

# Privatization and the Transition to a Market Economy

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**A**n effective privatization must transfer ownership in such a way that the new private-sector owners and managers have an incentive to maximize profit, and this incentive must be reinforced by a legal structure that encourages private-sector competition for these firms.

Chinese President Jiang Zemin announced in late 1997 that his nation would soon privatize thousands of state-owned enterprises. The precise meaning of privatization in the Chinese context is open to debate: one deputy minister explained that the state might retain a majority stake in the firms, and the editor of a communist newspaper said that expectations of a Western-style ownership structure in the firms had arisen from a “misunderstanding” (Lyle 1997). Still, while information is scarce about the details of the Chinese plan, it is clear that any privatization effort in the world’s most populous country could have a major impact on the global economy.

Given the distinct possibility of massive privatization in China, it is natural to reexamine economic reform in the postcommunist nations of Eastern Europe and determine what lessons may be drawn for China. The reform process in these nations has been substantial: the private-sector contribution to gross domestic product (GDP) now exceeds 50 percent in nineteen of the twenty-six states that once formed the Soviet empire (European Bank for Reconstruction and Development 1997), including each of the Eastern European states outside the volatile Balkan region (*Table 1*).<sup>1</sup> The short-term pain caused by economic reform has generally given way to significant gains in per capita GDP (*Figure 1*) and the possibility of membership in multilateral institutions such as the European Union and NATO.<sup>2</sup> But can any lessons from the

**Table 1**  
**Share of GDP Derived from Private Sources**

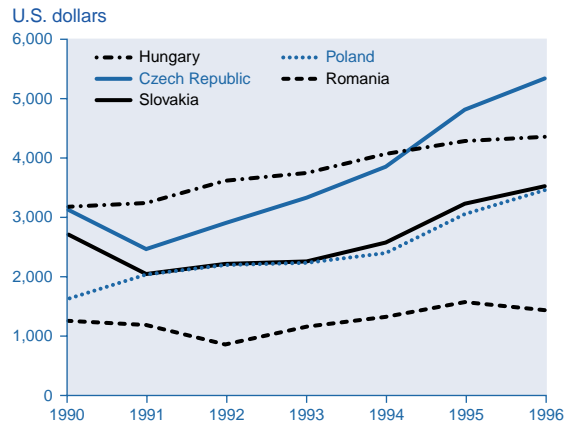
	1980	1988	1994	1997
Czech Republic	<1.0	<1.0	65	75
Hungary	3.5	7.1	55	75
Poland	15.6*	18.8*	55	65
Romania	4.5	—	35	60
Russia	<1.0	<1.0	50	70
Slovakia	<1.0	<1.0	55	75
United States	79.4	79.6	81.1	82.0

\* This is almost exclusively agricultural production (Slay 1993).

NOTE: Czechoslovakia dissolved in 1993 and was replaced by Slovakia and the Czech Republic.

SOURCES: Patterson 1993; European Bank for Reconstruction and Development 1994, 1997; Bureau of Economic Analysis.

Figure 1  
Real GDP Per Capita



experiences of these Eastern European nations be applied to other countries embarking on the road of economic reform? Also, was the road to privatization in these nations paved with serious mistakes others might be able to avoid?

In discussing these questions, it is important to define precisely what is meant by privatization. While privatization occurs whenever the ownership of a firm is transferred from the government to the private sector, the purpose of this transfer is to help create a competitive economic environment in which firms strive to increase efficiency and maximize profit. Thus, an *effective* privatization must transfer ownership in such a way that the new private-sector owners and managers have an incentive to maximize profit, and this incentive must be reinforced by a legal structure that encourages private-sector competition for these firms. These are the issues this article discusses.

### INFORMATION AND PRIVATIZATION IN PRACTICE

In theory, privatization is a relatively simple process in which potential investors evaluate the profit potential of each firm, choose those in which to acquire shares, and then manage the firms in a way that maximizes their return.<sup>3</sup> In practice, however, this model suffers from limitations when applied to the transition from communism to a market economy. In general, formerly communist citizenries are likely to be less familiar with market economics than their capitalist counterparts, and some commentators have suggested that this unfamiliarity could lead them to make bad investment decisions (Brada 1992). This perception is not without foundation. For example, a 1998 Moldovan newspaper headline marveled that the “private sector survives even though it gets no state

support” (Bird 1998), and it is estimated that one-sixth of Albania’s population may become bankrupt because of investments in pyramid schemes (Percival 1997). Such examples suggest that economic education may be important to the success of privatization.

In addition, formerly communist citizenries face special problems in attempting to evaluate the net worth of to-be-privatized firms. Balance sheets for such firms were not kept according to Western norms, often deliberately, so as to shield the poor performance of high-ranking party functionaries who were appointed as managers during the communist era but wish to retain their positions after privatization (Brada 1996, Tirole 1994). Moreover, the division of assets among such companies is not clearly delineated, so that a potential investor during the transition period could not be certain which assets would end up with a company and which would remain with the state (Bolton and Roland 1992). In addition, the transition to a market economy would almost certainly cause an enormous reallocation of resources across sectors of the economy, making it difficult for citizens to gauge a firm’s future performance even if communist-era balance sheets were available.

A final problem relates to communist-era informational asymmetries between the ordinary citizen and the party elite. Information is a closely guarded commodity under communist systems, and government officials commonly possess an enormous amount of information of which ordinary citizens are unaware (Blanchard and Layard 1992). In the aftermath of communism, then, a citizen’s information about state-run enterprises would be primarily a function of past affiliations with a now-discredited state. This implies that the group of citizens best able to evaluate the profit potential of state-run firms is composed of precisely those individuals society would least like to prosper.

Yet there is widespread agreement that shares in state-owned enterprises should be given to the public whose efforts created the enterprises. These “mass privatization” programs are regarded as the most egalitarian method of privatization because each citizen profits from them (Grime and Duke 1993). Also, giving each citizen a stake in privatization increases public support for the program and reduces the government’s ability to renege on its privatization commitments (see the box entitled “Credible Commitments and Privatization”).

Is there a socially optimal distribution of ownership shares when ordinary citizens are

unable to evaluate the prospective financial performance of state-run enterprises but communist functionaries are capable of making such evaluations? Perhaps surprisingly, there are some conditions under which this question can be answered in the affirmative. For example, suppose that shares are to be divided among the citizenry subject to three conditions:

1. Every share must be distributed to a citizen.
2. The expected profit of each citizen must be equal.
3. The risk (variance) borne by each citizen must be equal and must be as low as possible, subject to all other conditions.

Only one portfolio of shares meets these three criteria: a distribution in which each citizen receives an equal percentage of each enterprise.<sup>4</sup> Moreover, such a distribution can be implemented even if those in charge of privatization cannot evaluate the financial viability of state-owned firms—an important consideration in countries where government economic decision-making prowess is at best questionable.

There are no examples of large-scale privatizations in which each citizen was given an equal share in each state-owned enterprise. However, the equal-share distribution is a special case of the voucher-based privatization programs implemented by, among others, Poland and Czechoslovakia (which split into Slovakia and the Czech Republic on January 1, 1993). In these mass privatization programs, each citizen received an equal amount of purchasing power, which could be used to obtain shares of state enterprises. However, these and other mass privatization programs must confront certain problems.

### HOLDING COMPANIES AND EFFECTIVE PRIVATIZATION

#### Problems of Dispersed Ownership

Mass privatization carries with it a serious problem: no single investor has the ability to oversee management. Since managers do not own their firms, shareholders must oversee managers to ensure that management makes every effort to maximize profit (Jensen and Meckling 1976). However, mass privatization can produce a situation in which an enormous number of individuals hold only a small number of shares. Under this scenario, no single investor would have sufficient incentive to monitor managerial activity, even though every investor would gain by such monitoring (Gray 1996). Without a resolution to this problem, firms

Privatization helps promote economic growth by ensuring that firm owners have an incentive to maximize profit. However, one important aspect of any privatization program is the possibility of revocation (Weingast 1995). Unless those who become owners of privatized enterprises believe the government will allow them to keep the fruits of their labors, there is little reason to believe these owners will invest time and effort in their enterprises.

The importance of political commitment to the privatization process can be illustrated through an examination of Russia's New Economic Policy.\* Shortly after the communist takeover of 1917, Bolshevik leaders confiscated private farmland in what they called the "crusade for bread." Though the peasantry was ordered to continue working the fields, all farm output would go to the state rather than the workers. This policy reduced peasant effort to such an extent that mass starvation ensued, followed by peasant riots that began to threaten the survival of the Bolshevik regime. In response, Lenin introduced a partial privatization of farmland and a partial restoration of farmers' right to sell excess produce to ordinary Russians, arguing that peasants would not work at maximum efficiency unless they were able to reap the rewards of their labors.

But would the communist regime—which had previously viewed private property as anathema—be willing to commit to the New Economic Policy for the foreseeable future? Nove (1992) recounts the words of a communist official who complained New Economic Policy supporters "demand of us a promise that we will never, i.e. not in 15 or 20 years, confiscate or expropriate" farmland, to encourage peasant farmers to work without fear that the state would seize their crops and confiscate their land. This the official refused to do: in his words, expropriation of farmland by the state would occur "when the time comes for so doing."

The productivity gains from the New Economic Policy were short-lived, partly because of these fears. Farmland was then reconfiscated in a new effort to abolish private farming.

\* Details of the New Economic Policy are taken from Nove (1992).

might perform no better after privatization than they had before privatization.<sup>5</sup> Such a situation points to the difference between the act of privatization (transferring ownership to the private sector) and an effective privatization.

The oversight issue is especially problematic because of the temptation to retain communist-era managers during the transition period and let investors decide later whether to remove them. In Russia and the Ukraine, such holdover managers routinely used bribes and intimidation to forestall their replacements (Roland 1994), a maneuver that has been dubbed "grab-ization" by the media (Seely 1993). In Hungary, managers often held positions in local government, and the patronage opportunities afforded by such an arrangement encouraged local governments to resist both managerial replacement and the overall privatization effort (Bolton and Roland 1992). Finally, some managers across Eastern Europe simply seized firms from the state and began operating them as private businesses (Voszka 1993). This "spontaneous privatization" of firms was aided by a lack of information, even on the part of government, about which assets belonged to the state (Boycko, Shleifer, and Vishny 1994). When owners were able to replace management despite these problems, empirical evidence suggests such replacement helped

increase the economic performance of privatized firms in Eastern Europe (Dyck 1997). But in a world of dispersed ownership, such replacement may be unlikely to occur.

### **Holding Companies as a Solution**

To address these concerns, many economists have recommended the creation of a small number of powerful shareholders (Bolton and Roland 1992). Because firm performance would substantially impact the profit of these shareholders, they would (at least theoretically) have an incentive to control management (Gray 1996). At the same time, citizens could invest in the diverse portfolios of these powerful shareholders, rather than in a single company (Boycko, Shleifer, and Vishny 1994). Further, the powerful shareholders would presumably have a much greater ability to obtain financial information about the firms to be privatized and, therefore, a greater ability to pick a reasonable ownership portfolio.

Perhaps the most obvious candidate for the role of “powerful shareholder” would be government. As the single most powerful entity in a country, government would have the necessary size and scope to exert pressure on management. Moreover, because governments in formerly communist countries are far more intrusive into the lives of citizens than are governments in the West, government officials in these nations would be relatively adept at obtaining information and pressuring firms. However, governments have a multiplicity of interests, which include running an efficient firm but also include minimizing unemployment and facilitating political patronage. Presumably, there would be no reason to discuss privatization unless governments were failing to operate efficient enterprises, but a government that fails in this capacity would not be an appropriate choice for powerful shareholder.

The other obvious candidate for fulfilling the responsibilities of a powerful shareholder would be the indigenous banking sector.<sup>6</sup> After all, these banks had made loans to newly privatized enterprises before those enterprises were private. This suggests that the banking sector would have knowledge of the firms’ financial status and future prospects (to gauge the ability to repay a loan) as well as an especially strong interest in the firms’ financial future (to ensure such repayment). However, lending decisions under communism were based on political rather than economic considerations, and it was known that loans not repaid by borrowers would be covered by the state. Thus, communist-

era banks had no incentive to investigate the financial viability of firms to which they made loans or to hire people who possessed any particular aptitude for such investigations. Moreover, since it is almost impossible for bank privatization to precede the privatization of other enterprises, distributing firms across the banking sector would amount to continued nationalization rather than privatization.

With neither the national government nor the banking sector able to fulfill the responsibilities of the powerful shareholder during the transition from communism, privately run holding companies would become the most natural alternative. Econometric evidence from Britain suggests that holding companies can be an effective means of enforcing managerial productivity after privatization (Blanchard and Layard 1992). However, holding companies alone are not sufficient to ensure effective privatization, as recent experiences in Chile and Russia have demonstrated. Chile attempted large-scale privatization shortly after the ascension of Pinochet, and the result was an enormous concentration of ownership shares among private financial institutions that were subsequently rendered bankrupt by an economic downturn (Bolton and Roland 1992). In Russia, voucher privatization was hampered by the presence of bogus investment funds that absorbed citizen investments and acquired firms in the name of those citizens, but then vanished when payment was requested by the state (Seely 1993). Both Chile and Russia were forced to embark upon costly reprivatization programs.

These examples suggest that the proper implementation of holding companies is of crucial importance. How did the design of the Polish and Czechoslovak privatizations compare in this respect? Recognizing the pitfalls associated with mass privatization, the Polish proposal mandated the creation of between ten and twenty holding companies (Blanchard and Layard 1992). Responding to concerns about a lack of information about the financial performance of state-owned firms, each holding company was to be assigned a distribution of ownership shares by the government (Boycko, Shleifer, and Vishny 1994). Finally, to ensure managerial oversight, at least one-third of the shares of each state-owned firm would be given to a single holding company that would be expected to oversee the firm’s management. Each citizen would receive one share in each holding company but none in individual firms.

The Czechoslovak proposal, in contrast, did not mandate the creation of holding com-

panies. Instead, each citizen was to receive a certain number of voucher points, which could be used to obtain shares in individual firms. These points could also be entrusted to holding companies if such companies were to emerge from the private sector, but the government would not itself create them (Brada 1992). Voucher holders would then expend points to acquire shares in particular enterprises.

The Polish plan might appear to be the more effective means of privatization because it mandated a reasonable ownership structure and minimized the informational problems associated with citizen participation. In reality, however, the Polish plan was stymied for years because political pressures prevented the government from choosing how to allocate ownership shares to holding companies (Roland 1994). In Czechoslovakia, on the other hand, privately run investment funds quickly arose in response to an enormous demand for such funds by consumers. Indeed, more than half of all Czechoslovak citizens entrusted their vouchers to these funds, whose portfolios were determined through market mechanisms rather than the political process (Kotrba and Svejnar 1994, Grime and Duke 1993). Ironically, Czechoslovakia emerged with an ownership structure reasonably close to the structure desired by Poland without any government mandates to that effect, while Poland's attempt to mandate such a structure almost derailed its privatization program entirely.

The examples given here permit certain conclusions to be drawn regarding holding companies. First, citizens recognize the problems associated with mass privatization and, as the Czechoslovak experience demonstrates, will solve them through holding companies if given the opportunity to do so. Second, government can assist in this process by guarding against fraudulent holding companies, something the Russian state failed to do in its initial privatization effort. However, efforts to move beyond this oversight could harm a privatization program even if such efforts were well-intentioned, such as the Polish government's desire to ensure that holding companies would be created and would receive the proper distribution of shares. When states seek to create holding companies, the Polish experience suggests that policymakers must have a firm consensus on precisely how shares will be distributed—perhaps by implementing an equal-share distribution at the holding company level and then giving each citizen an equal share of each holding company.

## LEGAL STRUCTURE AND PRIVATE BUSINESS CREATION

A successful privatization program transfers ownership from government to the private sector in a way that ensures proper managerial oversight of the privatized firms. However, these firms will be tempted to behave as monopolies unless they face competition from other private-sector firms. Such competition cannot form as long as communist-era constraints on private business creation are maintained. These constraints range from a ban on the private ownership of land to the harassment of private-sector banks to confiscatory tax regimes. They even include price controls, which are not typically associated with private business creation but nevertheless play an important role in facilitating competition.

### Direct Constraints

There are several reasons to suppose that constraints on private business creation would diminish the economic effects of privatization. One reason is that constraints on private business creation lead to monopolistic industries (Feinberg and Meurs 1994). Although privatization programs move government-run monopolies into the private sector, they do not in and of themselves create competitive markets. Unless entrepreneurs are free to create competing firms, newly privatized companies will not face sufficient financial pressure to improve quality and reduce prices. In such a noncompetitive environment, privatization could change firm ownership without changing firm behavior.

Constraints on private business creation are also likely to harm consumers who wish to obtain goods deemed unimportant during communist rule. Communism emphasizes heavy industry over agriculture and the service sector, which suggests that the public sector would contain a disproportionately high number of heavy-industry firms but a disproportionately low number of service-sector and agricultural firms (Bolton and Roland 1992). In fact, the employment share of heavy industry relative to these sectors was estimated to be 50 percent higher in Eastern Europe than in comparable developed economies (European Bank for Reconstruction and Development 1997). Thus, private business creation is needed to shift the overall composition of firms in the economy toward services and agriculture and thereby satisfy consumer demand.

Another effect of constraints on private business creation is to exacerbate unemploy-

Table 2  
**Qualitative Competitiveness Measures, 1997**

	<b>Privatization</b>	<b>Removal of entry barriers</b>	<b>Price liberalization</b>
Czech Republic	Near OECD	Substantial	Substantial
Hungary	Near OECD	Substantial	Substantial
Poland	Near OECD	Substantial	Substantial
Romania	Substantial	Some	Substantial
Russia	Substantial	Some	Substantial
Slovakia	Near OECD	Substantial	Substantial

NOTE: Near OECD means near normal Western levels.

SOURCE: European Bank for Reconstruction and Development 1997.

ment problems that occur during the privatization process. Because communist doctrine emphasizes full employment, state-owned firms are encouraged to employ workers even when those workers become unprofitable for their companies (Feinberg and Meurs 1994). This suggests that private owners would almost certainly need to lay off workers. Unless these individuals are free to start their own businesses and free to work for newly created businesses, the unemployment created by privatization could cause rather severe social difficulties, especially given the near-total absence of a social safety net in these countries.

Finally, constraints on private business creation place an inordinate emphasis on successful privatization. Even though the theoretical issues involved in privatization are relatively simple, designing a privatization program that successfully translates theory into effective privatization is extremely difficult. By definition, private business creation lessens the economic influence of newly privatized firms. Therefore, business creation acts as a sort of safety net for poorly designed privatization programs and thereby assists in the transition to a market economy.

### Price Controls

Before the fall of the Iron Curtain, goods communist officials deemed necessary were often priced significantly lower than comparable goods in the West, while goods deemed unnecessary were often priced significantly higher (Arrow and Phelps 1993). It is, therefore, not surprising that price liberalization was one of the first issues with which the postcommunist states of Eastern Europe had to contend. Economists have argued that price liberalization is essential to the development of a market economy because prices are the mechanism through which entrepreneurs determine what to produce. Based on this advice, price reform was made the first priority of the postcommunist

Solidarity government in Poland and a high priority in most other Eastern European states (Vickers and Yarrow 1991).

While price controls are most commonly criticized for obscuring producers' ability to know which products to produce, price controls also act as a barrier to private business creation and therefore affect whether an entrepreneur produces at all. When the state sets artificially low prices in a particular industry, entrepreneurs have little incentive to set up firms in that industry because they cannot earn a sufficiently high rate of return on their investment. Thus, raising prices can actually help consumers by hastening the arrival of competitors, which will in turn eliminate the shortages endemic to communism and ultimately lower prices as well.

### Eastern European Experience

The privatization process is nearing completion across the core states in Eastern Europe, and constraints on private business creation in these states have been substantially reduced (*Table 2*). However, private business creation was hindered in a variety of ways during the transition period. In Russia, market entry was discouraged "by a variety of technological, administrative, and other obstacles" (Capelik 1992). In Hungary, market entry was hampered by a government policy under which large state banks ignored the private sector in favor of state-owned enterprises; additionally, any loans by private-sector banks to private-sector businesses could be deemed improper banking practices punishable by closure of the bank in question (Pataki 1993). And in Romania, government regulations impede market entry to such an extent that many privatized firms continue to be run as monopolies (Melloan 1998).

On the other hand, private-sector economic activity exploded in the Czech Republic as a result of rapid postcommunist market liberalization (European Bank for Reconstruction and Development 1997). For example, the Czech Republic's private-sector share of GDP is almost on a par with that of the United States (*Table 1*). Private-sector economic activity also rose in Poland and Hungary, where successful communist-era experiments in private-sector legalization helped persuade postcommunist policymakers to adopt market liberalization shortly after the fall of the Soviet Union (Johnson 1994). These three countries have had the fastest-growing economies in Eastern Europe since the transition from communism (*Figure 1*). While one cannot demonstrate conclusively that a favorable climate for private

business creation is responsible, the experience of these countries is consistent with the idea that constraints on private business creation can hinder growth.

The abolition of price controls occurred in a more uniform fashion in Eastern Europe. Within a few years after the fall of communism, price controls had been sharply reduced across the region (*Table 2*). This resulted in the virtual elimination of shortages and an eventual increase in product quality to near-Western levels. Reversion to the previous regime has been a possibility only in Russia, where many expressed hope that firms would voluntarily limit their price increases in the name of protecting the consumer (Arrow and Phelps 1993). Indeed, policymakers almost reinstated strict price controls in 1993 to counter what one legislator called the “greed” of producers, and the legislature enacted a number of provisions to punish those deemed to have raised prices too far or too fast (Bush 1993). This lack of political commitment to reform deterred entry and shifted business toward the black market (which has seen astonishing growth in Russia) while prolonging the presence of queues that in turn have generated widespread public dissatisfaction with the reform effort.<sup>7</sup> Several Russian regions reintroduced price controls in 1998 to quell this dissatisfaction, and the national government has discussed doing the same (LaFraniere 1998). Such a move would reduce competition in the Russian economy and, ironically, exacerbate many of the economic problems to which the public objects.

## CONCLUSION

This article explores problems and possibilities associated with privatization and the transition to a market economy. In it, I suggest that privatization at its most basic level—the distribution of shares from the government to the private sector—is difficult to achieve and insufficient to bring about economic growth. I also consider the importance of appropriate owner/manager incentives and conclude that privately created holding companies may be the best way to ensure that *de jure* privatization becomes effective privatization. Finally, I consider the importance of legal constraints on private business creation and conclude that a competition-enhancing legal framework is vital to the success of privatization.

What lessons can be learned from the Eastern European privatization experience and, perhaps, applied to emerging economies such

as China’s? One such lesson is that the design of a privatization program is as important as the economic theories the program incorporates. Unlike privatization in the West, which typically involves a single firm whose financial performance has been evaluated by independent auditors, the transition from communism involves the simultaneous privatization of hundreds of firms for which even the most basic balance-sheet information is likely to be unavailable. Additionally, a dispersal of ownership across many citizens could produce a situation in which shareholders would be unable to exercise effective oversight of management. One way to overcome this problem would be through the creation of holding companies in which each citizen could invest. For example, heeding the suggestion of economists, both Poland and Czechoslovakia made holding companies a centerpiece of their privatization programs. However, equally strong commitments to the principle of holding companies did not result in equal success with their implementation. Holding companies played an enormous role in the success of the Czechoslovak program but nearly destroyed the Polish scheme. Such seemingly small changes in implementation could have enormous consequences for Chinese privatization.

Of particular importance is the claim that Chinese privatization might not move a majority interest in state-owned firms into the private sector. If the Chinese government were to maintain a majority stake in a particular “privatized” enterprise, it could thwart efficiency-enhancing measures at that company if the measures were likely to increase unemployment. The government could also block the firm from entering new markets if those markets were already served by a government-owned firm. It could even bankrupt the firm if the private-sector shareholders were to resist the directions in which the government wished to take the firm. One might hope the government would behave as if it were a private-sector individual, but the only way to guarantee such behavior by the owners of privatized firms would be to ensure that every owner *is* a private-sector individual—which would be inconsistent with a privatization plan in which the government releases only a minority of ownership shares to the public.

Another lesson is that privatization, while important, is not sufficient to create a market economy. Eastern European governments focused on privatization as a quick fix, something that could be executed quickly and would bring about effective competition just as quickly. Yet

privatization does not by itself create competition. If communist-era restraints on private business creation were to be maintained in China, entrepreneurs would be unable to compete against newly privatized companies. This could mean that privatization would only convert government-run monopolies into privately held monopolies, with minimal employment opportunities for workers laid off during the privatization process. Such a result might exacerbate the unemployment shocks associated with the transition to a market economy without providing any of the efficiency gains that result from competition—probably the worst imaginable outcome for those who wish to help unleash the Chinese economy through privatization.

Chinese policymakers have much to learn from the Eastern European privatization experience. As China embarks upon its ambitious privatization program, it remains to be seen whether its leaders will look to Eastern Europe for guidance on how to enact a successful program—or whether they will simply repeat Eastern Europe's mistakes.

## NOTES

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- <sup>1</sup> These Eastern European states are the Czech Republic, Hungary, Poland, Romania, and Slovakia.
- <sup>2</sup> A study by Ali (1997) finds that increased economic freedom generally leads to increased economic growth.
- <sup>3</sup> One example is the landmark 1984 privatization of British Telecom (*Financial Times* 1995).
- <sup>4</sup> This is a standard portfolio-theory result applied to privatization. See Sharpe (1970) for a more general discussion of portfolio theory.
- <sup>5</sup> Hansen (1997) presents an alternative view in which mass privatization is desirable precisely because no single investor has the power to oversee management. According to this view, managers who face no shareholder oversight can transfer any profit from the shareholders to themselves, which gives managers a powerful incentive to maximize profit.
- <sup>6</sup> See Dittus and Prowse (1996) for an interesting and informative discussion of this issue.
- <sup>7</sup> Responding to this dissatisfaction, the Russian legislature passed a nonbinding resolution in June 1997 that called for the renationalization of many previously privatized companies. The nonbinding measure passed by a vote of 288 to 6 (Radio Free Europe/Radio Liberty 1997).

## REFERENCES

- Ali, Abdiweli (1997), "Economic Freedom, Democracy and Growth," *Journal of Private Enterprise* 13 (Winter): 1–20.
- Arrow, Kenneth J., and Edmund S. Phelps (1993), "Proposed Reforms of the Economic System of Information and Decision in the USSR: Commentary and Advice," in *Privatization Processes in Eastern Europe: Theoretical Foundations and Empirical Results*, ed. Mario Baldassarri and Luigi Paganetto (New York: St. Martin's Press), 15–47.
- Bird, Chris (1998), "Voters in Quandary over Moldova's Political Zoo," *Reuters Online News Service*, March 19 <<http://www.infoseek.com>>.
- Blanchard, O., and R. Layard (1992), "How to Privatise," in *The Transformation of Socialist Economies*, ed. Horst Siebert (Tubingen, Germany: Mohr [Siebeck]), 27–44.
- Bolton, Patrick, and Gerard Roland (1992), "Privatization Policies in Central and Eastern Europe," *Economic Policy: A European Forum* 15 (October): 275–309.
- Boycko, Maxim, Andrei Shleifer, and Robert W. Vishny (1994), "Voucher Privatization," *Journal of Financial Economics* 35 (April): 249–66.
- Brada, Josef C. (1992), "The Mechanics of the Voucher Plan in Czechoslovakia," *RFE/RL Research Report* 1 (17): 42–45.
- (1996), "Privatization Is Transition—Or Is It?," *Journal of Economic Perspectives* 10 (Spring): 67–86.
- Bush, Keith (1993), "Chernomyrdin's Price Control Decree is Revoked," *RFE/RL Research Report* 2 (5): 35–37.
- Capelik, Vladimir (1992), "The Development of Anti-monopoly Policy in Russia," *RFE/RL Research Report* 1 (34): 66–70.
- Dittus, Peter, and Stephen Prowse (1996), "Corporate Control in Central Europe and Russia: Should Banks Own Shares?" in *Corporate Governance in Central Europe and Russia, Volume 1, Insiders and the State*, ed. Roman Frydman, Cheryl W. Gray, and Andrzej Rapaczynski (Budapest: Central European University Press), 20–67.
- Dyck, I. J. Alexander (1997), "Privatization in Eastern Germany: Management Selection and Economic Transition," *American Economic Review* 87 (September): 565–97.



- European Bank for Reconstruction and Development (1994), *Transition Report* (London).
- (1997), *Transition Report* (London).
- Feinberg, Robert M., and Mieke Meurs (1994), "Privatization and Antitrust in Eastern Europe: The Importance of Entry," *Antitrust Bulletin* 39 (Fall): 797–811.
- Financial Times* (1995), "A Decade of Privatization," December 27, 9.
- Gray, Cheryl (1996), "In Search of Owners: Privatization and Corporate Governance in Transition Economies," *World Bank Research Observer* 11 (August): 179–97.
- Grime, Keith, and Vic Duke (1993), "A Czech on Privatization," *Regional Studies* 27 (8): 751–57.
- Hansen, Nico A. (1997), "Privatization, Technology Choice and Aggregate Outcomes," *Journal of Public Economics* 64 (June): 425–42.
- Jensen, Michael C., and William H. Meckling (1976), "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," *Journal of Financial Economics* 3 (October): 305–60.
- Johnson, Simon (1994), "Private Business in Eastern Europe," in *The Transition in Eastern Europe Volume 2: Restructuring*, ed. Olivier Jean Blanchard, Kenneth A. Froot, and Jeffrey D. Sachs (Chicago: University of Chicago Press), 245–91.
- Kotrba, Josef, and Jan Svejnar (1994), "Rapid Multifaceted Privatization: Experience of the Czech and Slovak Republics," *Economic Policy in Transitional Economies* 4 (2): 147–85.
- LaFraniere, Sharon (1998), "Legislative Leaders Decry Moscow's Political Vacuum," *Washington Post*, September 10, A26.
- Lyle, Robert (1997), "China: 'Survival of the Fittest' Drives Privatization," *Radio Free Europe/Radio Liberty Weekday Magazine*, September 15 <<http://www.rferl.org/nca/features>>.
- Melloan, George (1998), "Communism's Ghosts Trouble Europe's Grand Plan," *Wall Street Journal*, April 7, A19.
- Nove, Alec (1992), *An Economic History of the USSR: 1917–1991* (New York: Penguin Books).
- Pataki, Judith (1993), "Hungary: Domestic Political Stalemate," *RFE/RL Research Report* 2 (1): 92–95.
- Patterson, Perry L. (1993), "Overview: The Return of the Private and Cooperative Sectors in Eastern Europe and the Soviet Union," in *Capitalist Goals, Socialist Past*, ed. Perry L. Patterson (Boulder, Colo.: Westview Press), 1–16.
- Percival, Lindsay (1997), "Albania: Pyramid Schemes Common Across Europe," *RFE/RL Research Report* 6 (1): 31–33.
- Radio Free Europe/Radio Liberty (1997), "Duma Slams Privatization Results," *Newsline on the Web*, June 6 <<http://www.rferl.org/newsline>>.
- Roland, Gerard (1994), "On the Speed and Sequencing of Privatisation and Restructuring," *Economic Journal* 104 (September): 1158–68.
- Seely, Robert (1993), "Shops Go on Block as Ukraine Privatizes," *Los Angeles Times*, February 21, A4.
- Sharpe, William F. (1970), *Portfolio Theory and Capital Markets* (New York: McGraw-Hill Book Company).
- Slay, Ben (1993), "The Indigenous Private Sector in Poland," in *Capitalist Goals, Socialist Past*, ed. Perry L. Patterson (Boulder, Colo.: Westview Press), 19–39.
- Tirole, Jean (1994), "Western Prudential Regulation: Assessment, and Reflections on Its Application to Central and Eastern Europe," *Economics of Transition* 2 (June): 124–49.
- Vickers, John, and George Yarrow (1991), "Economic Perspectives on Privatization," *Journal of Economic Perspectives* 5 (Spring): 111–32.
- Voszka, Eva (1993), "Spontaneous Privatization in Hungary," in *Privatization in the Transition to a Market Economy: Studies of Preconditions and Policies in Eastern Europe*, ed. John S. Earle, Roman Frydman, and Andrzej Rapaczynski (New York: St. Martin's Press), 89–107.
- Weingast, Barry R. (1995), "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development," *Journal of Law, Economics and Organization* 11 (April): 1–31.