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Social stratification in transitional economies: property rights and the structure of markets

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Abstract In transitions from state socialism, property rights are re-allocated to organizations and groups, creating new markets and new forms of economic enterprise that reshape the stratification order. A generation of research has estimated individual-level outcomes with income equations and mobility models, relying on broad assumptions about economic change. We redirect attention to the process of economic change that structures emerging markets. The process varies across market sectors, depending on the entity that is granted rights formerly exercised by state organs, and on the combination of rights they are granted. The transformation of three sectors in China—agriculture, steel manufacturing, and real estate—shows how different allocations of property rights alter the stratification order in strikingly different ways. Historical analysis of the evolution of markets and enterprises integrates insights from economic sociology into research on social stratification, providing a structural perspective on transitions from state socialism.

Keywords Market reform · Privatization · Post-communist transition · China reforms

State socialist economies enshrined state ownership of all productive assets and allocated resources according to bureaucratic plans rather than direct market exchange. They provided employment and welfare guarantees, low cost public housing, and kept income differences relatively small by the standards of market economies.

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Although the accumulation of private wealth was severely limited, party and state officials enjoyed material privileges according to their bureaucratic rank. When it became clear at the end of the 1980s that almost all of the socialist states would move toward a market economy, it seemed that fundamental social transformations would soon follow (Nee and Stark 1989; Walder 1995a, c). But what would these transformations be? On the one hand, the shift to competitive market exchange suggested that ability and entrepreneurship would be rewarded at the expense of political connections and bureaucratic rank. As market competition and private ownership became more firmly entrenched, it seemed that the privileges of the former socialist elite would decline relative to a new breed of market-oriented entrepreneurs (Nee 1989, 1991). On the other hand, it also seemed that incumbent officials were being given a historically unprecedented opportunity to turn their control over public assets into private wealth, either seizing ownership of state assets directly, or using their lingering political authority to extract high incomes (Bian and Logan 1996; Hanley et al. 1995; Róna-Tas 1994; Parish and Michelson 1996; Walder 2003).

Which of these two possibilities prevailed obviously would depend on the specific way that a state socialist economy was restructured. How quickly and how fully would bureaucratic control over emerging markets be relinquished? How much opportunity would incumbent elites have to seize ownership and control of productive assets? How extensive would be the cuts in employment and welfare guarantees, and what would be the impact of privatization on incomes and the supply of housing? As transitions from state socialism got underway, these questions were unanswerable for a very simple reason: no one had ever observed a transition out of state socialism, because such a transition had never occurred. So scholars were left to take positions based on a mixture of intuition, speculation, and necessarily abstract claims about structural changes that were still underway and whose endpoint was largely unknowable.

There followed a thriving literature that focused single-mindedly on the measurement of outcomes at the individual or household level, exploiting the sudden availability of data from large surveys. One did not need to understand the reorganization of the economy in any detail to measure aggregate changes in income flows or career opportunities. Some kind of transformation of economic institutions was obviously underway, so measuring changes at the individual level through time would shed light on the primary questions of interest. Income equations gauged changing returns to individual characteristics that represent human capital, political affiliation, and participation in the private economy (Bian and Logan 1996; Bian and Zhang 2002; Gerber and Hout 1995; Hauser and Xie 2005; Nee 1989, 1996; Walder 2002; Walder and Nguyen 2008; Wu 2002; Wu and Xie 2003; Xie and Hannum 1996; Zhou 2000). Status attainment and mobility models gauged the changing impact of educational levels, prior position, and political affiliation in individual careers (Eyal et al. 1998; Hanley et al. 1995; Li and Walder 2001; Szelényi et al. 1995; Walder 1995c; Walder et al. 2000; Wu 2006; Zhou et al. 1996, 1997), and the intergenerational transmission of status (Gerber 2004; Walder and Hu 2009; Wu and Treiman 2007).

As estimates of changes at the individual level accumulated, it became increasingly clear that their interpretation required a better understanding of changes at the organizational or macro-societal level. Successive surveys found evidence that individuals with ties to the old regime often enjoyed income advantages and better career opportunities than others. Yet they also found that education, experience, and participation in the private economy are more strongly associated with higher incomes and career advancement than in the past. Those who suspected that the opening up of markets created large advantages for incumbent elites to convert bureaucratic privilege into larger incomes and personal wealth interpreted these results as confirming this suspicion (Hanley et al. 1995; Róna-Tas 1994; Parish and Michelson 1996; Walder 1996, 2003). Others acknowledged the lingering historical advantages of former elites, but argued that they are progressively reduced through time as a market economy is more fully established (Nee 1991, 1996; Nee and Cao 1999). Resolving these interpretive ambiguities requires a clearer conception of the underlying process of economic change, a task largely postponed in research focused on individual-level outcomes. Are outcomes at the individual level due to the fact that the fully competitive markets of economic theory have yet to be approximated? Or are they the product of markets with structural features that we have left unexplored and poorly conceptualized?

We address this problem by developing a structural conception of change in economic institutions that has direct links to changes in social stratification. In transitional economies, markets are created when elements of property rights formerly monopolized by government authorities are transferred to new organizations and groups. The structure of the resulting market is defined by the actors who are granted new rights and by the specific rights that they are granted. Market structures vary across nations due to differences in political institutions and government policy, and also across economic sectors within nations, where the interests of different organizations and groups influence outcomes.

The structure of a market has direct implications for social stratification. The act of creating it grants property rights directly to organizations and groups, directly altering social structure. This configuration of rights, in turn, defines the terms of market competition that shapes opportunities for individuals. This conception directly links economic sociology with the analysis of social stratification. It is also creates links to political sociology, because the social conflicts that are a response to changes in the stratification order, as we shall see, are additional evidence that fundamental transformations are underway. Historical sociologists have long viewed popular contention as a "tracer of social change" (Tilly et al. 1975), and the rapid creation of a market economy out of state socialism accelerates capitalist transformations that took many generations to complete in early modern Europe.

Sociological conceptions of market transition

What do we mean when we say that a market economy has been created? There are two broad conceptualizations of this transition. The first focuses on coordinating mechanisms in the economy and is derived from Polanyi's (1957) typology of economic systems, which designates state socialism as the most fully developed modern example of a "redistributive" economy (Walder 2011). Szelényi (1978) applied the idea to social stratification, arguing that material privileges accrued to those who occupied positions of power in redistributive bureaucracies. Nee (1989) built on this notion to argue that the shift to market allocation undermined the redistributive power of bureaucrats and would thereby reduce their advantages relative to other groups who availed themselves of opportunities in an emerging market economy. This created an implicit continuum of social change, ranging from bureaucratic state socialism to market driven capitalism, with free exchange on markets and fully privatized productive assets as a hypothetical endpoint of transition. Between these extremes is an intermediate zone that provides lingering opportunities for old regime elites to enhance their income opportunities (Nee 1991)—opportunities that should decline as the economy approaches the idealized endpoint (Nee 1996; Nee and Cao 1999). Szelényi and Kostello (1996) offered an alternative view, also based on the extent of market development, but they defined qualitatively different forms of market expansion: local markets in a socialist economy; socialist mixed economies; and capitalist-oriented economies. This conception preserves the emphasis on the shift from bureaucratic to market allocation, but it rejects the notion that changes observed in the initial phases will become progressively more pronounced as an economy evolves.

A second approach focuses on changing configurations of property rights rather than the shift from plan to market allocation. Stark (1990, 1992) observed that in practice socialist economies would evolve in ways that reflected legacies of the old system and variations in the privatization policies adopted by different countries. His analysis of the reorganization of industrial enterprises in the first stages of Hungarian reform (Stark 1996) proposed that "privatization" as conventionally understood did not capture the actual course of organizational change, which involved the blurring of boundaries between organizations and strategies by incumbent managers to ensure enterprise survival by a creative adaptation of previous organizational practices. For Stark, this represented "recombinant property," essentially an emerging new form of capitalist enterprise that bore the genetic legacy of the old socialist system. As an economic sociologist, Stark was not concerned with the implications of these hybrid organizational forms for social stratification, but he firmly established the idea that unanticipated forms of enterprise, representing novel configurations of property rights, were likely to lead transitional economies off of evolutionary paths defined by a continuum between two ideal types.[1]

Walder (1995b) offered a compatible view of novel organizational forms in his analysis of government-owned enterprises in rural China that defied predictions derived from Kornai's (1986) critique of state ownership. Drawing explicitly on institutional economics, particularly agency theory, he offered a solution to the apparent puzzle of small government owned and operated firms that competed fiercely on product markets, leading to a surprisingly rapid burst of rural industrialization. Later work offered a conception of the evolution of property forms in transitional economies based on the "bundle of rights" conception of property common in the fields of law and economics. According to Walder and Oi (1999), China's reforms proceeded via the partial re-assignment of different property rights—control, income, and transfer—that defined varied forms of corporate governance that were neither traditionally socialist nor unambiguously private, yet that frequently promoted enhanced economic performance.

[1] Nee (1992) also investigated "hybrid" organizational forms in his analysis of rural enterprises in China, although he viewed them as a mixed type appropriate to an intermediate stage of market transition.

The idea that property rights are recombined or re-assigned in novel ways in transitional economies is a familiar one, but its implications for understanding social stratification have not been fully exploited. The first implication is that market transition itself should not be viewed as a path of evolution toward a fully privatized economy—there are different paths toward differently organized markets. The variability of markets and firms through time and across national economies is a central preoccupation of economic sociology (Polanyi 1944; Fligstein 2001; Fligstein and Freeland 1995; Roy 1997). The second implication is that market transition has two distinct components: the shift toward the allocation of resources by competitive markets, and the variable re-assignment of property rights to the organizations and individuals who participate in markets. It is the latter process out of which a market is created, and that in turn has direct implications for the stratification order.

These implications have been hinted at in past work, but never explicitly developed. Empirical work focused on individual or household-level outcomes has usually settled for the passage of time as an indicator of the extent of market reform or has included proxy measures for privatization or economic development in analyzing differences across regions (Nee 1996; Nee and Cao 1999; Walder 2002; Xie and Hannum 1996). Walder (1996) has long insisted that the impact of markets depends on the prior allocation of property rights that defines a market sector. He attributes the rapid early disappearance of elite income advantages in rural China not to the generic impact of markets, but to the equal division of land to farm households in an exclusively agrarian economy. In subsequent work he and his collaborators have shown that the relative income returns to entrepreneurship versus rural office holding vary according to the local prevalence of small family enterprise (and petty commodity production) versus larger industrial firms (and wage labor) (Walder 2002; Walder and Zhao 2006; Walder and Nguyen 2008). These conclusions hinted at a broader perspective on social stratification in transitional economies that integrates ideas from economic sociology.

It was inevitable that the first generation of stratification research proceeded without a well-developed conception of the underlying transformation of the economy—one that had never previously occurred and was still in its early stages. The passage of time, however, makes this gap in our understanding less excusable. China's market transition has been underway for more than 30 years, and that of Russia and dozens of other post-communist states for more than 20. There are now scores of published studies of the transformation of agriculture and industry, of privatization programs and industrial restructuring, of layoffs, wage arrears and housing reform, and of political protests that react directly to these trends. It is now possible to examine, from a structural and organizational perspective, the creation of market sectors and their direct impact on the stratification order.

Property rights and the structure of markets

Property rights structure markets. They define which actors control assets and have rights to income flows and what they can exchange on markets. These change fundamentally when property rights are distributed from state agencies to new actors. State socialist economies enshrined a distinctive configuration of property rights in industry, agriculture, and the provision of housing and delivery of social services. To create a market in a given sector, property rights are reallocated, stripping some organizations and groups of certain rights and granting them to others. This can concentrate wealth into the hands of elites, but it can also transfer public property to ordinary households. The process re-directs flows of income and structures emerging markets. The changes create conflict and can stimulate popular resistance that responds directly to their social impact. Because these changes vary across market sectors, generalizations about the impact of markets require careful attention to the empirical process of market creation.

In the fields of law and economics, property is commonly conceived as a bundle of separate rights: to use or control an asset; to receive income flows from the asset; and to exchange rights over assets with others (Alchian and Demsetz 1973; Demsetz 1983; Furubotn and Pejovich 1974). These rights are separable, often shared, and are defined and enforced by social institutions: state regulation, formal organizations, law, or custom. This definition of property as socially defined rights enforced by institutions has had limited impact on economic sociology, despite its obvious affinity with sociological analysis (Carruthers and Ariovich 2004).

The starting point is a state socialist economy, which prohibits market coordination by assigning all three aspects of property rights to state agencies. State agencies control the activities of enterprises by mandating production plans, levels of employment, and wages and benefits; they claim net enterprise incomes as state revenue and subsidize unprofitable operations; and they alone decide whether to shift control and income rights among government agencies and jurisdictions. In a fully privatized economy, enterprises and their owners have all of these rights, subject to varied forms of state regulation. The enterprise decides what to produce, how much, the size of the labor force and levels of compensation; they have rights to net flows of income, but also must bear losses; and they are able to transfer the rights over an enterprise or an asset in voluntary sales.

Understanding property as a bundle of separate rights yields a crucial distinction between property rights reallocations and privatization. Privatization refers to the allocation of *all* rights—control, income, and transfer—to private (non-state) organizations or individuals. Some economic theorists initially conceived of privatization as the way in which economic change would (or should) proceed. Mass privatization was conceived as a way to create a new class of property owners in one stroke, and to remove the state's ability to interfere in economic activities in counterproductive ways. In the face of objections that the institutional foundations of a private economy were utterly lacking, they responded that the new class of private property owners would demand strict enforcement of property rights by the state. "Privatization … creates the very private owners who then begin lobbying the government … to create market-supporting institutions … institutions would follow private property rather than the other way around (Shleifer and Vishny 1998, pp. 10-11).

A wide range of observers saw this vision as unrealistic, even utopian (Murrell 1991; Olson 2000; Stark 1990). It was a highly stylized conception of a political process that turned out in practice to be variable and frequently flawed from the perspective of microeconomic theory. Two elements turned out to be highly variable, not only across countries due to their different political trajectories (Walder 2003), but also across market sectors within a single nation. The variables are (1) what entity receives the rights formerly monopolized by government—what is the definition of the "firm"; and (2) what specific rights are allocated to that entity: control, income, and transfer.

Early discussions of privatization neglected a vital question: what organized entity is to be given rights of control, income, and transfer? Stark (1996) suggested that it might be a networked group of firms that blurred conventional organizational boundaries, but Hanley et al. (2002) observed that Hungarian firms quickly evolved into conventional private ownership. Walder (1995b) suggested that in rural China it could be a small government jurisdiction that operated as a multi-division corporation in competitive product markets, but these too were subsequently privatized, largely via management buy-outs (Li and Rozelle 2004; Oi 1998).

These trends bring into sharp focus one central question: as the old bureaucratic economy is broken down, what form will economic enterprises take? Will national ministries or regional bureaus be reorganized into large corporations analogous to those in mature market economies, or will individual plants under them be released to form independent companies? To what extent will such reorganization involve major changes in employment and benefits for the existing workforce? Will collective farms be reorganized into market-oriented agro-businesses based on wage labor, or will they simply be split up into independent family farms? Who will own farmland and built urban space? Will the government retain ownership of land and assign long-term leaseholds to users? Or will land be privatized, permitting the permanent sale of farmland or built space among private parties? Throughout our discussion of property rights and the definition of the state socialist firm we have made clear that the firm and its owners will gain greater control, income, and transfer rights over assets. The definition of the firm that emerges in the transition to a market-oriented economy, however, and the rights that they obtain, can vary considerably in ways that have not been sufficiently appreciated.

We illustrate this analysis with a three-sector comparison of the Chinese economy. Our analysis of each sector is guided by three questions. First, as property rights are shifted away from government organs, to what organizations and groups were they allocated? Second, what specific rights were allocated to them, and in what combinations? Third, what was the impact of these reorganizations on social stratification among the groups affected? The comparative analysis is made possible by a wide range of published studies of each sector across a range of disciplines, supplemented by statistical data from published government sources and databases compiled by private parties. These studies rarely focused on either the allocation of property rights or on social stratification, so our synthesis of the research literature must draw out implications that were largely implicit and frequently ignored.

The first sector we examine is agriculture, conducted exclusively by collective farms in the 1970s, but that converted to market-oriented family farms by the mid-1980s. The second sector is iron and steel, which was dominated by large state complexes in the 1970s. The steel sector typifies the traditional welfare-oriented socialist firm and its fate in an era of rapid growth and restructuring. The third sector is real estate development, a new business that grew rapidly after the creation of markets in land use rights and built space. Property rights in each of these sectors have been reallocated in fundamental ways, and enterprises in all three sectors have been deeply exposed to market competition. Table 1 provides a preliminary overview of the differences across market sectors that we examine below.

Table 1 Property rights allocations in China under state socialism and after, by sector

	Property rights		
	Control	Income	Transfer
Agriculture			
Socialism	Commune and brigade authorities	Brigade authorities	Commune authorities
Market	Households	Household income retention above quota sales for farm products	Village authorities
State steel complexes			
Socialism	State agencies	State collects profit and covers loss; labor force guaranteed rights to employment and benefits	State agencies
Market	Enterprise managers	Enterprise retains profit after taxes; dividends paid to equity stakeholders; labor loses guaranteed income flows	State agencies
Real estate			
Socialism	State agencies joint with local government; enterprises and households with use rights	Not applicable; land and built space were not income-generating assets	State agencies joint with local government
Market	Local government contracts long term use rights to enterprises; incumbents purchase public housing	Local governments and real estate companies; households buy, sell and rent apartments	Local governments and households

From collective agriculture to family farms

At the end of the 1970s, Chinese agriculture was conducted by collective farms. Private households owned only their homes and household effects. Land, agricultural machinery, tools, and non-agricultural enterprises were the collective property of the commune and were controlled and managed by production brigades, which were roughly coterminous with natural villages. Commune authorities controlled productive assets and collected all income from economic activities. Leaders assigned work to individuals; compensation was calculated in work points, which were redeemable in cash and grain rations at the end of the harvest (Parish and Whyte 1978). Seed and fertilizer were purchased and owned by the collective; the harvest was gathered and sold to the state at fixed prices by the collective farm, which banked the proceeds and distributed net gains to households at year end. Leaders assigned off-farm employment through their control of nonagricultural enterprise and travelling construction teams. Unauthorized off-farm employment was severely restricted by grain rationing and household registration systems. Grain rations were only available at the registered place of residence (the collective farm, for rural residents), an arrangement that prevented migration to cities for temporary wage labor (Oi 1989). The residents of collective farms were essentially a servile labor force, tied to the land and forbidden to undertake economic activities not sanctioned by government-designated authorities.

If collective farms were to be restructured, releasing a servile labor force to participate in market activities, there were two obvious dimensions to the reallocation of property rights. The first was that the household would once again become an economic unit, acting as a "firm," regaining control over its own labor, deciding what activities to pursue, with rights to retain the proceeds of its economic activities. The second dimension was allocation of rights over productive assets, most importantly land. Historically analogous liberations of servile populations had confronted the same choice. Would land remain concentrated in large plantations based on wage labor or would the large farms be broken up and ownership over individual farms to allocated to the resident labor force? This was a hotly contested issue during Reconstruction in the former slave states after the American Civil War (Foner 1988, pp. 102–110), and in Haiti after a revolution ended plantation slavery, leaving the land issue unresolved (DuBois 2004). The end of collective farming essentially presented the same choice.

In the early 1980s the regime opted for neither historical alternative. Converting collective farms into state farms based on wage labor would have solved none of the severe productivity problems of collective agriculture. Turning collective farms over to private owners to run as a market-oriented private business was unacceptable on ideological grounds as a severely exploitative form of rural capitalism. But the privatization of land and the division of farms among resident households was also rejected, for the same reasons. This would have re-created a form of rural capitalism that existed after the land reform of the early 1950s. Full privatization would have deprived the state of the capacity to mandate staple grain production to supply cities at low cost—a key motive for Soviet-style collectivization of the late 1950s. Full privatization would permit households to buy and sell farmland, inevitably creating increased inequalities of landholding and the formation of rural social classes, with landless agricultural wage laborers hiring themselves out to more prosperous households with larger landholdings. The prospect of revived class stratification was an anathema to the Party leadership in the early post-Mao period.

The institutional solution, instead, was to grant extensive property rights in land to households, but with two important limitations. The most important was the division of land into family farms of roughly equal size and quality, but ultimate ownership—rights of transfer—remained with village governments. Families were granted control rights over their plots of farmland in contracts that were gradually extended for long periods, but the village retained ultimate ownership, and retained the right, rarely exercised, to reallocate land to other users. The second limitation was on households' control over cropping decisions. To ensure the supply of low-priced grain to cities, farm households initially signed "responsibility contracts" that pledged to grow and sell certain staple crops for sale at low state prices. Once this contract was fulfilled, the household was free to sell the same crop at higher market prices or to diversify into other crops, animal husbandry, nonagricultural enterprise, or off-farm wage employment (Oi 1989). The resulting upsurge of agricultural activity and the revival of rural markets greatly increased grain supply, leading to the gradual abolition of the obligatory grain sales. Rural governments, however, have retained transfer rights over land to the present day. Rural land markets never developed, and by the turn of the century, only 10 % of farm households rented land from others (Zhang et al. 2010, p. 98).

The grant of extensive control and income rights to ordinary rural households was of great economic benefit, leading to greater autonomy and higher living standards for ordinary farmers. During the first decade of this rural reform, the large gap between urban and rural incomes declined markedly. Because the land reform was universally applied with farms sized on a per capita basis, it was not surprising that early surveys of post-reform villages found that there was no net income advantage for households of rural officeholders (Nee 1989). So long as the local economy was based primarily on agriculture, rural office holding yielded no net income advantages (Walder and Zhao 2006). This changed, however, when rural regions began to diversify into more capitalized off-farm activities (Nee 1996; Walder 2002). Later surveys in rural China showed repeatedly that the household incomes of rural officials kept pace with those of ordinary citizens who operate a household business, even if they do not engage in business themselves (Nee 1996; Walder 2002). Cross-regional comparisons within China suggest that the prosperity of officials' households is tied to the size of the local manufacturing base, whether or not it is privately or publicly owned (Parish and Michelson 1996; Walder and Zhao 2006). Comparisons with rural Vietnam, where the non-farm sector is heavily dominated by small family businesses rather than larger manufacturing enterprises, suggest the same conclusion (Walder and Nguyen 2008). Despite the enduring economic advantages of those who hold rural political office in local economies that have diversified out of agriculture, rural office holders are a tiny percentage of households, and their wealth is rivaled by a much larger group of household entrepreneurs—some 20 % of the total nationwide—who earn large incomes from nonfarm enterprises without holding political office (Walder and Zhao 2006). Despite these persistent inequalities, it is clear that the stable smallholding structure of agriculture has distributed the benefits of the rural market economy very broadly.

Depriving rural households of transfer rights, however, had a stabilizing effect on rural social structure and a major impact on social stratification. To the present day, rural China maintains the same nationwide pattern of modified smallholding agriculture. Although upwards of 100 million rural residents work regularly off-farm in construction and export processing, these individuals still retain rights to family farm plots at home, and return to them periodically, especially during economic downturns. Migrants lack the protections and services accorded to registered urban residents, making them second-class citizens in the urban context. But this pattern of property rights in land serves a continuing welfare function, preventing the formation of a large landless population that migrates permanently into urban slums. National surveys indicate that migrant households have lower average incomes than registered urban residents, but they have much higher average incomes than non-migrant rural residents (Khan and Riskin 2005).

Two forms of rural political conflict marked the advent of this new system of social stratification, and shed further light on its outcomes. The dismembering of collective farms was highly popular, and proceeded without conflict. However, the new stratification order generated two forms of conflict that were directly related to the way in which property rights were now allocated (Walder 1994). The first source of conflict was with regard to the household's rights to income from their independent economic activities. In collective farms, funds for official salaries, public services, and other functions of rural government were paid out of collective budgets. The shift to household farming changed this radically: now households had to be taxed directly. Extractions were no longer hidden by a collective budget and pooled labor, but now took the form of exactions placed on households based on income that they earn through their own work. This made extraction visible and more keenly felt, especially because China had no system of administration or law to establish fair levels of taxes and fees or to adjudicate disputes about levels of extraction. As rural officials embarked on development and industrialization schemes during the 1980s and early 1990s, they raised effective levels of taxation on rural households who enjoyed increased incomes. This led to widespread disputes over the assessment of taxes and fees and to collective resistance. Officials in many rural regions resorted to forms of coercion that included the use of force, and this led to a rash of large and violent local farmer revolts for well over a decade (Bernstein and Lü 2003).

A second source of conflict was initially dormant, but expressed the negative side of continued village ownership of land. Because transfer rights are ultimately vested in rural governments, they retain the right to allocate land to other users (Ho 2001; Zhu 2004). When rural officials initiate local development projects that require the clearance of land for factories or luxury housing developments, farm households can be stripped involuntarily of land tenure in exchange for compensation that is often deemed inadequate or does not materialize. This has led to official pressure to accept compensation offers and vacate holdings, gradually escalating resistance and official coercion, leading to protracted and violent struggles over land (Cai 2003; Guo 2001).

These conflicts are a direct indicator of the transformed stratification order: conflicts over taxation and land under collective agriculture were unknown. Households did not have rights to their own labor and the household was not an economic unit. Income flowed to the collective and down to households after deductions for government costs at year's end. After households became economic units with rights to their own farm plots and their own labor, transfers of income went up from households to village governments in visible and keenly felt ways. The politics of land tenure were also transformed. Farm households could not be expelled from the collective farms to which they were permanently attached. Under household farming, however, because transfer rights remained with village governments, farm households were vulnerable to expropriation when governments decided to reallocate land to new uses that promised to contribute greater revenues to village budgets and the incomes of officials. Reallocations of property rights reshaped politics in direct ways.

State steel complexes: downsizing the welfare state

The steel sector is worlds apart from agrarian China, and presented a much more complex set of problems for market reformers. Steel was the heart of the socialist planned economy, emblematic of modern industrial might, receiving massive infusions of capital for a program of forced-pace industrialization. The Soviet model emphasized large industrial complexes and China created or expanded a series of massive enterprises in the 1950s with Soviet assistance. They employed and housed many tens of thousands of workers, providing extensive cradle to grave welfare: child care, schools, apartments, clinics and hospitals, medical insurance and pensions, all funded directly as costs of production (Walder 1986, 1992).

These enterprises were based on a distinctive configuration of property rights. Control rights were lodged at levels of a bureaucratic hierarchy well above that of the enterprise. What to produce, in what quantities, for what customers, and at what price, were all set by planning agencies and transmitted to salaried managers who were responsible only for fulfilling the plan. Decisions about expanding production, changing product lines, and size of the labor force were also made at a level of the hierarchy well above that of the enterprise, and the capital investment necessary for these efforts was provided to firms in the form of a grant (Kornai 1992).

The transition to a market economy pushes control rights down to the enterprise. When production plans are no longer transmitted from above, firms themselves decide what to produce, and how much, based on their estimate of demand. Firms also acquire greater control over the size of their labor force. Even if a firm remains under some form of state ownership, managers at the firm level gain greater authority over a much larger range of decisions than was the case under central planning.

The rights to income flows also change. Economic theories of the firm focus attention almost exclusively on claims to residual income—rights to profit (or responsibility for losses). This emphasis on residual claims is due to the conviction that it provides incentives for owners. Under state socialism income was simply transferred up the bureaucratic hierarchy, dulling incentives for efficiency, but in a market economy the firm and its owners become residual claimants, thereby creating new incentives.

While residual claims are important for theories about incentives for firms, for understanding the transformation of the stratification order it is even more important to understand how the "residual" is defined. There were two distinctive features of income rights in the state socialist firm. The first was that compensation for managers and professional staff is a small fraction of what these positions earn in market-oriented companies. Managers and elite professionals earned higher incomes and received better housing allocations than blue-collar workers under state socialism, but without a market for highly skilled personnel, executive compensation was a tiny fraction of prevailing levels in market economies. Executives did not receive shares of profit in the form of bonuses, nor were they allocated equity stakes. They were unable to accumulate personal wealth and pass it on to the next generation. Privileged lifestyles by socialist standards were due to rank in the organization and were enjoyed only so long as the position in the hierarchy was secure.

The second distinctive feature was labor's claim to income flows. These have been described as "job rights" (Granick 1987) or a "social contract" (Cook 1993; Tang and Parish 2000). The first claimant on income was labor—the wage bill must be met and jobs cannot be cut to reduce costs. The second claimant was the firm's current welfare and pension obligations. A third claimant was collective consumption—housing, clinics, daycare centers, and schools.

These accounting principles were defined and enforced by law and were considered costs of production. The socialist firm was the core of the welfare state, essentially a branch of government—its costs of production funded national expenditures on social welfare (Walder 1992). The "residual" was defined only after subtracting the legally mandated flow of income to the labor force in the form of wages and benefits. There was no incentive for the state as owner to increase the residual at the expense of employment and welfare—indeed this would defeat one of the main objectives of socialism. Transitions from state socialism, to be sure, divert residual income rights to new entities. But they also create a market for skilled personnel and reduce employment and income guarantees to the labor force. Job rights, welfare and pension schemes, and collective consumption all are subject to cuts, in some cases drastically so.

In small post-communist electoral democracies on the borders of Central Europe state enterprises were systematically restructured and privatized in conformity with prevailing international standards. This was part of an explicit aim of post-communist leaders to follow a model that provided prosperity and security in the European Union (Appel 2004; Hanley et al. 2002; King and Sznajder 2006; Sachs 1993). In former Soviet republics, especially Russia and Ukraine, the collapse of the Soviet state and its ensuing administrative disarray permitted incumbent managers to consolidate insider control over state enterprises as they were privatized, impeding and delaying the anticipated restructuring (Åslund 2007; Blasi et al. 1997; Eyal et al. 1998; McFaul 1995; Shleifer and Treisman 2001). Neither course was followed in China, where the leadership of an intact party dictatorship, committed both to its own survival and the revitalization of its economy, explicitly rejected the privatization of large state firms and maintained a rhetorical commitment to socialism in the context of market transition.

Restructuring of the large state steel complexes was on the agenda from the beginning, but it was not initially clear what form it should take. In principle, it was generally agreed that control and income rights should be transferred downward to the level of the firm, which would be permitted to retain profits and have greater control over production and investment decisions. The Communist Party ruled out privatization of state enterprises on the same political grounds that had prohibited the privatization of farmland. From the 1980s through the mid-1990s, the strategy was to grant greater autonomy to the managers of existing enterprises, which would become independent companies forced by market competition to increase the efficiency of their operations and boost output (Steinfeld 1998). This was essentially the same strategy pursued in Hungary during the 1970s, which Kornai (1986) argued had already failed due to the persistence of soft budget constraints. By the mid-1990s the state steel complexes predictably faced mounting debts. Expected to increase output to meet burgeoning domestic demand for steel while maintaining employment and bearing large costs for their social service programs, firms resorted increasingly to short-term loans and accumulated unsustainable debt (Chiu and Lewis 2006; Liu et al. 2006, pp. 43–46; Steinfeld 1998, pp. 206–224).

The failure of this approach led to a second and more radical phase of restructuring. First, the state reasserted control over the autonomous steel enterprises, merging existing companies into larger corporations, enlarging the scale of firms in an effort to make them more competitive both domestically and globally. Second, the state altered the scope of these firms, carving out productive assets and listing them separately as new companies on domestic and international stock exchanges. Holding companies partitioned their productive assets as separate new firms, listing them on domestic and international stock exchanges (Price et al. 2007; Walter 2010). Non-productive assets and social obligations like schools, housing, and hospitals remained with the state holding company or were transferred to local governments, housing stock was sold at a deep discount to employees, and unneeded land and buildings were sold to new real estate companies (Walter 2010). State ownership was maintained, but firms were drastically restructured. Labor forces were drastically downsized and social welfare obligations were assigned to separate holding companies that exercised dominant stakes in the new listed firm (Chiu and Lewis 2006; Walter 2010).

In this second phase of restructuring, employment in the state sector plummeted. Despite a doubling of output in the decade after 1990, 1.1 million jobs were lost (China Steel Yearbook 1996, 1999, 2002). During this period China's steel output moved from a distant fourth in global rankings to become far and away the world's largest producer (World Steel Association 2009, pp. 3–5). Despite spectacular output growth, hundreds of thousands were laid off as the older enterprises were downsized, closed, or merged, shedding the schools, housing estates, hospitals, and other social services that were the signature of state socialism (Chiu and Lewis 2006).

The cuts were deepest at the old steel complexes. From 1993 to 1999 employment in China's 12 largest steel companies shrunk by one quarter. The largest, Capital Iron and Steel, cut almost 40 % of its labor force, and the gigantic Ma'anshan Iron and Steel combine cut its workforce almost by half (China Steel Statistics 1994, pp.370–372; 2000, pp.262–264). From 2001 to 2007, as output tripled, employment in the 80 largest steel companies fell from 1.85 to 1.65 million (China Steel Statistics 2002, p. 132; 2008, p. 158; China Steel Yearbook 2008, pp.162–167; World Steel Association 2009, p. 4). The steel sector reflected the downsizing of China's traditional state sector after the mid-1990s, during which period state employment dropped from more than 100 to 65 million in a decade (Giles et al. 2006).

As old steel complexes were downsized and restructured they were merged into larger corporations. Baoshan Steel was merged with Guangzhou Steel to become the largest firm (Baosteel Group 2010). Tangshan and Handan Steel were merged into Hebei Steel; Anshan and Benxi Steel were merged into Anben Steel; Laiwu and Ji'nan Steel were merged into Shandong Steel; and Xiangtan, Lianyuan, and Hengyang Steel were merged into Hunan Valin (Asia Times 2005; China Daily 2008a; China.org 2008; China Valin 2010). All of these firms were afterwards among the ten largest. The largest privately held firm, Rizhao Steel, was forced to merge with state-owned Shandong Steel in 2008 (Reuters 2008). By 2008, nine of China's ten largest steel corporations listed their controlling shareholder as some branch of the State Council's Assets Supervision and Administration Commission (China Mining Association 2009). State entities were controlling shareholders of 74 % of the steel industry's publicly listed firms in 2008, with highly concentrated share ownership in which the largest stake averaged 47.5 %.[2]

Because large steel companies remain under state control, opportunities for the personal enrichment of corporate executives have been limited. In the steel sector, as in other nationally strategic industries in China, there is no counterpart to the wealthy oligarchs of some post-communist regimes. Successful smaller steel companies were founded during the 1980s and afterwards, and the personal wealth in the steel sector is limited to these private firms. China's wealthy private steel magnates have a common

[2] This figure is based on the China Securities Market Database compiled by the Center for China Economic Research, Beijing, an online proprietary database with historical and current data on Chinese securities markets.

story—most have managerial experience in state-owned companies or have worked in local government agencies. The founder of the private Yonggang Steel Group worked in a local steel mill and served as a village party secretary before establishing the firm in his native village (China Agriculture Newsnet 2008). The wealthiest steel magnate, who was worth an estimated five billion US dollars in 2008 (Hurun Report 2009)[3] was a former employee of Capital Iron and Steel who struck out on his own, forming partnerships with nearby rural governments in the 1980s to back his early ventures (Rizhao City Newsnet 2007). Others bought out failing small steel mills owned by local governments and built them into large companies like Jianlong Iron and Steel (Hurun Report 2010) and Rongcheng Steel (China Daily 2008b). While these private fortunes had roots in small government-owned enterprises, none of them was accumulated within the framework of the restructured state steel corporations.

Restructuring and downsizing the state steel sector had fundamentally different implications from those of the disbanding of collective farms. Residents of collective farms gained extensive advantages from the allocation of property rights to their households and rural welfare improved dramatically, with limited inequality. The deep restructuring of state steel complexes, by contrast, stripped large percentages of the labor force of employment and welfare guarantees that were enshrined in the property rights that defined the state socialist firm. At the same time, levels of executive compensation rose to unprecedented heights.

Unlike the farm sector the process of reform itself led to popular protest that directly responded to these losses. A large protest wave by laid off workers affected China's rust belt beginning in the mid-1990s. Whether the restructuring of a state firm involved outright closure or downsizing, protests initially were organized around the failure to deliver promised levels of compensation or the failure to pay state-mandated pensions for those who were retired early (Chen 2000, 2006; Hurst and O'Brien 2002; Lee 2007). Workers in these communities mobilized to charge managers and local officials with violation of state law and accused them of corruption and self-enrichment in the course of restructuring. These protests were met with a mixture of repression aimed at protest leaders and concessions to meet popular demands partially (Cai 2002, 2008). In recent years workers in firms targeted for merger and restructuring have taken a more proactive stance, protesting plans for future changes that threaten their job security and incomes. Some of these protests have turned violent, including the taking of hostages and the murder of company officials (New York Times 2009a, b).

The wave of protests, and the layoffs themselves, marked the shift from insider to outsider control. The initial reforms under the slogan "enterprise autonomy" granted greater control and income rights to managers of individual state enterprises. This bred conflict within firms over the allocation of bonuses and wage raises made possible when firms retained profits (Walder 1987). Workers, who could not be laid off, were able to pressure factory managers to increase compensation at rates that exceeded the increased profitability of the firm (Walder 1989). This dynamic was broken only after state agencies stepped in as outsiders to seize control back from

[3] Founded in China in 1999 by a foreign national, *Hurun Report* is a research service that compiles lists of China's high net worth individuals, similar to more familiar lists compiled by *Forbes* and *Fortune* magazines. The *Hurun Report* produces twenty issues a year, along with special online supplements.

incumbent managers, merging, restructuring, and downsizing steel enterprises, forcing layoffs that individual managers were unable or unwilling to carry out. The reassertion of outsider control by state agencies is what made it possible to strip large percentages of the labor force of their previously guaranteed rights to flows of income.

China's steel sector contrasts strikingly with the early privatization of Russian state firms. The contrasting outcomes show how important it is to distinguish property rights reallocations from the idea of privatization and to distinguish insider from outsider control. Compared with Russia, the restructuring of China's steel sector was radical and deep, paradoxically conducted by a state bureaucracy ideologically opposed to privatization. Russia's reforms under Yeltsin in the 1990s were widely criticized as excessively radical, and the rapid privatization of state enterprises in the early 1990s was reviled in some quarters as "shock therapy" that sacrificed the interests of labor under the spell of misguided and untested neoliberal policies (e.g., Amsden et al. 1994; Reddaway and Glinski 2001).

Yet in fact Russia's rapid privatization actually served to *prevent* the kind of deep restructuring of state firms observed in China. As the Soviet Union collapsed, Russia's state companies fell under the de facto control of incumbent managers, but the privatization law passed by its elected parliament granted the large majority of shares to existing employees. This granted effective control to insiders—both managers and employees were opposed to ceding control to outsiders who might fire the old management and cut the labor force. Therefore the restructuring that was expected to flow naturally from privatization never occurred (Åslund 2007; Blasi et al. 1997; McFaul 1995; Shleifer and Treisman 2001). Instead of downsizing and restructuring as in China, Russian firms maintained employment by delaying wage payments and engaging in barter trade to survive. Employment declines in the 1990s, despite severe inflation and stagnant growth, were relatively modest (Brown and Earle 2002; Brown et al. 2010; Gerber 2006; Gimpelson and Kapeliushnikov 2011). Quite contrary to widespread understanding of the impact of privatization, the Chinese state stepped in and acted as the outsiders who failed to materialize in Russia, overriding the vested interests of management and labor and radically restructuring firms *without* privatizing them in any meaningful sense. This comparison highlights the fact that it is not exposure to markets or privatization per se that brings about social outcomes, but specific ways in which property rights are reallocated, or "recombined". The outcomes in each case depended on which specific rights were granted to which actors—in this case, the crucial distinction is not the distinction between state and private ownership, but the distinction between insiders and outsiders.

Real estate: creating markets in land and built space

In agriculture and steel, enterprises were transformed when property rights were reallocated, altering existing sectors. In commercial real estate, which became the fastest growing sector in the economy and a major component of national growth, there were no existing enterprises to transform. Under state socialism there was no market in productive assets—including land and built space. All transfers of such assets were inevitably between state entities, and were completed as administrative acts. Prior to market reform there was no enterprise sector devoted to property development. Land and built space, the primary asset on which such a sector is based, was owned by the state and controlled by local governments—and remains so. In the planned economy government bureaus exercised control rights, assigning buildings or parcels of land to government projects as needed (Chan 1999; Ho 2001). Land and buildings were allocated for designated purposes without money changing hands. There was no market in land, buildings, or apartments, either for firms or for individuals (Zhou and Logan 1996; Zhu 2004). New buildings were put up by state-owned construction teams under the orders of planning bureaus, or by the construction departments of large state enterprises.

A market sector required the ability to transfer use rights to urban land and buildings. This endowed assets with new value around which profitable new enterprises could be formed. State ownership of land has survived, but a 1986 law fundamentally changed property rights over urban land by separating use rights from ownership. Local governments retained ownership, but land use rights could be leased to others for long, contractually specified periods, and a market for land use rights emerged (Xie et al. 2002).

While the land law made real estate development possible, housing reform made it profitable. Housing became a commodity for individuals to purchase rather than a state welfare provision (Wang and Murie 1996). In the mid-1990s the government signaled that the system of providing public housing at nominal cost would be discontinued, and that the existing housing stock would be sold to current occupants at deeply discounted prices. This created opportunities for a new type of firm: real estate development companies that consolidated parcels of land, subcontracting demolition and construction to separate firms or to firms that they created and controlled. Real estate became a lucrative business, rapidly remaking the face of urban cityscapes. Per capita urban housing space increased from 6.7 square meters in 1978 to 27.1 by 2007 (Ministry of Civil Affairs 2009, 62), and the percentage of urban households that owned their apartments grew from 11 % in 1978 to 81 % in 2002 (Khan and Riskin 2005).

Unlike the steel sector, there were no existing firms to restructure and downsize. In 1997 the sector employed 880 thousand and sold 90 million square meters of built space (China Real Estate Statistics 2000, 4). By 2008 employment topped 1.7 million and generated 1.27 trillion in output (China Real Estate Statistics 2008, p. 183; China Statistical Yearbook (2009, pp. 42, 116).

The real estate sector has much higher percentages of private ownership than the steel sector. Many city agencies formed real estate development companies that capitalized on their control of land (Duckett 1998, p. 92). State enterprises with surplus land also devoted it to property development, which was often more profitable than their core business (Wu 1999). But city governments and state enterprises had no prior experience in property development. Nor did they have the capital required for initiating these projects. New construction and development companies were quickly formed to fill the breach, often with capital from banks controlled by local governments or from state enterprises eager to reap larger earnings than possible in their core business. These entities frequently retained an ownership stake in development projects, and foreign real estate and construction firms also participated actively in joint ventures. These new firms, which had a mixed ownership structure, either contracted directly with city governments or formed joint "property development companies" as an alliance of local government and private capital. Local governments contributed land to the project in return for an equity stake in the venture (e.g., Luwan District Annals 2008, p. 499). This alliance of state and private capital with local government created an urban growth machine. City governments use their authority to remove current occupants clearing the way for developers to demolish existing buildings and complete new projects. They also share in the income flows from the lucrative sale and rental of the modern new residential and commercial complexes (Zhu 1999, 2004).

Private capital has a much larger role in this sector than in steel. Government entities continue to hold significant ownership stakes, but they are dispersed among a number of state-controlled entities rather than concentrated in large state holding companies as in the steel sector. Unlike steel, many of the private ownership stakes are held by individuals, many of them former government officials who helped to found the firms, some of whom may be members of the top management team. Only two of the ten largest real estate development firms in 2008 were ultimately controlled by a state entity. All but one were listed in Hong Kong or on domestic stock exchanges with an ownership structure that includes large individual stakes, either by founder-entrepreneurs or top management. The individual founder of one of these companies still controlled the firm, which was not publicly listed (China Real Estate Statistics 2008, p. 372). In 1999, the percentage of listed real estate firms with state entities as controlling shareholders was 77.4 %; in 2008, it was still 52.8 %.[4]

The pattern of private wealth generated by China's real estate sector contrasts sharply with the pattern generated by steel. The sector more closely resembles the pattern associated with the oligarchs of post-Soviet Russia than that of the state-dominated Chinese steel sector. In 2009, 60 of China's 129 US$ billionaires were in real estate, some 40 % of the total. Of the 999 high-wealth individuals identified that year, 326 were in real estate, with average household wealth of US$ 703 million. Eight of the ten wealthiest individuals on the 2009 list were real estate magnates, with net wealth that ranged from 1.9 to 4 billion US dollars (Hurun Report 2009). The steel sector, by contrast, produced only eight US$ billionaires by 2009, 6 % of the total, one tenth of the real estate sector's 60 billionaires. There were only 20 steel-related fortunes out of the 999 documented on the Hurun list, barely 2 % of the total and a tiny fraction of the 326 individuals or families in the real estate sector (Hurun Report 2009). The lack of steel fortunes is striking, because many steel firms were publicly listed on stock exchanges as part of their restructuring. The state controlled steel firms participate in stock markets in order to raise capital while sharply restricting private equity holdings (although executive compensation at these firms is at record levels). Real estate generates far more private wealth, through larger private equity stakes in the listed firms, but also through large private holdings in firms that are not publicly traded.

Part of the wealth generated in this sector flows into government coffers and into the hands of individual officials. Dahua Group, the tenth largest real estate firm in 2008, is a typical example. Originally founded by a township government near

[4] China Securities Market Database cited in note 1.

Shanghai, the company's equity doubled from 1999 to 2002 during Shanghai's property boom. In an insider privatization in 2002, 34 employees purchased 95 % of a company valued at 234 million yuan for only 99 million. The CEO, a former vice-head of the township government that founded the firm, obtained 48 % of the firm's equity for 53 million yuan. This restructuring put this former township official at number 36 on the Forbes list of wealthy Chinese for 2005 (Yang 2007).

The commercial real estate sector depended on the creation of a new class of urban homeowners through the massive transfer of government housing assets to ordinary households. As part of the downsizing and restructuring of state enterprises in the 1990s, the provision of essentially cost-free government housing was discontinued. In this respect China's market transition is little different from other transitional economies, where tenants have typically been given the right to purchase their homes at a deep discount (Guriev and Rachinsky 2008; Yemtsov 2008). By the year 2000, most transitional economies had high ownership rates of 80 % or above, much higher than the 50–60 % rates typical of developed market economies (Yemtsov 2008, p. 314). Housing assets are transferred to urban residents at a small fraction of their eventual market value, and private family assets rise along with the inevitable rise in the prices of real estate in economies characterized by chronic housing shortages. Housing privatization has had a large impact on the distribution of household wealth: in the former Soviet Union and eastern Europe housing assets are the largest component of household wealth; an estimated 1.1 trillion US dollars in assets were transferred to households during the 1990s, equivalent to roughly US$ 3,300 per capita (Yemtsov 2008, p. 313). China experienced a similar transition in the 1990s. Only 14 % of households owned their homes in 1988. In 2002, after the privatization program was essentially complete, the figure was 81 %—much higher than rates in established market economies. Of the households that owned their own homes in 2002, 78 % purchased them at a deep discount through programs sponsored by local governments or state enterprises. As in other transitional economies, this represented a massive transfer of state assets. In the 7 years from 1995 to 2002, the average value of housing assets grew 4.6 fold, while total household wealth grew 3.3 fold. This reflects the increasing value of real estate, and the increased rates of home ownership due to privatization. By 2002, housing assets comprised 57 % of total household wealth, an amount equal to five times the average household income in 1995 and almost three times the average household income in 2002 (Meng 2007; Walder and He 2013). The larger and better quality apartments previously allocated to those with higher rank gave them somewhat larger housing assets after privatization, but the advantages were small, and the benefits were widely shared (Walder and He 2013). In this respect the urban real estate sector had a second-order impact that in some respects resembled the division of farmland to individual households. The privatization of public housing at subsidized prices, and the rapid subsequent appreciation of real estate values, provided urban households with an unprecedented stake in the private economy.

Conflicts generated by this process have involved residents expelled by urban redevelopment. When a district is scheduled for redevelopment, residents are typically given a short period to vacate. Developers move quickly to prevent organized resistance or the filing of legal claims. Residents are typically given a short deadline to vacate their premises and are offered lump-sum compensation and discounted purchase of a new flat in distant suburbs. There is no negotiation or legal due process, even if the residents have legal title, and compensation rarely approaches market value for the properties, which are in any case impossible for residents to estimate. Appeals to the local government and its subordinate courts are futile, primarily because the local government itself has financial interests in the project.

Urban clearance can become a protracted and violent affair. Some households refuse to move, hold out for higher compensation, organize petition drives, hire lawyers and file court cases, form homeowners associations, and approach the domestic or foreign media with their complaints. In response, developers and their government partners pressure residents by cutting off utilities and hiring private enforcers to intimidate holdouts and invade their homes. Often local police are sent to enforce eviction orders, sometimes sparking collective violence. The interests shared by homeowners have led them to organize citizen groups that target local governments and protest urban redevelopment plans, and community-based resistance has occasionally bred violent confrontations (Cai 2005, 2007; Ho 2001, 2005).

There are labor conflicts in the real estate enterprises, but they are not the product of restructuring. There was no prior labor force in the real estate sector, and therefore no layoffs or cuts in benefits. The rapidly growing labor force includes large numbers of migrant workers from rural regions who were released to participate in national labor markets by the disbanding of collective farms. They work on short-term contracts and receive almost none of the fringe benefits, insurance, or long-term commitments once typical in the state sector. Migratory workers with tenuous residence status are vulnerable to construction contractors who frequently delay or deny wage payments (Agence France Presse 2005; Associated Press 2005). This is a widespread problem for the unprotected rural migratory labor force (Lee 2007), and collective protest in this sector has focused not on the loss of jobs and benefits, but on abuses by labor contractors.

In summary, a market-oriented real estate sector was created by the allocation of transfer rights to local governments, enterprises, and households. As in rural areas, local governments retained ultimate ownership of land. Unlike rural areas, however, reformers created an active market in the transfer of use rights on long-term contracts—precisely the opposite of the intention of land reform in farming regions, which was to create a stable and egalitarian system of land use rights by farm households that prohibited such transfers. Without existing state-owned real estate development companies to restructure, an entirely new sector of firms with mixed ownership grew out of a partnership of local governments, which controlled land and could clear occupied space, and private capital, which worked in tandem with local government. This permitted the accumulation of vast private fortunes in ways that were greatly restricted in the state-dominated steel sector. Unlike rural land reform, the occupants of public housing received a windfall of assets as real estate markets were created, becoming full owners of properties at deeply discounted rates. The subsequent appreciation of property values fueled their participation in thriving real estate markets and also created the broad foundations for a propertied urban middle class. This generated conflicts among those offered insufficient compensation for involuntary removals in urban redevelopment projects, but the outcomes for urban residents were, on the whole, positive. This was in sharp contrast with the fate of members of the labor force that lost their guaranteed employment and benefits in the restructuring of the steel sector.

Conclusions

We have proposed a structural conception of economic change in transitional economies. A market is created by the reallocation of property rights from government agencies to new actors—either enterprises or households. Opportunities in the resulting market are defined by the structure of markets. The structure of markets, in turn, has two dimensions: the actors that are granted new property rights, and the specific bundle of rights that are allocated to them. When a market structure is established—almost always as a result of government action—it directly reshapes the stratification order in observable ways. These policies, and the structure of markets, vary across nations due to differences in national policy and political institutions, but they also vary across sectors within a single nation, as governments grapple with qualitatively different problems at different points in time. The differences that we have traced across three economic sectors are summarized in Table 2.

The variations across sectors that are clarified by this conception are fundamental ones, but they are largely qualitative in nature. They involve changes in opportunities for income and career advancement, and also the direct allocation of assets and property to enterprises and social groups. The great advantage of estimates of individual-level outcomes is that they express precise quantitative measures of changing determinants of income and career advancement. The drawback of individual level estimates is that their interpretation will not be any clearer than the underlying conception of change in the economy. If we rely on an abstract notion that a market economy is more fully developed through time, the analyst need not be concerned about the actual process of market creation that is underway. These can be dealt with by proxy measures for ownership type or some other proposed measure across regions or through time. Most work of this nature has been agnostic about how the underlying economic transformations are conceived—complicated changes are underway, but what matters are the changes in income determination and career advancement. This approach can evolve into a descriptive accounting exercise if it is not linked to a clear conception of change in economic organization. We have shown that the outcomes vary qualitatively across sectors, which makes it less clear what national-level estimates are actually measuring and what hypotheses about the drivers of change are actually being tested.

We have grounded the analysis of social stratification in a foundation provided by economic sociology. As markets are structured by the allocation of specific property rights to designated actors, the stratification order is transformed. Contrary to the impressions left by research designs intended to gauge changes at the individual level over time, fundamental changes are inherent in the initial act of creating a market. Farmers gain stable use rights over small landholdings, but not full ownership rights that would permit a market in farmland; permanent state workers initially keep jobs and benefits when management insiders control the firm, but they are laid off and lose benefits in restructurings by a state that reasserts outside control; occupants of public housing become homeowners with equity; wealthy oligarchs become common in real estate development, but not in steel manufacturing.

What, then, is the impact of a shift to a market economy on the stratification order: do old regime elites convert their bureaucratic control into private wealth and unprecedented incomes, or do formerly deprived groups gain new rights and new

Table 2 Market structures and stratification outcomes

	Agriculture	Steel	Real estate
Socialist enterprise	Collective farms	Large steel complexes	No socialist real estate sector
Property rights under socialist system	Servile labor; commune and brigade authorities control labor, land, crop decisions, off farm employment	Limited control and income rights for management personnel; labor a fixed cost of production; extensive job rights for employees with broad benefits	Land use rights controlled by commune administrations and allocated for approved use by bureaucratic decision; no incomes to be derived from land use; no market in land or built space
Property rights re-allocations	Full household rights over labor and off-farm employment, use and income rights over farm plots of equal size; transfer rights over land retained by government	Management gains control rights and firms gain income flows; state consolidates and merges firms, restructuring corporate form and listing minority shares on domestic and international stock exchanges	Local governments gain right to sell use and income rights over land and built space on long term contracts; real estate developers gain rights to income from enhanced value of developed properties; urban public housing sold to occupants at deep discount
Structure of markets	Private household economy; local and migrant wage labor; farm production for rural markets based on stable smallholding	Large state-controlled corporations favored by state banking system and government policy	Rapidly growing real estate sector with extensive public-private mixed ownership; large flows of income to local governments; housing becomes major investment for urban households
Implications for stratification order	Rising household income; equal landholdings level farm incomes; prohibition of land sales prevents formation of classes based on land tenure	Drastic reduction in size of labor force; widespread and deep layoffs; dominant state ownership restricts private equity stakes and accumulation of large private fortunes	Large new class of wealthy real estate magnates; creation of new class of urban homeowners with equity; large increases in employment for contract and temporary construction labor and property maintenance
Popular contention	Disputes over extraction of government revenue; tax revolts; conflicts over land seizures for development projects	Protests by laid-off workers in regions deeply affected by corporate restructuring	Disputes over compensation for evictions in urban redevelopment projects; labor disputes over abuse of migrant workers by construction contractors

opportunities? We have shown that the answer varies in fundamental ways across differently structured markets, even within a single national economy. And we have shown that the structure of markets is the product of specific decisions about which actors will be granted property rights, and which configuration of rights they come to hold. This process is inevitably political, in which governments are deeply involved. Although the shift from plan to market involves a reduction in government involvement in economic coordination, government actions structure the market economies that emerge. Market competition proceeds based on the structure of the market, and individual level outcomes are shaped by these structures. Sociological analysis of transitions from state socialism has much to gain from a structural perspective that builds insights from economic sociology into the analysis of social stratification.

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