The Governance Grenade: Mass Privatization, State Capacity and Economic Development in Postcommunist and Reforming Communist Societies

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Abstract

This article critiques neoliberal transition theory from a state-centered perspective. Neoliberal scholars have used cross-national regression analysis to argue that postcommunist economic failure is the result of inadequate adherence to neoliberal precepts. Sociologists, in turn, have relied on case study data to show that postcommunist economic failure is the outcome of too close adherence to neoliberal policy recommendations, which has led to an erosion of state effectiveness, and thus produced underdevelopment. The present paper advances a version of this statist theory based on a quantitative analysis of mass privatization programs in the postcommunist world. We argue that the neoliberal policy of rapid large-scale privatization creates severe supply and demand shocks for enterprises, thereby inducing firm failure. The resulting erosion of tax revenues leads to a fiscal crisis for the state, and severely weakens its capacity and bureaucratic character. This, in turn, reacts back on the enterprise sector, as the state can no longer support the institutions necessary for the effective functioning of a capitalist economy, thus resulting in de-modernization. In this paper, we test the predictions of neoliberal transition theory against those of our statist theory, using cross-national regression techniques. We find that the implementation of mass privatization programs negatively impacts measures of economic growth, state capacity and the security of property rights.
Introduction

Between 1989 and 1991, the Soviet empire disintegrated, leading to the emergence of markets and private property in all socialist economies except North Korea and Cuba. Western-trained neoliberal economists provided the postcommunist policy elites with a blueprint for constructing capitalism amid the ruins of communism. These economists developed the so-called Shock Therapy policy package, which was adopted in some form by most of the postcommunist world (UNDP 1999: 30; Murrell 1996: 31; Greskovits 1998: 22-23). In the still-communist countries of Asia, markets and private property were being implemented more gradually, from 1978 onwards in China, and by the middle to late 1980s elsewhere in the region. After another decade and a half of liberalization and privatization, few analysts predict anything but a capitalist endpoint.

Despite the widespread implementation of the neoliberal policy agenda, economic divergence in the postcommunist world has been greater than anyone predicted. One of the most unexpected outcomes was what economists have termed the “postcommunist recession,” an economic decline which amounted to a system-wide depression, leading to extensive de-industrialization. The affected countries experienced a catastrophic decline in the technological level of production, the effectiveness of state institutions, levels of human capital and life expectancy (see UNDP 1999; Vorobyov and Zhukov 2000; Burawoy 2001a). In Russia, as in most of the Former Soviet Union (FSU) and South Eastern Europe (SEE), the poverty rate skyrocketed, increasing from 2 percent in the late 1980s to 50 percent by the middle of the 1990s (Milanovic 1998). Between 1989 and 1999, Russian per capita income fell by 38 percent, while male life expectancy declined by 5 years (World Bank 2004), ranking the country’s overall life expectancy 122nd in the world, tied with North Korea and Guyana (Brainerd and Cutler 2005: 2).

Central Eastern Europe (CEE) fared noticeably better. The region experienced a substantial but relatively lower increase in poverty, while life expectancy actually grew during the first decade of transition. In terms of economic development, Poland (followed closely by Slovenia) grew the most over this period, 39.3 percent, while Hungary, Slovakia, and the Czech Republic returned to approximately at pre-transition levels. CEE also stands out with respect to the quality of the state and the protection of property rights, with the CEE states performing markedly better than the rest of Eastern Europe and the FSU (EBRD 1999).

1 See anthropologist Janine Wedel’s (2002) seminal account of this network of economists and postcommunist elites, and Kennedy’s (2002) influential description of “transition culture.”
East Asia, where a number of communist regimes remained in power, experienced very high average growth rates, ranging from a moderate 36 percent in Laos to an extraordinarily successful 119.7 percent in China.

Table 1 demonstrates the overall diversity of postcommunist

Table 1: Mass privatization programs, economic growth, state capacity, and security of property rights

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A comparison of countries within each region reveals substantial variation that appears to follow no obvious pattern. The Czech Republic, for instance, one of CEE’s most advantaged countries in terms of human capital levels, prior history of capitalism, debt burden, and location was the worst performer on indicators of growth, state capacity, and security of property rights in its region (EBRD 1999; World Bank and EBRD 2000). In
the European part of the FSU, few analysts would have predicted Belarus to outperform Russia or Ukraine on these same indicators. Likewise, in Central Asia, it is unclear as to how Uzbekistan was able to fare better than the relatively modernized, oil-rich, and initially democratic Kazakhstan. These cases are but three examples of a large variety of unexplained post-communist outcomes. We argue that a substantial part of this divergence in outcomes can be accounted for on the basis of particular government policies employed during the transition. The differential implementation of these policies in the 30 post-Soviet style economies\(^2\) constitutes a quasi-natural experiment in the transition to capitalism that provides a rare opportunity for social scientists to investigate some of the causal processes of globalization and development.

Until now, sociologists have not offered many explanations of the post-communist divergence, which is surprising, given sociology’s great attention to changes in culture (e.g., Eyal 2000; Eyal et al. 1998, 2001; Kennedy 2002), stratification order (e.g., Gerber and Hout 2004; Nee 1989; Walder 1995a; Oi and Walder 1999; Róna-Tas 1994; Burawoy et al. 2000), circulation and reproduction of elites (e.g., Eyal et al. 1998, 2001) and structure of property in the post-Soviet style economies (e.g., Stark 1996; Stark and Bruszt 1998, 2001; Hanley et al. 2002; Walder 1995b; Oi 1992; Nee 1996; Borawoy and Krotov 1992; Burawoy 2001a, 2001b; King 2002; King and Sznajder 2006). One possible explanation for this silence is that many sociologists have relied on ethnographic, survey, or network data collected in one or, at most, two countries, which for the most part precluded strong theorizing about postcommunist economic divergence due to a lack of comparable data.

Nonetheless, some robust results have emerged from this case study literature. Perhaps the most consistent findings pertain to the role of the state in causing postcommunist divergence: scholars have routinely observed the beneficial effect of the state in China (Walder 1985; Nee 2000; Burawoy 1996), and documented the destructive effect of a state weakened by neoliberalism in Russia (Burawoy and Krotov 1992; Burawoy 1996; Burawoy 2001a, 2001b; King 2002, 2003).

These findings stand in sharp contrast to the past decade and a half of research by neoclassical economists, who have offered an explanation of postcommunist divergence that confirms their original theory, utilizing cross-national regressions of annual statistical data reported by the international financial institutions. These authors hold that while countries did not

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\(^2\) We have no data on the former Yugoslavia, and we exclude East Germany because it was formally incorporated into one of the leading capitalist economies.
start with identical initial conditions, and thus some had advantages over others, most of the variation in postcommunist performance is explained by how adequately neoliberal policy precepts were implemented. Specifically, the claim is that the closer a given country adhered to the neoliberal policy agenda, the better was its performance during the transition era.

The neoliberal position stands in direct opposition to state-centered explanations, which, so far, remain unsupported by cross-national statistical analyses, even though such methods are otherwise highly prevalent in sociological research. The present paper corrects for this dearth by providing a straightforward statistical evaluation of the neoliberal neoclassical economic and state-centered theories.

Our own theory holds that the implementation of neoliberal policies (measured by implementing Mass Privatization programs), creates severe supply and demand shocks for the enterprise sector, leading to technological downgrading and reliance on inefficient exchange relationships, such as barter, to maintain production. These conditions create a fiscal crisis of the state, which, in turn, erodes its bureaucratic capacity and strength. The ensuing weak, non-bureaucratic state further damages prospects of successful enterprise restructuring, especially in high-tech manufacturing. The result is a vicious cycle of declining state capacity and enterprise failure, resulting in system-wide de-modernization.

The remainder of this paper is structured into six parts. The first specifies in greater detail the neoliberal neoclassical economic transition theory. The second elaborates the state-centered alternative. The third discusses the methodology and data used in the existing econometric analyses of postcommunist performance. The fourth delineates our own variables, data, methods, and hypotheses. The fifth reports the results of our regression models, showing that the implementation of mass privatization programs has led to de-modernization, as measured by reduced state capacity, inadequate protection of property rights and lower economic growth. In the conclusion we delineate a number of theoretical and policy implications, and suggest directions for future research.

The Neoliberal Theory of Economic Transition

Neoliberal Shock Therapy was, above all else, a Smithian analysis: a successful transition to capitalism could be accomplished by relying on the power of market forces and private property, unleashed by a radical curtailment of the state’s involvement in the economy. Shock Therapy, it was argued, would set free economic restructuring in the postcommunist world, leading to rapid growth and convergence with the West (Sachs 1994: 25).
The heart of the theory is the Smithian notion that economic development can be achieved by combining free markets with private property. The 1999 edition of the European Bank for Reconstruction and Development’s (EBRD) *Transition Report* succinctly sums up the consensus of foreign advisors and postcommunist policy elites at the start of the transition: “Private ownership would ensure profit-oriented corporate governance, while liberalization of trade and prices would set free the competitive market forces that reward profitable activities. Firms would have therefore both internal and external incentives to restructure” (1999: 167). For the analysts at the EBRD, of course, it went without saying that this scenario takes low inflation as a given, as stable money provides the foundation for the type of rational decision-making which is believed to be the primary mechanism of developmentally beneficial restructuring. Within this framework, self-interested actors (i.e., private owners), responding to the “true” information of prices, pursue rational economic activity and, when aggregated at the national level, this will produce the most efficient outcome. The role of the state is limited to the protection of property rights and the provision of public goods. Internationally, each country comes to rely on doing what it does best, taking advantage of its real (i.e., non-socialist) comparative advantage. The policy implications are clear. After macroeconomic stabilization measures are introduced, the priority should be on liberalizing (both externally and domestically) and privatizing the economy as quickly as possible. 

The logic is elegant. Neoliberal reforms (rapid liberalization, privatization, and stabilization) would combine the advantage of “true prices” with “a fully private incentive structure,” unleashing enterprise restructuring (EBRD 1999: 167; see also Sachs 1992, 1996; Frydman, Gray, and Rapaczynski 1996; Kosolowski 1992; Lipton and Sachs 1990a; Fischer and Gelb 1991; Blanchard et al. 1993: 10-11; Carlin, Reenen, and Wolfe 1994: 72). At the same time, mass privatization would destroy the strongest potential anti-reform coalition. Neoliberals expected that unless firms were privatized and trade in their sectors liberalized during the brief window of opportunity afforded by the period of “extraordinary politics,” managers and workers of state-owned enterprises could be expected to act in their own self-interest and seek to halt or even roll back privatization and liberalization efforts in order to put off the unpopular consequences of restructuring (e.g., lay-offs) (Lipton and Sachs 1990b: 298; see also Frydman, Rapaczynski, and Turkowitz 1997: 84; Blanchard et al. 1991: xiv).

Privatization, by creating a system of dispersed economic owners in economic competition with each other, is thought to create agents with an interest in a lawful and rational state that provides an even playing field. These new capitalists would have a powerful interest in forging a “night-
watchman state” (EBRD 1999). Such a state, because it refrains from distorting markets, would create conditions for the optimal reallocation of capital and the continued restructuring of the enterprise sector. Since failing companies would no longer be rescued through government intervention, state investment would be replaced by private capital, as free competition would generate a complete set of markets. This includes a capital market (Lipton and Sachs 1990a: 102, 111), which would fund enterprise restructuring. Taken together, these conditions would create the optimal incentive structure for firms to restructure so as to reflect their real comparative advantage, thus laying the foundation for rapid economic growth and convergence with Western Europe (Sachs 1994: 25; Blanchard et al. 1991; EBRD 1999).

Neoliberals believe the political success of this policy package depends above all on speed. Privatization had to be accomplished during the period of “exceptional politics,” when people were willing to put aside short-term self-interest for the future benefit of society. It was understood that economic actors are rational utility-maximizers, and that self-interested behavior was bound to reassert itself sooner rather than later. Therefore, as there was no way of knowing how long this window of opportunity would last, governments had no choice but to pursue rapid large-scale privatization.

Economists and policy-makers have long known how to stabilize and liberalize economies (i.e., by raising interest rates, limiting monetary emissions, freeing prices, and opening up trade. In the postcommunist context, this could be accomplished through national parliamentary legislation. In contrast, the difficulties in privatizing a large number of state-owned enterprises in a short period of time were enormous. Margaret Thatcher only managed to privatize about 30 companies over the course of eleven years. The postcommunist world, however, had thousands of large state enterprises and, unlike England, no existing class of capitalist owners. Furthermore, neoliberal policy advisors by and large assumed that transition economies were too risky for foreigners to make large investments, and that, even if foreign direct investments were forthcoming, local nationalist forces would prevent large amounts of privatization to foreigners (Frydman, Pistor and Rapaczynski 1996). Considering the potentially short-lived window of “exceptional politics,” foreign investment was simply too slow to be viable strategy (Blanchard et al. 1991).

The solution was to implement mass privatization programs, which involved the rapid transfer of shares to firm insiders and citizens for nominal sums, thus

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3 This is a reformulation of arguments made by Therborn (1978), Friedman (1962) and Hayek (1944).
creating a kind of “people’s capitalism.” However, it was assumed that com-
petition, a free capital market, and unhindered firm exit and entry would quick-
ly lead to a concentration of capital. Some neoliberals argued that Western
financial consulting firms should serve as asset management companies, in
which ordinary people could invest their vouchers. Voucher or citizen privati-
ization would thus legitimize the transition to capitalism by giving citizens and
firm insiders a stake in privatization, while at the same time providing an
ingenious vehicle for the transformation of large amounts of state property
during a short period of time. Appendix B describes the different ways priva-
tization occurred. Mass Privatization was by far the most innovative.

The State-Centered Alternative

We build our theory on the basis of findings from qualitative sociological
research. Burawoy and Krotov (1992) provide one of the first and most
important sociological critiques of neoliberal transition economics, relying
on extensive ethnographic fieldwork in a number of firms of a Russian lum-
ber conglomerate. They describe a situation where neoliberal policies have
ironically led to the realization of the classic communist dream of the “with-
ering away” of the state. Rather than producing a modern capitalist market
economy, the reforms produced a system of “merchant capitalism,” an
account which Burawoy later reformulated as a theory of postcommunist

According to the theory of merchant capitalism, Shock Therapy led to the
destruction of the socialist planning apparatus. However, rather than mar-
kets emerging to take its place, the pathologies of the old economic system
were exacerbated. The informal relationships that had emerged between
enterprises as they were trying to solve the problems of the socialist short-
age economy were recreated by postcommunist managers who, faced with
the dismantling of the planning apparatus, resorted to barter instead of
monetized, market relationships. Old socialist conglomerates, freed from
central control, and still possessing monopoly power in their markets, acted
to reinforce their positions of supremacy. The resulting disruption in supply
chains led to greater anarchy of production. This anarchy of production
could only be solved by improvisation by workers. This created even
greater worker control of the labor process than existed under socialism,
and thus gave rise to a situation in which the workers became essentially
merged with the means of production. As a result of these conditions, there
were no systematic incentives or pressures for firms to reinvest in the
means of production or to change products to maximize profits (as there
are in Western capitalism). Instead, surplus was appropriated in the sphere
of circulation by “merchant capitalists,” a politically connected trade and
financial elite, who then shipped their new wealth out of the country.
Burawoy (1996, 1999, 2001a, 2001b) develops this merchant capitalism thesis into a theory of postcommunist involution. His comparison of Russia and China, although based only on Russian fieldwork, highlights the centrality of the state in explaining postcommunist divergence. Juxtaposing the two countries, Burawoy argues that “[a]t each step of the transition the absence of an effective state explains the unintended consequences of reform as the acceleration of economic involution” (1996: 1111).

Even though involution was driven by state collapse, Burawoy insists that involution is not a feature of the transitional system, but rather an “emergent and enduring type [with] nothing inherently unstable about [it]” (1996: 1115). Thus, ironically, it is the weakened state itself which locks in permanent involution by continuing to bail out inefficient firms, thus recreating soft budget constraints. As a result, firms do not go out of business, and resources are not re-allocated to more efficient purposes. “Russia … ended up with a perverse combination of private property and soft budget constraints. The result is involution” (1996: 12).

We agree with much of Burawoy’s analysis. Neoliberal policies successfully destroyed the planning apparatus but, unfortunately, did not confirm the neoliberal belief that “markets spring up as soon as central planning bureaucrats vacate the field” (Sachs 1994: xii). Eliminating state involvement in the economy does not automatically produce Smithian behavior (specialization, innovation, accumulation, and rational profit-maximization). Rather, postcommunist actors were able to recreate socialist informal institutions to shield firms from exposure to the competitive market forces, as described by Burawoy and Krotov.

We also build off of Burawoy’s concern for an effective state (see also Manchin and Szelenyi 1987 and Szelenyi and Kostello 1996). This, of course, echoes a theme in sociological analyses of China (Walder 1995b; Nee 2000), comparative and historical sociology, and the sociology of development more generally (Evans 1995; Evans and Rauch 1999; Chibber 2002). We must, however, slightly modify the mechanisms outlined in Burawoy’s theory. His analysis, ultimately, rests on the observation that in Russia, as opposed to China, there was no “communist party to fall back on” for maintaining political control, thus forcing the state to resort to firm bailouts to ensure domestic stability (1996: 115). We believe this argument both over-emphasizes the hardness of budget constraints in the Chinese state-owned sector and under-emphasizes the hardness of these constraints in Russia. Even if Burawoy is empirically correct, however, isolating the existence of the communist party as a key variable offers no vantage point for explaining differences between Russia and other East European countries, in which the communist parties had also disintegrated.
Our analysis differs from Burawoy’s insofar as it places primacy not on the state’s ability to produce hard budget constraints, but on the depressive effects of Shock Therapy on firms and, subsequently, state capacity via the mechanisms of falling revenues and increased incentives for corruption. Fieldwork in Russian firms reveals a myriad of supply and demand shocks that hit firms following the implementation of neoliberal reforms (King 2002, 2003). By 1999, most Russian firms operated under substantially hardened budget constraints. While the state bailed out some major firms at points during the first half of the 1990’s, the shortage of state revenue made these rescue operations, for the most part, a phenomenon of the past. Yet the central problem facing the economy was not the end of government bailouts, but a lack of state support for market institutions. Firms stayed alive, despite hardened budget constraints, largely by relying on non-market forms of exchange. They attempted to meet market demand to the extent possible, but this typically meant moving (far) down the technological ladder due to the disruption of complex high-tech supply networks.

Thus, we offer an alternative state-centered theory, building on Burawoy’s analysis of postcommunist involution, which emphasizes supply and demand shocks to enterprises, as well as their indirect effect on state capacity as the main mechanism responsible for de-modernization.

The negative shocks to the domestic economy which follow rapid liberalization of prices and foreign trade, as well as the shock associated with the austerity of stabilization programs, have been extensively discussed by heterodox critics of the Washington Consensus (the most prominent is Nobel Laureate Joseph Stiglitz [2002]; but see also Gowan 1995, 1999; Andor and Summers 1998; Chossudovsky 1997; Amsden, Kochanowicz, and Taylor 1994; UNDP 1999). These depressive affects (on the supply of investment capital from austerity and the loss of markets to global players from liberalization) are by now well known and understood.

The third component of Shock Therapy, the one empirically examined in this paper, is the implementation of mass privatization programs. These programs have received vastly less attention than the other “shocks” (but see Ellerman 2001, McDermott 2002; King 2001, 2002, 2003 for exceptions). Mass privatization allowed large state-owned firms to be quickly privatized even though no class of domestic capitalists existed. In effect, this was a reverse “telescoping” of class formation, using state fiat to speed up what has always been a relatively lengthy historical process.

As a result of this creation of private owners by fiat, firms privatized though such programs did not have owners with sufficient resources to restructure them. Cut off from state resources, but without any capital to carry out
desperately needed restructuring, and without the injection of new managerial talent, many firms found themselves in untenable positions. Owners, managers, and workers, unable to work cooperatively to better their common cause, pursued short-term, self-serving strategies to accumulate wealth and survive the transition.

Mass privatization also created minority owners with no capacity to monitor firm insiders or other owners. This outcome was inevitable because the institutions that protect shareholder rights and help to create markets in advanced capitalist systems – regulators and regulatory agencies, an independent business press, credit rating agencies — did not yet exist (Hall and Soskice 2001; Elson 1991). This combination led to large amounts of asset stripping, wreaking havoc on the functioning of many firms.

Sometimes, privatization leads to a total change of product line, creating an additional supply shock for downstream industries. As an example the one factory making cathode ray tubes for Soviet television producers was privatized, and turned into a beer factory. This eliminated the one source of an affordable input that accounts for 60-70% of the value added in the final product. The equivalent imported products were too expensive to make production profitable (King 2003).

As a result of the multiple supply and demand shocks produced by Mass Privatization (as well as other neoliberal reforms), most firms experienced severe financial crises. Firms responded in a number of ways: a large share of all wages went unpaid; firms reduced their demand for inputs, especially investment goods; and there was a huge decline in gross capital formation throughout Eastern Europe and the FSU.\(^4\) In addition to lowering production and investment, firms retreated to non-monetary (and thus non-market) mechanisms of exchange to ensure survival (e.g. barter), and/or shifted to lower value-added production to earn actual currency (EBRD 1999).

As economic activity declined and crisis hit the enterprise sector, tax payments shrank due to the spread of hard-to-tax barter, and the decrease in value-added resulting from technological downgrading. Importantly, Mass Privatization eliminated the institutional basis for extracting resources from society (taxation) before another, income or profit based tax system, was established. In the communist period, the state funded itself with the profits from the profitable state owned enterprises. Privatization eliminated this revenue stream before the taxation system was well established. These

\(^4\) For example, by the end of Russia’s mass privatization program in 1994, investment had declined to 30 percent of its level in 1990. By 2000, it was at only 18 percent of its level in 1990.
effects combined to create a severe fiscal crisis. In Russia, for example, receipts of the consolidated state budget declined from 41 percent of GDP in 1990 to only 26.8 percent in 1997, even as real GDP was halved (Vorobyov and Zhukov 2000: 5; EBRD 1999: 73). As a result, both state orders and state payments for the remaining orders collapsed, producing another major demand shock for firms.

The loss of tax revenue from enterprise failure, exacerbated by the rise of difficult-to-tax non-monetary transactions, inevitably weakened the state. This fiscal crisis, combined with a widespread hostility toward industrial and Keynesian policies, resulted in a lack of support for the institutions that enable firms to restructure in order to compete in high value-added goods on the liberalized domestic or world market. A particularly important instance of this phenomenon occurs when the state stops supporting the institutions that turn out skilled manpower – especially young experts – and enable R & D efforts. Many firms in Russia suffered from the inability to replace skilled manpower because the state drastically reduced funding for the local polytechnics that trained people for these occupations (King 2003).

This fiscal crisis also meant that the state was increasingly unable to meet its formal obligations to its officers. The state began to break down since poorly paid (or unpaid) state officials were easily corrupted. Its bureaucratic nature decomposed as it became riddled by patron-client ties between government officials and businessmen, which then created additional barriers to the operation of firms without such connections (for Russia, see the seminal works of Pappe 2000, and Reddaway and Glinski 2001). Private market success came to depend to a great extent on arbitrary political decisions and the exercise of private force. This lawless environment also reacted back on the enterprise sector, curtailing entrepreneurship and investment.

All these effects combined to create postcommunist de-modernization or involution.

The competing causal effects of mass privatization are represented in figure 1.

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5 Unfortunately, we do not have data on state revenues for most countries in the early nineteen-nineties, so we are unable to test these points directly in the analysis.
Although we believe that research into the affects of other policies should be a high priority, we have reason to believe that privatization policy will be the single biggest determinant of postcommunist variation. There simply was not enough variation in the existing measures of liberalization and stabilization to explain much of the dependent variable.

**The Econometric Literature on Postcommunist performance**

There is a substantial econometric literature using cross-national data that supports the neoliberal position. This literature has three major strands. The first, the orthodox position, holds that the central determinant of postcommunist economic success is the implementation of neoliberal policies, which consist of various types of deregulation, stabilization, and privatization measures – collectively referred to as “liberalization” (de Melo and Gelb 1996; de Melo et al. 2001; Sachs 1996; Fischer, Sahay and Vegh 1996).
A second group, the economic institutionalists, argues that economic reforms have basically no effect. What matters instead are history and geography, reflected in a variety of structural features referred to as “initial conditions” (Popov 2000; Stuart and Panayotopoulos 1999; Campos 2001). The orthodox position does not deny the importance of “initial conditions” but it emphasizes the pathologies of accumulation under socialism, most importantly “over-industrialization” and “lack of market experience.” Accordingly, the postcommunist world is mostly paying the price of having an “artificially” high growth of living standards in the past. Finally, a third group argues for the joint importance of a wide variety of initial conditions and the implementation of liberalizing reforms (Falcetti, Raiser and Sanfey 2002).

*The Liberalization Index*

Within the economic literature, the specification of the independent variable, the measurement of liberalization, comes from only a few sources. Most accounts use an index created by Martha de Melo and her colleague Alan Gelb (1996) of the World Bank. This variable combines many policies and also partially measures the success of these policies. The de Melo and Gelb composite liberalization index (LI) has three weighted components: (1) internal markets (liberalization of internal markets and the abolition of state trading monopolies) (weight .3); (2) external markets (liberalization of the foreign trade regime, elimination of export controls and taxes, and substitution of low-to-moderate import duties for import quotas and high import tariffs; current account convertibility) (weight .3); and (3) private sector entry (including progress of small-scale and large-scale privatization) (weight .4).

Added together, these components produce an index that ranges from 0 to 1 with 0 representing an unreformed economy and 1 an extensively reformed economy. The component measures are partially based on annual scores produced by the EBRD for its *Transition Report* series. De Melo and Gelb describe their index creation as follows:

> An extensive process of consultation was followed in assigning annual country rankings for each component of the LI [liberalization index]. First, the authors proposed rankings on the basis of their own knowledge and country reports. Second, the authors consulted World Bank and other country specialists on a country’s pace of reforms over time and on its ranking relative to other transi-

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6 De Melo was Head Economist of the Policy Research Department for the Transition Economies at the World Bank, and part of the team of researchers that produced the analysis for the World Development Report From Plan to Market (1996). Both de Melo and Gelb were also affiliated with the Harvard Institute for International Development which was headed by Jeffrey Sachs at the time.
tion countries known by the specialist. Third, revised rankings were submitted to a second round of comments from relatively senior experts who have a comparative perspective across a wide range of countries. And fourth, for the 25 countries in the CEE and FSU, a further adjustment was made based on the transition indicators in the EBRD’s 1994 Transition Report and the accompanying text. This adjustment was designed to introduce further objectivity into the country rankings ... In the final analysis, the rankings reflect the author’s judgment [1996:36].

A close look at some of the country scores for privatization undermines their validity. Take, for instance, the scores for privatization in Russia and Poland. According to country reports published by the EBRD, Russia, from 1992 to 1994, privatized about 80 percent of its large enterprises via a mass privatization program. In Poland, by contrast, resistance to mass privatization plans delayed the program until 1995, and limited its scope to small and medium-sized firms worth only 10 percent of total state assets (Orenstein 2001; Kramer 1995). Yet, in terms of its privatization score (ranging from 0 to 1), de Melo and Gelb assigned Poland a .82 in 1992, whereas Russia received a .49; by 1994, Poland was a deemed a .86, and Russia only a .66. Thus, according to these indicators, one would get the impression that the Poland was much closer adherence to neoliberal policy precepts with regard to privatization than Russia, when in reality the reverse was true: by 1994, Russia had privatized 15,000 large state-owned enterprises and Poland almost none.

Overall, the LI covers a variety of different policies, some of which likely produced opposite effects. Moreover, the index contains an inherent bias toward success, as a number of its component indicators taken from the EBRD reports include indirect measures of a growing economy or an effective state in their definition of the higher scores. It also seems possible that the coders have a strong theoretical orientation and value commitment toward neoliberal economic orthodoxy, and sincerely believe the latter to produce developmentally beneficial outcomes (see the seminal works by Wedel [2001] and Kennedy [2002]). In the construction of subjective indexes, such perceptions might inadvertently enter the coding process. Indeed, at least the liberalization and privatization EBRD indicators suffer from coder bias (King et al. 2008)

A further problem with the LI is that it does not take into account the “double movement” identified by Polányi (1957). That is, the destabilizing effect free-market policies exert on society, provoking a backlash that necessitates a partial reversal of those policies. For instance, as David Woodruff (1999) shows in Money Unmade, Russia’s strict monetarist policies led to the proliferation of barter and the use of local monies. This, in turn, forced the government to print more rubles in an effort to renationalize the increasingly fragmented economy, thus, in effect, reversing the monetarist policies.
We argue that the best way to test for the effects of neoliberal (or any other) policies is to use variables that represent in a clear and straightforward way the actual implementation of concrete policies. Lumping all policies into a single variable might obscure all kinds of potentially cross-cutting effects which makes inferring causality about policies even more difficult than normal.

*Annual Rates of Growth versus Absolute Rate of Growth*

When measuring economic growth, most of the econometric literature relies on variables measuring annual rates of growth, such as annual change in GDP or GDP per capita. Annual rates of growth might be highly misleading as an indicator of transition success because the steeper the economic decline of a given country during the early transition years the higher will be its subsequent short-run (i.e., annual) growth rates, for the economy is starting out at a lower base. Consequently, we argue that the rate of growth over the entire period should be the variable of interest in statistical analyses of the transition to capitalism. None-the-less, we also use annual rate of growth as a dependent variable.

*Data, Variables, and Hypotheses*

*Data*

The analyses reported in this paper are based on a dataset of the social, economic, and political development of 30 transition and reform communist economies. This data is drawn from two principal sources: (1) the World Bank World Development Indicators Database (World Bank 2004), an annual compendium of economic, social, environmental, business, and technology indicators for 152 countries with populations of more than 1 million people; and (2) the World Bank/EBRD Business Environment and Enterprise Performance Survey (World Bank and EBRD 2000), a survey of over 4000 firms in 25 transition economies, conducted between 1999 and 2000, that examines a wide range of interactions between firms and the state. In addition, variables were generated on the basis of historical records, including those provided by the various editions of the *Transition Report* (EBRD 1994-2005).

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7 The survey is based on face-to-face interviews with firm managers and owners; it is designed to generate comparative measurements in such areas as corruption, state capture, lobbying, and the quality of the business environment, which can then be related to specific firm characteristics and firm performance. The survey includes about 125 firms randomly sampled in each country, with larger samples for Poland and Ukraine (over 200 firms), and an even larger sample for Russia (over 500). While the survey excludes China and Vietnam, and consists exclusively of cross-sectional data, it provides exceptional coverage of the postcommunist world, and is therefore most appropriate for the purpose of the present paper.
Response Variables

Economic growth. We use the percentage change in GDP per capita (PPP) between 1989 and 2003 as a measure of economic growth. We also replicate the analysis using the annual rate of growth.

State Capacity. Constructing valid and reliable measure of the bureaucratic nature of the state or of state capacity is notoriously difficult. The present analysis relies on a governance quality index developed by the EBRD. The index is a composite score ranging from 1 (ineffective) to 3 (highly effective), taken from the Business Environment and Enterprise Performance Survey, which averages a firm’s perception of obstruction resulting from microeconomic and macroeconomic factors, physical infrastructure, and law and order (EBRD 1999: 116). Given the subjectivity and presence of bias in other EBRD indicators, it seems very likely that any bias will be coding more successful countries as having better governance, and will thus make for a very conservative test of our hypothesis.

Property Rights. Strong bureaucratic states protect property rights and contracts. Drawing again from the Business Environment and Enterprise Performance Survey, we incorporate a variable that indicates the percentage of a country’s firms which disagree or strongly disagree with the statement that their national government “will uphold contracts and property rights.”

Central Explanatory Variable

Mass Privatization. A binary indicator is used to specify whether a given country implemented a mass privatization program, defined as a program that relied on either vouchers or vouchers combined with subsidized insider buy-outs, that covered at least 25 percent of the assets of all large state-owned enterprises over a period of two years. This is a very rough measure that indicates that a substantial Mass Privatization program was implemented. This coding is based on the country descriptions that accompany each EBRD transition report. Although a rate variable would be much more useful, it is not possible to construct such a variable from the EBRDs reports because of inconsistency in reporting. The EBRD has no data archive, so these published reports contain the entirety of their data on privatization. The problem in constructing a rate variable is that the Transition Reports provide data on total assets of firms, or total number of firms, or in percent of total employment. All of these measures have advantages and disadvantages, but the fact is that we can not construct a better variable with

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8 The coding for each country is reported in Table 1. See appendix B for the best estimate of the size of the programs.
the records of the International Financial Institutions that kept track of these events. So, the rough binary measure we created is what we use in our analysis. The officer responsible for mass privatization at the World Bank during this period, Ira Lieberman, agreed with our coding. What is crucial from a scientific perspective is that our variable construction is completely replicable. Anyone can get the individual country reports of the Transition Reports, and check our coding. Appendix B provides more detailed information on the programs taken from the pages of the Transition Reports. Looking at appendix B, the 25% cut-off is a natural place to cut the sample. There are several countries with about 10% or less, while the rest of the countries that had such programs included 30-80% of the firms or assets or labor force.

Control Variables

Initial development. We use initial GDP per capita (logged) prior to transition as a measure of controlling for initial differences in wealth between countries, a measure which economists like Barro (1991) have found to be associated with future growth rates.

Total Population. Total population prior to transition is included as a measure of country size.

Presence of Oil. A binary indicator is employed to account for the presence of large amounts of oil, as this may have a strong effect on a country’s economic performance during the transition.9

Military Conflict. A variable measuring the sum of years of conflicts or ethnic violence, which are typically associated with major economic disruptions.

Transition Progress. An aggregate transition indicator is employed to control for transition progress to date. In its original form, this indicator is the average of eight component transition indicators of structural reforms published in the EBRD Transition Report series, measuring the extent of enterprise privatization and restructuring (three indicators), market liberalization and competition (three indicators), and financial sector reform (two indicators). For the present purpose, the component indicators for privatization progress were removed, making the aggregate indicator a measure of

9 Findings regarding the direction of this effect, however, are inconclusive. Assuming that the necessary infrastructure was in place, the presence of oil should have made the transition easier, given the value of oil as an export commodity. Some research (Gylfason 2001; Sachs and Warner 1995; Sala-i-Martin 1997), however, found that resource-rich economies have, on average, grown slower than those with poor resource endowments.
progress in areas other than privatization.10

Central Eastern Europe and Baltic States. A binary indicator is used to identify Central and Eastern Europe and the Baltic States, as these countries were, on average, significantly more successful than other transition economies.

Hypotheses

We investigate the following hypotheses which were derived from our state-centered theory of transition:

**Hypothesis 1:** Countries that implemented mass privatization programs will have lower growth of GDP per capita over the transition period than countries that did not implement mass privatization programs.

**Hypothesis 2:** Countries that implemented mass privatization programs will have lower state capacity than countries that did not implement mass privatization programs.

**Hypothesis 3:** Countries that implemented mass privatization programs will have worse enforcement of contracts and protection of property rights than countries that did not implement mass privatization programs.

For each of these hypotheses we could have constructed neoliberal versions that are the mirror-image of the state-centered ones (Mass Privatization leads to more growth, better state capacity and better protection of property rights).

Models were estimated using ordinary least-squares regression. In each case, the Breusch-Pagan/Cook-Weisberg test, as well as several graphical tools, were used to test for heteroskedasticity. Models in which heteroskedasticity was detected were re-estimated using robust errors. In addition, all models were tested for outliers and influential cases; removing influential cases, at no point, led to different substantive conclusions.

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10 In their original form, the EBRD indicators range from 1 to 4+, where 4+ indicates that a given country’s structural characteristics are comparable to those found in an advanced capitalist economy, and 1 corresponds to the conditions in an unreformed, centrally planned economy with state ownership as the dominant form of ownership. In order to facilitate statistical analysis, the transition indicators were linearized by assigning a value of +1/3 to a “+” sign, and a value of −1/3 to a “−” sign. Note that the transition indicator is merely used to control for reform measures other than mass privatization programs; it is not conceived as a way of assessing the viability or timing of those reform measures and, in fact, it would be misleading to use it for this purpose since they are biased in favor of growth, as argued above.
Results

Table 2 reports the coefficients for the regressions of economic growth on mass privatization and several additional explanatory variables.

Table 2: Coefficients for regressions of GDP per capita growth (1989-2003) on mass privatization and several control variables

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5 w/o E Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass privatization</td>
<td>-47.3459 (3.10)**</td>
<td>-47.8938 (3.48)**</td>
<td>-51.9633 (3.82)**</td>
<td>-49.4195 (3.76)**</td>
<td>-30.2719 (4.02)**</td>
</tr>
<tr>
<td>Initial GDP per capita</td>
<td>-0.0019 (2.23)*</td>
<td>-0.0048 (2.56)*</td>
<td>-0.0061 (2.56)*</td>
<td>0.0003 (2.56)*</td>
<td></td>
</tr>
<tr>
<td>Initial population (log)</td>
<td>-17.6017 (2.40)*</td>
<td>18.1827 (2.58)*</td>
<td>18.1564 (2.56)*</td>
<td>0.2981 (2.56)*</td>
<td></td>
</tr>
<tr>
<td>Presence of oil</td>
<td>-24.4604 (2.23)*</td>
<td>-6.4573 (2.58)*</td>
<td>-3.715 (2.56)*</td>
<td>17.983 (2.56)*</td>
<td></td>
</tr>
<tr>
<td>Military conflict</td>
<td>-6.4099 (2.23)*</td>
<td>-6.3087 (2.58)*</td>
<td>-5.4329 (2.56)*</td>
<td>-4.5838 (2.56)*</td>
<td></td>
</tr>
<tr>
<td>Transition progress</td>
<td>-1.75 (2.40)*</td>
<td>-1.93 (2.58)*</td>
<td>-1.44 (2.56)*</td>
<td>29.5008 (2.56)*</td>
<td></td>
</tr>
<tr>
<td>CEEB</td>
<td>-29.5008 (2.40)*</td>
<td>22.0797 (2.58)*</td>
<td>25.0359 (2.56)*</td>
<td>-1.78 (2.56)*</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>32.3933</td>
<td>-233.1852</td>
<td>-298.876</td>
<td>-280.1306</td>
<td>-67.022</td>
</tr>
<tr>
<td>Observations</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.21</td>
<td>0.57</td>
<td>0.61</td>
<td>0.63</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Note: Absolute value of t statistics in parentheses
* significant at 5%; ** significant at 1%

Model 1 considers the effect of mass privatization programs without any control variables. The coefficient indicates that countries that implemented a mass privatization program, on average, experienced 47.3 percent less growth in GDP per capita (PPP) during the period from 1989 to 2003 than countries that did not, a finding that is statistically significant. The model explains about 21 percent of the variation in the dependent variable. Model 2 introduces a series of additional explanatory variables, including initial GDP per capita, initial population, years of military conflict, and presence of oil. The coefficient for mass privatization remains virtually unaffected in light of these controls. In Model 3, we add transition progress to date as a further control variable. Adding this explanatory variable increases both

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11 As noted above, the transition indicator has a built-in positive bias; its coefficient should therefore not be taken at face value as it most likely provides an overstated estimate of the benefits of rapid economic openness.

15 The models contain a dummy variable indicating whether a given country is missing data in the response variable for 1989; coefficients are not reported. We also ran the full model on a data set provided by the United Nations Commission for Europe that reported GDP per capita PPP from 1990 to 2003, excluding Bosnia and East Asia (not reported). There were no missing years of data for any countries. The results were statistically significant and consistent with those reported in Table 2 (-25%).
the negative magnitude and significance level of the mass privatization coefficient, indicating that its effect holds even when other reforms (i.e., stabilization and liberalization measures) are accounted for. In Model 4, we introduce a control variable for Central and Eastern Europe and the Baltic States. This lowers the coefficient for mass privatization only marginally, suggesting that this regional difference does not explain the previously observed results. Finally, in Model 5, we exclude the East Asian cases from our model; while doing so leads to a somewhat lower coefficient for mass privatization, the negative direction and significance of the effect remain unchanged. Taken together, the results from Table 2 demonstrate that mass privatization programs are associated with significantly lower economic growth over the transition period.

Table 3 replicates the analysis using the annual rate of growth of GDP. Even though this indicator is biased against hypothesis 1, the results show that mass privatization programs are associated with substantially worse economic performance. Mass Privatization alone predicts 2.5% less growth per year, and can explain 19% of the variance. In the full model (16) the coefficient is about 3% less growth per annum.

Table 3: Coefficients for regressions of average GDP per capita growth (1989-2003) on mass privatization and several control variables

<table>
<thead>
<tr>
<th></th>
<th>Model 14</th>
<th>Model 15</th>
<th>Model 16</th>
<th>Model 17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All cases</td>
<td>All cases</td>
<td>All cases</td>
<td>w/o E. Asia</td>
</tr>
<tr>
<td>Mass privatization</td>
<td>-2.5047</td>
<td>-2.6782</td>
<td>-2.9257</td>
<td>-1.7189</td>
</tr>
<tr>
<td></td>
<td>(2.85)**</td>
<td>(2.85)**</td>
<td>(3.15)**</td>
<td>(2.38)*</td>
</tr>
<tr>
<td>Initial GDP per capita</td>
<td>0</td>
<td>-0.0001</td>
<td>-0.0002</td>
<td>0.0001</td>
</tr>
<tr>
<td></td>
<td>-0.14</td>
<td>-0.41</td>
<td>-1.3</td>
<td>-0.42</td>
</tr>
<tr>
<td>Initial population (log)</td>
<td>-1.87</td>
<td>0.6347</td>
<td>0.6701</td>
<td>-0.1827</td>
</tr>
<tr>
<td>Presence of oil</td>
<td>-1.3919</td>
<td>-0.2968</td>
<td>-0.9428</td>
<td>0.9428</td>
</tr>
<tr>
<td></td>
<td>-1.03</td>
<td>-0.2</td>
<td>-0.83</td>
<td></td>
</tr>
<tr>
<td>Military conflict</td>
<td>-0.4906</td>
<td>-0.4844</td>
<td>-0.4512</td>
<td>-0.4512</td>
</tr>
<tr>
<td></td>
<td>-1.94</td>
<td>-1.97</td>
<td>(2.34)*</td>
<td></td>
</tr>
<tr>
<td>Transition progress</td>
<td>-1.5</td>
<td>1.7944</td>
<td>1.485</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.4609</td>
<td>-7.9992</td>
<td>-11.9949</td>
<td>-1.1148</td>
</tr>
<tr>
<td></td>
<td>-0.89</td>
<td>-1.38</td>
<td>-1.93</td>
<td>-0.18</td>
</tr>
<tr>
<td>Observations</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.19</td>
<td>0.43</td>
<td>0.49</td>
<td>0.56</td>
</tr>
</tbody>
</table>

Absolute value of t statistics in parentheses
significant at 5%; ** significant at 1%

16 The models contain a dummy variable indicating whether a given country is missing data in the response variable for 1989; coefficients are not reported.
Table 4 reports the results of the regressions of governance quality on mass privatization programs and a series of additional explanatory variables.

Table 4: Coefficients for regressions of quality of governance index on mass privatization and several control variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
<th>Model 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass privatization</td>
<td>-0.446**</td>
<td>-0.365*</td>
<td>-0.374**</td>
<td>-0.361**</td>
</tr>
<tr>
<td></td>
<td>(0.118)</td>
<td>(0.131)</td>
<td>(0.137)</td>
<td>(0.118)</td>
</tr>
<tr>
<td>Initial GDP per capita (log)</td>
<td>–</td>
<td>0.124</td>
<td>0.096</td>
<td>0.044</td>
</tr>
<tr>
<td></td>
<td>(0.087)</td>
<td>(0.110)</td>
<td>(0.119)</td>
<td></td>
</tr>
<tr>
<td>Initial population (log)</td>
<td>–</td>
<td>-0.044</td>
<td>-0.034</td>
<td>-0.034</td>
</tr>
<tr>
<td></td>
<td>(0.066)</td>
<td>(0.072)</td>
<td>(0.055)</td>
<td></td>
</tr>
<tr>
<td>Presence of oil</td>
<td>–</td>
<td>-0.025</td>
<td>-0.005</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>(0.193)</td>
<td>(0.204)</td>
<td>(0.113)</td>
<td></td>
</tr>
<tr>
<td>Military conflict</td>
<td>–</td>
<td>-0.003</td>
<td>-0.002</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.040</td>
<td>(0.041)</td>
<td>(0.053)</td>
</tr>
<tr>
<td>Transition progress</td>
<td>–</td>
<td>–</td>
<td>0.072</td>
<td>-0.047</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.164)</td>
<td>(0.145)</td>
</tr>
<tr>
<td>Central Eastern Europe and Baltics</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>0.285</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.240)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.696***</td>
<td>1.411</td>
<td>1.282</td>
<td>1.895</td>
</tr>
<tr>
<td></td>
<td>(0.083)</td>
<td>(1.274)</td>
<td>(1.345)</td>
<td>(1.253)</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.412</td>
<td>0.371</td>
<td>0.333</td>
<td>0.368</td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: Numbers in parentheses are standard errors
* p<0.05; ** p<0.01; *** p<0.001

Model 6 indicates that mass privatization has a strong negative and significant effect on the indicator of state capacity, which amounts to more than a full standard deviation of the dependent variable (its minimum is .82, its maximum is 1.98, and its standard deviation is .344); the model explains a full 41.2 percent of the variation in state capacity. The introduction of several additional explanatory variables in Model 7 reduces the negative magnitude of the privatization coefficient slightly but does not affect its significance level. These findings hold when transition progress (Model 8) and regional variation (Model 9) are taken into account, indicating that the observed negative effect of mass privatization programs on government effectiveness constitutes a robust finding. Countries that implemented a mass privatization program were thus more likely to experience a significant decline in government effectiveness.
Table 5 presents the results for the regressions on property rights security.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 10</th>
<th>Model 11</th>
<th>Model 12</th>
<th>Model 13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(3.338)</td>
<td>(3.256)</td>
<td>(2.946)</td>
<td>(3.013)</td>
</tr>
<tr>
<td>Initial GDP per capita (log)</td>
<td></td>
<td>3.961</td>
<td>0.495</td>
<td>0.100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.091)</td>
<td>(2.361)</td>
<td>(2.543)</td>
</tr>
<tr>
<td>Initial population (log)</td>
<td></td>
<td>-0.648</td>
<td>0.389</td>
<td>0.398</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.699)</td>
<td>(1.574)</td>
<td>(1.610)</td>
</tr>
<tr>
<td>Presence of oil</td>
<td></td>
<td>-4.082</td>
<td>-1.510</td>
<td>-1.289</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5.332)</td>
<td>(4.868)</td>
<td>(5.000)</td>
</tr>
<tr>
<td>Military conflict</td>
<td></td>
<td>1.997</td>
<td>2.206*</td>
<td>2.315*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.031)</td>
<td>(0.923)</td>
<td>(0.969)</td>
</tr>
<tr>
<td>Transition progress</td>
<td></td>
<td></td>
<td>9.167*</td>
<td>8.118</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3.839)</td>
<td>(4.460)</td>
</tr>
<tr>
<td>Central Eastern Europe and Baltics</td>
<td></td>
<td></td>
<td></td>
<td>2.446</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(4.923)</td>
</tr>
<tr>
<td>Constant</td>
<td>-15.869***</td>
<td>-38.158</td>
<td>-52.168</td>
<td>-47.423</td>
</tr>
<tr>
<td></td>
<td>(2.26)</td>
<td>(31.864)</td>
<td>(28.974)</td>
<td>(31.139)</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.423</td>
<td>0.496</td>
<td>0.600</td>
<td>0.582</td>
</tr>
<tr>
<td>N</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

Note: Numbers in parentheses are standard errors
* p<0.05; ** p<0.01; *** p<0.001

Noting that higher values of the response variable denote more secure property rights, Model 10 shows that mass privatization programs have a negative and highly significant effect on the security of property rights; the model accounts for approximately 42.3 percent of the variation in the response variable. In countries that adopted mass privatization programs, ceteris paribus, the percentage of firms reporting insecure property rights and contract enforcement was about 14 percent higher than in countries which did not implement such programs. Adding controls for initial development, country size, oil, and years of military conflict (Model 11) produces a slightly lower but nonetheless significant coefficient for mass privatization; the explained variation increases to about 49.6 percent. Model 12 demonstrates that the observed relationship between mass privatization and property rights security holds, even when one controls for other
reforms, which themselves appear to have a beneficial impact on property rights security.\footnote{Note that the coefficient of the transition indicator is only marginally significant (p = 0.044), and that its significance disappears when the regional control variable is introduced in Model 13.}

The model accounts for roughly 60 percent of the variation in the response variable. Finally, Model 13 reveals that the previous findings hold, even when the superior regional performance of Central and Eastern Europe and the Baltic States is taken into account. Altogether, the results reported in Table 4 indicate strong support for the hypothesis that mass privatization programs are associated with reduced security of property rights and contracts.

Taken together, these findings constitute a strong confirmation of Hypotheses 1, 2, and 3. Countries that implemented mass privatization programs experienced reduced economic growth, and are characterized by lower state capacity and worse enforcement of property rights and contracts than countries that did not implement such programs.

Let us now return briefly to the issue of growth rates. Figure 2 presents two graphs on the economic performance of postcommunist countries. The first graph represents the entire population of postcommunist countries, whereas the second graph excludes the East Asian cases. (Note that Mongolia, as a former satellite state of the FSU, was not removed). The graphs divide countries into mass privatizers and non-mass privatizers. In each graph, two locally weighted regression lines (lowess smoothing curves) are shown, which can be understood as representing the average of all countries in the respective privatization groups.\footnote{These graphs are for heuristic purposes, and are not meant to imply causality. To make such claims, a proper time-series analysis would have to be performed, a task well beyond the space limitations of this article.}

\footnote{25}
The graphs show that while the transition depression affected all countries, evident in the downward trajectory during the early years of transition, the mass-privatizing economies recovered substantially later than non-mass privatizers. Crucially, the subsequent rate of growth is not higher among countries which implemented a mass privatization program. (In fact, they grew...
at a slightly slower pace.) Thus, the argument made by advocates of Shock Therapy, that more radical reforms deliver higher long-term growth even if they are initially painful, is not confirmed by these graphs.

**Discussion and Conclusion**

Our analysis strongly supports the state-centered theory of transition over the neoliberal neoclassical version. We restricted our hypothesis-testing to only one element of a tripartite neoliberal reform package, namely, mass privatization programs. The neoliberal theory holds that mass privatization programs improve the economic functioning of firms, secure the liberal character of the state, and neutralize political opposition in the transition to capitalism. Instead, as our findings demonstrate, the implementation of mass privatization programs hurt the enterprise sector, and contributed to the weakening of the bureaucratic character of the state and its ability to support the institutions necessary for a functioning capitalist economy. From the neoliberal perspective, this produces what can be termed the paradox of *the liberal path to patrimonialism*. "Telescoping" the formation of private property had the exact opposite affect than was intended by the neoliberal. Rather than securing the transition to Western-style capitalism, it derailed the entire transition. A different type of capitalism, emphasizing patron-client ties and a non-bureaucratic state, has emerged. Meanwhile, the countries that went much slower in creating a private sector, like Poland and Slovenia, are much closer to the Western capitalist systems with a relative separation of politics and economics (King 2002, King and Szelenyi 2005).

Because we have limited our analysis to mass privatization programs, we have not provided evidence that the rest of the neoliberal paradigm has a negative impact, even if rapid privatization is demonstrated to be an erroneous policy. From the beginning, privatizing the large number of state enterprises in the postcommunist world was by far the most challenging issue for neoliberal researchers and policy advisors. In fact, there was disagreement even within the neoliberal community, as scholars such as Janos Kornai (1990: 11) warned against super-rapid privatization, arguing that it was far more important to get strategic owners that will be able to restructure enterprises.

While our findings indicate that mass privatization programs have a destructive effect on economy and state, we do not claim that the neoliberal endpoint is undesirable. What we demonstrate is that the neoliberal policy package accomplishes the opposite of its stated purpose. Thus, the policy implications of the present analysis are clear. Whenever designing liberalizing reforms of any sort, *far more attention must be paid to safe-guarding*
state revenues so as to protect its bureaucratic stability. On a theoretical level, our analysis supports the position that state and market are not antagonistic entities as maintained by the neoliberal perspective (Block 1994; Evans 1995; Fligstein 2001; Block and Evans 2005). It also supports the traditional sociological thesis of the importance of a bureaucratic state for successful capitalist development (e.g., Weber 1978; Evans 1995; Evans and Rauch 1999; Chibber 2002).

Finally, the findings also falsify the political economy analysis of neoliberal transition scholars: delaying large-scale privatization did not lead to a reversal of the transition process. The incorrect predictions of this mode of theorizing, which constituted the justification for the Shock Therapy policy package and radical economic reforms in general, reveal the inadequacies of the political analysis of many neoclassical economists. Given that the neoclassical model is based on the assumption of utility-maximizing individuals, it is indeed inexplicable why the actors in the state-owned sector of postcommunist countries that did not rapidly privatize did not form the expected anti-reform coalitions, or otherwise attempted to obstruct the implementation of reforms.

While we do not offer any such political analysis in the present paper, we firmly believe that sociology, not neoclassical economics, seems to provide the correct theoretical tools for developing a realistic political economy analysis of postcommunism, and developing countries more generally. Such an analysis seeks to explain transition policies, to a large extent, as the result of structural forces. However, as Weber emphasized, structures merely load the historical dice for different outcomes, which are often the result of some strategic decision or historical accident. Weber thought of such strategic choices as the switching points on the train tracks of history. We believe that mass privatization was the biggest such switching point in the postcommunist context.14

14 Stuckler et al (2008) have shown in a probit analysis that Mass Privatization programs were best predicted by the demonstration effect of big neighbors and as a result of ethnic competition. The size of the second biggest ethnicity was a significant predictor. This captures newly minted national elites using Mass Privatization to unseat ethnic Russian managers, thereby allowing the appointment of new clients. This is consistent with detailed historical work on Russia that has shown that privatization was politically, rather than economically, determined, and that, furthermore, there was a great degree of contingency. To Russian historians and social scientists, there is no question that the decision to undertake mass privatization was by no mean pre-determined. There was, in fact, substantial conflict over this issue, and its resolution could well have turned out otherwise. Ultimately, this resolution occurred with the bombing of the Russian parliament by Yeltsin, and the agreement between Luzhkov and Chubais that mass privatization would be implemented in Russia as a whole, excluding Moscow (see the ample documentation of this point in Reddaway and Gilinski [2001] and Medvedev [2000]). It is worth noting that Moscow, which avoided mass privatization, has vastly outperformed Saint Petersburg and the rest of Russia on both economic growth and government effectiveness.
It should by now be clear that almost all other ways of dealing with the problem – that is, privatizing the state-owned sector – would have been preferable to the neoliberal-inspired mass privatization programs. As an easy alternative, maintaining state ownership until some restructuring was done and/or a viable strategic owner appeared, seems like a much better policy. This is essentially the difference in Poland and Russia’s privatization experience, producing strikingly different results.

Acknowledgements

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Appendix B: Types of privatization

There were eight different ways in which this privatization was actually accomplished. All countries employed a mix of these methods.

1. Vouchers or coupons. These were programs that distributed “vouchers” or “coupons” to the adult citizenry which can then be used to purchase enterprises during privatization auctions. Their face value was much greater than their cost to the public. This was the major method in Russia and the subject of this empirical analysis.

2. Competitive auctions. This typically occurred after a period of active restructuring. Some form of foreign ownership was often a natural outcome of this method (since they would be expected to win a large percentage of fair auctions because of their capital and experience). This was the modal form employed in Hungary and Poland (see King and Snajder 2006).

3. Non-competitive auctions. In many instances politically connected businessmen are able to privatize enterprises via rigged auctions. In such cases, the price paid for the enterprise is incredibly low. This was the modal form of Russia’s raw materials sector in the now infamous “Loans for Shares” program in which the crown-jewels of the Russian economy, its oil and metals firms, were privatized by oligarchs in exchange for media and political support for Boris Yeltsin’s 1996 re-election bid (see King and Treskow 2006 for details).

4. MEBOs. Perhaps the most common form of privatization overall was management and employee buyouts. There were a variety
of ways of accomplishing this transfer, but it almost always involved substantial discounts to enterprise insiders. In most cases, management or some outside owners would centralize the shares of the workers by slowly buying them up. Sometimes there would use lease-to-own arrangements, where managers and employees would lease the enterprise from the state until they paid an amount that made them its owners.

(5) ESOPs. These are employee shared ownership schemes in which the employees gain ownership of the firm. Unlike ordinary management and employee buyouts however, there is a legal devise that centralizes the ownership and voting of the workers. This is crucial, since it guarantees actual worker control. These were very rare throughout the postcommunist world, and were mostly prohibited in practice in Russia.

(6) FDI. Foreign direct investment is typically the outcome of fair auctions, but can also be accomplished in other ways. There can be a formal or informal preference for FDI (such as in Estonia, where FDI was sought as a hedge against Russian domination). There can be FDI via closed tender, where the process isn’t transparent but negotiated between the government and foreign buyer behind closed doors. FDI is the dominant method in Hungary, Estonia, and CEE more generally. FDI can also take the form of joint ventures with state owned enterprises (this is very common now in China).

(7) Cross-ownership. Here, firms are allowed to purchase the shares of other firms, which in turn purchase the shares of their new owners. The result is a system of cross-institutional ownership where a group of firms own themselves. This in practice means the upper management of these firms controls them from outside owners. This was observed in the Czech Republic (King 2001).

(8) Restitution. In some cases the legal title of some enterprises that had been nationalized by the Communist regime was returned to their original family of ownership. Another variant was to give vouchers to compensate for nationalized property that could be used to purchase other stocks. This was a very minor method overall.

(9) Greenfield privatization. This is the strategy of not privatizing SOEs for quite a while, but creating conditions conducive to greenfield investment and the exit of inefficient firms. In essence, this allows a private sector to grow up around a state owned sector, until the country “outgrows the plan.” This is the dominant method in China.
## Appendix C: Best Estimate of Extent of Mass Privatization Program

<table>
<thead>
<tr>
<th>Country</th>
<th>Mass privatization scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>Never implemented</td>
</tr>
<tr>
<td>Armenia</td>
<td>75% medium and large enterprises</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Less than 10% of firms by assets</td>
</tr>
<tr>
<td>Belarus</td>
<td>Never implemented</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Never implemented</td>
</tr>
<tr>
<td>Cambodia</td>
<td>Never implemented</td>
</tr>
<tr>
<td>China</td>
<td>Never implemented</td>
</tr>
<tr>
<td>Croatia</td>
<td>Very small program (225,000 people) in residual state holdings in 15% of enterprises</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>33% of assets of all firms</td>
</tr>
<tr>
<td>Estonia</td>
<td>Never implemented</td>
</tr>
<tr>
<td>Georgia</td>
<td>50% of medium and large enterprises</td>
</tr>
<tr>
<td>Hungary</td>
<td>Never implemented</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>60% of medium and large enterprises</td>
</tr>
<tr>
<td>Kyrgyz Rep.</td>
<td>50% of medium and large enterprises</td>
</tr>
<tr>
<td>Laos</td>
<td>Never Implemented</td>
</tr>
<tr>
<td>Latvia</td>
<td>About 40% of large or medium enterprises</td>
</tr>
<tr>
<td>Lithuania</td>
<td>About 45% of all enterprise assets</td>
</tr>
<tr>
<td>Macedonia</td>
<td>Never implemented</td>
</tr>
<tr>
<td>Moldova</td>
<td>About 40-50% of assets</td>
</tr>
<tr>
<td>Mongolia</td>
<td>About 75% medium and large enterprises</td>
</tr>
<tr>
<td>Poland</td>
<td>About 10% of assets</td>
</tr>
<tr>
<td>Romania</td>
<td>About 38% of medium and large enterprises</td>
</tr>
<tr>
<td>Russia</td>
<td>More than 80% of the industrial workforce</td>
</tr>
<tr>
<td>Slovakia</td>
<td>About 10-15% (all while part of Czechoslovakia)</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Never implemented</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>Never implemented</td>
</tr>
<tr>
<td>Ukraine</td>
<td>About 44% of medium and large enterprises</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>Never implemented</td>
</tr>
</tbody>
</table>

Mass Privatization = Privatization by vouchers alone on in combination with Management and Employee Buyouts (see Appendix B for description).

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