INTERPRETATION OF THE SOVIET-TYPE ECONOMY AS STATE CAPITALISM*

What is State Capitalism?

During the 1970s and 1980s, officials of the Soviet Union routinely described their economy as "socialist," and Western commentators routinely described it as "Communist." However, some Marxists and a few others said that the Soviet Union was really "state capitalist" rather than socialist. But beyond saying that socialism was "good" and state capitalism "bad," they had a hard time specifying just what state capitalism was and how it differed from socialism.

State capitalism is part of mercantilism, described below. If Soviet-type economies were state capitalist, they are more than just historical cases. The Czarist economy that preceded the Soviet era was also an example of state capitalism and today, Russia and some other successor states to the former USSR are forms of state capitalism. State capitalism is widespread, as it has been over the last three to four thousand years. In the world of today, state capitalism is often portrayed as the main alternative to "democratic capitalism"—Chrystia Freeland, the current Canadian Minister of Foreign Affairs, made such a comparison in a recent newspaper article, for example—thereby recasting the comparative aspect of Comparative Economic Systems.

Genuine socialism, as opposed to state capitalism disguised as socialism, is rare. We shall return to this issue at the end of the article.

Historically, *mercantilism* as an economic system had two basic features, the first of which is state capitalism:

1. Governments established monopoly rights for selected firms in exchange for the right to share in their profits and to use them as agents to help achieve state goals. The latter meant that these firms would not be able to fully exploit their opportunities for monopoly profit when state priorities dictated another course of action. For example, they might be required to use domestic resources in production in place of imports and thereby to incur higher costs. Loyalty to the government was often a factor in selecting enterprise managers, which could also mean a lower quality of management.

Examples are 17th century France and Spain, Japan between the Meiji Restoration and World War II, and, to a lesser extent, England and Holland. At least in France, Spain, and Japan, efficiency was sacrificed for state control.

2. Governments tried to generate export surpluses. This meant tariff and tax/subsidy policies to promote exports and reduce imports. Seventeenth century England was an example. In some cases, the currency was kept under-valued.

Of course, not every country could do this. If some nations had export or current account surpluses, others would have to have deficits.

Soviet-type economies are alleged to have had the first feature above. While these economies were "socialist," in that most of the material means of production and distribution were government-owned, it is argued that a state capitalist system was grafted onto the basic socialist model. As owner, the state took nearly all profits and losses earned by state firms at official prices—this is basically what socialism means, ie., that the government has income rights to the firm's net profit or loss.

However, the shortage nature of the economy allowed firms to earn additional "unofficial" profits, which they kept for themselves and their controlling state agencies. These additional profits were privatized, an identifying feature of capitalism.

Soviet-type economies did *not* have the second feature of mercantilism. Their currencies were *over*-valued in terms of Western currencies. They were import-oriented, using trade to obtain products that were difficult or impossible to produce at home, but which were deemed essential by their governments and Communist Parties. Trade was also used to bring in technology. Over-valuation of the domestic currency produced shortages of imported goods to complement the shortages of domestically-produced products at official prices, on which more below.

Before reform in 1978, China adopted the first, but not the second feature of mercantilism, as was typical of a Soviet-type economy. After reform, she adopted both features, and the renminbi went from being an over-valued currency to one that was under-valued. China achieved large export surpluses, mainly through low labour costs and a low currency. The Chinese also made major efforts to transfer technology and skills to their country in order to duplicate the economic success stories of other East Asian nations, while also building a powerful military machine.

The Soviet-type economy (hereafter STE) was in principle a planned economy, in which firms received input and output quotas that they were supposed to fulfill and which were supposed to guide production. These were set by state officials as part of an economy-wide plan, and managers/workers received bonuses paid out of official profits when the plan was fulfilled. These bonuses were almost the only official profits that firms were allowed to keep, but they soon became semi-automatic and thus more like costs in the form of wages and salaries than profits.

In this context, plan quotas were frequently changed, even while a firm was fulfilling its plan, which suggests that quotas were often adjusted to outputs rather than the other way around, in part to make sure that as many firms as possible fulfilled their quotas. The phenomenon of "storming," in which firms initially worked slowly, but then speeded up as the deadline for fulfilling plan quotas approached, can be viewed as a way for a firm to signal to its planning superior whether its quota was above or below its profit-maximizing output. If the quota was too low, the firm would produce a relatively high rate of output. If the quota was too high, it would produce a lower rate of output.

But if quotas were adjusted to outputs, how were outputs set?

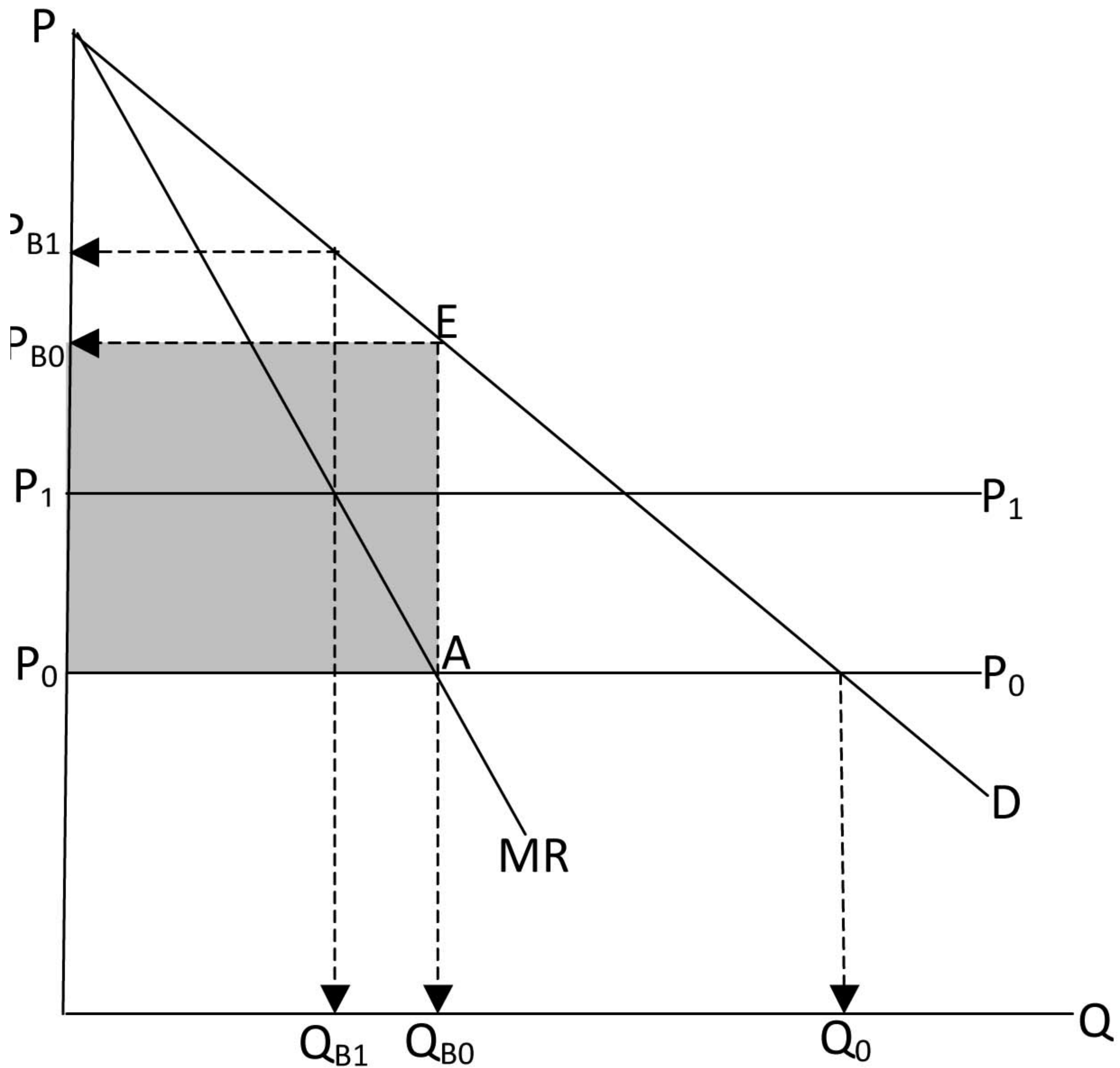
Mercantilism and Shortages.

The STE was also an economy of pervasive and persistent shortages at official prices. Queuing was common, as was waiting and bribery, with bribes being paid to obtain goods and services in short supply. A second feature of the STE was the "soft budget constraint." Nearly all official profits—profits made at official prices set by the state—were deducted into the state budget—in effect, they were taxed away. Losses were subsidized. State absorption of both profits and losses is a basic feature of government ownership, but there was also a separation of ownership from control.

The state budget and banking system—basically one large entity—was the owner of state firms. It claimed their profits and losses. The state agency that controlled a firm plus the firm's own direction was its management. When this kind of separation occurs, we expect managers to undertake actions that benefit themselves, but not the owners. Shortages allowed them to do this, and the fact that nearly all official profits were taxed away gave them an incentive to do it.

This is where mercantilism comes in. Because of shortages, the demand price of a good in short supply—or the price read off a firm's demand curve at any given quantity—exceeded the official price, and firms could often collect the difference between actual and official prices in the form of a bribe or some other type of side payment. While official profits were taxed away, unofficial profits were not taxed.

In the graph below, let DD be the demand for a product, with MR denoting its marginal revenue. Here we have in mind a consumer good sold mainly to households. Let P_0 be the official price of the good, which would be set administratively and changed infrequently, and let Q_0 be the quantity demanded at price P_0. If the firm could set its own price, it would set this price above P_0 and supply an output lower than Q_0.



What price and quantity would the firm set if it is an after-tax profit maximizer and has to turn over all its official profit to the state, but none of its unofficial profit? In effect, it would maximize its unofficial profit. In the graph above, A is the point of intersection between MR and the horizontal line whose height is P_0. Let Q_{B0} be the output at which marginal revenue equals P_0, and note that Q_{B0} is less than Q_0. Then Q_{B0} is the output that maximizes unofficial profit, and P_{B0} is the profit-maximizing price, implying that the firm must charge its customers more than P_0 for this product.

In fact, P_0 is the marginal *cost* to the firm of the product, rather than its marginal revenue. If the seller produces one more unit of output, P_0 is what it must pay in additional costs of production and profit turned over to the state budget.

If the seller could sell every unit of output at P_{B0}, its "unofficial" profit would be the area of rectangle $P_{B0}EAP_0$. This is the profit it can keep. Instead of actually selling the product at price P_{B0}, it might sell at price P_0, but collect in addition a bribe or other side payment or favour, equal in value to length EA in the graph—in effect charging for the right to buy the good now rather than wait or do without. Total payments or bribes would equal the area $P_{B0}EAP_0$.

Note that the firm's total private cost is P_0Q, regardless of how efficient it is. If its official profit falls owing to a reduction in its internal operating efficiency, the state pays the cost of this in the form of lower taxes. If the firm's internal operating efficiency rises, the state gets the benefit. Thus the firm's incentive to cost control is low. The soft budget constraint is alive and well, and the opportunity to collect bribes doesn't change this.

While bribes were often paid in Soviet-type economies, many sales also took place at official prices, without additional payments, but after queuing, waiting, and possibly searching in order to obtain the good or service. From the seller's standpoint, the problem with this is that waiting, queuing, and search costs borne by buyers do not generate any revenues for it, whereas bribes or other side payments do—sellers would prefer buyers to bear costs that translate into revenues for them.

Nevertheless, these were in principle socialist societies in which workers were not supposed to be exploited. Thus the firm may face a political necessity to give its buyers a choice between waiting or queuing to obtain its product at the official price vs. paying a bribe over and above the official price in return for being allowed to jump all or part of the queue. The firm will still supply Q_{B0} units if it believes that the total bribe it is able to collect is an increasing function of the maximum possible total bribe, or $P_{B0}EAP_0$.

The Firm's "Supply" Curve.

Suppose the official price rises from P_0 to P_1 with no change in demand. In the graph above, this represents an increase in the producer's marginal cost, as well as a change in the sharing rule between the state budget, on one hand, and the firm and its controlling state agency, on the other. With higher marginal cost, the firm will supply *less* of the good; at official price P_1, the profit-maximizing output is Q_{B1}, less than Q_{B0}. A rise in the official price *reduces* supply, the reason being that, at any output, an increase in the official price is like a cost increase rather than a revenue increase to the supplying firm.

More generally, the quantity supplied at any official price will be the quantity at which MR equals this price. In a limited sense, the firm's marginal revenue curve is its supply curve.

This curve is normally downward-sloping, which implies that the firm's “supply” curve is backward-bending. When the official price rises, quantity supplied falls instead of rising, as with a "normal" supply curve. Moreover, raising official prices won't get rid of shortages, since marginal revenue is always below demand when the latter is downward-sloping.

It should be emphasized, however, that the marginal revenue curve is a supply curve only in a limited sense. It tells what happens to quantity supplied when the official price changes with *no change* in demand.

If an increase in demand leads to an increase in marginal revenue, as would be normal, the firm will supply more output for any given official price as a result of the demand increase. If both demand and the official price go up, one cannot say, in general, whether the firm's output will rise or fall. It could do either.

The mercantilist view of a firm in a Soviet-type economy says that it does pay attention to demand in setting outputs. As a result, the desire for profit plays a role in output determination. Output quotas are adjusted to levels that maximize after-tax profits—in doing this the firm and its controlling state agency are in collusion—rather than being set by government planners independently of profitability considerations.

However, this could still allow the planners room to set investment priorities and, in particular, to determine the basic shares of consumption, investment, and defence in national income. Nevertheless, firms might go beyond determining quantities supplied of goods they are supposed to produce and produce as well goods that are profitable for them, even if the state plan does not call for this. Eventually, these new products would find their way into the plan. In fact, firms and ministries often did this in Soviet-type economies, frequently integrating backward to produce their own supplies since the official supply system often worked badly.

If the above is a correct view of an STE firm, then the STE is/was more like a market economy than is generally acknowledged. But since irrational official prices play the major role in output determination from the cost side, outputs are still irrational, as are unofficial prices, including the bribes.

Moreover, if the soft budget constraint applies in a market economy that is nominally socialist, we could see behaviour by sellers there that is similar to the STE firm. The market socialist firm would try to keep its official or published price below equilibrium, but charge customers a higher unofficial price via bribes and other side payments. It would also set output to maximize its unofficial profit, which it would try to retain. Thus the difference between an STE and a "socialist" market economy in practice may be less than is usually supposed. The two could both end up being forms of state capitalism.

More generally, in conditions where there are high taxes on profits plus low enforcement against selling at unofficial or unpublished prices or against collecting bribes, firms have an incentive to obtain below equilibrium official or published prices for their products—the prices that determine the profits they report to the tax authorities—plus higher prices

(including bribes or other side payments) at which sales are actually made. They would set outputs to maximize after-tax profits.

In economies where government plays a major role in promoting economic growth—regardless of whether these economies are nominally capitalist or socialist—interest rates are often kept low, even below the rate of inflation, and credit is rationed according to government priorities. In these economies, bribes are often charged or else borrowers are required to keep part of their loans on deposit in the bank; borrowers can then use less than 100% of the amounts they borrow, and banks can re-lend the rest.

These are ways of bringing the actual interest rate paid up to the market-clearing level, but some borrowers also receive better treatment than others (are more equal than others). In China, for example, interest rates are kept low to ease the repayment burden on state firms, many of whom cannot afford bribes (or even to service their loans) and benefit from evergreening (constantly rolling over non-performing loans). But some non-state borrowers do pay bribes in order to obtain loans that are in short supply at official interest rates.

Did STE Firms Really Maximize Unofficial Profits?

There is disagreement and conflicting evidence as to whether firms in an STE actually tried to maximize their unofficial profits as described above. We must keep in mind that mercantilism involves a trade in which firms help to achieve state goals in return for monopoly rights. By implication, this may require them to produce a menu of goods and services or to produce in ways that sacrifice some profit (eg., to use domestic rather than imported resources, as in the Nazi economy). Their ability to earn profit at the expense of state production or investment priorities is limited.

Nevertheless, bribes were widespread in Soviet-type economies—and appear to be widespread in North Korea today—and production quotas were often changed, whereas official prices were relatively rigid. They were set to cover costs in either an average (Soviet Union) or marginal (China) firm producing any given type of product; their setting occupied a large government bureaucracy. However, the notion of "cost" that these bureaucrats used did not reflect either economic or accounting cost as these terms are understood in developed market economies.

Capital costs and rents in particular were understated because of the Marxian idea that only living labour creates value. In the Soviet Union itself, there is no known instance of a firm requesting decreases in the official prices for its products, although firms did request official price increases. The former would raise potential bribes, while the latter would reduce them, but might make the gross value of output target—in practice, the most important one for official bonuses and career advancement—easier to fulfill. This suggests that in at least some cases plan quotas plus the official rewards system did motivate firms to produce more than their profit-maximizing outputs.

In particular, the state sometimes created markets for products that would otherwise have been unsaleable at their official prices. Despite the pervasive shortages, some products lacked features that buyers wanted or else were of such low quality that they went unsold—their demand prices were below their official prices at existing output levels. But firms were still allowed to produce these goods in some cases and count them toward plan fulfillment. The unwanted products were bought by the state and went into state inventories, which were often recycled (re-sent through the production process). For these products, no bribes were possible, but the state did subsidize their production.

State vs. Democratic Capitalism

The contrast between state and "democratic" capitalism noted by Freeland and others raises the question of what democratic capitalism is and how the two differ. Democratic capitalism would be characterized by more competition, resulting in less monopoly profit and fewer state preferences for some firms over others—hence a more level playing field in this competition. Competence would be a more important criterion for selecting managers than loyalty to the government. Ultimately, this has to come from a more inclusive political system, which forces the government to appeal to a broad electorate, instead of to a relatively small number of insiders including the managers of state capitalist firms, to stay in power.

Thus the basic difference between state and democratic capitalism lies in how inclusive the political system is, and the nature of the political system plays a major role in determining the nature of the economic system. As a result, successful economic reforms also require successful political reforms—both systems have to change—and political systems are often hard to change.

Under state capitalism, government buys the support of insiders by granting them monopoly profit, thereby redistributing wealth in their favour. In return, state capitalists support the government by helping it to realize its goals and in other ways. For example, they may help to root out opposition to the government within the ranks of their employees.

Because concentrations of market power and selection of managers for loyalty to the state characterize state capitalism, such a system is usually inefficient—it doesn't maximize output from given resources. If the number of insiders is small relative to the population, their incomes can be made independent of the general performance of the economy. However, the larger is the share of the population to which a government must appeal in order to gain and stay in power, the harder it is to hold on to power purely by redistributing wealth. Thus the more necessary it is to pay attention to macro-economic goals, such as growth.

State capitalist economies may grow rapidly and may well promote economic growth, since this is an avenue for achieving military strength and international bargaining power as well

as prestige and influence. And it can be shown that outsiders in these economies always have some bargaining power vis-à-vis the government; they can never be completely ignored.

But the economies in question also pay a higher price for growth in that they sacrifice more consumption to obtain a given increase in growth. Investments are governed by political as well as by economic criteria—state capitalist governments help out the capitalist firms that are among their major supporters—so that the average return on investment is lower than if economic criteria alone governed investment. The result is that growth demands a lot of investment and a lot of saving to finance this investment. Because the quality of investment is low, the quantity of investment has to be high—investment and saving take up large shares of GDP, which either forces the consumption share of GDP to be low or growth to be low. Insiders escape most of the cost of low consumption.

Also state capitalist economies have to grow while protecting the monopoly profits of the government's supporters, according to the basic contract that defines state capitalism. This means suppressing competition that could threaten those profits and, in particular, suppressing potential innovations that could threaten existing profits. The result is less competition, including a lower rate of innovation, which makes type (c) growth difficult or impossible to attain.**

With their emphasis on redistribution to a relatively narrow elite, state capitalist economies are rarely inclusive or liberal democracies, although they sometimes maintain the trappings of democracy. Given the tendency of nominally socialist economies to become state capitalist, if the mercantilist view is correct, we must ask what could prevent this and preserve socialism?

As long as government can rely on a relatively small number of insiders to stay in power, state capitalism readily becomes the economic extension of an autocratic or illiberal democratic political system. Genuine socialism therefore requires a liberal or inclusive political democracy and would be evidenced not only by effective institutions of restraint, as well of representation, but also by a more equal distribution of wealth than under state capitalism.

The problem in combining liberal democracy with socialism is that ownership of most of the capital and resources in the economy gives an incumbent government a strong potential advantage over its political opposition in an election. It is not clear how to prevent a political opposition from being at a disadvantage. Until this problem is solved, whether liberal democracy can survive in a country with the powerful state that socialism implies is an open question.

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*I am indebted to Sarah Aboul-Magd for drawing the graph.

**Types (a), (b), and (c) growth are defined in the article on Chinese economic growth on this website, where the difficulty of switching to type (c) growth is also discussed.

REVIEW QUESTION:

The Lange-Lerner model of market socialism is described on pp. 194-196 of the text, *Market and State in Economic Systems*. A feature of this model of socialism is a central planning board that has the job of adjusting product prices to balance supply and demand. Firm and industry managers are told to set outputs where prices equal marginal costs, so that competitive prices would come to prevail. In addition, the socialist government is supposed to tax the income from capital and use the receipts to finance a "social dividend." Each person would receive his or her income from labour plus a share of the social dividend, which would be distributed in such a way as to increase equality and to otherwise maximize social welfare, as defined by government.

A criticism of the Lange-Lerner model is that enterprise and especially industry managers could take advantage of their market power and control over supply to cause the central planning board to raise prices to monopoly levels rather than set them at competitive levels, as Lange and Lerner intended. This would be done by withholding supply to force prices up.

But is this criticism correct, even if individuals continue to be interested in their own material welfares under socialism instead of thinking solely in terms of the common good? In practice, could a Soviet-type economy and Lange-Lerner market socialism become the same economic system (in which case, managers would try to cause official prices of their products to be set below rather than above competitive levels)? What basic factor would determine this? When would market socialism also become a form of state capitalism? Explain.

ANSWER

If industry managers receive pay based on the profitability of their industries, they have a potential incentive to try to collude with managers of firms to turn each industry into a cartel that maximizes industry-wide profits. To do this, they have to have monopoly rather than competitive prices for products supplied by the industry. They don't set their own prices, but they do set their own outputs, and they know the criteria used by the central planning board to set prices. Thus they are in a position to restrict outputs to monopoly levels and wait for the central planning board to set monopoly prices. They would also have to be able to conceal their true marginal costs from the central authorities.

In order to make this work, the cartel has to be stable. Historically, cartels have broken down because of disagreements about how profits should be divided between member firms and over how the output quotas of individual firms should be set. Individual enterprises always have an incentive to expand production beyond the cartel-set quotas since monopoly prices exceed their marginal costs and, if they can act alone, they will face more elastic demand curves than does the industry as a whole. In order to act alone, however, they would have to be able to keep price cuts secret from industry managers and other firms in the industry.

Would the central authorities encourage cartel-destructive behaviour? They could do this, for example, by allowing firms to set their own prices *below* the official prices set by the planning board, but not above. Under socialism, the authorities are supposed to be anti-cartel, but in practice, their tolerance of cartel behaviour depends on how close the political system is to liberal democracy—or, more generally, on how inclusive the political system is. If the political system is not inclusive and the economic system is allowed to turn into state capitalism, monopolistic behaviour by firms will be tolerated in return for support in achieving state goals and in keeping the current government in power.

In the latter case, the behaviour of industry managers toward the central planning board depends on taxation. If taxes on profits at official prices are low enough, maximization of official profits makes sense. Industries will behave like monopolies and manipulate the central planning board into setting high official prices. But because these are at least nominally socialist governments, official profits may be mostly taxed away to finance the social dividend, and losses at official prices may be subsidized, since the state owns the official profits and losses of each firm.

Lange assumed that at least some profits would be taxed away to finance the "social dividend," but didn't say how large the profits tax should be. However, he hints that *all* profits could be taken by government, since these belong to the people on whose behalf government is supposed to act. If this is the case, industry managers would want to keep official prices *below* monopoly levels—and indeed below levels that balance supply and demand—so that sellers can charge more than the official price and keep the difference. In this case, we may still get monopoly prices, but these will be set by the firms themselves (albeit possibly in disguised form), who will charge *more* than official prices for their products. Here official prices will again be effective marginal costs for suppliers.

Under state capitalism, governments may tolerate such behavior because industry managers and the managers of important enterprises are key supporters. They are "insiders," whereas most members of the general public are "outsiders." In a non-inclusive political system, outsiders are less important than insiders in terms of the value of their political support to government. If the political system becomes exclusive rather than inclusive, a Lange-Lerner economy could end up being much like the Soviet-type economy was in practice, if we agree that the STE was an example of state capitalism.

In general, economic and political systems are linked. An inclusive political system is the other face of an efficient economic system—in which rents are temporary and eventually competed away—and an exclusive or non-inclusive political system is the other face of an economic system with relatively large amounts of economic or excess profits that are protected and

therefore persist over the long run. The playing field is not level in a non-inclusive system. Insiders are favored over outsiders, where insiders are those best able to supply political support to government.

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