvements, more liberalized technology transfer and the support for innovations are felt in different ways throughout the employment system.

Finally, formulas must be found to integrate the social support programs into the overall economic system. The question of wages and income distribution remains a chapter within itself. How can sufficiently strong enough productivity growth be achieved in order to encourage growth in wages and in living standards? The ratio of income growth to the growth rate of supply of goods is an indicator of economic performance which allows certain conclusions to be drawn about the levels of consumption, production and the factors of production required to attain a specific standard of living. Furthermore, harmonization of social values (ie. health, environment, safety, etc.) constitutes an additional area of interest to reforming economies.

Title: Opening of the Economy (Joint Ventures, Convertibility, etc.)

Content:

When considering the advantages and consequences of a socio-economic and political-economic reform the importance of economic growth in the international dimension moves to the forefront of the discussion. The effects of open borders, freer trade, deregulated markets, joint ventures, international investments, convertible currencies and a variety of other characteristics of an opening economy influence the national and international markets for consumer and producer goods, capital, labour, and finance. The integration of a nation into an active market characterized by free entry and a large number of participants reduces the direct dependency of such a country on a single or overly dominant trading partner and the risks associated with such a monopoly or monopsony situation. Exploitation of the comparative advantages enhance the economic vitality and market power (and often market share) of a country's commercial industries, in addition to its ability to attract foreign investments and improve the general standard of living

of its citizens.

A move to increased openness will require a careful balance between national and international policies. The unfolding of an accessible economy can preserve and/or initiate domestic competition as a result of the impulse from the international market place. A desirable goal for previously centrally-planned economies will be to attain competitiveness in the established industries and sectors while simultaneously establishing new business areas that can generate employment and improve the foreign currency account and the trade balance to an internationally competitive level. Introduction and acceptance of innovations in technology, market practices and business management can serve to achieve and maintain a certain market share in a particular sector. The economic and political roles of a nation, as well as its internal well-being, are in no small part affected by its international competitiveness.

The increased integration of economies between one another is accompanied by an extensive variety of trade-offs, gains and losses, and structural changes. Many of the consequences of the opening process are at the same time reason for and result of the improved cross-border information flow and the increased availability of economic data and statistics. It will still be a major undertaking to decide which data to collect in the future, how to process it, utilize the results and convert these into appropriate policies.

The state of East-West relations continues to change rapidly and provides ever increasing opportunities for business and industry. The traditional East-West trade relations the world has had to deal with in the past are giving way to more simplified, convenient and open approaches as a result of modified legislation and administrative procedures. The potential for a number of forms of industrial and commercial cooperation, such as joint production, joint contracts, and joint projects, remains on the upswing. Takeovers by multi-national enterprises and joint ventures combine foreign financial support and business experience with domestic market knowledge in order to speed up the process of internationalization. Studies on these topics can help determine under which conditions these types of business ventures can be initiated, beneficial for the economy and how they will influence the future market environment.

The question of convertibility of a currency is a crucial issue in the discussion concerning the opening of an economy. Decisions must be

made with respect to the basis on which the exchange rate should be defined. The advantages and disadvantages of the move to fixed, pegged or freely floating rates has to be carefully weighed in the face of probable appreciation or depreciation and resulting influences on saving, investment and consumption. The use of a convertible currency will inevitably lead to better and more active trade in higher quality goods. Internal prices will be a key indicator of the effects of a change to convertibility. While the need for new forms of currency control will arise, the new type of exchange rate will influence the flow of capital and investment across the border, the level of external purchases, the balance of payments and the trade balance.

The desire to blend better into the world and western economic scene will require the development and adherence to specified and accepted standards, norms and levels of quality. Within the economy of a previously centrally-planned nation, the move from vertical to horizontal integration will be necessary at all levels of production. The procedure utilized to achieve such structural change should only be the product of careful formulation.

Title: Economic Stabilization (Taxation, Monetary and Fiscal Policy, etc.)

Content:

Economic stabilization is a rather general title for an extremely far reaching topic area. In order for an economic reform to be successful, nation stability (economic, social and political) should not be impaired. The issue of stabilization, also known as macroeconomics in the West, does not exist as such in the East, and is key to preventing unnecessary inflation and unemployment in the transition. Monetary and fiscal policy, taxation, banking reform and state deficits are just a handful of the more prominent subjects within the scope of economic stabilization, whether in a time of reform or not.

Fiscal policy can be the process of shaping taxation and public expenditure in order to help moderate the downswings of the business cycle and to contribute toward the maintenance of a growing, high-employment economy free from excessive demand inflation or deflation. Monetary policy can be adjusted in a manner to try to stimulate

private investment. An appropriate saving/investment balance is required, otherwise an economy will tend more strongly toward external borrowing which inturn leads to a worsening of the trade and current account positions, the national deficit and external debt. To the problem of external debt is added that of internal debt leading to a postponement of consumption. How much of the stabilizing load is carried by monetary and how much by fiscal policy depends on public-sector growth targets and international-payments constraints. Also, the financing of deficits and surpluses itself helps shape the course of money-supply growth. The fundamental goal of fiscal and monetary authorities should be to assist in providing a favorable economic environment within which the people can have the widest opportunity for achievement and sufficient incentive to do so.

Taxation has and always will be one of the main instruments with which governments can implement fiscal policy and influence the stability of the economy. Taxation is a method of collecting resources required to make available social services, programs and public goods. Taxation and transfers help determine the distribution of private incomes. During a time of reform questions arise with respect to which types of taxes should be implemented in which forms. Taxation can be introduced in an indirect or direct fashion. Indirect taxes (ie. excise, or sales taxes, value-added taxes, etc.) are levied against goods and services and thus only indirectly on people. Direct taxes (ie. income, inheritance, etc.) are levied directly on people or firms (ie. corporate income tax). Considerations about the distribution of tax revenues via transfer payments or other social support systems should be made simultaneously with the decisions on how to tax whom when.

An enormous amount of possibilities exist within the monetary and fiscal apparatus to encourage economic growth. The key is to combine the appropriate policies for each individual situation. When dealing with a country which plans to initiate a radical economic reform the existence and value of a possibly active shadow economy must be considered. There will be adjustments in the official economy when attempting to integrate these markets if it is so desired. In order to obtain a more liberated economic system some deregulation in certain sectors can do wonders. Rules and legislation are necessary for an orderly economic process with functioning markets, but policy-makers must be aware of the possibility of once again increasing the regulatory burden and thereby hurting economic growth and market freedom.

Title: Prices and Competition

Content:

Freeing the prices in an economy to reflect actual demand and supply situations is one of the most fundamental steps in the process of attempting to liberate the market and engage in free trade. Existing and new, direct and indirect mechanisms and methods must each be weighed and analyzed as to the effects they could have in moving products into a free market pricing environment. A system of market prices should operate to solve the basic economic problems of what, how and for whom. Prices for goods should reflect more accurately the interaction between consumer demand and industry supply, while the factor-prices and amounts are to be the result of the demands of business and the public's supply of the factors. Free prices tend to initiate competition which inturn leads to improved general economic growth and social well-being as a result of increased supply, variety and quality of goods and services.

The impacts of implementing a market-oriented pricing system are more numerous than the methods used to introduce it. Changing prices have definite effects on output and employment. With free prices increases in demand will often lead to a rising price level (inflation), higher employment, improved capacity utilization and industrial performance, and increased private investment. At the same time, profitability will change due to the higher resource and input costs, possibly leading to shortages. Problems intensify if each increase in prices becomes the signal for an increase in wages and costs, which again sends prices up still further. Therefore, policy-makers must guard against drastic inflation (hyperinflation) which disorganizes production and the social order, negates the wealth of large portions of the population as money becomes worthless and allows only speculators to profiteer. Of course, the contrary is deflation which is primarily associated with growing unemployment of labour and capital reducing the well-being of society. If true producer and consumer needs are to be taken into account, price determination and stabilization in a previously planned economy is a difficult task.

Although the ultimate goal of a complete reform from a dictated pricing system to a free pricing system is to have market determined prices, there will always remain a variety of goods or services that rely on different types of support. Answers must be found to the questions of

which types of products need to be subsidized and how, which of them will be subject to price controls and how the levels and mechanisms of price subsides should be determined. The possibility of a coexistence of different kinds of prices (regulated and free market) has been discussed as a potential alternative. In such a case, care must be taken not to increase the regulatory burden. Changing prices possibly combined with some form of sales taxation will affect consumer expenditure.

The topic of indexation gains in importance when dealing with the problem of altering price levels. In established market economies some prices are frequently adjusted using indexation. This process often forces increases in productivity because the firms must operate within given limits. In situations where certain restrictions are set on price changes as a result of the use of indexation, elements in the non-price areas (ie. quality, service, security of supply, etc.) are necessary to encourage competition.

SUMMARY OF DISCUSSION

RESPONSES TO SOVIET IMPRESSIONS concerning the PROBLEMATIC OF ESTABLISHING A MARKET ECONOMY

PRESENTED AT THE FIRST INTERNATIONAL MEETING on ECONOMIC REFORM AND INTEGRATION

by Christoph M. Schneider

HOSTED

under the auspices of the

ECONOMIC REFORM & INTEGRATION (ERI) PROJECT

of the

TECHNOLOGY, ECONOMY & SOCIETY (TES) PROGRAM

at the

International Institute for Applied Systems Analysis

1 – 3 March 1990

Radical Economic Reform: Top-Priority and Long-Term Measures ¹

In general, before one indulges in analyzing the Soviet economy and making recommendations for economic reform, it should be completely clear that both a liberated or "free" market system and a centrally planned economic system have their own internal consistency. Therefore, it is not acceptable to simply suggest an interchange of a number of the undesirable elements for more desirable ones as a solution to the present crisis situation. The pieces in each system are interdependent. In the USSR, the critical elements necessary for the functioning of a market economy are missing. Reform politicians should not singly rely on "one-shot" adjustment measures or instruments. For example, radical decentralization of enterprises without free prices can easily lead to monopoly situations which will not result in the desired and required efficiency gains. If the inappropriate macro-environment is pervasive during the implementation of reform tools, one must expect negative effects such as wage and price inflation as well as shortages.

The accumulated problems associated with the functioning of a command economy model can only be solved by engaging in a transition to a market economy. Doubtlessly, this is more easily said than done. The transition from one non-contradictional, integrated system to another is a clear step toward finding a solution to these troubles. As stated, it is impractible and counterproductive to merge the two systems. A decision must be made to either move to the new system completely or not. The fundamental problem in the Soviet Union, for example, lies in the absence of institutions characteristic of a market economy. Responsibility and independence of economic actors are needed and should be more strongly encouraged. Horizontal integration and the links between economic sectors and agents are unknown elements of an institutional structure that has been wholly dominated by vertical connections which are dictated and not subject to laws of competition. Along these lines, the need arises for liberated prices that are not set by a central committee irrespective of real costs, output or demand, but give true signals of supply and demand conditions in the market place. Two of the main barriers to a price reform are the enterprises, which have become accustomed to obtaining inputs at unreal prices, and the working class, which panics at the thought of not being able to afford the basic needs if inflation should sky-rocket.

^{1.} Paper written and presented by E. Yasin (USSR). Comments made by Richard Cooper (USA), Ognyan Panov (BG), Leonid Grigoriev (USSR) and Karol Lutowski (PL).

The move of an economy from a command to a market system will usually be accompanied by serious adjustments and modifications in the structure of production and the distribution apparatus. The Soviet Union is characterized be a dangerously high level of concentration or monopolization in all sectors. Simultaneous to the establishment of a more horizontally integrated production structure that can be directly encouraged through increased privatization, new and well-functioning internal and external links within and between sectors will be necessary to overcome the problem of inefficiency and shortage in a country rich in resources. Unfortunately, there is a lop-sided concentration of investment and production effort in primary resources, which inevitably leads to a feeble consumer sector. At this time, the Soviet Union still has no real financial market, a centralized system of resource allocation presently substitutes for what should be a capital market and the labor market is characterized by an abundance of inadequacies and a lack of real structure. A goods market based on supply and demand conditions, as well as capital and labor markets supported by a solid financial system and incentives and motivation are all essential elements of a market system that could help a nation moving away from a command system toward growth and security.

In any case, policy-makers and economic advisors should be aware of the fact that every society has an established social contract on which the relationship between government and citizens is based. The relations and roles of commerce and industry to the aforementioned main parties are also inherent within the said agreement. The entire labor force relies to some extent on expectations of real wages and job security which in no small part influences the overall economic stability. In no instance can a government violate the social contract without peril. In the popular mind, social justice is equal to social consumption rather than to social opportunity. The consequences of equal opportunity must be socially acceptable in order to introduce a market economy, otherwise social disruption will result, as becomes clear in Professor Yasin's statement, "A Soviet citizen would rather die of hunger than of envy." Of course, the fundamental advantage of a market economy is that it directly encourages the mobilization of each individual in society, as well as his talents, tastes and way of taking risks.

After realizing the great difficulties and costs involved in moving from an established centrally planned economic system to a market economy, the question of whether it is actually worthwhile to change completely from the previous system definitely becomes a valid one. What is certain, is that a comparative analysis of the expectations of an indicator, such as output per capita, under the old system on the one hand and under a free market system on the other hand must be made over a certain time profile. Even if only in a relative sense, this would at least allow the determination of which plan of attack would be more beneficial for the country in the future. The potential gains of a shift between systems and the characteristics of the probable adjustment path must be investigated before any decisions as whether to proceed or not are made.

The old, traditional eastern European systems as they are today, are clearly no longer consistent with the economic situation and progress of the industrialized world where the striving for productivity and efficiency increasingly dominates the scene. It would prove impossible to adjust to the Western information society based on technological progress within the framework of the centralized base in which the activity of individuals for the common good of the economy is not sufficiently encouraged. The human factor is an essential element when attempting to attain productivity increases. Unfortunately, the old monopolistic system does not really allow for the influence of the individual active human factor.

Using the real life example of Poland, some short-term effects of a radical economic reform can already be seen. In this case, the most unpleasant surprise was the incredibly high inflation. As a result of the shock, the standard of living and the levels of production and of real income fell significantly. The period of reduction was shorter than expected and it has reached a type of temporary equilibrium. Consumer goods do become available at the new higher price level, but only for those few who can afford the higher price. The liquidity of the banking system became questionable and many enterprises withdrew within themselves. Although it seems that in a number of instances the work ethics and moral have improved, enterprises continue to go bankrupt, each time posing a liability for the budget. Additional unexpected and expected events continue to occur. Results such as these lead to the question of whether the reform program will be delayed, or not.

Capital Market and Privatization 2

and

Privatization in the USSR: Necessary for Structural Change³

When speaking about economic problems and reform, the distinctions between stocks and flows in an economic system must be clear. The basic build-up of capital markets is central to the success and failure of a move to a market economy. Within the realm of business of the banking system, an allocation of the flow of savings among diverse investment applications to create new investment opportunities becomes essential. Although the flow problem is present, it is the stock problem which is much more serious and basic. There should be a transfer of the stock of current assets from their present form to a productive stock in a new form where the stock can accrue. The steps of a reform should first deal with the stock problem before turning to find a solution to the flow problem. Essentially, the sock problem refers to a transfer of ownership. The three objectives that would be important to see at the top of the list of policy objectives of the Soviet government are the following:

- 1. To make more efficient and productive use of assets.
- 2. To generate revenue to finance government spending.
- 3. To reduce the quantity of money in private hands.

Substantial care is necessary when implementing policy reform in order not to link the objectives. Any general agglomeration can inevitably constrain the pace of achieving different and individual goals. Both quantitative and qualitative measures are required when attempting to reach an appropriate solution.

The one possible way to solve existing stock and flow problems simultaneously could be by the sale (of assets) to the public. Initially, the private sector may not be able to absorb all assets and investment

Kagalovsky (USSR), Petr Aven (USSR) and Il Sakong (S. Korea).

Paper written and presented by Leonid Grigoriev and Sergei Aleksashenko (both USSR).
 Paper written and presented by Anatoliy B. Chubais and Sergei A. Vasiliev (both USSR). Comments made on both papers by Benjamin Friedman (USA), Kimio Uno (JPN), Mario Nuti (I), William Nordhaus (USA), Alfred Kahn (USA), Janos Gacs (H), Pavel Klima (CSFR), Karl-Ernst Schenk (FRG), Konstantin

possibilities. Some measures must be taken that this situation is normalized within a short adjustment period. Basically, the private sector must buy back assets which are in governmental or state hands. The underlying objective of policy in this area is to organize, encourage and facilitate the transfer of capital assets to the private sector. The question of whether the state should actually be compensated for capital turned over to the citizens, to whom it theoretically belonged previously, arises as a rather contentious issue. In general, a transfer of financial resources back to the state is not necessary because the governing body was just holding these resources for the private sector anyway.

Once privatization of state holdings has been agreed on as a policy move, decision-makers are preoccupied with choosing the optimal form of ownership which they plan to promote. There are four main models of firm ownership that are presently most popular in the discussion. First, leveraged buy-outs, where the owners are simultaneously the managers and vice versa, although this does not necessarily have to be the case. Second, the transfer of ownership to the workers. Yugoslavian experience resembles this second point to the extent that the management rights and responsibilities are in the hands of the workers' councils, though actual ownership has remained in government hands. Third, a broad dispersion of ownership assets or shares among the general citizenry and to then allow the opportunity for trading. Fourth, an entrepreneur system in which the dominant shareholder, who has a position equivalent to that of an owner, acts as an entrepreneur. In the latter case, the state need not be the entrepreneur, but the new entity must have the incentive to act as an entrepreneur. If the state does remain as the owner, its ownership rights cannot differ from those of the private companies. A probability of a loss of economies of scale would certainly be outweighed by new and improved competition and the finding of entrepreneurs.

Overall, the discussion of privatization in the Soviet papers seems to concentrate on the production sector. A decision has to be made or a compromise reached with respect to the proportion of private ownership relative to public ownership. In addition, the sectors (manufacturing, services, etc.) in which the implementation of such policy measures can achieve the most effective beneficial results in the shortest time need to be identified. Substantial public sectors are known to exist even in many successful market economies of today. It would, of course, be ideal to have a well-functioning and integrated mixture of both private and public sectors to drive the growth process of an economy. The role of the government must be clear and distinct as either

an entrepreneur or as a taxer in each particular case.

The ownership concept affects a number of other aspects essential to a competitive economy. An inadequate ownership structure leads to an inappropriate distribution of profits which itself influences the movement of savings back into productive investment. The risks associated with this decision path are an important element of a normal capital market. The fundamental reason behind privatization is to initiate some of the characteristics of a market system. The creation of a higher investment demand than the available supply of savings could lead to raised interest rates and/or capital rationing. In the Soviet case there is a definite need for a long-term credit bank or other financial institutions. A supplementary requirement is a horizontally integrated factor market where decisions on investments are made with respect to the cost of inputs (ie. capital, labor, etc.). As a result, these inputs should be traded in the market with as real prices as possible. Followingly, a market must exist for evaluating assets, otherwise the economy is vulnerable to insider moves which are classified as a general loss to the society as a whole.

As time goes by and political systems adapt to the forever changing demands of the people, it seems that the definition and characteristics which formerly distinguished so clearly the capitalist from the socialist countries have become increasingly fuzzy. The fact remains that socialist countries do concentrate to much on just plain production as their motor for growth, while neglecting the budget side. Moving to a complete capital market should not be at the beginning of a transition agenda from a command to a market system. The element of privatization is crucial and reasonably successful, especially where enterprises rely on a large proportion of their financing to be internal as in the United States. The encouragement of this type of financing should be seriously considered by Eastern European reformers. Successful firms have diverse ownership characteristics, such as;

- 1. an entrepreneurial group (management)
- 2. incentives
- 3. competition

Care must be taken to control the enthusiasm to achieve a market full of straight-forward, text-book Western type firms.

Aside from the fact that privatization of state enterprises and assets has been proven to lead to a more competitive environment and

increases in the rate of technological change, a variety of problems still remain to be solved. The most important question to be faced is not only concerned with the choice of which route to privatization should be chosen, but also with what timing this process should proceed. If the is a lack of infrastructure and programs of labor reallocation and retraining, privatization can cause unemployment. Decision-makers will also have to deal with the problem of the many enterprises that are destined for bankruptcy under privatization due to the decades of noncompetitive and not demand or cost oriented production and the heavy reliance on government subsidies. Who actually sells to whom and who will and can afford to be the majority shareholders are further unresolved areas. Finally, any move to privatization must be socially acceptable. Therefore, reformers need to adjust their policies in a way to ensure public acceptance, while still achieving predetermined economic goals and largely preventing any negative externalities that threaten to arise.

There are various ways in which privatization affects the performance of enterprises individually and thus also the market as a whole. The primary achievement is an increase in the efficiency caused by the changes in the control mechanisms. A initial step in the right direction would be to eliminate ex-anti controls and increase ex-post evaluation. As a result firms would be accountable to the public and the supply, the quality of products and demand-oriented production would improve. The importance for performance evaluation is essential to the market system. After a proper appraisal of assets it may be found that a partial privatization could be sufficient, allowing a mutual symbiosis between private and public sectors as alluded to earlier.

Employment and Labor Market 4

The detailed description of unemployment and the labor market in the Soviet Union reveals that this nation is suffering from both surpluses and shortages of labor. In simple words a solution to this dilemma calls for the reallocation of labor from the areas where it is in surplus to those where a shortage exists. Doubtless to say, that this is, as usual, more easily said than done. The reasons abound for these disequilibrium situations in the labor market of a command economy; the most common being of a geographical nature or the problem of labor hoarding by enterprises.

In a changing world striving to keep up with technical progress, the Soviet Union is an example of a nation which still has a concentration of employment in the traditional sectors, while other sectors (the tertiary sector for example) lag far behind the penetration and development they achieved in most Western countries. The Soviet labor scene is characterized by high employment, even overemployment, in agriculture, manufacturing and transportation, while employment in the service sector remains low. This is exactly the opposite of the picture in the United States and other Western industrialized countries, where experience shows that a large and a strongly manned service sector is required to improve the standard of living. Generally, the goal of full employment (or, at least, the maintenance of a consistent level of employment) is achieved with macro-economic policies. In the Soviet case, successfully attaining this target depends on decisions made by the individual firms, or in other words, at the micro-level. The actual line of command for policy decisions is not quite so clear because a majority of enterprises were and still are in state hands.

The major obstacle hindering the development of a functional labor market in the USSR is the lack of labor mobility. The following are a few suggestions that could lead to possible solutions to the problem of creating labor mobility:

1. Unemployment Insurance (UI). UI is a definite requirement in a free labor market environment. It would be more appropriate to make the management and distribution of such benefits the

^{4.} Paper written by V. I. Scherbakov and A. N. Shokhin (both USSR) and presented by A. N. Shokhin. Comments made by Albert Rees (USA), Wil Albeda (NL), Ognyan Panov (BG), Benjamin Friedman (USA), Richard Cooper (USA), Merton J. Peck (USA), Sören Wibe (S), E. Yasin (USSR), Leonid Grigoriev (USSR), A. Chubais (USSR) and Kimio Uno (JPN).

responsibility of regions or republics rather than of the central government. Careful consideration has to be given to the level and duration because overly generous unemployment benefits will be a disincentive for people to seek employment.

- 2. Employment Exchanges. The situation with respect to blue and white collar placement operations must be improved or even developed in many areas. In addition to state placement offices private employment agencies should be established where a fee might be charged to the employer. As a result, unemployed workers and the number and type of vacancies can be monitored and matched to facilitate a more desirable employment picture. The agencies could advertise positions as well as people seeking work.
- 3. Retraining. The opening of borders and the increase in foreign trade will inevitably lead to higher imports that often have the effect of raising unemployment. The surplus of workers will need retraining programs supported by enterprises and the unions to allow the displaced labor to be reintegrated into the labor force. If private companies take over the responsibility of retraining, their obligation will no longer be to just employ and and re-employ depending on swings in the economy, but to retain a flexible work force which will prove better for the firms, the employees and society as a whole. Both in the training and retraining phase, the costs should be shared between companies and government. Thus, quality and demand responsive training can be ensured.
- 4. Counter-cyclical Activities. If public works did not take to long to get underway and attempted to engage in counter-cyclical activities, some of the employment slack created by the economy could be taken up. These measures will generally only work in an active economy and not with big projects where the lags may actually lead to overemployment in certain periods.

In general, two items are paramount to the development and activity of a free labor market. They are:

- 1. Freedom to Move. Unfortunately, this is hardly possible in a society that utilizes control instruments such as resident permits and the like.
- 2. Availability of Housing In the past, Soviet enterprises largely controlled the amount of housing stock; so, a worker was afraid of losing his home if he left the company. Therefore, it is clear

that a free housing market is necessary. A problem arises when the new prices that reflect actual supply and demand situations on the housing market will be too high for the average person to afford. The threat exists that citizens may interpret this as a breach of the social contract. The housing must not only be available, but the conditions of the dwellings must meet some acceptable quality standard.

The key to a functional labor market is the free flow of people. Employees should not have to live with the fear of possibly experiencing social losses as a result of movement.

Eastern European countries face an overwhelming range of problems with respect to labor and unemployment. The much cited surpluses and shortages are the result of a lack of adequate training for job flexibility, the strict government regulations concerning translocation and the lack of a tradeable housing stock (other than on the black market where there are only opportunities for the select few with sufficient means), which all negatively influence the essential mobility factor. During the reform or transition phase it would appear appropriate to have the state managing the labor market. A clear system of job classification is required in order to ensure equal renumeration for jobs of equal value. Reforming centrally planned economies should attempt to adhere to a transition policy where real wages do not initially increase so that enterprises have time to develop, to reinvest profits and to allow the development of "true" trade unions. Well-trained workers, entrepreneurial employees, market oriented managers and educated trade union leaders are all crucial elements required if the entire labor market system is to work.

There is no doubt that a new process of progress has be embarked upon, with which a certain loss of security (that was considered to be at the very foundation of a real socialist system) is associated. Once again, social acceptance of any alterations in the existing labor organization are main points of discussion. The labor market is the most developed relative to the others (such as commodity, capital, etc.) in the Soviet Union. In order to stimulate productivity and the working environment, labor must be treated as a team or group and always as a system. Problems arise with individualization. Labor market reformers must prepare for the redistribution of the labor force between the state and non-state sector. In lieu of the new situations facing the labor market, it becomes quite evident that trade unions should play an essential role. They are present to ensure harmony within the enterprise, to influence managerial efficiency, to protect workers from

malicious managerial acts and to influence the wage levels.

The new development process needs to be supported by accompanying measures in other areas of the economy. In this sense there are a few addition comments to be made on the activation of a free housing market. The liberalization of housing is linked to the general privatization of other assets. The value of the housing assets are probably much higher than the other asset stock in the economy. Of course, there is always the alternative available to legalize the black market in housing. This might even be possible engaging in incremental changes so as not to cause too large a disturbance in the system as a whole.

An Open Economy: The Soviet Model 5

Today it is becoming more and more evident that there exists a general world-wide desire to open economies as a whole or at least in certain markets (ie. the financial markets of France and Japan). Certainly, "opening of the economy" is no ambiguous concept. It basically refers to foreign capital movements, domestic capital movements, merchandise and other trade, and so on.

The question of why there is so much interest in an opening of the economy inevitably arises during the discussion of this topic. A wide variety of reasons are heralded to be at the heart of the move of a centrally planned economy to one more intensively integrated in the world market. This allows both the taking advantage of its unique talents, status and resources and the utilization of the strength and support of the group. Four of the main reasons for participating in an economic environment characterized by relaxed national frontiers are:

1. Resource Requirements

A growing economy with the desire to improve production generally requires quantities and types of resources which must be imported from the rest of the world. Although this is not always necessarily a necessary feature of modernization, the goal here is to increase investment rates.

2. Technology, Ideas and Know-How

Countries which have come to lag behind the rapidly advancing levels of know-how in the western industrialized nations have, therefore, difficulty to compete in the international market place. These states need to encourage the transfer of technology and management strategies that have proven to be successful in improving productivity, efficiency and competitive vigor. This utilization of indirect investment can be a very successful instrument to stimulate growth as can be seen in the examples of Japan and South Korea. Joint ventures are also examples of a combination of knowledge transfer and capital. Finally, the implementation of new technologies and strategies develop to be sources of badly needed foreign exchange.

^{5.} Paper written and presented by I. Ivanov (USSR). Comments made by Richard Cooper (USA), Anthony Solomon (USA), Urpo Kivikari (SF), John Montias (USA), Janos Gacs (H), William Nordhaus (USA) and Alfred Kahn (USA).

3. Gains of Specialization

An opening to the international market place motivates the utilization of domestic talents and resources. When a nation utilizes its comparative advantages, it can produce in a more cost-effective fashion and maximize profits, while simultaneously allowing the preservation of the environment and the longevity of non-renewable resources.

4. Competition

Opening the economy will assure the establishment of a competitive environment. Competition and incentives are vital to drive economic growth, while improving the consumers freedom of choice which, in turn, spurs consumption that once again fuels the competitive atmosphere in a non-monopoly market. Doing away with artificial border restrictions will inevitably increase competition in the areas of prices and quality. The foreign competitors can and often will act as a motor for internal or domestic competition. Finally, comparative advantages can be exploited.

The nature and timing of a conversion from the traditional closed command economy to an open market economy are still unresolved points of discussion. An opening will in the normal sense be accompanied by the implementation of tariffs. The reforming economies should try to stay away from quotas and other quantitative restrictions that tend to impede efficiency, productivity and motivation. The timing and severity of such controls will inevitably have an impact of the functioning of the market. Consequently, it would be advisable to keep the tariff quite reasonable and apply it in a similar manner as a tax which should not only target imported, but also domestic products. Clearly, this provides the government with a relatively reliable source of revenue. Real competition will be influenced by the use of tariffs; nevertheless, this situation can present new challenges for entrepreneurs in their attempt to maximize profits under the presence of different restrictions.

During the opening of a market economy, competition and incentives play a crucial role. Import penetration definitely influences internal markets. If a price reform should take place, import competition must be provided at world prices, particularly during the early stages of adjustment. Of course, this will require the free availability of foreign exchange for imports. The question of the need for an actual market determined exchange rate is invariably linked to an opening of the economy. Experts and policy-makers are faced with the problem of choosing the initial rate. It may be appropriate to select a slightly

undervalued rate which is favorable for exports and simultaneously makes imports less attractive. This is no pledge to increase protectionism, but simply to encourage domestic production for export. Eventually, the goal must be to reach world levels of quality, competition and other market characteristics. Once the situation stabilizes, it is likely that an appreciation can be expected.

A number of elements must be in place in order to facilitate a successful opening of an economy, although no guarantees can be made in any case. One of the most important factors is macroeconomic stabilization, which includes implementation of policies to soak up excess purchasing power and to solve the current account surpluses and budget deficits. Furthermore, a price and enterprise reform must be undertaken and well under way, so that the foundations of a competitive system are in place. At the same time, firms in the Eastern European reforming economies must be assured greater and freer access to Western technology, training and information. In addition, successive steps of liberalization should involve the opening of the import system and a move toward convertibility. In simple terms this means that the "complete" openness of the economy can only be achieved within the framework of a market economy. To a large extent, the benefits of opening the economy will be influenced and to some measure predetermined as a result of the established policies within a country.

In general, the central authorities will still have to maintain certain controls during the transition phase. Especially in conjunction with attempting to attract foreign investment, the government must provide various guarantees and must ensure that profit can be remitted. There remains little doubt, that the initial step toward transformation involves the collection and analysis of sufficient macro-economic data to allow any macro-economic policy decisions. Centrally planned economies would surely profit from a membership in a number of the international organizations and funds, but they must beware not to join with too much haste because a premature membership is accompanied by numerous restrictions which may be detrimental in the long-term. Of course, joining in multi-lateral activities will help the social and political images of socialist countries and will improve and speed up the integration of these countries into the global open market.

Economic Stabilization: Monetary and Fiscal Policy 6

Basically, the goal of a modern economic reform for most countries with previously planned or command type systems is to move to a market economy. There are two possible approaches which can be followed in order to achieve the desired effects:

- (1) the "big bang" approach (as exemplified by Poland) and
- (2) the "phased" approach.

The difficulty with the second type is the question of sequencing, because no historical precedent exists. When a number of alternatives are available, the fundamental rule of transition implies that the choice which promises to move the existing situation most convincingly toward a market economy system is the more disireable path to choose.

The primary question facing economists and policy-makers focuses on where to begin to treat the reform issue in a centrally planned economy as the Soviet Union. Is there a macroeconomics of a socialist economy? Near the top of the list of crucial issues when dealing with this topic are the institutions of the market place and their role in striving for economic stabilization. Naturally, a route must be chosen which speeds up the movement to a market economy. At the same time, central authorities should refrain from introducing additional regulation that impedes adjustments and growth. The macro-initiative includes studies to determine whether the economy in question is close to potential output or closer to a balanced situation in the short run. The principle characteristic of the Soviet economy is that the budget is out of balance and a domestic currency overhang exists, which can produce inflation or aggravate repressed inflation. In addition, prices are out of alignment and there is an obvious lack of competition. Movement towards a market situation must be utilized to allow economic expansion, although such a path usually proves to be initially problematic and painful. The main tools that can be implemented to develop remedies for the present ill condition of not sufficiently demand oriented economies are monetary and fiscal policy.

The budget situation of a reforming economy is largely a flow problem.

^{6.} Paper written and presented by K. Kaglovsky and A. Khandruyev (both USSR). Comments made by William Nordhaus (USA), John Montias (USA), Sören Wibe (S), Benjamin Friedman (USA), Victor Bogatchov (USSR), Wolfgang Gerstenberger (FRG), Mario Nuti (I), Marton Tardos (H) and Ognyan Panov (BG).

The immense detrimental effects incurred as a result of maintaining a budget deficit are often overemphasized. Experience proves that countries with relatively large budget deficits of up to 10 percent can do better than just survive, in fact, they can even thrive. The problems associated with such an attitude concentrate on the difficulty to find financing for a deficit and what to do with the obtained funds. If these are used for productive investments, then this policy alternative has a variety of benefits. If the deficit does increase, then policy-makers should attempt to refrain from implementing only quick-and-easy, short-run solutions such as simply printing money and, instead, look at the variety of alternative monetary methods. The lesson is to restructure the budget (i.e. by eliminating subsidies, etc.) in an attempt to attain macroeconomic stability. As a result of the loss of control of the budget, excess demand will emerge and incomes will become greater than GNP, while free prices will lead to product availability, though they may be too expensive to buy.

In cases of radical economic reform, it is important to renew both capital and money markets. This will entail the separation of central from commercial banking. Presently, the central bank of the USSR can supply some domestic and foreign currency, but due to the lack of a system of bank reserves there is no capacity to control the money supply. This also reflects the weak leverage to implement and enforce other monetary instruments. In fact, due to the ineffective system and the absence of appropriate statistics and methods of monitoring, the authorities cannot precisely say how much money is in circulation. The present trend and situation in the Soviet Union may direct policy more towards monetary reform rather than price reform, because the price reform would more negatively affect the population in the form of direct costs, opportunity costs and the like. Essentially, monetary policy cannot be left to be determined within the market.

Inflation is a further problem within the realm of economic stabilization, which is clearly close to the heart of most Eastern European reformers and policy-makers. Stagflation, indexation, measurements and accounting have all been listed as sources of inflation in Eastern Europe. One of the keys to the reform is to achieve market clearing prices without inflation. Due to the fact that it is improbable that restructuring the economy can be successful in an inflationary environment, the inflationary pressures must be diffused. In order to achieve this, austerity, strict fiscal policy, tight monetary policy and a social pact on wages are required. The citizens must accept and agree with measures for any reform program to attain preferred results.

The fundamental problem, which is at the root of deteriorating economic life in countries traditionally bound to a command or planned economic framework, is associated with the inability to apply even simple economic principles. The relative roles of microeconomic (structural) and macroeconomic (stabilization) policies in the reform plans is of crucial importance. While the issues are reasonably critical on the micro-side (i.e. incentives, competitiveness and prices), the stabilization issues may be those that are more easily dealt with as long as they remain within the given structural framework. Of course, the links between the different areas of economic stabilization, such as between wages, monetary policy, and budget deficit, should not be neglected if a thorough reform is to be successful.

In summary, four areas of economic stabilization must be carefully analyzed and policies developed when attempting to proceed on the course of an economic reform from a command to a market system.

- 1. Banking and Monetary Reform

 This includes a number of subtopics like: institutions of central banking (instruments, appropriate policies in the near future, independence and autonomy), commercial banking (supervision, regulation, accounting), other government liabilities (bonds, etc.) and monetary "reform" (parallel currency, mandatory conversion). Both complete and decent statistics and data will be necessary to understand the existing situation and make appropriate policy decisions for the future.
- 2. Fiscal Policy, Taxation, Deficits
 Under this heading the main points to scrutinize are: the importance of budget discipline, the structure of the tax system (including the types of taxes, cyclical aspects and stabilization rules), roles of commodity subsidies relative to income transfers and the generally appropriate role of utilizing the budget relative to allowing market determination.
- 3. Anti-inflation Policy
 Here the main question revolves around the reasons for and the problems of how to deal with open versus repressed inflation. Other important topics include: government tools available and utilized to deal with inflation (for example; fiscal, monetary, tax on wages fund, social and/or political support), indexation (how much, nominal versus real anchors and problems of the price-wage-price spiral) and social costs of anti-inflation policy (such as unemployment, budgetary problems).

4. Sequencing of Overall Stabilization

In this case, the fundamental dilemma to be addressed deals with stabilization before structural change, or not. Structural change is associated with freeing prices, demonopolization, privatization, hard budget constraints and opening the economy. The question of whether to choose the "BIG BANG" or "GRADUALIZATION" as the transition method is also at the forefront of discussion. Finally, it is crucial to adjust the planning system to compensate for and adjust in the face of changes induced by the reform such as changes with respect to deposits, investment, wages, and so on.

Prices, Indices and Taxes in the Program of Economic Reform ⁷

The task of overcoming the fundamental hurdles of economic reform pose a macro-cosmic problem to the Eastern European countries which neither they, nor especially the West, should underestimate. A free market is free of governmental controls, free of governmental regulations and incorporates a system of free pricing. The complexity involved in a move to free prices is enormous because the target is always changing due to the dynamics of the economy. The introduction of only partial freedoms cause several distortions to arise. This type of process often leads to the infamous "snowball-effect" which can instigate complete economic disaster. The key to success lies in swift movements, actions and policy implementations. Slow deregulation, for example, with prices based on average costs causes severe distortions. It is always crucial to recognize the differences arising between the relationships in demand and capacity due to the reliance on marginal cost calculations. Inevitably, prices and quality move to the forefront.

The path of deregulation which is decided upon, must be introduced into the appropriate environment and provide the direction for further liberalization and growth in the economy. Anti-trust laws are usually a standard requirement to protect competition, while the deregulation itself directly provides incentives for better performance. This economic maneuver should also encourage the move away from oversimplified cost/plus pricing systems. At the same time, various methods of dealing with the social costs of a transition to economic freedom will be essential. These may include direct contributions, transfer taxes (in the form of differential excise taxes - even negative excise taxes for food) and awareness not to double tax consumers. A fundamental requirement for a global open market is that individual free markets must be consistent and compatible with one another.

Competition will influence the behavior within the small and large firm sectors differently as a result of their structural and managerial dissimilarities. In the small firm sector, the characteristic problem of competition is usually simplified in comparison to the situation with the larger counterparts. Although the ownership side is quite clear (where the different forms also include employee ownership), the more important

^{7.} Paper written by G. A. Yavlinskiy and presented by E. Yasin (both USSR). Comments made by Alfred Kahn (USA), Merton J. Peck (USA), Karol Lutowski (PL), Pavel Klima (CSFR), Heins-Dieter Haustein (GDR) and Richard Cooper (USA).

issue lies in directing or initiating the required capital investment flows to the managers. The bottom line in the small firm sector is the closer ties to the consumer which encourage the desire to please the customer. The introduction of more active competition in this area can raise the quality of products and service without actually raising (sometimes even reducing as a result of rationalization) the utilization of real resources. This trend is frequently linked to specialization which leads to sub-contracting due to the comparative advantages between the enterprises allowing for more entry and as a result also increased competition in the small firm sector.

On the other hand, large firms are generally dominated by self-perpetuating management hierarchies. Each one seems to have the characteristics of an island in a market economy. The planers and decision-makers must be taught to use the market as a source of information which can be utilized to the best of their advantage to increase productivities, efficiencies and competitive motivation. The best transition to privatization and thus stock-holding would initially involve the state as the majority stock-holder. This type of state ownership is compatible with a competitive environment if the state is only a passive owner, the enterprises have financial autonomy and are directly involved in international competition.

When considering the move to free market conditions from a command system, the question of the potential for competition in an economy arises. In general, competition dominates regulation. Under each particular reform situation, the policy experts should observe the inherent requirement to maintain budgetary discipline. In addition, analysis with respect to the needs for, and costs and benefits of subsidies and state enterprises would clarify a number of the existing inegitable situations. If enterprises are privatized, managers will be forced to work with revenues and profits and can no longer rely on the natural competition laming subvention. The timing of the implementation of free prices (price liberalization) as an essential element of the move toward competition is particularly crucial in the wake of the possibility of negative effects if this is done within the framework of a monopoly dominated structure. Structural diaproportions can and will probably lead to an inflationary situation in the Soviet Union because the structure of production is geared towards primary products and the weakest links are consumption and infrastructure. It is true that liberalization can increase the budget deficit as a result of increases in industrial prices. wages, inflation, the cost of production and subsidies, but this may prove to not be detrimental to the economy if it is deliberately undertaken for stabilization purposes.

The policy items in the area of prices and competition, which must be dealt with in order to facilitate the transition from command to market economies, have different levels of priority. The following are the most important issues to be considered under the more general topic of prices and competition on the road of economic reform to a market system. A specific look at designing an anti-trust law is needed. This is not the most urgent requirement, but increases in importance once privatization and price liberalization has gotten under way. Furthermore, a system of regulating what are referred to as public tilities in the western sense and known as public "properties" in the eastern sense. The reason for this lies in the fact that these are the areas where competition is felt to be deficient or even impossible for political and or social reasons, or because the entity is a "natural monopoly". In an effort to determine a system of price regulation for these types of situations, agreements must be reached between regulators, economists and accountants. The costs and benefits of regulating prices must be analysed to determine whether such a policy would be economically justified. An additional question which appears crucial to the reform process is the designation of which sectors of the economy to regulate or deregulate first.

There are still more issues on the list of what is vital for policy reformers to act upon to encourage the transition to a market system. For example, investment funds (ie. pension funds, etc.) and holding companies need to be created and managed. Of course, their functions in the new market economy must be carefully defined.

Moreover, the success of a reform hinges to a large extent on the advice of qualified practitioners, such as business people and accountants, whose experience in various areas including how to set prices and assess the value of capital assets can be applied. As a result, there will have to be extensive work on moving from dual-price systems to a system where the law of one price is not violated. In light of this trend toward deregulation and privatization the management of the public sector becomes a paramount question. Analysts and policy-makers must consider the alternatives of how the function of state enterprises must and will change with the liberalization and opening of the economy, and which measures are necessary to deal with possible undesireable effects and externalities that may arise expectedly or unexpectedly. With respect to the valuation of assets a substantial amount of technical help is required in the countries where there has been no free market activity has allowed prevailing demand and supply conditions to determine real asset values. Finally, a functional taxation policy is required to cover government expenditure on common property and social programs and simultaneously act as a type of market and social regulatory

mechanism. While a general draft law is needed immediately, the laws with respect to taxation will have to be adjusted to properly accompany an economy in transition.

IIASA

TECHNOLOGY, ECONOMY AND SOCIETY PROGRAM (TES) ECONOMIC REFORM AND INTEGRATION PROJECT (ERI)

Research Priorities*

Based on Suggestions Formulated at the ERI Scoping Meeting 1-3 March, 1990

Laxenburg, 21 March, 1990

FIRST PRIORITY:

Topic Area: Capital Market and Privatization

- role of central bank (politically independent or not)
- banking and monetary reform
 - institutions of central banking
 - commercial banking (regulation, accounting)

^{*} Selected by the USSR State Commission for Economic Reform on 21 March, 1990 as particularly pressing issues.

Topic Area: Labor Market and Employment

- public and/or private labor exchange offices
- effects of out-going migration
- view of trade union legislation during transitions
- unemployment insurance

Topic Area: Economic Stabilization

- structure of the tax system
 - kinds of taxes, cyclical, stabilization rules
- roles of commodity subsidies relative to income transfers
- government tools to reduce inflation
 - fiscal, monetary, tax on wages fund, social/political support
- indexation
 - how much, nominal versus real anchors, price-wage-price spiral
- social costs of anti-inflation policy
 - unemployment, budget
- sequencing of overall stabilization

Topic Area: Prices and Competition

- implementation of anti-trust policy
- price deregulation
 - move from dual-price systems to a system where the law of one price is not violated

SECOND PRIORITY:

Topic Area: Capital Market and Privatization

- market clearing interest rate vs. capital rationing
- timing of stock market implementation
- insurance
- stockholding companies

Topic Area: Labor Market and Employment

- collective bargaining and/or state income policy
- measure for labor mobility
- dealing with ethnic tensions
 - (ie. anti-descrimination legislation)
- training and retraining options
- system of labor market observation
- necessity of independent managment
- forms of worker participation
- health insurance (compensation)
- housing

Topic Area: Opening of the Economy

- convertibility
 - allocation of foreign exchange
- trade policy issues
 - tariffs vs. quotas

Topic Area: Economic Stabilization

- monetary "reform" (parallel currency, mandatory conversion)
- statistics/data

Topic Area: Prices and Competition

- creating and managing investment funds
- regulation of public utilities or public "properties"
- assessment of capital assets
- how to advise the practitioners (business people and accountants)

FIRST SERIES OF ERI SEMINARS

in

Sopron, Hungary

July 23 - August 3, 1990

Preparations:

As a direct consequence of the 1-3 March 1990 ERI Meeting at IIASA in Laxenburg, a series of seminars for five Study Groups (in accordance with the titles of the research priorities) has been organized. Due to a heavy schedule and a vast amount of information, the responsible research coordinators have decided to devote these meetings exclusively to opportunities and problems in the Soviet Union. More than one background paper and/or draft law (all translated into English) are expected to be provided by experts from the Soviet Union for comments from the meeting participants.

Participation at these seminars will involve experts from all of IIASA's National Member Countries, including Bulgaria, Czechslovakia, Hungary and Poland. A set of seminar series dealing with opportunities and problems in these countries will be arranged in the near future. Chairpersons of the individual Study Groups are expected to make their reports on the present seminar topics for the USSR available to the ERI Steering Committee for review by October 1990. Currently, this Steering Committee has the following members:

- S. Shatalin (USSR) Chairman
- H. Kato (JPN) Vice-Chairman
- K. Uno (JPN)
- W. Albeda (NL)
- R. Cooper (USA)
- W. Nordhaus (USA)
- A. Kahn (USA)

On the following pages, some technical information concerning the ERI Seminar Series 23 July - August 3 1990 in Sopron, Hungary can be found.

Technology, Economy & Society Program

Economic Reform & Integration Project

Study Group Meetings—Sopron, Hungary

21 June 1990

Date	Study Group	Chairman
Monday, 23 July - Friday, 27 July	Prices & Competition	Professor A. Kahn
Tuesday, 24 July - Saturday, 28 July	Labor Market & Employment	Professor W. Albeda
Saturday, 28 July - Wednesday, 1 August Opening of the Economy	Opening of the Economy	Professor R. Cooper
Monday, 30 July - Friday, 3 August	Capital Market & Privatization Professor K. Uno	Professor K. Uno
Monday, 30 July - Friday, 3 August	Economic Stabilization	Professor W. Nordhaus

International Institute for Applied Systems Analysis (IIASA)

Technology, Economy & Society Program

ECONOMIC REFORM AND INTEGRATION PROJECT

ADDRESS LIST OF STUDY GROUP INVITEES

Capital Market and Privatization 25 June 1990

Professor Kimio Uno
Faculty of Policy Management
Keio University at Shonan Fujisawa
5322 Endoh
Fujisawa 252
JAPAN
Chairman

tel: 0081-466-475000-3054 fax: 0081-466-475041 tlx: 3652580 untuku J

Dr. Elena Babycheva Institute of Banking State Bank of the USSR Moscow USSR

Professor Dr. Tamas Bauer Goethe Universität Lehrstuhl für Volkswirtschaftslehre Schuhmannstr. 34 A D-6000 Frankfurt 11 FEDERAL REPUBLIC OF GERMANY

tel: 060-69-7981-3659 fax: 060-69-7981-8383

Dr. Valery Borissov Ministry of Economy and Planning Dondukov Str. 21 BG-1000 Sofia BULGARIA

tel: 003592-867-2892

Professor Robert Boyer CEPREMAP 142 rue de Chevaleret F-75013 Paris FRANCE

tel: 00331-40-77-84-28 or 00331-40-77-84-12 secretary

Dr. Istvan Csillag Deputy Director Financial Research Ltd., Paulay Ede u. 36 H-1060 Budapest HUNGARY

Univ.-Doz. Dr. Gerhard Fink International Business Research c/o Odelga Koppstraße 103 A-1171 Vienna AUSTRIA tel: 9-95-25-36-133

fax: 9-95-25-36-133

Professor Richard Freeman Department of Economics Littauer Center Harvard University Cambridge, MA 02138 USA

tel: 001-617-495-4246 fax: 001-617-495-7730

Professor B. Friedman Department of Economics Littauer Center 127 Harvard University Cambridge, MA 02138 USA

tel: 001-617-495-4246 fax: 001-617-459-7730

Dr. L. Grigoriev
IMEMO
USSR Academy of Sciences
Moscow
USSR

Professor Gregory Grossman Department of Economics University of California Berkeley, CA 94720 USA

tel: 001-415-642-0822

Dr. Manuel Hinds Trade and Financail Division Office No H9065 The World Bank 1818 H Street, N.W. Washington, D.C. 20433 USA

tel: 001-202-473-2979

fax: 001-202-477-8772 or 001-202-477-1578

Professor Dr. Hiroshi Kato Department of Economics Keio University 2-15-45 Mita Minatu-ku Tokyo 108 JAPAN

tel: 00813-453-4511 fax: 00813-456-5400

Professor J. Kornai
Member of the Hungarian Academy
of Science and Chair-Professor
Department of Economics
Littauer 222
Harvard University
Cambridge, MA 02138
USA

tel: 001-617-495-4246 fax: 001-617-495-7730

Dr. Robert Litan Brookings Institution 1775 Massachusetts Ave., N.W. Washington, D.C. 20036 USA

tel: 001-202-797-6000 fax: 001-202-797-6004

Dr. V. Naishul
Institute of Economics and Forecasting
of Scientific and Technological Progress
USSR Academy of Sciences
Moscow
USSR

Dr. A. Topinski Vice President National Bank of Poland ul. Swietokrzyska PL-00950 Warsaw POLAND tel: 004822-265515

Professor Dusan Triska Ministy of Finance Ceskdipska 381 CS-190 00 Praha 1 CZECHOSLOVAKIA

Professor E. Yasin State Commission on Economic Reform Moscow USSR

International Institute for Applied Systems Analysis (IIASA)

Technology, Economy & Society Program

ECONOMIC REFORM AND INTEGRATION PROJECT

ADDRESS LIST OF STUDY GROUP INVITEES

Labor Market and Employment 25 June 1990

Professor W. Albeda
President of the Scientific Council
for Government Policy in the Hague
Chairman of the Board
MERIT.
University of Limburg
P.O. Box 616
NL-6200 Maastricht
THE NETHERLANDS
Chairman

tel: 003143-88-87-42 fax: 003143-21-65-18

tlx: 56762

Professor Ivan Angelov Advisor to the Prime Minister Institute of Economics Bulgarian Academy of Sciences 3, Aksakov Str. BG-1000 Sofia BULGARIA

tel: 003592-88-19-47

Dr. B. Bosworth Brookings Institute 1775 Massachusetts Ave, N.W. Washington, D.C. 20036 USA

tel: 001-202-797-6000 fax: 001-202-797-6004

Dr V. Casmarski
National Center for Public
Opinion Studies
Moscow
USSR

Dr. A. Chubais
Leningrad Institute of
Engineering and Economics
Leningrad
USSR

Dr. Alan Gladstone International Labor Office (ILO) 4 route des Morillous CH-1211 Geneva 22 SWITZERLAND

tel: 05022-799-6111 fax: 05022-798-8685

tlx: 415647

Dr. Janos Köllö Institute of Economics Hungarian Academy of Sciences Budaörsi ut. 43 H-1112 Budapest HUNGARY

Professor Richard Layard
London School of Economics
and Political Science
Houghton Street
Aldwych
London WC2 2AE
UNITED KINGDOM

Dr. A. Rivlin Brookings Institution 1775 Massachusetts Ave. Washington, D.C. 20036 USA

tel: 001-202-275-4346 fax: 001-202-797-6004

Professor A. Shochin Foreign Ministry Moscow USSR

Dr. S. Vasilev
Leningrad Institute on
Finance and Economy
Leningrad
USSR

Professor Sören Wibe
Department of Forest Economics
Swedish University of
Agricultural Sciences
S-90183 Umea
SWEDEN

tel: 0046-90-165800 fax: 0046-90-166073

International Institute for Applied Systems Analysis (ΠASA)

Technology, Economy & Society Program

ECONOMIC REFORM AND INTEGRATION PROJECT

ADDRESS LIST OF STUDY GROUP INVITEES

Opening of the Economy 25 June 1990

Professor Richard Cooper Department of Economics Harvard University 1737 Cambridge Street Cambridge, MA 02138 USA

Chairman

tel: 001-203-432-3247 fax: 001-203-432-5779

Dr. Elena Arefieva
IMEMO
USSR Academy of Sciences
Moscow
USSR

Dr. Jorge Braga de Macedo Director DGII Commission of the European Communities 200 rue de la Loi B-1040 Brussels BELGIUM

Dr. Laszlo Csaba
Head of Department
KOPINT-DATORG
Institute for Economy, Market
Research and Informatics
Dorottay utca 6
P.O. Box 133
H-1051 Budapest
HUNGARY

tel: 00361-1186-219 fax: 00361-1186-483

Dr. B. Fedorov
Central Committee of
The Communist Party
Moscow
USSR

Dr. Janos Gacs
Institute for Economy, Market
Research and Informatics
Dorottay utea 6
P.O. Box 133
H-1051 Budapest
HUNGARY
tel: 00361-1186-219
fax: 00361-1186-483

Professor Urpo Kivikari
Institute for East-West Trade
Turku School of Economics and
Business Administration
Rehtorinpellonkatu 3
SF-20500 Turku
FINLAND
tel: 00358-21-638311

tel: 00358-21-638311 fax: 00358-21-503131

Dr. Robert Lawrence Brookings Institute 1775 Massachusetts Ave., N.W. Washington, D.C. 20036 USA

tel: 001-202-797-6000 fax: 001-202-797-6004

Dr. Y. Levin
IMEMO
USSR Academy of Sciences
Moscow
USSR

Mr. Paul Gerd Loeser
Central Advisory Group of the
President of the Commission of the
European Communities
(Lacroix Group)
200, rue de la Loi
B-1049 Brussels
BELGIUM

tel: 00322-235-0622 fax: 00322-235-2305

Professor Vladimir Musatov Institute of USA and Canada Studies USSR Academy of Sciences Moscow USSR

Professor Richard Portes Birkbeck Col-Dept of Economics University of London 7-15 Gresse Street London W1P 1PA UNITED KINGDOM tel: 0044-71-930-7182

Professor Dr. Horst Siebert
Director
Institute of World Economics
P.O. Box 4309
D-2300 Kiel 1
FEDERAL REPUBLIC OF GERMANY

tel: 060-431-884-313 or 884-489

fax: 060-431-85853 tlx: 292497 weltw d Professor R. Simonyan IMEMO USSR Academy of Sciences Moscow USSR

Professor T. Walchev
Institute of Economics
Bulgarian Academy of Sciences
3, Aksakov Str.
BG-1000 Sofia
BULGARIA
tel: 0046-90-88-19-47

Dr. John Williamson
Institute of International Economics
11 Dupont Circle N.W.
Washington, D.C. 20036
USA

tel: 001-202-328-9000 fax: 001-202-328-5432

Monsieur Salvatore Zecchini Special Counsellor to the Secretary General OECD 2 rue Andre-Pascal F-75775 Paris FRANCE

tel: 00331-4524-8200 fax: 00331-4524-8500

International Institute for Applied Systems Analysis (IIASA)

Technology, Economy & Society Program

ECONOMIC REFORM AND INTEGRATION PROJECT

ADDRESS LIST OF STUDY GROUP INVITEES Economic Stabilization

25 June 1990

Professor W. Nordhaus Department of Economics Yale University 28 Hillhouse Ave., New Haven, CT 06520 USA Chairman

tel: 001-203-432-3587 fax: 001-203-432-5779

Doz. Dr. Ventseslav Dimitrov Institute of Economics Bulgarian Academy of Sciences 3, Aksakov Str. BG-1000 Sofia BULGARIA tel: 003592-88-19-47

Professor Rudolph Dornbusch MIT Department of Economics Massachusetts Institute of Technology Cambridge, MA 62139 USA

tel: 001-617-253-3648 fax: 001-617-253-1330

Dr. E. Gaidar Pravda Newspaper Moscow USSR

Dr. K. Kagalovsky
Moscow Institute of
Construction Engineering
Moscow
USSR

Professor A. Khandruev Institute of Banks State Bank of the USSR Moscow USSR

Professor A. Lindbeck
Director
Institute for International Economic Studies
University of Stockholm
Universitetvägen 109
S-10691 Stockholm
SWEDEN
tel: 00468-162000

tel: 00468-162000 fax: 00468-165886

Professor K. Lutkowski
Advisor to the Ministry of Finance
Ministry of Finance
ul. Switokrzyska 12
PL-00916 Warsaw
POLAND

Dr. Kalman Miszei c/o Dr. Tibor Asboth State Office for Technical Development P.O. Box 565 H-1374 Budapest HUNGARY tel: 003611-187-135

fax: 003611-187-998

Professor J.M. Montias Yale University 111 Prospect Str., New Haven, C.T. 06520 USA

tel: 001-203-432-3247

fax: 001-203-432-5779

Professor D.M. Nuti
Department of Economics
European University Institute
San Domenico di Fiesole
I-50016 Florence
ITALY

tel: 040-55-50921 switchboard 040-55-509-2221 direct

11.17

1.59

fax: 040-55-599-887

Dr. Jacek Rostowski
School of Slavonic and
East European Studies
University of London
Senate House
Malet Street
London WC1E 7HU
UNITED KINGDOM

Dr. V. Rudlovcak Ministry of Finance Federalni Ministerstvo Financi 15 Letenska 15 CS-110 00 Praha 1 CZECHOSLOVAKIA

International Institute for Applied Systems Analysis (IIASA)

Technology, Economy & Society Program

ECONOMIC REFORM AND INTEGRATION PROJECT

ADDRESS LIST OF STUDY GROUP INVITEES

Prices and Competition 25 June 1990

Professor Alfred Kahn Cornell University 308 North Cayuga Street Ithaca, NY 14850 USA Chairman

tel: 001-607-277 3007 fax: 001-607-277-1581

Professor Richard Ericson
Department of Economics
Columbia University
1022 International Affairs Building
420 West, 118th Street
New York, NY 10022
USA

tel: 001-203-432-3558 fax: 001-203-432-5779

Dr. John Foster
B.A.M.A. (Econ.) Ph.D.
Senior Lecturer in Economics
Department of Political Economy
Adam Smith Building
University of Glasgow
Glasgow G12 8RT
Scotland
UNITED KINGDOM
fax: 0044-41-330-4940

Professor Carl Kaysen
MIT
STS Program
Massachusett Institute of Technology
Cambridge, MA 02139
USA

tel: 001-617-253-4054 fax: 001-617-258-8118

Dr. Klaus-Peter Möller
Director
Institute for Applied Systems Research
and Prognosis (ISP)
Königstr. 50 A
D-3000 Hannover
FEDERAL REPUBLIC OF GERMANY

tel: 060511-34-52-41 fax: 060511-31-87-34

Professor A. Nove
University of Glasgow
Institute Soviet &
East European Studies
Glasgow G12 8QQ
Scotland
UNITED KINGDOM

Dr. V. Shironin VNIISI USSR Academy of Sciences Moscow USSR

Monsieur Lionel Stoleru
Secretaire d'Etat
aupres du Primier Ministre
charge du Plan
58 rue de Varennes
F-75007 Paris
FRANCE

tel: 00331-427-58000 fax: 00331-454-40572 tlx: 200 724 premin Professor M. Tardos
Institute of Economics
Hungarian Academy of Science
Budaörsi ut. 43
H-1112 Budapest
HUNGARY
fax: 003611-1851158

Dr. Sidney Winter GAO Brookings Institution 1775 Massachusetts Ave., Washington, D.C. 20036 USA

tel: 001-202-275-4346 fax: 001-202-797-6004

Professor G. Yavlinsky
State Commission of Economic Reform
Moscow
USSR

Mr. Vladimir Zapelik
CEMI
USSR Academy of Sciences
Moscow
USSR

Mr. Josef Zielieniec Institute of Economics Academy of Sciences of Czechoslovakia CZECHOSLOVAKIA