

**THE SOVIET
INDUSTRIAL
ENTERPRISE**

Theory and Practice

ANDREW FRERIS

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To my wife Anabella

PREFACE AND ACKNOWLEDGEMENTS

This book is based on my doctoral dissertation presented at the London School of Economics in 1981. The material has been extensively revised and rewritten. Current developments in Soviet planning up to the Spring of 1983 have been included where necessary or relevant.

Most of the thesis was written under the supervision of Prof. P. Wiles and several sections from it were presented at his and Dr. S. Gomulka's seminars at LSE. Their help and advice is gratefully acknowledged especially that of Prof. Wiles. Further thanks are due to Dr. A. Zauberman for introducing me to the field of Planometrics and to my friend and colleague Dr. P. Wiedemann for his help and support over the years.

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From reading the prefaces of practically every academic book written by a married man it appears that wives bear the brunt of authorship. Mine was not an exception and this, amongst other reasons, is why the book is dedicated to her.

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INTRODUCTION

No centrally planned system can afford the collection, verification and dissemination of the volume of information necessary to control with a high degree of accuracy and certainty the behaviour of agents carrying out the instruction of the planners. It must therefore follow that the microeconomic analysis of planning is mainly concerned with the explanation of the behaviour of production units that operate within constraints, but are still able to:

- (a) exercise a degree of control over how or whether to execute parts of a plan;
- (b) exercise a degree of control over the quantity and type of information they pass on to planners in the process of the formation of the plan.

This book explores aspects of the behaviour of the Soviet industrial enterprise, drawing mostly on its experiences in the late 1970s and early 1980s, but also examining where necessary, the environment of its operations in the post-1965 reforms period.

The 'theory of the Soviet enterprise' is perhaps a misnomer. As Wiles points out 'an enterprise is a congeries of people'.⁽¹⁾ In the case of the Soviet Union the congeries is primarily interacting with its supervising Ministry via associations. In this sense the theory of the firm in the Soviet Union concerns itself not so much with the interaction between enterprises or with their customers but with that of the planners and the planned. It then follows that a key component in any explanation of the behaviour of the Soviet enterprise must contain an analysis of the compatibility of the motives and drives of those responsible for seeing that the plan is carried out and the planned. An obvious area for research would be the bonus and incentive schemes in current use in the USSR. The Soviet literature, however, does not offer much guidance as to the current state of microeconomic thinking as applied to the theory of the enterprise. In fact there is a veritable dearth

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of models of enterprises and only very recently some attention has been paid to the subject. There is, of course, a large volume of literature on the problems of choice and application of success indicators, but this is only one aspect of the overall behaviour of the enterprise. In a sense Soviet microeconomics has been directed towards a monistic interpretation of the operations by laying undue emphasis on the problems of bonus schemes and success indicators, and therefore bypassing the issue of the degrees of freedom available to the managers in executing their plan.

As Montias(2) has indicated, assuming a typical mode of behaviour may produce some interesting results but ultimately is a misleading exercise, if the interaction of the producing units with the rest of the decision-makers such as the central supply organs, ministries etc. is not accounted for:

The fallacy is not in the technique of analysis but in trying to squeeze more out of these models predicated on the monistic behaviour of the 'basic decision makers' in each system than these models can contribute.

This note of caution is necessary in justifying the approach adopted here when using and interpreting the results of both western and Soviet authors in this area.(3)

One of the aims of this book is to show that complex and realistic models of the Soviet enterprise built around a neo-classical model of the firm, make a limited contribution towards understanding and predicting the behaviour of enterprises, precisely because they leave out of the picture important aspects of the interaction of the planners and the planned. The main thrust of the argument will be to direct attention to, and where possible to quantify, the role of the plan itself in conjunction with the bonus schemes, given the constraints under which the enterprises operate.

The first chapter outlines some important aspects of the system of planning, recent changes in the hierarchy of control, and the financial flows of the enterprise. The second chapter examines in detail the operations of the supply system, i.e. the Gosplan and its organs, in the context of the Soviet enterprise. It is shown there that the Gosplan and its role in the planning of the enterprise has to be considered in conjunction with taut planning - the hallmark of Soviet planning practices so far. These two chapters set the factual background against which Chapter 3 surveys and develops several analytical models of the Soviet enterprise and appraises their predictions. Chapter 4 and 5 examine then in detail two important aspects of the models outlined, namely the role of the plan itself and the concept of tautness and the role of different bonus schemes in influencing or predicting enterprise behaviour. Chapter 6 outlines in detail the material incentives scheme in use in the Soviet Union during 1980-85 in the context of the points raised in the analytical chapters and finally appraises the statistical and econometric

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evidence on the success of the incentive schemes. A short concluding chapter draws all the threads of the argument together and enumerates the findings and conclusions.

The book will be useful to students of planned economics in general, and USSR in particular, as it attempts to build an analytical framework of a long-neglected area in planning - that of the microeconomics of planning. The analysis however is backed by a wealth of statistical and empirical illustrations that either confirm some of the accepted views of the behaviour of the Soviet enterprises or, in a number of cases, throws a different or unusual light on the microeconomics of industrial planning in the USSR.

Notes

1. P.J.D. Wiles, *Economic Institutions Compared*, Basil Blackwell, Oxford, 1977, p.63.

2. J.M. Montias, *The Structure of Economic Systems*, Yale Univ. Press, New Haven, 1966, p.232.

3. The two works cited below are the best examples of monographs by western authors on the operations of firms in centrally planned economies. In both cases however the approach is descriptive rather than analytical and the case of the Soviet enterprise is not covered.

G.R. Feiwel, *The Economics of a Socialist Enterprise, A Case Study of the Polish Firm*, Praeger, New York, 1965.

D. Granick, *Enterprise Guidance in Eastern Europe*, Princeton Univ. Press, Princeton, 1975.

An excellent compendium of essays on the industrial enterprises in planned economies appeared under the editorship of I. Jeffries: *The Industrial Enterprise in Eastern Europe*, Praeger, New York, 1981. The section on the Soviet Union written by A. Nove (pp.29-38) is informative but mostly descriptive.

Chapter One

THE STRUCTURE AND PLANNING OF THE SOVIET INDUSTRIAL ENTERPRISE

1.1 INTRODUCTION

The following five sections will summarise the institutional background of the Soviet industrial enterprise paying particular attention to features that may affect the formulation of analytical models of enterprise behaviour. Some detailed information is given on the formation of *obyedinenii* (associations) as they now play an important role in industrial management. Figures are also given on the growing concentration of Soviet industry as this feature relates to the development of the associations and has tended to diminish the degree of independence that enterprises might have enjoyed. The planning cycle of the enterprise and the contents of the plan are then examined paying particular attention to financial flows and the role of profit. This is an important area as it relates to the formulation of incentives funds and bonuses which constitute the main topic of Chapter 6.

As this book is concerned with the behaviour of the Soviet industrial enterprise it is essential to define clearly at the outset the exact meaning of 'industrial' and 'enterprise' in Soviet terminology(1).

Industry covers the following sectors in the economy: electrical energy, oil, gas, coal, ferrous and non-ferrous metallurgy, chemicals and petrochemicals, machine building and metal processing, timber, wood, paper and printing, building materials, glass and china, light and food industry, medical and micro-biological industry and meal and fodder. It now follows that the enterprises examined here will exclude those involved in agriculture, transport and services. Distribution is excluded as well, except that the operation of the industrial supply system which includes some physical distribution of goods on a wholesale basis will be examined in Chapter 2.

An industrial enterprise is defined as a fundamental organisational unit characterised by administrative and managerial independence. More likely than not the enterprise will be expected to run on a '*khozraschet*' basis. This means that the

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enterprise should be able to cover the expenditures from its own funds and to make a profit. Nove(2) defines as follows the implications of *khozraschet* for the operations of an enterprise:

... (it) will cover the operating expenses out of income derived from the sale of goods and services to other enterprises or (in the case of retail establishments) to the population. Similarly it will pay for its material inputs to supplying enterprises, all at prices determined by the planning authorities; it pays amortization (depreciation) charges, also at rates determined from above. Working capital is in part provided by short-term credit obtained from the State Bank; these too are planned, and bear a low rate of interest. Wages paid to workers and employees are likewise based on officially-laid-down scales...

1.2 HIERARCHICAL STRUCTURE, PLANNING AND CENTRALIZATION

Individual enterprises come into direct contact with two types of authorities: Ministries and associations. There are now three types of ministries(3):

- (a) All-Union Ministries. In 1979 there were thirty-two of these covering areas such as oil, gas, paper and machine construction. Enterprises under the auspices of these types of ministries are run directly from Moscow and are not answerable to local authorities.
- (b) Union-Republican Ministries. These ministries have dual offices both in Moscow and in the appropriate republic. In 1979 there were thirty of these responsible for areas such as agriculture, coal, ferrous metals and finance.
- (c) Republican Ministries. These are purely local looking after local industries in their republics.

The role of these ministries in the planning of production and supply will be examined in section 1.3 below.

The enterprise will ultimately be under the auspices and direction of the two major planning organs of the State, the Gosplan and Gosstab. The first sets out the broad national output etc. targets and ensures the consistency of the plan. The latter plans the supply system inherent in the production plan as set out by Gosplan. These two organs supervise and communicate with the ministries and occasionally directly with the enterprises. The Gosstab in particular has a complex system of territorial units and departments that interrelate closely with the enterprises. The functions of the Gosplan will be examined in greater detail in section 1.3. Gosstab operations are the subject of Chapter 2.

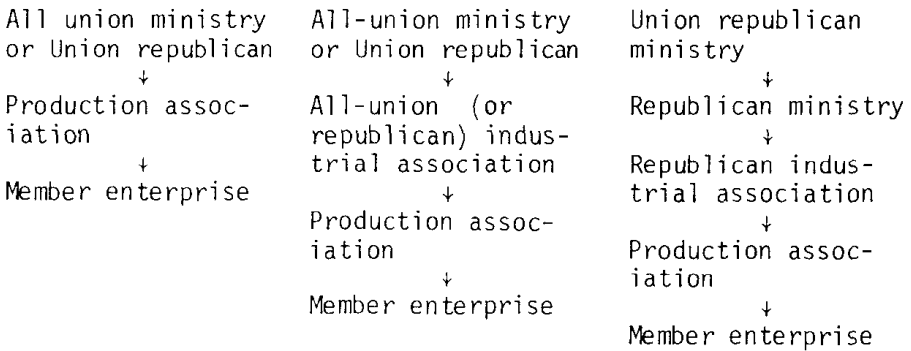
As from 1973 industrial enterprises have been organised at

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an accelerating pace into two kinds of associations:(4)

- (a) 'Proizvodstvenoe' (production), usually consisting of four enterprises.
- (b) 'Promyshlennoe' (industrial), a much larger body either republican or all-union intended to replace ministerial departments (glavks).

The role of the association in the planning hierarchy is envisaged in a two, three and exceptionally four-tier structure:



The role and aims of the production association have been described as:

- (a) To economise on information and aid planning by treating a number of production units as a single entity as far as input allocation is concerned.
- (b) To concentrate and specialise production by a process of mergers and by bringing under a single management different establishments.
- (c) To encourage research and development and technological progress by bringing together scientific and research institutes with actual factories so as to accommodate applied research. Indeed in Soviet literature, associations are invariably referred to as 'production and scientific-production associations', the latter being associations whose emphasis and tasks are on applied research and technological progress.

Table 1.1 shows that although production associations did exist before 1975 their rate of growth and importance accelerated greatly, especially between 1975 and 1976. There are no comparable aggregate data available for industrial associations except for certain industries or sectors (see for example Table 1.4).