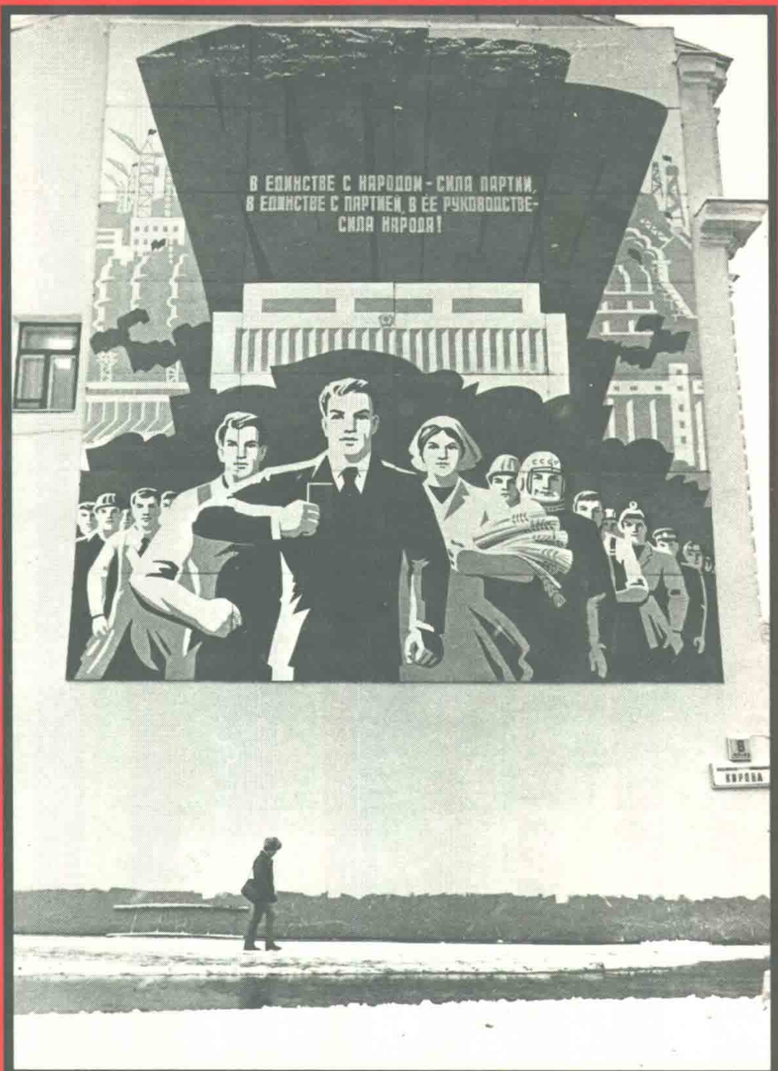
MODERN SOVIET ECONOMIC PERFORMANCE



Trevor Buck and John Cole

MODERN SOVIET ECONOMIC PERFORMANCE

Trevor Buck and John Cole

First published 1987

Basil Blackwell Ltd
108 Cowley Road, Oxford, OX4 1JF, UK

Basil Blackwell Inc.
432 Park Avenue South, Suite 1503
New York, NY 10016, USA

British Library Cataloguing in Publication Data
Buck, Trevor
Modern Soviet economic performance.
1. Soviet Union–Economic conditions—1976–
I. Title II. Cole, John. 1927–
330.947'0854 HC336.25
ISBN 0-631-14417-X

Library of Congress Cataloging in Publication Data
Buck, Trevor
Modern Soviet economic performance.
Bibliography: p.
Includes index.
1. Soviet Union—Economic conditions—1976–
I. Cole, J. P. (John Peter), 1928– . II. Title.
HC336.25.B826 1987 330.947'085 86-24457
ISBN 0-631-14417-X

Typeset in 10 on 12pt Sabon by
Opus, Oxford
Printed in Great Britain by
Billing & Sons Ltd, Worcester

ACKNOWLEDGEMENTS

Grateful thanks are due to Sue Corbett at Blackwells for her gentle, firm direction of the project, and above all to an anonymous publisher's reviewer who provided excellent criticisms and suggestions for new directions that we might follow. Jill Wilson mastered our long-hand and her new word-processor with great calmness and skill : many thanks. Comments on odd chapters were gratefully received from Alistair Bruce, Sandra Buck, Dan Wilson, Júlia Dudás, Phil Hanson, Paul Hare, Mike Bleaney, Hans-Jürgen Wagener, Mike Wright and by Jeremy Russell at Shell UK Ltd. Zsuzsa Kapitány, Judit Szabó and János Kornai discussed soft budgets in general terms. Of course, all the usual disclaimers apply.

PREFACE

Many commentaries have been written on the performance of the Soviet economy. They are often either too journalistic for an academic audience or too academic for the layman, written by a community of specialists for their own consumption. This book tries to enjoy the best of both worlds. John Cole wrote substantial parts of chapters 3 and 9. He speaks Russian, has visited the Soviet Union several times, and provided all the primary statistics for this study. Trevor Buck is an economist who contributed the remaining material and retained overall control of the project. He has twice taken parties of British students on industrial study visits to the Soviet Union.

With this mixture of authors, the book is written in a style that should be digestible for the layman and for students of comparative economics and economic or regional geography. It tries to analyse rather than just describe and uses the conceptual framework suggested by the Hungarian economist, János Kornai. Kornai is concerned with the extent to which industrial enterprises are rewarded (or penalised) by market forces according to the success (or failure) of their financial performance. Where success is generously rewarded and failure is severely penalised, then Kornai would identify hard budget constraints, although in practice administration as well as market forces may determine the hardness of constraints.

It is suggested that the general hardness and softness of constraints in industry can provide a broad explanation of the comparative performance of different economic systems. Hard budget economies experience *excess supply* everywhere, and for example this can manifest itself in high unemployment (outside the firm), rapid technological advance and a particular kind of economic growth. Although central planning *can* operate with hard budgets, we will argue that the Soviet Union can generally be described as a relatively soft budget economy characterised by universal *excess demand.* We do not argue that either hard or soft budgets are 'bad', merely that they each give rise to a particular pattern of economic performance that can only be judged against particular values.

On an emotional level, the book tries to make a modest contribution to the reduction of international tensions. Both authors experienced an individualistic upbringing in the West and would not want to live for long in the Soviet Union. Despite this position, however, we do not see why the relative performance of Western and Soviet-type economies should contribute to inter-system rivalries. It seems clear that it does. For example, an experienced and influential British politician, Lord Carrington, now Secretary General of NATO, is reported as saying: 'OK, our economy is not all that good, but there's nothing wrong with the system. The Soviet system just doesn't work. You've only got to look at the failure of the Russian economy: they have to go to America in order to feed themselves' (*Guardian*, 31 December 1983, p. 8). Now, the USA imports sophisticated manufactured goods from Japan and oil from the Middle East, and Britain is a net food importer on a large scale. None of this trade is held to constitute failure, however.

We will propose that, despite many relative weaknesses (and strengths), the Soviet economy is not in a state of collapse. On the other hand, the economic managers of the Soviet Union and other economies of the Soviet bloc have obviously got their hands full already and we cannot believe that, whatever their political and other objectives, the Soviet Union is anxious to impose its *economic* system on the rest of the world.

Politics and economics are interdependent in Marxist theory, and the Soviet system of the public ownership of the means of production and central planning has been employed by Cuba and Viet Nam. We remain convinced, however, that the practitioners of Soviet-type planning do not, as such, generate pressures for international domination. Without value-judgements, neither capitalism nor central planning can be proved to be superior. In our opinion neither system can feel particularly proud of its performance in economic terms.

Trevor Buck
John Cole
University of Nottingham

CONTENTS

Acknowledgements		vi
Preface		vii
1	The Soviet Economic System	1
2	Fairness	33
3	Allocation and Production	51
4	Excess Demand and Inflation	79
5	Unemployment	95
6	Investment	106
7	Innovation	118
8	Economic Growth	138
9	Living Standards	151
10	Hard or Soft Budgets	168
References		180
Index		189

CHAPTER ONE

THE SOVIET ECONOMIC SYSTEM

This chapter is divided into five sections: after some background in the first section, the second provides a description of the Soviet economic system for a Western reader with no previous experience of it; the third section is concerned with the crucial role that information plays in central planning; the fourth reviews Kornai's theory of suction and pressure that we feel comes closest to explaining the performance of the Soviet system; and the fifth introduces readers to the chapters that follow.

BACKGROUND

In this section we try to explain the Soviet system by contrasting it with the operations of a very large international corporation in the West (Shell UK Ltd) with which the reader may be familiar. It was Harry Schwartz (1965) who popularised the 'USSR Incorporated' analogy. Here, the Shell Company is used to emphasise the similarities and (mostly) the differences between the capitalist and Soviet systems.

We would argue that the process of central planning still dominates the allocation of industrial and agricultural resources in the Soviet Union, despite attempts at reform and the development of informal, and often illegal, unplanned transactions between enterprises and between individual citizens. Nobody knows how extensive these black and grey markets are. (The latter are unlawful market dealings that are rarely prosecuted.) In one sense, they may be viewed as an essential characteristic of central planning itself.

It was unfortunate for Lenin and later Stalin that Karl Marx provided them with only a critique of capitalism. This gave them *carte blanche* after the 1917 Revolution, but little guidance on the form an economic system should take in the post-revolutionary period. In the long run the aim was pure communism: a utopian world in which money and the state would wither away and basic needs would be satisfied within self-sufficient communes. Today, visitors to Moscow are proudly shown the practically free public transport network as an example of communism. In addition, factory managers point to sports centres, built on 'free' Saturdays by the workers who then use the facilities without charge, as a step in the direction of communism, many decades after the revolution.

Since 1917, a 'temporary', transitional state of socialism has prevailed. At first it took the form under Lenin of 'War Communism' (until 1921) and then the 'New Economic Policy', but by the early 1930s a system of the public ownership of the means of production and decisions by central directive had been completed under Stalin, a regime that shows every sign of surviving until the end of this century at least. It is this regime that, in our opinion, gives the Soviet economic system its unique character. It should, however, be emphasised that state socialism has been subjected to massive reforms in CMEA (Comecon) countries outside the Soviet Union and it may not be accurate to describe all CMEA members as 'Soviet-type' economies.

There are only two ways of allocating resources, if we ignore decisions within families, clans and similar collectives, although various mixtures of the two may evolve. The first is the *market* transaction. For example, if Shell Oil (UK) Ltd wishes to obtain supplies for an offshore oil installation in the North Sea, then the local manager is empowered to purchase on the open market. Helicopter transport, food, toilet rolls can all be procured by the manager or his purchasing office, by inviting tenders or simply by placing an order with a supplier. In these market transactions it is quite usual for communications to take place between company employees of equivalent status, e.g. between Shell's local purchasing officer and a supplier's (often local) sales office. In other words, communications are *horizontal* and do not need to pass up and down through the managerial hierarchies of the respective companies.

In such decentralised transactions a great deal of information is exchanged between buyers and sellers that need not concern head office. A local food supplier can advise when a particular fresh vegetable is abundant and cheap. The buyer can warn of the need for extra, unplanned helicopter flights in the near future. Even with transactions that are complex and long term, it is possible for sophisticated contracts to anticipate problems. For example, Shell would contract engineers to build their drilling platforms rather than make them 'in-house'. Payments would keep step with progress and penalty clauses could be invoked for unplanned delays or other contingencies.

Without denying the potential drawbacks with market transactions in the form of monopolies, bankruptcies and the unpredictability of prices, for example, it seems clear that market transactions offer *flexibility*. Replacements for unexpected breakdowns or unsatisfactory supplies may be only a telephone call away and head office need never be concerned with operating details. Information on scarcities and demands is conveyed by market prices, and Adam Smith's 'invisible hand' lives.

Ignoring the allocation of resources within small, self-sufficient communities, the only alternative to markets is allocation through the 'visible hand' of administration, hierarchy or *planning*. Information is now collected and transmitted *vertically* up through a managerial hierarchy until it reaches the decision-makers. They transmit their decisions in the form of directives to lower-level employees, who are supposed to carry out their instructions. Western readers will have encountered this kind of resource allocation throughout their education, in their tax affairs, in the armed forces, if they have served, and certainly at work if they are employed by a large corporation. Although markets are used extensively under capitalism, it is not feasible to contract for everything. For example, the economies of large-scale production may determine that iron and steel should be made as part of the same process rather than cold iron being bought in by a separate steel producer. 'In-house' production in a large, hierarchical corporation will also be preferred to external contracting between separate companies, if Oliver Williamson's ideas on transaction cost economies are valid.

Williamson (1981) feels that the visible hand of administration (or in-house production) offers substantially lower transaction costs compared with market transactions between companies, especially if products are technically complex and/or are unique (i.e. are produced and sold on a 'one-off' basis). With such transactions, not all contingencies can be anticipated, and Williamson predicts that buyers and sellers may behave opportunistically to exploit the 'bounded rationality' of the other party, which is economic jargon for the fact that dealers cannot obtain all the information relevant to a transaction and could not handle it all even if it were obtainable.

So, for example, Shell takes on board oil-drilling in the North Sea as well as processing at its refineries, rather than risk the high prices and unreliable deliveries of an autonomous supplier, although it would still contract with outsiders for the repair of broken office windows. Planning enables the corporation to *co-ordinate* its main activities: oil prospecting, drilling, refining and sales to the final consumer, although in practice these activities may reside in subsidiaries or divisions of Shell. Planning, as opposed to market transactions with other companies, thus enables Shell to organise the sequencing of its operations properly. If planning goes well, there should be none of the serious bottlenecks in production that markets sometimes bring. If it goes badly, at least Shell should have plenty of notice, which should give the management a chance to modify its plans accordingly. Planned integrated activities are appropriate wherever scale economies or the interdependence of operations rules out separate market transactions. The difficulties of operating a city's underground railway network with each station as a separate commercial entity are obvious and would be explained by Williamson in terms of transactional costs.

The problems with administrative co-ordination are well known in the Soviet Union, and apply there to the whole economy rather than to just one part of one industry, as with Shell. Of course, information necessary for the sequencing of activities may be easier to obtain from suppliers who are now on the same payroll and do not have the same incentive for opportunistic behaviour as separate corporations. Fine, but there is a large literature in economics on the self-interested behaviour of corporate managers who may seek objectives, such as an easy life, which are not always consistent with the maximum profitability of the company. In any case, even the most devoted company manager cannot know everything.

For these reasons, rules-of-thumb (or intelligent guesses influenced by decisions in the past) evolve within the company, enabling decisions to be made in very complex, uncertain circumstances, while at the same time representing 'political' truces or compromises between different interest-groups within the organisation. Naturally, corporations rarely admit publicly to the use of such rules-of-thumb, and often insist that their activities are administered 'rationally' after all available information has been collected. Readers who have worked in a Western company will know differently, however, and will have noticed that the process of allocating resources between competing departments of a firm (or 'budgeting') resembles a subjective art and not an objective science. A department's budget will often be last year's authorisation plus (or minus) a percentage, and such 'incrementalism' is extremely prevalent in the head offices of large corporations and in the budget decisions of central government (see Jackson, 1982, pp. 146–72). It is just not feasible to conduct a 'rational' review of a company's entire operations for each planning period, or 'zero-base budgeting' (ZBB) as it is called by accountants. Here is an extract from a modern management accounting text (Macariello, 1984, p. 336) on the subject:

> Much has been written about zero-base budgeting since it was first implemented by Peter Pyhrr at Texas Instruments during the 1960s. The discussion about ZBB appears to have been useful. However, the really new part of ZBB – having DEC [Discretionary Expense Centre] managers justify their entire operation on an annual basis – is not workable. . .
>
> ZBB is a misnomer. Budgeting is inherently an incremental process. This is due to the limits of human information processing that make it extremely difficult, if

not impossible, to evaluate all activities from scratch each period. Moreover, there is the pressure of time; the budget process normally takes place within a three or four-month period of time. Whenever ZBB has been used, a large portion of activities has been exempted from zero-base review. So rather than zero-base review, it has more often been 80 per cent-base review, with only 20 per cent of the budget subject to complete review on an annual basis. This is merely another example of incremental budgeting.

We would need a tape-recorder inside every corporate manager's office to prove that incrementalism is prevalent. Incrementalism is easier to demonstrate from official inquiries into public bureaucracies however, and there is no reason to expect private bureaucracies to behave differently. For example the Jarratt Inquiry into the efficiency of British universities (Committee of Vice-Chancellors and Principals, 1985) found that (pp. 21–2) 'in some of the universities there is still a strong emphasis on maintaining the historical distribution of resources. Planning and resource allocation tend to be incremental rather than dynamic.' In the sub-report on the authors' own University of Nottingham (Committee of Vice-Chancellors and Principals, 1985) it was concluded that (p. 5) 'its reaction to the recent funding constraints has, on the whole, been to maintain the status quo at the expense both of diluting its existing strength and of new developments'. It is not intended to pillory university bureaucracies, which are little different from any other, and cut-backs in 1986 have been more discriminating. Inertia and incrementalism are a feature of all bureaucracies. They certainly are a dominant characteristic of Soviet planning.

So, capitalism is a mixture of markets and hierarchies (planning). Shell, like many other large companies, now prefers to buy in from other companies goods and services that are beyond its immediate competence to provide, although strategic decisions are still reserved for the Group Holding Company and separate service companies. Operating companies (who actually make things) are largely left to their own devices, to sink or swim in their markets without central interference, although expenditures (market transactions) beyond certain authorisation levels must be approved at higher levels of the planning pyramid. The Group Holding Companies need not concern themselves with operational details and can spot operating companies with poor performance by comparing similar activities in different countries. In this sense Shell resembles the multidivisional (or 'M'-) form advocated by Williamson (1981), and Shell has effectively created markets within the overall hierarchy of the firm.

There can be no question of a universally 'optimal' combination of markets, hierarchies and multiple divisions. Tinbergen (1967) considered an optimal regime that could evolve as governments realised the appropriateness of markets and plans in particular circumstances. For such a regime we must assume, however, that governments are 'rational actors' and that individual sectors of the economy can be organised piecemeal. (In practice, economic systems come as a 'package deal' and cannot be assembled like purchases chosen from supermarket shelves.) In the West, it seems clear that economies of scale require the planned supply of water, and the interdependence of routes suggests a planned railway system. Agriculture is an industry exposed to major uncertainties and these would seem to demand on-the-spot decisions by farmers motivated by a stake in the value of total production less costs. Technology does have an influence on the suitability of market and plan for particular circumstances but it is rarely a conclusive one. At the end of this chapter, in figure 1.2, eight different kinds of economic efficiency are shown, and the 'best' economic system must depend on the weights given to these, and to non-economic, objectives.

It will be shown below that like capitalist firms, the 'USSR Inc' also uses a mixture of markets and plans, though in different proportions. Apart from this difference, there are three others that seem important. First, an operating company in Shell is answerable to the Group Holding Company in a similar fashion to the Soviet enterprise and its ministry, but in the case of Shell, the operating company must also compete to some extent with other oil companies, and the Group Holding Company must publish financial information on all its activities which is perused by the Stock Market and its analysts. The verdict of the Stock Market will act as an external check on Shell's growth or decline, and shareholders can dispose of Shell shares dispassionately if they consider long term prospects, or even quarterly earnings, poor. The Soviet enterprise is responsible to *its* ministry, but the ministry is partly responsible *for* the enterprise and may not draw attention to poor enterprise performance. Stock Markets contribute to relatively 'hard' budget constraints for capitalist firms, which are discussed later in this chapter.

In contrast with the Soviet enterprise, profits ('net income') in the Royal Dutch/Shell Group of companies fell by about 16 per cent in 1981 and stayed at that level during 1982 despite inflation. Largely as a result, capital expenditure did not grow in real terms between 1979 and 1982 and in 1983 it was cut by 10 per cent through the postponement of development programmes. Total employees fell by 10,000 between 1981 and 1983, from 166,000. Although certain cycles can be discerned in Soviet industries, redundancies without the offer of alternative employment are rare. Of course 'USSR Inc' as a whole cannot shed labour like a capitalist firm, even if it wanted to.

The second difference is concerned with the fact that companies like Shell may diversify to spread risks. Shell seems rather unusual in this respect. It has a Non-traditional Businesses Division, which in the past has diversified into forestry, metals and even duck-breeding, but these ventures have not always been successful and the company has now decided that its expertise lies in the oil and gas industries. Expansion beyond these industries is no longer contemplated. Diversification enables companies to avoid putting all their eggs in one basket and reduces the riskiness of the overall venture. In the Soviet Union, on the other hand, product diversification by the enterprise involves complex supervision of the enterprise by a number of ministries, and is therefore discouraged.

Third, even a massive corporation like Shell is obviously not the whole of the British oil and gas industry. Just like the individual corporation above, the whole of the capitalist system or nation does not have all its eggs in one basket either. Each corporation has its own view of the future. In Shell's case, a number of scenarios of the future are constantly being produced and revised (see Jefferson, 1983). Corporations make mistakes, but others have made different judgements on the future and can take advantage of these errors. The resources of a capitalist industry are rarely all committed to a single strategy, which may of course prove to have been mistaken with the benefit of hindsight.

At this stage, readers patiently waiting for some background to the Soviet economic system may reasonably ask: 'What on earth has all this to do with the Soviet Union?' We would claim that a review of the familiar characteristics of the Western system can be used to throw light on that of the Soviet Union, using the analogy of 'USSR Inc'. If capitalism consists of markets plus the superimposition of hierarchies in corporations and government, then the Soviet economic system can be seen as its converse, since some horizontal market transactions are added to the basic vertical hierarchies of central planning.

It was Lenin who first predicted that in the Soviet Union 'The whole of society will have become a single office and a single factory' (Lenin, 1968 edn, p. 337). Under Soviet planning, the central hierarchy controlling 'USSR Inc', like the capitalist firm's board of directors, determines economic strategy.

This view of 'USSR Inc' implies a planned economy quite different from the 'indicative' planning of Western capitalism, where central agencies provide information for firms and perhaps point out the outcomes they would desire, but then leave firms to make their own investment, employment and output decisions. Within the hierarchy of 'USSR Inc' the central administration tries to allocate all resources by directive. Enterprises are able to comment on plans in advance, but otherwise are only required to carry out central plan directives.

The institutions of 'USSR Inc' are more difficult to describe than the organisational chart of a Western corporation, however, since there are representatives of *two* hierarchies at most levels of the Soviet economic system (see the next section). It should be remembered that, despite complex institutional detail, the core of the Soviet economy is a central authority that issues directives down through an administrative hierarchy to enterprises. The reader must be reminded at this stage that the economy of the whole of the USSR is many times larger than that of the largest capitalist transnational companies. Also the territorial extent on which 'USSR Inc' operates is about a hundred times as large as the UK and has about five times as many citizens. The great size of the USSR almost inevitably assures that virtually all natural resources for complete economic development are available, which largely frees central planners from dependence on foreign economies. At the same time natural resources, population and productive enterprises are widely dispersed over an enormous area, many goods are moved over hundreds and sometimes thousands of kilometres, and communications are greatly stretched. In this respect one could not have chosen a more difficult country to plan centrally. Many geography texts on the Soviet Union describe this situation in detail. The next section of this chapter concentrates on a short description of the Soviet economic system and an analysis of economic information in relation to it.

THE SOVIET ECONOMIC SYSTEM

Readers requiring more detail and rigour than this section provides are recommended to see Nove (1982). Figure 1.1 shows a highly simplified chart of the formal institutions of Soviet planning. The Council of Ministers has direct charge of 31 'All-Union' ministries administered at the federal level, and indirect control of another 22 Union-Republican ministries, which administer products of lower priority through planning hierarchies within the Soviet Union's 15 Socialist Republics (SSRs).

Formally, the Council (or rather its Presidium, since the whole Council only meets four times a year) receives its general instructions from the Supreme Soviet, which also operates a powerful Presidium, as the Supreme Soviet only meets twice annually. This Supreme Soviet, or its Republican equivalent, is in turn elected from the soviets themselves, which are local authorities at regional, city and village levels.

On the face of it, the Soviet Union operates a system of 'democratic centralism'. There is a public discussion of economic reforms, which is in practice restricted to means rather than ends. Legislative proposals are made at the centre in the light of these discussions and are approved from the level of the soviets upwards. Economic plans for the various ministries are produced with the help of the State Committee for Planning (Gosplan) and the central statistical administration, and are enthusiastically

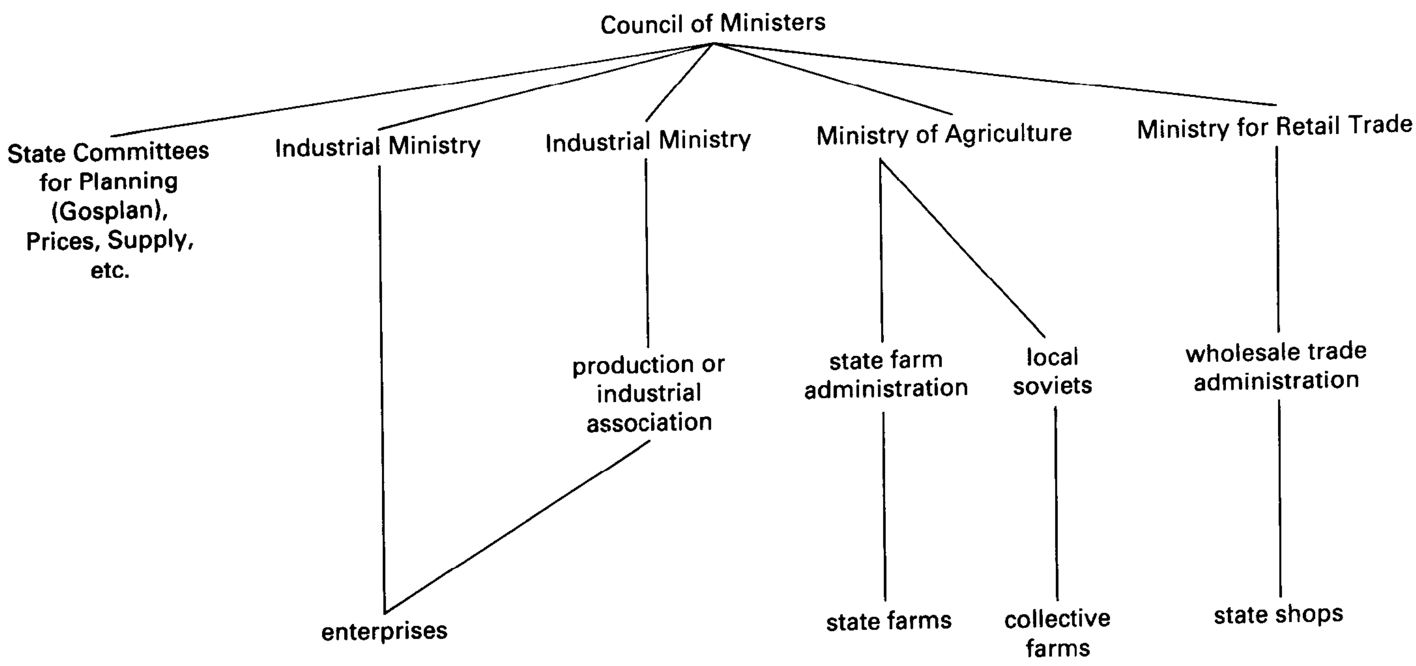


Figure 1.1 Soviet economic institutions. In 1984, there were 62 ministries and 22 State Committees. Only a few are shown here, and important omissions include Finance, Defence and Foreign Trade. In practice, industrial enterprises can be controlled directly by the ministry ('All Union' industries'), at the level of the republic or by local authorities.

endorsed by unanimous votes on a show of hands at all levels. Output plans eventually become law.

Behind all this formal activity, however, lies the second, 'shadow' hierarchy of the Communist Party of the Soviet Union (CPSU). The Party is even more centralised than the economic institutions and recourse has to be made much more frequently to Moscow than is the case through the formal economic channels.

At the centre, the Congress of the CPSU meets every five years, but is represented meanwhile by the Central Committee of the Party which is served by a full-time secretariat. The Central Committee in turn has its own Presidium, or Politburo, which effectively makes all strategic decisions. The Central Committee of the CPSU has a department to supervise the activities of each ministry, and all important appointments down to the directorships of individual industrial enterprises are made from the *nomenklatura*, or list of candidates approved by the Party. It is suggested below that this system contributes to relatively 'soft' budget constraints in Soviet industry, since the ministry and the Party see enterprise performance as being to some extent their responsibility, following the appointments and other decisions made from the centre. This weakens the resolve at the centre to identify and penalise poor enterprise performance compared with capitalist enterprises exposed (to some extent) to the disciplines of the capital market and to competition in product markets.

The ministries and the Party simultaneously control most economic activity in the Soviet Union, either directly from Moscow or through their republican equivalents. It is not suggested, however, that Party control is explicit, with the exception of important decisions of a strategic nature. Plan formulation takes place between enterprise employees and their superiors in the associations, ministries or ministerial branches. Most of the participants are likely to be communists, but the Party itself only becomes important in the supervision of plan performance, in canvassing support for the plan within enterprises and, crucially, by providing a network of contacts for enterprise employees when supply uncertainties threaten plan fulfilment. The state's ownership of the means of production gives control over all industrial enterprises. Enterprises are governed by a single director, who is responsible to the appropriate Ministerial branch, although in practice the director is subject to additional influences from the state Bank, the Ministry of Finance, the Committees for People's Control and State Security, and the Party, both within the enterprise and locally.

The director is required to use the state's assets, for which the enterprise has had to pay a capital charge of 6 per cent since 1967 (these assets were 'free' before then). The enterprise is instructed in its *Tekhpromfinplan* what to produce and when to deliver, and purchases of capital, labour and