

Persistence Despite Revolutions

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Abstract

Can efforts to eradicate inequality in wealth and education eliminate intergenerational persistence of socioeconomic status? The Chinese Communist Revolution and Cultural Revolution aimed to do exactly that. Using household survey data, as well as newly digitized archival records, we show that the revolutions were effective in homogenizing the population economically in the short run. However, the pattern of inequality that characterized the pre-revolution generation re-emerges almost half a century after the revolutions. Individuals whose grandparents belonged to the pre-revolution elite earn 14 percent more income and have completed more than 11 percent additional years of schooling than those from the rest of the population. We find evidence that human capital (such as knowledge, skills, and values) has been transmitted within the elite families, and social capital embodied in kinship networks have survived the revolutions. These channels allow the pre-revolution elite to rebound after the revolutions, and their socioeconomic status persists despite one of the most aggressive attempts to eliminate differences in the population.

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One cannot remain rich for more than three generations.

A Chinese Proverb

1 Introduction

Many factors could contribute to the lack of mobility in a society. For example, children of the elite may have a substantially higher chance of remaining in the elite if they reside in polities with lenient taxation schemes on wealth inheritance (e.g., Piketty, 2000). Children of the elite may be more likely to possess important drivers for success, if the education system and neighborhood investments favor them to acquire additional, higher-quality human capital (e.g., Borjas, 1992; Black et al., 2005; Chetty and Hendren, 2018a).

Can efforts to eradicate inequality in wealth and access to formal education eliminate intergenerational persistence of socioeconomic status and foster mobility? Or would the former socioeconomic elite be able to recreate their advantage in an environment where wealth and access to education have been thoroughly reshuffled? In this paper, we investigate these questions in the context of two major revolutions that occurred consecutively in China — the Communist Revolution in the 1950s and the Cultural Revolution from 1966 to 1976. These revolutions represent some of the most radical attempts in human history to eliminate the advantages of the elite. The Communist and Cultural Revolutions aimed to shut down two critical channels of intergenerational persistence as emphasized by canonical models (Becker and Tomes, 1979; Becker and Murphy, 1988; Becker et al., 2018):¹ transmission of physical capital (land and factory assets were expropriated from the rich and redistributed to the poor) and transmission of human capital through formal education (secondary schools and universities were closed for an extended period of time; the elite were excluded from admission when they reopened).

What happened to the families who lived through the revolutions? Take the family history of Guangyu Huang as an example. Guangyu was born in 1969. His grandfather, a wealthy landlord in Guangdong, lost his land and assets during the Communist Revolution. Guangyu's father, Changyi, grew up in the midst of the Communist and Cultural Revolutions, and as a result received neither inheritance of wealth nor formal education, and eked out a living by extracting persimmon oil. Guangyu grew up after the revolutions, but lived by collecting trash with his siblings during his early childhood. Eventually, Guangyu was admitted to Renmin University, one of China's most prestigious universities. His fate changed in 1987 when he seized the opportunity of the first wave of private enterprise boom during the reform era of China and founded GOME Electronics. GOME became a huge success, making Guangyu one of the richest men in mainland China between 2004 and 2018, with a net worth of RMB 36 billion (approximately US\$ 5 billion).

¹We present a stylized version of this class of models in Section 4.1.

While the Huang family is an extreme example, we find that this represents a more general pattern across China: Despite extraordinary repression, the descendants of the pre-revolution elite are significantly and substantially better off today. Although the revolutions successfully shut down the two primary channels of intergenerational persistence, intergenerational persistence remained. In fact, the pre-revolution elite perform well even in comparison with members of the Communist Party and their families — the elite that emerged in the wake of the revolution and from which the vast majority of the pre-revolution elite are excluded.

We trace the socioeconomic conditions of the pre-revolution elite and their descendants, following three generations in China: (i) the “grandparents” (roughly individuals born before 1940) — the generation who grew up before the revolutions; (ii) the “parents” (born between, roughly, 1940 and 1965) — the generation who experienced shocks such as the expropriation (or redistribution) of land and factory assets, and school closures; and (iii) the “children” (born roughly after 1965) — the generation who grew up after the revolutions ended — by the time they were teenagers, secondary schools and universities had reopened, and China had started the reforms that resumed private asset accumulation and private enterprises.

To systematically examine various socioeconomic outcomes along these three generations, we primarily rely on the China Family Panel Studies. This representative survey of Chinese households allows us to measure contemporary socioeconomic outcomes of the pre-revolution elite and the rest of the population, as well as an array of factors that could shape these outcomes. We link survey respondents to the pre-revolution asset ownership levels of their households using the “class labels” assigned to their grandparents at the beginning of the Communist Revolution. We define those who were labeled as landlords and rich peasants in rural areas or capitalists and enterprise owners in urban areas as the pre-revolution elite; together they represented approximately the top decile of the population in terms of socioeconomic status (National Bureau of Statistics, 1980).

We first document that after the Communist and Cultural Revolutions, the parents generation of the pre-revolution elite enjoyed no more tangible advantages in wealth than their peers in the rest of the population; if anything, they even earned a lower income.² The Cultural Revolution also effectively leveled the educational advantage of the former elite households. If anything, the parents generation of the pre-revolution elite were less likely to graduate from senior high school or above than their peers in the rest of the population, as individuals with an elite background were discriminated against in access to formal education throughout the Cultural Revolution.

²We confirm the asset level of the elite prior to the Communist Revolution and document the effect of the revolution by digitizing the *County Gazetteers*, a set of archival records that each county keeps to chronicle important events and historical data. In the immediate aftermath of the Communist Revolution, the rural pre-revolution elite, who used to own six times more land per capita than the rest of the population, no longer owned more land than the poor peasants. The county-level Gini coefficient in land ownership decreased from 0.5 before the revolution to under 0.1 right afterwards. Privately-owned businesses in urban areas, which used to make up 55.9% of total industrial output, essentially disappeared, as assets were confiscated and ownership transferred to the state or collectives by the end of the Communist Revolution.

A simple, generic framework of intergenerational transmission of socioeconomic status (in Section 4.1) would predict persistent suppression of the elite premium after the revolutions. However, the immediate and immense impact of the revolutions felt by the parents generation is no longer present among the third, children generation. While the revolutions explicitly aimed to reverse the rankings of socioeconomic status between elite households and the rest of the population, they did not manage to do so beyond two generations. By 2010, individuals whose grandparents were part of the pre-revolution elite earned a 14 percent higher income each year, held more prestigious and demanding jobs, and had completed more than 11 percent additional years of schooling than the rest of the population. Such a rebound is robust to using a range of alternative empirical specifications and accounting for a variety of potential confounding factors; it can also be replicated using a completely different household survey with different sampling strategy, elite status elicitation method, and survey years. Notably, the pre-revolution elite managed to reach an earning premium similar to that enjoyed by the new, post-revolution Communist elite.³

We rule out a number of potential explanations for the rebound. First, the revolutions were indeed thorough in depriving the elite households of their wealth and access to higher education, and shutting down land and enterprise inheritance — the most important assets in rural and urban areas. No compensation for past confiscations or discrimination was granted. Second, we show that general trends, such as structural transformation and rising inequality, while providing a critical contextual backdrop for the children generation, are unable to explain the elite rebound that we document. Third, we show that selective unnatural deaths among the pre-revolution elite, due to reasons such as targeted violence during the revolutions and mortality during the Great Chinese Famine, cannot account for the observed rebound. On the contrary, we find that elite victims of the famine and the revolutionary violence are if anything likely to be positively selected. Fourth, we similarly show that emigration to Taiwan likely exhibited positive selection, suggesting that the baseline estimates of the pre-revolution elite’s rebound may be a lower bound.

What explains the resurgence of the pre-revolution elite among the children generation? We begin by enriching the conceptual framework (in Section 5.1) and show that we need a broader definition of human capital to account for the intergenerational persistence despite the revolutions that we document. We then empirically investigate two particular manifestations of the broadened class of human capital that the revolutions did not manage to annihilate among the elite. First, human capital transmission through non-school channels has survived despite the revolutions. This could encompass a range of elements from knowledge, to skills, to values, and can be transmitted within households. We find that the pre-revolution elite perform better in standardized reading tests than the rest of the population, regardless of attainment in formal schooling. Moreover, the pre-revolution elite exhibit systematically different values and attitudes today (from both the non-

³Translating the cross-sectional income gap into intergenerational mobility statistics, we find that individuals whose grandparents belonged to the pre-revolution elite have a 14.3% chance of staying in the top decile of the income distribution. This is higher than the persistence rate of the top decile (extrapolated from two-generation transition matrices) in Taiwan (10.1%), Canada (11.1%), Russia (13.0%), and the U.S. (14.1%).

elite and the post-revolution Communist elite): In particular, they are more likely to consider effort as important to success.⁴ Their behavior reflects these values and attitudes: The pre-revolution elite work longer hours during workdays and spend less time on leisure during weekends.

Second, the pre-revolution elite benefit from social capital embedded in the traditional kinship networks, a vital fabric of traditional society in China. These local social networks facilitated a stronger rebound among the pre-revolution elite who do not migrate away from their ancestral regions.⁵ The revolutions strongly suppressed local kinship networks, of which the pre-revolution elite were often at the center, but they failed to uproot them completely.⁶ Conversely, the post-revolution Communist elite do not benefit and may even be hurt by traditional kinship networks as they exhibit a smaller income premium in counties where such networks are strong. Moreover, the pre-revolution elite's stronger clan-based social networks enjoyed in their ancestral counties raise their thresholds of migration, implying an elite income premium among migrants, which we indeed observe. The pre-revolution elite are more responsive to push factors (e.g., agricultural revenue shocks) and more likely to migrate to localities on upward trajectories of economic development, reflecting a more developed entrepreneurial spirit.⁷

Taken together, these results suggest that despite the revolutions shutting down the transmission of physical capital and of the human capital that can be acquired through schools, one observes strong intergenerational persistence of socioeconomic status. Human capital transmitted through non-school channels, abilities to venture and migrate to economic opportunities, and social capital rooted in local kinship clans are prominent ingredients for outstanding economic performance. Interestingly, all these ingredients are transmitted within families and clans, and even such aggressive and successful revolutions as China's Communist and Cultural Revolutions failed to prevent their transmission in elite households, attesting to the resilience of this transmission channel. As a result, intergenerational persistence prevails despite the revolutions.

Our paper connects three strands of literature: on social inequality and mobility, on cultural and value persistence within families, and on the role of social capital. Each of these strands of literature is enormous, and we simply cannot do justice to all previous works. Studies of intergenerational mobility of socioeconomic status often explain persistence by formal channels, in particular emphasizing the roles played by physical capital (e.g., inheritance) and human capital acquired through education (e.g., accumulation of productive skills and knowledge through

⁴Such differences in expressed work ethics are evident even among adolescents who have not completed formal schooling or participated in the labor market.

⁵We also find that families of the pre-revolution elite are more tightly knit: Members of the pre-revolution elite households are more likely to engage in assortative matching in marriage, forming households with both spouses belonging to pre-revolution elite families, and they are more likely to interact with other family members.

⁶Works across the social sciences have documented the important role kinship networks play in China, throughout history and up until today — see, among others, Bian (1997), Tsai (2002), Tabellini and Greif (2012), and Martinez-Bravo et al. (2017). Clan leadership today typically coincides with local official positions (Guo and Herrmann-Pillath, 2019), which the children generation of the pre-revolution elite are slightly less likely to assume.

⁷We also provide a suggestive decomposition, following Gelbach (2016), to assess the quantitative importance of work ethics and social capital in explaining the elite income premium in the children generation.

elite schools). We show that human capital transmitted through families (including, but not limited to, values; see a review of the literature by Alesina and Giuliano, 2015) and family networks in general (see Alesina and Giuliano, 2014 for a survey of the literature) have important consequences for intergenerational mobility.⁸ Reminiscent of an older, theoretical literature (Becker and Tomes, 1979), we demonstrate that even if many of the formal transmission factors are deliberately muted, intergenerational persistence could still occur through human capital transmission within the family, as well as through family-based social networks.

By documenting the intergenerational mobility and inequality patterns in contemporary China, we also contribute to a growing literature analyzing this pattern around the world.⁹ Much of the literature on mobility focuses on two generations, with a few exceptions:¹⁰ Boserup et al. (2014) estimate intergenerational wealth mobility across three generations in Denmark, and find that persistence across three generations can be higher than across two;¹¹ Adermon et al. (2018) examine mobility in Sweden over four generations, and Barone and Mocetti (2021) document persistence among households in Florence over six centuries, both highlighting the critical role played by inheritance in fostering persistence over the long run. We join this literature by adding an important data point on China, providing one of the first estimates of intergenerational mobility in terms of asset ownership and income beyond two generations in developing countries, and emphasizing long-run persistence channels beyond wealth inheritance.

The three generations we examine are particularly important because they experienced one of the most radical attempts to suppress the elite and to foster mobility. The ability of the elite to weather large negative shocks to their socioeconomic status provides micro-foundations to the growing literature on long-run persistence (see Nunn, 2009; Michalopoulos and Papaioannou, 2020; Voth, 2021, for reviews of the literature). In particular, our results complement several recent works that analyze the resurgence of various groups after shocks in distinct historical contexts. The scale of negative shocks ranges from losing substantial slave assets during the U.S. Civil War (Ager et al., 2019) to forced migration in Poland after the Second World War (Becker et al., 2020).¹²

⁸Our paper relates in particular to studies of the transmission of values promoting effort, education, and delayed gratification (see, among others, Galor and Özak, 2016; Sunde et al., 2022; Figlio et al., 2019). Closer to our empirical context, a culture of valuing education is found to persist in localities in China that are historically more densely packed with individuals who excelled at the imperial civil service examinations (Chen et al., 2020), and such a culture could affect mobility patterns across China (Geng, 2020).

⁹Recent works include: Chetty et al. (2014) and Saez and Zucman (2016), which explore inequality and mobility patterns in the U.S.; Alesina et al. (2018b), which compares the mobility in the U.S. with several countries in Europe; Alesina et al. (2021), which describes mobility and inequality in Africa; Asher et al. (2024), which investigates educational mobility across India; and Piketty et al. (2019) and Fan et al. (2021), which document the rising wealth inequality and decreasing mobility in reform-era China.

¹⁰A few papers study the persistence of family status across more generations, but look at occupation or other proxies of status instead of income and wealth, e.g., Long and Ferrie (2018) on the U.S. and Britain between 1850 and 1910, ? on Tongcheng County in China between 1300 and 1900, and Campbell and Lee (2011a) on Liaoning Province in China between 1749 and 2005.

¹¹Benhabib et al. (2022) provides a theoretical underpinning on why three-generation persistence in socioeconomic status could be higher than that observed across two generations.

¹²Interestingly, resurgence does not necessarily occur in all contexts. E.g., Acemoglu et al. (2011d) suggest a lasting

Szelényi (1988), Hanley and Treiman (2004), and Guirkinger et al. (2022) document a similar resurgence in post-Communist countries in Europe and Central Asia, respectively, as we do in China; transmission through educational attainment and high occupational status during the Communist period played important roles in explaining the resurgence, yet these channels of intergenerational persistence were all shut down during the Chinese revolutions.

In fact, the Chinese revolutions that we study are unparalleled in their effort to eradicate the advantage held by the elite, making the resurgence that we document remarkable: Even such an aggressive and traumatic attempt is insufficient to uproot the differences between pre-revolution elite households and the rest of the population beyond two generations. In so doing, our paper contributes to the literature across the social sciences that studies the consequences of the Chinese revolutions on inequality and mobility.¹³ Several papers are closely related to our work: De la Ruelle and Li (2012) and Treiman and Walder (2019) explore the long-term effect of the Communist Revolution on household-level characteristics and the life chances of individuals with different class labels, respectively; Chen et al. (2015b) (focusing on urban dwellers) and Xie and Zhang (2019) (looking at the broad population) document resurgence in educational attainment among individuals whose grandparents belonged to the pre-revolution elite; and Sato and Li (2007) find that family background is associated with contemporary wealth. Building on these results, we examine a comprehensive set of outcomes of the pre-revolution elite, especially their income and economic conditions, and we systematically compare the pre-revolution elite with the new, Communist elite formed after the revolutions. Moreover, we identify, to the best of our knowledge, the first set of empirical evidence pointing to the channels through which such a persistence occurs despite the revolutions. Our results hint at a non-negligible portion of inequalities being due to productive traits nurtured by parents in their children. These findings resonate with the Weberian Culturalist approach characterizing Szelényi's (1988) interpretation of elite trajectories in 20th-century Hungary, and provide empirical evidence to the old debate in sociology on the role of family transmission in the intergenerational persistence of socioeconomic status (e.g., Bourdieu and Passeron, 1970; Boudon, 1974).

This paper is organized as follows. Section 2 provides institutional and historical background on the Communist Revolution and the Cultural Revolution in China. Section 3 describes the data used in the analyses. Section 4 begins with a stylized conceptual framework of intergenerational persistence, and moves on to show that the revolutions were successful in eliminating inequality and homogenizing culture for two generations, but individuals whose grandparents belonged to the pre-revolution elite are substantially richer today. Section 5 enriches the conceptual framework

negative effect of mass murder (the Holocaust) on the local socioeconomic conditions in Soviet Russia. Neither would positive shocks in educational attainment necessarily persist across multiple generations, as shown by Wantchekon (2016) in the context of colonial schools in Benin, while Bautista et al. (2023) find a persistent effect of reduced access to higher education under Pinochet in Chile.

¹³Among others, see Zhang (2021) and Xie et al. (2022) for recent overviews of inequality and mobility patterns in post-revolution China, respectively.

by broadening the definition of human capital, explores two manifestations of the broadened class of human capital that could help explain the elite's resurgence, and offers a tentative assessment of their quantitative importance. The last section concludes.

2 The Communist and Cultural Revolutions

As we cannot comprehensively depict the Communist Revolution and the Cultural Revolution with all of its rich historical details and complexities, we focus in this section on the particular aspects of the revolutions that intended to eradicate the advantages of the pre-revolution elite: confiscating their assets, removing their access to secondary and higher education, and even stigmatizing attitudes and values that they might have held prior to the revolutions. We describe these aspects in more detail and place them in their historical and institutional context in Appendix A.

The Communist Revolution and wealth redistribution

The Communist Revolution was a series of movements that allowed the Chinese Communist Party to consolidate political power throughout China toward the end of the Chinese Civil War (1945–1949). The revolution aimed to transform the structure of asset ownership and thoroughly redistribute wealth in both rural and urban China.

China being an agrarian economy at the time, a central component of the Communist Revolution was the Land Reform (1947–1953). Described as one of the most extreme examples of wealth equalization in a short period of time in human history (Wong, 1973a), the Land Reform aimed to gain the support of the rural masses for the new Communist regime (Kung et al., 2012). The *Agrarian Reform Law*, formally introduced in 1950, guided the Land Reform around the country. The law emphasized the Communist Party's commitment to expropriate the class of landlords and rich peasants, and to advocate the proprietorship of the general peasantry. Article 1 of the law states the overarching principles of the Land Reform:

“The land ownership system of feudal exploitation by the landlord class shall be abolished and the system of peasant land ownership shall be introduced in order to set free the rural productive forces, develop agricultural production, and pave the way for China's industrialization.”

The expropriation and redistribution process consisted of two stages. First, local *ad hoc* committees assigned *class labels* to households, primarily based on their land holdings at the time (Hinton, 1966). Rural class labels broadly consisted of five categories: landlords, rich peasants, middle peasants, poor peasants, and hired labor. Until the *Agrarian Reform Law* was repealed in 1987, the class labels were stable over time and through generations: The labels were passed along patriarchal lines regardless of the actual political inclination and behavior of individuals.¹⁴

¹⁴Forging class labels was nearly impossible (Wemheuer, 2019). Class labels were common knowledge in villages.

Second, based on the assigned class labels, land and other production tools and assets (e.g., cattle) were confiscated from the landlords and rich peasants, and redistributed to the middle peasants, poor peasants, and landless hired labor. We accordingly define the pre-revolution elite as the landlords and rich peasants (approximately 9% of the population in rural China, see National Bureau of Statistics, 1980) and the rest as non-elite. The Land Reform can be considered as a zero-sum game, since in the vast majority of cases, what was expropriated was entirely redistributed (Wong, 1973b). By the time the Land Reform was concluded, the landless, poor, and middle peasants had received farmland for cultivation amounting to 43% of total land acreage in China, according to some estimates (e.g., Wong, 1973b).

Property rights over land were complicated during this period of Chinese history. Throughout the Land Reform, effective private ownership over land was still allowed. From 1954, however, private land ownership (along with many other assets) was abolished by the first Constitution of the People's Republic of China.¹⁵ Potential incomplete confiscation during the Land Reform was effectively eliminated, since the landlords and rich peasants could no longer claim legal ownership of property and assets, had they retained any. Moreover, the absence of land ownership rights suggests that the land assets were redistributed primarily in relative rather than absolute terms: namely, the ranking between the rich and the poor was reshuffled, but the poor did not necessarily receive private ownership of more assets.

At the time of the Communist Revolution, the overwhelming majority of the Chinese population lived in rural areas. Urban areas, however, experienced a similar revolution — the Socialist Transformation of Capitalist Enterprise, — which fundamentally reshaped the enterprise ownership landscape. First, as in rural areas, the urban population was assigned class labels, and the socioeconomic elite were grouped under the “capitalist” and “enterprise owners” labels (Kraus, 1977). Second, the urban elite's assets — real estate and, more importantly, their businesses — were expropriated (see, e.g., Perkins, 1966; Richman, 1969; Cliver, 2015). In 1953, the United Front Work Department of the Peoples' Congress Central Committee issued a report titled “Advice on Utilizing, Restricting, and Remolding the Capitalist Enterprises,” which marked the beginning of a three-year movement of socialist reform in the urban sector. The report provided principle guidelines to the movement. Mao Zedong, in his comments to this report, asserted that the capitalist class “need[ed] to be eliminated and transformed.” He further emphasized the two-step procedure to follow: first, turn the unrestricted private enterprises into state capitalism, char-

Moreover, a double record of class labels was kept: one in individual dossiers held by the village collective, and another separate record held by central security organs for Communist Party cadres (Wemheuer, 2019). Finally, class background was subject to potential rechecks by external teams during political campaigns, and providing false or misleading information could be severely punished (Brown, 2015).

¹⁵The collectivization effort centralized land ownership and rights for agricultural production at the commune level. Individual farmers could lease land from the state and grow crops, although no rents were effectively paid to the state. The endowed land that individual farmers could grow food on was essentially land (re)allocated to them during the Land Reform (Lardy, 2008). Land remains publicly (or collectively) owned to this day, although private land use rights and limited transfer rights have been legalized since 1982.

acterized by a highly restricted ownership structure; second, transition from state capitalism to full socialism.¹⁶ The government thus first exerted intense pressure on capitalists to form ‘joint state-private’ firms, where their power would quickly be taken over by joint labor-management committees. The Communist Revolution completed its transformation of the urban sector in 1955–1956 by nationalizing or collectivizing all remaining businesses.

The Cultural Revolution and education disruptions

The Cultural Revolution was a massive, decade-long sociopolitical movement launched by Mao Zedong in 1966, initially intended to preserve the fruits of the Communist Revolution. Two aspects of the Cultural Revolution stood out: its stance toward the former elite and its disruptive education policy. Since its inception, the Cultural Revolution was concerned with status inheritance. One of its primary goals was to completely eliminate any remaining advantage of the pre-revolution elite over the masses and to prevent the pre-revolution elite from passing down their privileges to their offspring (e.g., Whyte, 1973). Throughout the Cultural Revolution, the former elite and their descendants were placed at a severe disadvantage — often explicitly in the selection criteria and procedures — in their access to public goods, valuation of work points, job assignments, career promotions, and Communist Party membership (e.g., Kraus, 1977; Unger, 1982b).

Among the many things to which the pre-revolution elite were denied access, education is a particularly important one. Motivated by the fear that the pre-revolution elite might be able to maintain their influence through formal education, the Cultural Revolution radically and severely disrupted secondary and higher education (MacFarquhar and Schoenhals, 2006). Almost all senior high schools and colleges were shut down between 1966 and 1968, and most universities remained closed until 1972 (Unger, 1982b). Moreover, merit-based admission into the few education programs still operating during the Cultural Revolution was suspended throughout the revolution. Admission was primarily based on class labels (at the expense of the elite) and political achievements rather than academic credentials (Shirk, 1982). As a result, the vast majority of the eligible applicants were workers, peasants, and soldiers (Deng and Treiman, 1997a).

Besides disrupting educational institutions themselves, the Cultural Revolution induced a wide range of disturbances across Chinese society concerning traditional values. The inheritance of cultural values from the pre-Communist era was regarded with suspicion. Teachers and intellectuals — and the value for education and “bourgeoisie knowledge” represented by them — became the targets of denunciations (Wang, 2001). Children were also encouraged to expose their parents’ counter-revolutionary behaviors, representing a broad effort to weaken the nuclear family structure (Du, 2021).

¹⁶These policies were then formalized in the 1st Constitution of China (1954), affirming the goal that “ownership by the public should gradually replace ownership by the capitalists” (Article 10).

The aftermath of the Revolution and the absence of restitution

The “Reform and Opening” era following Mao’s death in 1976 was characterized by the gradual phase-out of discrimination against the pre-revolution elite and unprecedented economic growth.¹⁷

The stigma attached to the pre-revolution elite class and the overt institutional disadvantage they faced were officially abolished in the 1980s (Walder and Hu, 2009a). The merit-based college entrance exam was resumed at the end of 1977, and more broadly, access to education and high-status occupations was no longer based on explicit political criteria (Lu and Treiman, 2008). However, the former elite did not benefit from compensatory favoritism after the end of the revolutions. The gradual normalization of their status, called “removing hats,” was enshrined only with the repeal of the Agrarian Reform Law in 1987 and did not give right to compensation for the decades of persecution.

The economic reforms gradually introduced after 1978 originally allowed private enterprises to develop alongside a largely unaffected public sector. The economic take-off that characterizes the post-Mao period, in particular after China’s accession to the World Trade Organization in December 2001, thus first materialized in the private sector. This may matter for the trajectories of pre-revolution elite families, as they were largely barred from public sector jobs and thus concentrated in the nascent private (and, sometimes, informal) sector.

3 Data

In this section, we first describe our main data source on individual outcomes and present summary statistics. We then briefly present secondary data on county-level outcomes (used for motivating facts) and auxiliary data (used in robustness checks and to investigate mechanisms).¹⁸

3.1 Individual outcomes across generations

Our main data source is the China Family Panel Studies (CFPS) survey, which allows us to measure a variety of individual-level outcomes across generations. CFPS is a large-scale, nationally representative panel survey; it is further representative at the provincial level, allowing for comparisons between sub-provincial administrative units in five over-sampled provinces.¹⁹ CFPS completed interviews with a total of 14,608 sampled households and all individuals living in these households, amounting to 33,600 completed adult observations in the 2010 baseline wave of the

¹⁷More detailed background information on the Reform and Opening era can be found in Appendix A.3, and a discussion of the main results in light of those more recent events is provided in Section 4.4.4.

¹⁸The data, especially county-level and auxiliary sources, are described in greater detail in Appendix B.

¹⁹The CFPS is conducted by the Institute of Social Science Survey at Peking University; detailed information about the CFPS project can be found at <https://www.issp.pku.edu.cn/cfps/en/>. The 25 provinces of China covered by the CFPS represent about 95% of the population in mainland China. The 5 over-sampled provinces are Liaoning, Shanghai, Henan, Guangdong, and Gansu.

survey.²⁰ Our main sample consists of all the respondents who completed both the 2010 and 2012 waves, as class labels were elicited in 2010 and the 2012 income measure is more complete (Xie et al., 2017). Unless otherwise noted, the measures we focus on in the analyses are elicited from the 2010 baseline survey.

Importantly, CFPS contains information on the class label assigned to the respondent’s family at the time of the revolutions. As the class labels have been passed down through generations since the Communist Revolution, this allows us to identify the descendants of the pre-revolution elite. The vast majority of the individuals born before 1970 — growing up before the repeal of the *Agrarian Reform Law* in 1987 — know their family class labels and report them in the 2010 survey (see Appendix Figure D.5).²¹ If a respondent in younger generations does not provide a family class label, we use her father’s as class labels were passed down along patriarchal lines. Overall, 8.04% of households contain members identified as pre-revolution elite, in line with the figure (6–10%) suggested by the *County Gazetteers* and historical accounts (National Bureau of Statistics, 1980).²² Among the pre-revolution elite individuals, 75.0% directly report that they hold elite class labels and the remaining are inferred from reports of older generations in the households. As such inference requires co-residence due to the structure of the CFPS sampling frame (little information on parents is available when they do not belong to the respondent’s household), we replicate our baseline findings using an alternative survey, the 2002 wave of the Chinese Household Income Project (CHIP), which allows us to obtain a full record of family class labels, as this history was elicited from all household heads — see Appendix B.2.²³

Associating each individual with her family class label allows us to compare members of the pre-revolution elite households with the rest of the population across three generations. The first (grandparents) generation corresponds to individuals born before 1940 ($N = 1,602$) — these individuals grew up *prior to* the Communist and Cultural Revolutions. The second (parents) generation consists of those born between 1940 and 1965 ($N = 12,130$) — they grew up in the midst or immediate aftermath of the Communist and Cultural Revolutions, and they attended secondary school (if at all) between the end of the Communist Revolution and that of the Cultural Revolution. The third (children) generation gathers individuals born between 1966 and 1990 ($N = 11,321$) — they grew up largely during the post-1978 Reform and Opening era, during which ownership of private assets was reintroduced, universities reopened, and a market economy was partially established. Our results are robust to alternative generation cutoffs around these historical land-

²⁰CFPS also collected limited information from every respondent on all their offspring, whether co-resident or not.

²¹Intentional misreporting of class labels is unlikely, as class background is an important component of family identity. In fact, we observe very little inconsistency in reported class labels between multiple household members interviewed independently: 94.1% of the households have all household members reporting identical class labels.

²²In the children generation, 6.67% of respondents are descendants of the pre-revolution elite. Using instead parents’ reports of their own class labels and of their number of children in CFPS, we find a slightly lower share (6.5%) of pre-revolution elite descendants in the children generation. We leverage information elicited from parents on their children in Appendix D.4.4.

²³We present these results briefly in Section 4 along with a number of additional robustness exercises on the pre-revolution elite and their outcomes.

mark events.

To benchmark the socioeconomic status of the pre-revolution elite, we compare them with the new, Communist elite that emerged after the revolutions. Specifically, we define the post-revolution elite as those who belong to a household with at least one Chinese Communist Party member; 6.85% of the CFPS respondents in the children generation can be categorized as the post-revolution Communist elite. Communist Party membership is extremely selective: At the time of our baseline survey in 2010, around 6.48% of the children-generation population were Party members, a share coincidentally similar to the pre-revolution elite's. The correlation coefficient between pre- and post-revolution elite status is -0.956 , indicating that these two elite groups are largely mutually exclusive.

In Table 1, we present the summary statistics (mean and standard deviation, in columns 1 and 2, respectively) of individual-level outcomes based on the CFPS, pooling all respondents from elite and non-elite backgrounds, across three primary categories: income; educational performance; and labor market outcomes.

3.2 Distribution of wealth around the time of the revolutions

We document the immediate effect of the Communist Revolution on wealth distribution by manually collecting data on land assets — the most important form of wealth in China at the time — from the *County Gazetteers*.²⁴ The *Gazetteers* were published in the 1990s, in the wake of the “second generation” of Chinese leaders led by Deng Xiaoping, who allowed more light to be shed on the revolutionary era.

The resulting data constitute the first systematic evidence on asset inequality in early-1950s China and provide quantitative information on the land distribution both immediately before and immediately after the Land Reform. *County Gazetteers* further provide a break-down of assets by class labels, allowing us to compute measures of inequality.²⁵ This enables us to document the dramatic equalization of assets that affected the grandparent and parent generations during the revolutionary era — see, for instance, the maps in Figure A.6.

3.3 Auxiliary data

We leverage an array of auxiliary data for robustness checks or to test mechanisms. These data are described in Appendix B.2 and only listed here for completeness. We use the CHIP data and its different structure to circumvent class label inference issues in the children generation; we use the 2005 1% Population Survey and borrow a measure of push factors from Imbert et al. (2022)

²⁴See Appendix B.1 for a substantial presentation of the *County Gazetteer* data, a discussion of its representativeness, and details about the collection methodology and challenges. We carried out a similar effort for urban areas, collecting data on enterprise ownership from *City Gazetteers* and the report on the *Socialist Transformation of Capitalist Industry and Commerce in China* — see Appendix B.1 as well.

²⁵See Appendix B.1.4 for the methodology.

to characterize migration behaviors; we rely on the roster of top imperial examination graduates (*jinshi*) throughout the Ming and Qing dynasties to measure clan presence; we combine the 1953 Population Census with data from Lin (2018) on Taiwan émigrés in a robustness check; we use the 2000 Population Census to compute cohort losses due to the Great Famine; we include data on mass killings during the Cultural Revolution from Walder and Su (2003), which we complement with original data on the casualties of the Communist Revolution from our *Gazetteers*; and we exploit newly collected data from Buck (1937) to shed light on long-term patterns in land inequality prior to the revolutions.

4 Repression and rebound of the elite

4.1 Conceptual framework: intergenerational persistence and its disruption due to the revolutions

Before delving into empirical investigations, we first describe a stylized, standard conceptual framework to illustrate forces that drive intergenerational persistence and how the Communist and Cultural Revolutions may affect them.

Setup The core of the conceptual framework follows the seminal works of Becker and Tomes (1979), Becker and Murphy (1988), and Becker et al. (2018). Altruistic parents of generation t in dynasty i maximize a function of their own consumption utility and the “quality” (or economic success) of their children of generation $t + 1$, measured by their expected wealth:

$$\max U(c_{i,t}) + dE(W_{i,t+1}),$$

where $c_{i,t}$ stands for the parents’ consumption, $W_{i,t+1}$ is the total wealth of generation $t + 1$, and the intergenerational discount factor d denotes parents’ altruism toward their children. Consumption utility U is a monotonically increasing convex function, i.e., $U_c^o > 0$ and $U_c^{oo} < 0$. Without loss of generality, we take the functional form $U(c) = 2^{\frac{1}{\sigma}} \bar{c}$.

Wealth, $W_{i,t+1}$, is the sum of individual income $I_{i,t+1}$ and a (non-negative) bequest $b_{i,t+1}$ from the parents.²⁶ We assume that the interest rate on savings, R_k , is fixed and fully anticipated. Income, $I_{i,t+1}$, is the product of human capital $H_{i,t+1}$, the overall return to human capital $r_{i,t+1}$, which depends on the current macroeconomic factors while generation $t + 1$ is in the labor market and may — during the revolutions — differ across dynasties,²⁷ and an idiosyncratic income shock

²⁶In other words, parents cannot take loans on behalf of their children. This assumption reflects an imperfect credit market in which borrowing is not possible. Formal financial institutions were very limited and private loans did not exist during the revolutions.

²⁷We assume that parents hold rational expectations about future returns to human capital, that is, $E_t(r_{i,t+1}) = r_{i,t+1}$.

(with mean 1), $e_{i,t+1}$, realized in adulthood:²⁸

$$I_{i,t+1} = r_{i,t+1} H_{i,t+1} e_{i,t+1}.$$

Human capital is a function of the (formal, monetary) educational investment y made by parents, e.g., tuition fees: $H_{i,t+1} = y_{i,t+1}^b$.²⁹ Following Becker et al. (2018), we assume a diminishing return to investment: $b < 1$.

Individuals in each generation solve the following maximization problem:

$$\max_{c_{i,t}, y_{i,t+1}, b_{i,t+1}} U(c_{i,t}) + d E_t [r_{i,t+1} y_{i,t+1}^b e_{i,t+1} + b_{i,t+1}],$$

with budget and borrowing constraints:

$$c_{i,t} + y_{i,t+1} + \frac{b_{i,t+1}}{1 + R_k} = W_{i,t} \quad \text{and} \quad b_{i,t+1} \geq 0.$$

Proposition 1 (Intergenerational persistence during normalcy) The next generation's education level y_{t+1} and income I_{t+1} positively correlate with parental wealth W_t .

This simple framework describes, during normalcy, the interaction between parental wealth, human capital investment in the next generation, and the resulting intergenerational persistence in income. See Appendix C.1 for the proof.

Corollary 1 (Intergenerational persistence during revolutions) Intergenerational persistence disappears if there is no difference in parental wealth.

The revolutions prevent the forces of intergenerational persistence from operating. In the grandparents generation, the Communist Revolution equalized assets and banned bequests, $b_E = b_N = 0$, where E indicates the elite and N the non-elite. The Cultural Revolution ensured that the elite would not acquire more education than the non-elite ($y_E = \underline{y} = y_N$), by barring the former from acquiring formal education beyond compulsory schooling, \underline{y} , while the non-elite could accumulate education and reach their optimal $y = \underline{y}$. Lastly, the elite were excluded from Communist Party membership and discriminated against on the labor market, especially for army employment and (state-owned) factory jobs ($r_E < r_N$).

²⁸We abstract from physical capital in this setup, without loss of generality. Adding a term k^z in the income production function does not alter the key results.

²⁹As in Becker et al. (2018), following Bowles and Gintis (2002), we mute differences in (genetic) endowments, $A_{i,t}$, across dynasties i , so that human capital only depends on the educational investment. We provide some evidence in Section 5.2 that the rebound of the pre-revolution elite in the children generation is unlikely to be due to the automatic transmission of human capital through A . The decomposition of the elite income premium in Section 5.4 further allows for an indirect estimation of the importance of A and potentially other (unmodeled) factors as the residual not explained by formal education (and "informal" human capital v , introduced in Section 5.1 below).

As a result, the revolutions sever the transmission of income from the grandparents generation ($t = 1$) to the parents generation ($t = 2$): $E [I_{E,2}] / E [I_{N,2}] < 1$, which in turn leads to the prediction of lower incomes and education levels for the pre-revolution elite in the children generation ($t = 3$): $E [I_{E,3}] / E [I_{N,3}] < 1$.

Corollary 1 highlights that under such a stylized and standard setup, one would expect the revolutions to break the intergenerational persistence of education and income. We examine whether this is indeed the case next.

4.2 Empirical specification

To take this conceptual framework to the data, we need to estimate $E [I_{E,3}] - E [I_{N,3}]$, or, equivalently, $E [I_{E,3}] / E [I_{N,3}]$.

We implement a simple Ordinary Least Squares regression of an outcome of interest Y_{if} for an individual i from family f on an indicator variable, $Elite_f$, equal to 1 for families classified as landlords, rich peasants, capitalists, or enterprise owners at the time of the Communist Revolution, and 0 otherwise.³⁰ We consider a variety of outcomes: income, variables capturing labor market choices, educational performance, and (in Section 5) various proxies for work ethics and social capital. All specifications control for birth cohort and residence county fixed effects. This ensures that county characteristics or events that affect all individuals in a county or birth cohort in the same way do not drive the results. In some specifications, we additionally include a vector of controls, \mathbf{X}_{if} , e.g., an indicator for being employed in a State-Owned Enterprise (SOE) and an interaction of that indicator with province dummies, to ensure that we compare individuals within the same labor market:

$$Y_{if} = b_0 + b_1 Elite_f + \mathbf{X}_{if} \mathbf{b} + m_{county} + d_{cohort} + \#_{if}, \quad (1)$$

where the errors, $\#_{if}$, are clustered at the level of the county, which constitutes the relevant level of administration for many policies.³¹

We estimate Eq. 1 within generations to highlight the different effects of the revolutions on the parents, who were directly affected in their educational choices and through labor market restrictions, and on the children, who did not directly suffer from the discrimination targeting the pre-revolution elite. Thanks to the fixed effects, Eq. 1 allows us to compare individuals with and without an elite background *within* the same cohort and county of residence. The identifying assumption is that conditional on the fixed effects and control vector \mathbf{X}_{if} , $Elite_f$ is orthogonal to unmodeled variables affecting the outcome.³²

³⁰Some tables compare the pre- and post-revolution elites; the specification remains the same, and only the definition of the $Elite_f$ dummy changes. Unless otherwise specified, “elite” always refers to the pre-revolution elite.

³¹Local policies may also be implemented at the prefectural or provincial level. We vary the level of clustering in Appendix Table D.13, Panel D.

³²Two important robustness checks do not conform to Eq. 1. First, to capture life-cycle variation in an individual’s

Given the properties of OLS, the main coefficient of interest, b_1 , can be interpreted directly as $E[I_{E,3}] - E[I_{N,3}]$ in the conceptual framework. Equivalently, $E[I_{E,3}]/E[I_{N,3}] = (b_0 + b_1)/b_0$.

4.3 Successful revolutions in one generation

We first investigate whether the Communist Revolution and Cultural Revolution achieved their redistributive and egalitarian goals among the parents generation who were directly affected.

4.3.1 Eradication of land inequality and private enterprise

The dramatic redistribution of land by the Land Reform is apparent from the *County Gazetteers*. Figure 1, Panel A, plots the cross-county distribution of average land holdings among landlord households, in acres per capita, right before (dotted line) and right after (solid line) the Land Reform; and Panel B plots the distribution of Gini coefficients in land ownership across counties.³³

On the eve of the Land Reform, landlord households were at the top of the wealth distribution in rural areas. They owned approximately 6 times more land per capita than poor peasants. Inequality in land ownership was thus stark, but land holdings were relatively small (6 acres per capita on average for landlords, albeit with a long right tail, see Panel A). Landlords were closer to well-off farmers in small-scale farming economies than to rentiers owning huge plantations; they often worked on the land themselves, sometimes hiring labor (Fei et al., 1992); see Appendix A for more historical details.

Within half a decade, the Land Reform wiped out inequality in land ownership, which constituted the main asset and source of differences in socioeconomic status in China. Landlords' land holding was shrunk and equalized to poor peasants', and cross-county differences were leveled. As a consequence, the Gini coefficient fell sharply from on average 0.5 to an unprecedentedly low level of 0.1.³⁴

A similar transformation affected privately owned enterprises — the most important assets of the pre-revolution elites in the urban sector. As shown in Figure 1, Panels C and D, most firms were privately owned and the private sector accounted for well over half of industrial output in 1950, but by the end of the decade the private sector had been eradicated in China.

income trajectory, we use the panel dimension of CFPS and estimate $Y_{ift} = b_0 + b_1 Elite_f + \mathbf{X}_{ift}b + Age_{ift} + m_{county} + d_{cohort} + \#_{ift}$. Second, we leverage information elicited from parents about all their children — whether co-resident or not — to estimate a within parent-child pair elite premium: $Y_{igpf} = b_0 + b_1 Elite_f - Children_{ig} + n_{pf} + d_{cohort} + \#_{igpf}$, where g is the generation (parents or children), p is a parent-child pair, $Children_{ig}$ is an indicator equal to 1 if i belongs to the children generation and 0 otherwise, and n_{pf} are pair fixed effects.

³³The methodology underpinning the Gini coefficient calculations is presented in Appendix B.1.4.

³⁴The distribution of the ratio of land holdings between the poor peasants and landlords shifted substantially to the right after the Land Reform, centered just above 1 which indicates equal land holdings. This result and other empirical evidence can be found in a more detailed Appendix A.1.4.

4.3.2 Elimination of the elite premium in education

Next, we examine whether the Cultural Revolution affected inequality in educational attainment among the parents generation, particularly the cohorts that would have attended secondary or tertiary education at that time.³⁵

We first document the gap in educational attainment between the grandparents generation of the pre-revolution elite and the rest of the population. Figure 2 presents, for each birth cohort, the difference between the share of individuals from the pre-revolution elite households who completed at least secondary education and that for their peers from the rest of the population (see Appendix Table D.5 for the results in regression form). The grandparents generation cohorts born between 1930 and 1939 were not directly affected by the Cultural Revolution as they would have graduated from secondary school before the disruption of higher education began. We observe that the pre-revolution elite among these cohorts are about 7.7 percentage points (or 80.7%) more likely to have completed at least secondary school education.

The positive gap between the share of pre-revolution elite who completed secondary education or above and that of the rest of the population rapidly shrank, due to increasing restrictions (e.g., quotas) imposed at the detriment of the pre-revolution elite, and eventually disappeared among the cohorts directly affected by the decade of the Cultural Revolution: The advantage in educational attainment among members of the pre-revolution elite households is at its lowest between the 1947 cohort (the first cohort who reached the age to enter university when the Cultural Revolution began) and the 1960 cohort (the last cohort that would have reached the age to enter secondary school by the time of the normalization of education, in 1972), as marked by the shaded rectangle in Figure 2. In fact, the pre-revolution elite were worse off in terms of secondary-school educational attainment than their counterparts from the rest of the population. This is due to the combination of the expansion of basic education during this period disproportionately benefiting individuals from non-elite households, and the pre-revolution elite often being barred from accessing formal education.

4.3.3 The life of the parents generation

Finally, we examine the socioeconomic outcomes of the parents generation beyond asset inheritance (which was nonexistent) and educational attainment. Table 1, columns 3 and 4, compare the parents generation of the pre-revolution elite with their peers from the non-elite households. We control for cohort and county of residence fixed effects, hence exploring only within-cohort within-county differences between elite and non-elite descendants. Column 5 presents the overall

³⁵The education system in China before the Cultural Revolution consisted of six years of primary education (starting at age 6 or 7) and six years of secondary education (or “middle school,” split into “junior” and “senior”). During the Cultural Revolution, primary and secondary schools were both reduced to five years (Pepper, 1978).

mean of the corresponding variables among the parents generation as a whole.³⁶

The individuals of the parents generation from the pre-revolution elite households earn a *lower* (about 4.0%) labor income in 2010 than their peers without an elite background (see Panel A). The negative income gap is particularly striking considering that the parents generation of the pre-revolution elite are actually less likely to be retired from the labor force as of 2010. In fact, we observe a similar pattern if we restrict attention to individuals from the parents generation who are younger than the typical retirement age, if we focus on the non-retirees in the sample, or if we incorporate pension and other retiree-related income sources (see Appendix Table D.6).

Panel B further examines labor market choices. We find that they are slightly more likely to be self-employed and to hold a low-prestige occupation (although these differences are not statistically significant).

Panel C replicates results on educational attainment as shown previously. The parents generation of the pre-revolution elite no longer enjoy an advantage in attaining formal education, and if anything, they become less likely to complete secondary or tertiary education than their peers from non-elite households. Interestingly, despite the lack of formal schooling, the parents generation of the pre-revolution elite do *not* exhibit statistically significantly worse math skills, and they display significantly better reading skills, both measured in a standardized test administered by the CFPS in 2010. This suggests that the pre-revolution elite may have maintained some degree of human capital by supplementing informal means of training and transmission such as home schools. We will return to the transmission of human capital through informal channels in Section 5.2.

Although it is challenging to comprehensively depict how the parents generation of the pre-revolution elite fared during and in the immediate aftermath of the revolutions, one may get a glimpse of their experience through their membership in the Communist Party of China. The parents generation of the pre-revolution elite are significantly less likely to be members of the Communist Party (see Appendix Table D.3, Panel B), an indicator of broad political and social status since the revolutions, and of the ability to obtain preferential access to scarce resources. Moreover, the decline of the pre-revolution elite in the parents generation is particularly evident during the Great Chinese Famine (1959–1961), one of the worst peacetime disasters in modern history, caused by misallocation of food (Meng et al., 2015). We find that individuals among the parents generation of the pre-revolution landed elite were *more* likely to experience hunger during the Famine (see Appendix Table D.3, Panel C), despite the fact that their parents were landlords or rich peasants with ample access to agricultural products merely a decade before.

Taken together, these results show that the Communist and the Cultural Revolutions were remarkably successful in the short run — essentially eradicating inequality in land ownership in

³⁶Few members of the grandparents generation survived to 2010, and most of the survivors had retired by then. In Appendix Table D.7, we however provide evidence on key outcomes for the grandparents generation.

rural areas and privately-owned enterprises in urban areas, as well as in educational attainment. the revolutions directly afflicted the lives of the parents generation: Members of the pre-revolution elite households no longer exhibited an elite premium in the dimensions that we can measure. The parents generation was thus unable to pass down to the subsequent generation the two factors highlighted by economists as central to successful economic performance — physical capital and human capital acquired through formal education.

4.4 Rebound after the revolutions

We now investigate the socioeconomic conditions among the third, children generation who grew up after the revolutions, comparing the outcomes of individuals belonging to the pre-revolution elite households with the rest of the population.

4.4.1 Income

We first compare contemporary income in the children generation for individuals with and without a pre-revolution elite background. Table 1, Panel A, columns 6–7 present the results from the regression of total annual income on an indicator of whether one’s grandparents were pre-revolution elite. The specification controls for cohort fixed effects and county of residence fixed effects, absorbing cross-sectional differences in wage and labor market conditions between counties. Income is measured in 2010, thus keeping the macroeconomic conditions at the time of measurement fixed for all subjects.

The patterns of inequality that characterized the grandparents generation re-emerge. The children generation in pre-revolution elite households earns on average RMB 2,177 more per year in income in 2010 than their counterparts from the non-elite households. Relative to the average wage, this amounts to an annual income gap of approximately 13.9%. In other words, *within* county inequality in contemporary China is at least still partly due to the divergent socioeconomic outcomes between the *pre-revolution* elite and non-elite households in the children generation.

To the extent that the pre-revolution elite may have been disadvantaged in entering the public sector due to the legacy of the revolutions, and the post-revolution era was characterized by a private sector boom, one may suspect that the income gap we document merely reflects differences in children generation’s employment sectors. We decompose the identified income gap into between and within public vs. private sector differences in Table 2, Panel A. Column 1 replicates the baseline specification. Column 2 additionally controls for public and private sector fixed effects, taking out the cross-sector income differences across China. In column 3, we control for province-specific public-private sectoral income gaps to account for the provincial heterogeneity in such differences. Finally, in column 4, we control for a migrant fixed effect to account for the fact that migrants may differentially benefit from the private sector boom. The elite versus non-elite income gap remains largely unchanged throughout columns 2–4, at 14–15%. This implies that the

primary sources of the income gap are *within* employment sectors rather than between them. We observe similar patterns when we examine rural and urban households separately (see Appendix Table D.10).

The income gap between the pre-revolution elite and non-elite steadily increases as the cohorts become younger, in particular among those born after the 1960s who entered the labor market when market forces began to function again after 1978 (see Appendix Figure D.6 and Appendix Table D.5, which trace the income gap between the pre-revolution elite and non-elite for birth cohorts starting in 1930). As the proportion of one's professional career that overlaps with the Reform and Opening era increases, the pre-revolution family background plays a bigger role in predicting contemporary income and labor market performance.³⁷

A natural question that may arise is: How does the 14–15% elite income premium that we observe in the children generation compare to income gaps between other groups or in other contexts? We answer this question in Appendix D.4.3, where we use two different types of benchmarks. First, we compare the premium with various income gaps and show that it is similar in magnitude to the premium associated with belonging to the post-revolution, Communist elite and represents a large fraction of other sources of cross-sectional income differences in China. Second, we translate our estimates into transition probabilities,³⁸ and we show that our estimated income gap implies a reproduction rate of the top decile from grandparents to grandchildren that is similar to what we see in capitalist economies such as the United States.

Robustness of the income rebound

The positive elite vs. non-elite income gap that we identify is robust to a range of alternative empirical specifications. First, it is unaffected by the specific cohort cutoffs that define the children generation (see Appendix Table D.13, Panels A.1–3). Second, the income gap remains largely unchanged when we use alternative definitions of the pre-revolution elite: (i) relying only on individuals' own reported class labels and not on inference from parents' answers (Panel B.1); and (ii) restricting the sample of pre-revolution elite to the descendants of rich peasants (more likely to be a working elite; Panel B.2). Third, the magnitude of the income gap that we document remains similar when the outcome is instead the log of income (Panel C.1). Fourth, the income gap is robust to accounting for various correlation structures of the data: (i) allowing for spatial correlation across the CFPS sample (Panels D.1 and D.2); and (ii) clustering the standard errors at the province level (Panels D.3). Finally, the estimated income gap is unaffected by the specific sample composition of CFPS: (i) controlling for household size or household generational composition, which could affect the sampling probability given the CFPS sampling frame (Panels E.1 and E.2);

³⁷This pattern also suggests that the rebound of the children generation of the pre-revolution elite is unlikely to be driven by the Township and Village Enterprises (TVEs), since their rebound occurred largely after the demise of the TVEs in the mid to late 1990s (Park and Shen, 2003). Moreover, the TVEs were often headed by local cadres and Communist Party members, groups from which the pre-revolution elite were largely excluded.

³⁸We describe the procedure to recover the transition matrix from regression coefficients in Appendix E.

(ii) excluding residents in Shanghai where the CFPS over-samples and where overseas migration among the pre-revolution elite may have been particularly prevalent (Panel E.3); (iii) applying the weights provided by the CFPS team to achieve nationally representative estimates (Panel E.4); (iv) restricting the sample to the five over-sampled provinces (Panel E.5); and (v) using the whole 2010 sample and only the income information available in that wave (Panel E.6).

One may still be concerned that we under-count the elite among the children generation, due to the manner in which we elicit class labels and the fact that not all in the children generation co-reside with older generations. To address this concern, we re-estimate the elite premium using a different household survey — the Chinese Household Income Project (CHIP) and its primary 2002 wave. CHIP elicits the class labels of *all* household heads. In other words, we do not need to infer elite status in the children generation based on co-residence with parents. Results replicating the baseline specification are presented in Panel E.7. We find a smaller, yet sizable (8.1%) and significant elite income premium, which is remarkable for two independent surveys eight years apart.³⁹ As a complementary exercise, we examine the elite premium in children’s outcomes reported by the parents generation themselves, using CFPS. This exercise enables us to cover all the children of the parents in the sample; it does not require children to co-reside with older generations; and it allows for a full class label record, as nearly all respondents in the parents generation know their class labels (see Appendix Figure D.5). Reassuringly, we show in Appendix Table D.12 that children of elite background are employed in higher-status jobs, — as measured by the International Socio-Economic Index of occupational status (ISEI), — are much more likely to have obtained at least senior high school education (although these two effects are measured with noise), and earn significantly higher incomes than their peers.⁴⁰

The income gap we estimate is also unaffected when we take into account potential confounding factors. First, our baseline comparison does not capture life-cycle variation in an individual’s income trajectory, and one may worry that the differential age effects between the elite and non-elite may drive the observed cross-sectional income differences. We combine the panel structure of the CFPS, using income observed in subsequent waves of the survey (2012, 2014, and 2018) to separately control for both cohort and age fixed effects; the baseline elite income premium remains largely unchanged (Appendix Table D.13, Panel F.1). Second, one may also be concerned that the places where the pre-revolution elite tend to live experience differential development paths, which could account for the observed elite income premium. However, the elite income premium is unchanged if we control for province-specific cohort fixed effects (Panel G.1). Finally, one may be concerned that the income gap is primarily driven by the individuals whose parents are entrepreneurs or self-employed. We find that the elite income premium is unaffected when we

³⁹We also replicate and find very similar results for a subset of core outcomes examined in later parts of the paper that are also elicited by the CHIP survey, ranging from years of education, hours of work per day, and monetary exchanges with friends.

⁴⁰CFPS did not ask parents to report or estimate their children’s incomes. We therefore predict incomes in the children generation based on the occupation and education level reported by their parents.

control for parental career status (Panels H.1 and H.2).

4.4.2 Employment status and additional labor market outcomes

The large income premium that characterizes the children generation of the pre-revolution elite combines two different margins (the extensive and intensive margins) and two sources of income (wages and agricultural income). The descendants of the pre-revolution elite indeed differ from the rest of the population in their degree of participation in the labor market. Table 1, Panel B, presents the results of a regression of various employment statuses on the pre-revolution elite indicator. We see that the children of the pre-revolution are significantly more likely to be employed.

Among those employed, the children generation of the pre-revolution elite are more pro-market and entrepreneurial as reflected by their employment sectors. Table 1, Panel B, shows the following results. First, we find substantial intergenerational occupation upgrading from agriculture to non-agricultural sectors among those from the elite households: The children generation from pre-revolution elite households are more likely to work outside of agriculture, and this probability is if anything higher if their parents worked in the fields. This may indicate both a willingness to venture outside of one's parents' trade and a higher ability to seize opportunities outside of (low-productivity) agriculture.⁴¹ Second, the pre-revolution elite, in the children generation, are about 4% more likely to be self-employed, a differential that comes both from entrepreneurs and owners of firms.⁴² Third, we find that the children generation of the pre-revolution elite have significantly higher occupational status as measured by the ISEI score, which ranks occupation categories so as to maximize the role of occupation as an intervening variable between education and income (Ganzeboom et al., 1992a). This may reflect the higher share of entrepreneurs, as well as a higher educational attainment, which we investigate below.

4.4.3 Educational attainment

The pre-revolution elite's resurgence in the labor market is accompanied by their rebound in educational attainment. Among the cohorts that began secondary and tertiary education after the normalization of education (i.e., those born after 1961), the proportion of individuals from the pre-revolution elite households who completed at least secondary school immediately bounces back and remains much higher than that of their counterparts in the non-elite households (see the

⁴¹Appendix Table D.8 decomposes the pre-revolution elite premium into the intensive and extensive margins and distinguishes between wage and total (i.e., wage *plus* agricultural) incomes. The pre-revolution elite children's significant income premium is robust to focusing on wages only (Panel A) and to looking at different sample definitions based on labor market participation (Panel B).

⁴²This relates to recent evidence that parental background is key in explaining business ownership in China; specifically, children of entrepreneurs are more likely to become entrepreneurs themselves (Jia et al., 2021). To the extent that self-employed small business in rural China often requires access to capital via social network and informal lending (e.g. Zhang and Loubere, 2013), this also suggests that the pre-revolution elite have stronger social ties and are able to excel at network-intensive career paths. We investigate the importance of social networks in Section 5.3 and assess the role of parents' career in the elite's rebound in Section 5.4.

right section of Figure 2). We then analyze this pattern more rigorously in regressions, where we exploit across households, within-county, and within-cohort variation. As shown in Table 1, Panel C, individuals from pre-revolution elite households complete on average 0.83 years (or 11%) more schooling in the children generation. They are much more likely to complete secondary school and higher education than their counterparts from non-elite households.

The increased schooling also reflects differences in tangible human capital accumulation, as measured by math and reading skills in a standardized test administered in the 2010 CFPS module. The children generation of the pre-revolution elite households performed significantly and substantially better in both math and reading than their peers from non-elite households.

Given that just one generation ago, the pre-revolution elite did not enjoy any advantage in — if anything, were discriminated against in their access to — formal schooling, the rapid and systematic rebound of the children generation is particularly striking.

4.4.4 Unlikely explanations for elite's rebound

We now investigate potential factors that could drive the elite's rebound in the children generation, but for which we find little empirical support. Such factors can be organized into four main classes: limitations of the revolutions; external mechanisms; selection; and sampling.

Limitations of the revolutions The pre-revolution elite's comeback could simply reflect the failure of the Communist and Cultural Revolutions to thoroughly deprive elite households of their wealth and access to higher education. Wealth may have been hidden if the Land Reform failed to take away all the land from the landlord and rich peasant households beyond the subsistence level, and the confiscation of other agricultural productive assets may have been incomplete. Such an explanation is unlikely, for at least three reasons.

First, the pre-revolution landed elite were more likely to suffer from starvation during the Great Chinese Famine, which constitutes *prima facie* evidence that they did not retain meaningful wealth after the Land Reform — see Appendix Table D.3, Panel C.

Second, hidden assets became largely irrelevant due to the collectivization movement in 1952–1957 that completely eliminated private property rights (both usage and transfer rights) to any land and production assets soon after the Land Reform. To the extent that one could try to hide wealth and assets from being confiscated, it is primarily in the form of slaughtering cattle for one-off private consumption, and the estimated scale of such behavior is rather low (Chen and Lan, 2017).

Third, no compensation policy was put in place to make up for the decades of persecution suffered by the pre-revolution elite, and cases of restitution are extremely limited — see Appendix A.3 for more information on restitution. Restitution of collectivized assets is unlikely to drive the persistence among the rural elite that we document, as confiscated assets were not returned to their previous owners. A systematic examination of the records in the *County Gazetteers* suggests that

the ownership of a portion of the previously confiscated agricultural production assets such as semi-mechanized farming tools has been re-allocated from collectives to households since 1981. However, these assets were typically allocated through lotteries or auctioned, rather than returned to their original owners (Unger, 1985). A small fraction of the urban elite received a portion of the belongings they had lost during house raids at the beginning of the Cultural Revolution, especially in Shanghai (see Appendix A.3 for more details). Excluding Shanghai residents from the sample does not change our baseline results (see Appendix Table D.13, Panel E.3). Finally, we show in Appendix Table D.4 that in 2010 the children generation of the pre-revolution elite are more likely to report unfair treatment from government officials. They are also (if anything) less likely to receive subsidies from the government or any other institution.⁴³

A related concern pertains to the duration of the revolutions. Would the pre-revolution elite have been able to rebound, had the Communist and Cultural Revolutions affected more than one generation? Széleányi (1988), Hanley and Treiman (2004), and Guirkinger et al. (2022) show the resurgence of the pre-revolution elite in the former Soviet Bloc. In the context of the former U.S.S.R., this rebound is all the more striking as the Communist period lasted longer there than in China. However, the comparison with our results is complicated by the fact that the policies implemented in Europe and Central Asia were much less radical, which makes the Chinese case particularly interesting and remarkable.

External mechanisms The elite rebound in the children generation could be the fortuitous consequence of their parents' self-employment and the private enterprise boom that characterized the Reform and Opening era. Parents with an elite background were indeed barred from factory jobs and other public sector positions during the revolutions, — either through labor-market discrimination or because of lower education, — leading to their concentrating in the private sector, which was less prestigious and financially rewarding before the liberalization of the economy. This could have put them and their children at an advantage in the subsequent private sector growth. Their rebound might also not have materialized, had China remained an agrarian economy.

We find that these explanations are unlikely. First, elite-background parents and children do not exhibit a significant difference in the probability to operate in the non-state sector in 2010 — see Table D.3, Panel B. Even if elite parents may have changed jobs during their careers, they do not seem to have taken advantage of the potential for income generation in the private sector — see Table 1. However, it could still be that their — more educated — children made their parents' fledgling businesses prosper. We investigate this alternative story more formally in Section 5.4. Second, the descendants of the pre-revolution elite also display a sizable and significant premium within the agricultural sector (Table D.9), which shows that their rebound is not merely the by-product of China's recent development strategy.

A related concern is that the pre-revolution elite's children generation may rebound simply

⁴³We include this potential confound in our decomposition of the elite income premium in Section 5.4.

because they ride the tide of the general resurgence in inequality across China and local conditions that favor inequality. Combining pre-revolution data on land ownership distribution from the *County Gazetteers* with contemporary data on inequality in real estate housing — the most relevant asset today — from the 2000 Population Census, we however show that the counties that were more unequal in the past tend to be *more* equal today.⁴⁴

Selection due to mortality The rebound of the pre-revolution elite could be the consequence of selection through famine mortality and violence targeting the pre-revolution elite. In particular, three major episodes generated large mortality across the population and may have differentially affected the pre-revolution elite: the Great Chinese Famine and violence during the Communist and Cultural Revolutions. We discuss the impact of those episodes in two steps.⁴⁵

First, we study the relationship between historical inequality and the severity of those episodes. In Appendix Table D.14, we investigate the relationship between the severity of the three high-mortality episodes that occurred in the lifetime of the grandparents and parents generations and inequality in land ownership before the revolutions. For all three high-mortality episodes, we observe that the severity of the episode in a given county is *not* statistically significantly associated with local inequality prior to the revolutions, and the systematic killing of landlords and rich peasants, albeit not zero, was too low to drive the persistence pattern that we document. Conversely, the size of the average famine-induced cohort loss at the county level is large and may have generated selection *within* the elite.

Second, we investigate whether selective survival can explain the observed premium among surviving elite. We start with survival during the famine, as measured by the famine severity in one's county of birth. In Appendix Table D.15, we show that the average pre-revolution elite income premium remains when we account for heterogeneity by famine severity. In fact, such a premium is *smaller* among individuals originating from counties that experienced a more severe famine (the coefficient on the interaction is not statistically significant at conventional levels). In other words, famine survival is likely to have led to negative selection among the pre-revolution elite, and thus the baseline estimates of the pre-revolution elite's rebound are likely a lower bound. Finally, we examine survival during the revolutionary violence. Appendix Table D.16 implements a similar exercise for the Cultural Revolution, examining heterogeneity in the elite income premium by the number of deaths due to the revolution divided by total population. We find a small and insignificant coefficient on the interaction between the death ratio and the elite status variable, suggesting that survival selection was mild among the pre-revolution elite.

Taken together, the evidence suggests that these events are unlikely to be driving the income premium we observe in the children generation of the pre-revolution elite.

⁴⁴We provide a detailed presentation and discussion of these results in Appendix D.6.

⁴⁵Further details about this empirical exercise can be found in Appendix D.4.6.

Selection due to migration The stark rebound of the pre-revolution elite in the children generation could reflect their different migration patterns. We consider three primary ways in which migration may explain our results: (i) selection out of the sample due to emigration out of mainland China, (ii) remittances, and (iii) spatial sorting of those included in the sample. While (iii) would be consistent with the entrepreneurial spirit that characterizes the pre-revolution elite and thus constitutes a potential mechanism behind the rebound (see Section 5.3 for a closer investigation), (i) and (ii) may bias our findings; we shall discuss their role here.

First, the pre-revolution elite may have a higher probability of migrating out of mainland China and thus being excluded from the CFPS sample.⁴⁶ International emigration presents in particular a threat to our inference through the grandparents generation: Whereas international emigration today is likely to be strongly positively selected based on current income and education, — and thus should lead us to underestimate the elite income premium, — the direction of selection is unclear for emigration in the early days of the People’s Republic of China. We examine the heterogeneity in the elite income premium in terms of the share of the population (from the 1953 Population Census) that emigrated to Taiwan — émigrés’ main destination in the 1940s and 1950s, — using Lin’s (2018) breakdown by province of origin of the immigrants from the mainland in the Taiwanese 1956 Population Census.⁴⁷ Appendix Table D.17 presents the results. We find that while the elite premium remains substantial across counties, it is (if anything) *lower* in regions that saw a larger share of their populations emigrate to Taiwan, suggesting *positive* selection of émigrés and thus allowing for a lower-bound interpretation of our baseline results.

Second, previous waves of both internal and international migration may confound our results if the children generation of the pre-revolution elite were more likely to receive remittances from rich urban or émigré relatives, allowing them to invest in human or physical capital and thus improve their socioeconomic position. We do not find evidence that the magnitude of such remittances is substantial among the households we study, and we find no differential access to remittances in the pre-revolution elite households (see Appendix Table D.3, Panel D).

Sampling Lastly, the household-based sampling that characterizes CFPS may affect our estimates of the elite’s rebound. Although we have no specific reason to believe that pre-revolution elite households are systematically over- or under-represented in the CFPS sample, such sample selection could occur if, e.g., rich families are less likely to participate in surveys and rich families *with an elite background* have some symbolic revenge to take, giving them the incentive to participate. Conversely, we show in Appendix Figure D.7 that the elite premium is visible at every level of the earnings distribution, not just in the right tail.

Elite and non-elite households may also differ in their probability to establish independent

⁴⁶Since our baseline results pool the urban and rural populations, internal migration cannot affect our results.

⁴⁷The main destinations in the aftermath of the Civil War were Taiwan, with 1.2 million immigrants from mainland China by 1956 (Lin, 2018; Yap, 2018), and Hong Kong, with 285,000 by 1954 (Peterson, 2012). Another 100,000 Chinese nationals were already in Hong Kong prior to 1949 (Peterson, 2012).

households. This would not bias the results unless this probability correlated with economic success *differentially* in elite and non-elite households. For instance, successful elite households would be overrepresented if they were more likely to split when economically successful. The robustness of our results to an alternative empirical strategy that allows us to include parent-child pair fixed effects (see Appendix Table D.12) suggests instead that the elite’s rebound is not driven by such compositional issues.

5 What explains the elite’s rebound?

In Section 4, we document that the pre-revolution elite has systematically rebounded in the children generation, despite the fact that the revolutions successfully equalized income in the parents generation, and despite the predictions of the stylized model — as outlined in Section 4.1 — that the suppression of physical capital (accumulated through asset inheritance) and human capital (that could be acquired through formal education) would break the intergenerational persistence.

What explains the pre-revolution elite’s resurgence? In Section 5.1, we begin by enriching the conceptual framework by broadening the definition of human capital and show how such a broader human capital could account for intergenerational persistence despite the revolutions. We then highlight two manifestations of the broadened class of human capital that the revolutions did not manage to annihilate among the elite: informal human capital transmitted through families and clan-based social capital. We examine their empirical relevance in Sections 5.2 and 5.3, respectively, and provide a suggestive decomposition of the elite income premium in Section 5.4.

5.1 Conceptual framework: intergenerational persistence despite the revolutions

To account for the rebound in elite income premium despite complete income equalization in the parents generation, we enrich our conceptual framework by broadening the definition of human capital. $H_{i,t+1}$ now encompasses a term $v_{i,t+1}$ that shapes the level of human capital alongside formal education:

$$H_{i,t+1} = y_{i,t+1}^b v_{i,t+1}^g,$$

where we assume $g < 1$.

We intend v to be a generic term that captures a variety of forces that belong to the broad class of human capital. For instance, it could be a set of productive values and cultural traits, e.g., work ethics or entrepreneurship, or denote social capital and networks that would allow one to make better employment or investment decisions.

Importantly, $v_{i,t+1}$ is an investment that requires active and costly nurturing.⁴⁸ We assume the cost to vary by the level of v in the previous generation ($v_{i,t}$). Intuitively, this reflects the fact

⁴⁸This fundamentally distinguishes it from (particularly, genetic) endowments A that could enter the human capital production function and would be transmitted passively and mechanically across generations — see Kweon et al. (2025) for a recent study on the association between genetic factors and income.

that investing in $v_{i,t+1}$ is easier if it is consistent with what the parents possess. For example, it is costly for parents to establish high work ethics among their children, but relatively less so if the parents themselves exhibit high work ethics and transmission occurs in part through “learning by observing.” We capture the cost of v ’s transmission by introducing a utility cost of its investment in each generation’s optimization problem:

$$U(c_{i,t}) + dE(W_{i,t+1}) - q_{i,t}v_{i,t+1},$$

where $q_{i,t}$ captures the unit cost of investment, which varies with $v_{i,t}$ and therefore across dynasties: $q_{i,t} = q(v_{i,t})$, so that $q_{E,1} < q_{N,1}$ if v was a factor behind the pre-revolution elite income premium. Crucially, as v ’s production occurs within the family and/or community, the revolutions did not and could not directly alter $q_{i,t}$.

We can thus re-write each generation’s optimization problem as follows:

$$\begin{aligned} \max_{c_{i,t}, y_{i,t+1}, v_{i,t+1}, b_{i,t+1}} \quad & U(c_{i,t}) + dE_t \left[r_{i,t+1} y_{i,t+1}^b v_{i,t+1}^g e_{i,t+1} + db_{i,t+1} - q_{i,t}v_{i,t+1} \right], \\ \text{s.t.} \quad & c_{i,t} + y_{i,t+1} + \frac{b_{i,t+1}}{1 + R_k} - W_{i,t} \text{ and } b_{i,t+1} = 0. \end{aligned}$$

We next examine the predictions of this framework in terms of education and income for the parents ($t = 2$) and children generations ($t = 3$). First, in the parents generation, the revolutions banned bequests, shut down educational investments beyond \underline{y} (for the elite), and decreased the overall return to human capital r , but differences in v_2 may persist, as this transmission channel remains intact.⁴⁹ Subsequently, the revolutions reduce (and potentially eliminate, as we showed empirically) the elite income premium in the parents generation, but to a lesser extent than in the simpler framework because of persistence in v .⁵⁰

Proposition 2 (Persistent differences in the parents generation despite the revolutions) Differences in v may persist into the parents generation, and $I_{E,2} = I_{N,2}$ implies that $v_{E,2} > v_{N,2}$.

Appendix C.2 presents the proof.

Second, after the revolutions, parents can again freely choose the (formal) education investment $y_{i,3}$ with a total budget of $I_{E,2} = I_{N,2} = \bar{I}$ — as we observe empirically.⁵¹ The key difference

⁴⁹If parents invested in v before the Cultural Revolution shock occurred or before they realized it, differences in v_2 would necessarily persist. In what follows, we assume that parents were aware of the effect of the Cultural Revolution on their children’s education levels and future earnings.

⁵⁰Instead of generating persistence through a v , Becker et al. (2018) assume that the parent’s human capital, H_t , enters their child’s human capital production function. Such a model would have the following consequences in our context: (i) it would reduce the likelihood of complete income equalization in the parents generation, as some human capital would be automatically transmitted; and (ii) conditional on imposing $y_E = y_N$ and observing income equalization in the parents generation, we would observe no elite rebound in the children generation.

⁵¹We assume that all members of the parents generation recognized the end of the revolutions and country’s return to normalcy.

between elite and non-elite grandchildren is their non-financial resources, i.e., v_3 nurtured by their parents, which generates the prediction that elite grandchildren will earn more and be more educated than their non-elite peers. The income premium results from the direct effect of a higher parental investment in $v_{E,3}$, due to a lower cost $q_{E,2}$, and the indirect effect on y through complementarities between y and v in the human capital production function.

Proposition 3 (*Elite income premium rebound in the children generation despite the revolution*) Conditional on their parents' having the same financial resources, the grandchildren of the pre-revolution elite have higher education, exhibit higher v , and earn higher incomes, i.e., $y_{E,3} > y_{N,3}$, $v_{E,3} > v_{N,3}$, and $I_{E,3} > I_{N,3}$.

Appendix C.3 presents the proof.

This conceptual framework highlights the importance of incorporating a broader set of factors in the formulation of human capital in order to account for the patterns of persistence that we document in Section 4. While a comprehensive investigation of all potential factors that may fall under the category of v is beyond the scope of this paper, we explore two manifestations of v that may be at play: human capital transmitted through families (e.g., cultural values), in Section 5.2; and social capital (e.g., clan-based networks), in Section 5.3. We finally assess their contributions to the elite income premium in Section 5.4.

5.2 Human capital transmitted through families

We now examine, as a first manifestation of v , whether human capital was transmitted among the pre-revolution elite through channels other than formal education (in particular, through families), and whether this could account for the elite's rebound.

We begin by revisiting the results on basic math and reading comprehension abilities that we presented previously. The parents generation of the pre-revolution elite performed equally well in math tests and substantially better in reading compared to their peers. The difference in the latter amounts to a level associated with about one year of formal education, despite a similar level of education. This pattern suggests that certain skills and knowledge were among the elite households through non-school channels. We observe a high level of performance, in both math and reading, among the children generation of the pre-revolution elite as well, although this could reflect human capital acquired through a combination of school and non-school channels.

We next turn to values and attitudes, another important aspect of human capital. We focus primarily on work ethics, which is generally predictive of income and wealth across many contexts (Alesina and Giuliano, 2015). We find that the pre-revolution elite express a much stronger belief in hard work. When asked "do you agree that the most important factor that determines someone's success is how hard she works," the children generation of the pre-revolution elite are much more likely to agree with the statement relative to their peers in the rest of the population (see Table 3,

Panel A.1, columns 4 and 5). They are also likely to have greater career aspirations and consider being rich as an important aspect of life (although this is noisily estimated). Such differences in expressed work ethics and aspirations are not merely reflecting the pre-revolution elite's higher income and educational attainment: Similar differences are observed even among young adults who have not yet participated in the labor market and experienced actual income differences themselves; and the expressed work ethics is *not* elastic to income changes over the period between 2010 and 2018 when we observe respondents repeatedly — see Appendix D.5.

The differences in expressed work ethics are consistent with actual differences in behavior. Table 3, Panel A.2 reports the estimated differences in hours spent on work during weekdays and hours spent on leisure on weekends between the pre-revolution elite and the rest of the population. One can see that the children generation of the pre-revolution elite spend significantly and substantially more hours working on weekdays and fewer hours on leisure on weekends — amounting to almost 198 more hours at work (and hence less leisure) each year.⁵² We observe similarly high working hours among the parents generation of the pre-revolution elite, though intriguingly not in their expressed attitudes on work ethics.⁵³ The stigma attached to these values during the revolutions may have made the parents generation reluctant to express them publicly even to this day.

Interestingly, while the pre-revolution and post-revolution elites enjoy a comparable income premium, the latter do *not* express stronger work ethics (see Table 3, Panels A.1, column 7), indicating that the high work ethics that we observe among the pre-revolution elite is not to be taken for granted among any socioeconomic elite group in China.⁵⁴ This may come as a surprise given that the stereotypical narrative (often used by the Communist Party itself during the revolutions) portrays the pre-revolution landed elite — especially the landlords — as a lazy, purely rent-seeking and exploitative class, and the Communist elite as the diligent working class. While some individuals may confirm such a stereotype, the average member of either elite class does not, which may reflect the fact that the average landlord and rich peasant did not own large latifundia in pre-revolution China,⁵⁵ and often engaged in farm labor themselves. Nonetheless, it is important to note that this does not necessarily suggest that high work ethics is uniquely held by the pre-revolution elite. In fact, children from non-elite households whose parents exhibit similarly high levels of work ethics also outperform their peers on the labor market.⁵⁶ In other words, the

⁵²Working longer hours has an ambiguous effect on welfare. It may make the descendants of the pre-revolution elite worse off, trading off income and well-being. Conversely, it could make them better off in other dimensions that they care more about than leisure. While we have limited data to explore this conjecture, self-reported happiness stands at a similar level among the elite and the non-elite (unreported results).

⁵³We observe higher levels of stated work ethics among the grandparents generation of the pre-revolution elite, although the difference is noisily estimated due to the sample size of the older cohorts (see Appendix Table D.18, Panel C).

⁵⁴They do spend more time working on weekdays (at a level similar to the pre-revolution elite), but they do not reduce their leisure time on weekends compared to the rest of the population (see Table 3, Panels A.2, column 7).

⁵⁵See Appendix A.1.4 for evidence and further discussion.

⁵⁶See Appendix Table D.20.

pre-revolution elite possess an important set of traits that has a high return in a modern, market economy.

In addition to the stronger work ethics, the pre-revolution elite exhibit differences in a number of other important values. The pre-revolution elite, compared to the rest of the population, are more likely (and significantly so, for the children generation) to declare that competition is desirable for society (see Table D.3, Panel E). We also observe that the pre-revolution elite spend *less* on real estate and housing compared to their non-elite counterparts, suggesting a shift toward investments in intangible assets (Panel F).⁵⁷

Co-residence with the parents generation may be an important factor to account for the transmission of values and the attitudinal differences between the pre-revolution elite and non-elite. Using CHIP data on income and co-residence patterns, we find that the sub-group of individuals in the children generation who live under the same roof as their parents exhibit the largest elite vs. non-elite income premium, and the gap essentially vanishes among those whose parents have already passed away.⁵⁸ While co-residence with parents could be driven by the alignment of fundamental attitudes between the two generations, the inability to co-reside due to the parents' premature death makes such sorting less of a concern. The pattern observed here is consistent with the interpretation that vertical transmission, of which co-residence and spending a significant amount of time together are a pre-requisite, plays an important role in explaining the attitudinal differences among the children generation. Close interactions between the generations may play an even bigger role in the transmission of stigmatized values and attitudes.⁵⁹ Furthermore, the fact that parental deaths do not correspond to a higher income among the elite also suggests that it is unlikely that the elite premium is simply the result of a willingness to take revenge and rectify the persecutions experienced by the previous generations.⁶⁰

Taken together, these results indicate that despite the revolutions, families have been an important vehicle for transmitting human capital across generations, including knowledge, skills, and important values.

⁵⁷Such a shift is similar to the patterns documented among the previously landed elite in Bolivia after the revolution (Kelley and Klein, 1977) and Polish forced migrants after WWII (Becker et al., 2020).

⁵⁸See Appendix Table D.21. CHIP allows us to observe incomes in the children generation and determine the class labels regardless of co-residence with parents. Conversely, we face limitations in terms of variables capturing v .

⁵⁹One could attribute part of the persistence and rebound to innate traits and characteristics, such as genetics, personalities broadly defined, intelligence, and emotional intelligence. The pattern that the pre-revolution elite's rebound may be affected by the co-residence with their parents suggests that such innate characteristics are unlikely to be the primary driver.

⁶⁰A similar hypothesis is that the persecution of the grandparents and parents generations established or made salient an elite group identity (Akerlof and Kranton, 2000) and narrative (Benabou et al., 2018), which would be critical in fostering a set of key values and attitudes. An indirect piece of evidence inconsistent with the persecution-induced revenge and resentment is that we do *not* observe weaker differences among those in the children generation who do not know their class labels and thus may belong to families where the history of persecution is less salient — see Table D.13, Panel B.1.

5.3 Staying with clan-based networks or moving to opportunities

We next examine, as a second manifestation of v , whether clan-based social networks fostered the elite's rebound. Such networks constitute an important social capital laying the foundation of local social fabrics, and may have been preserved and transmitted among the elite despite the revolutions.

Since clan-based social networks are closely tied to location, we distinguish between individuals who remain in their birthplaces and those who have migrated away. On the one hand, clan members who remain in their home counties strengthen and benefit from these social networks. On the other hand, staying may imply forsaking valuable opportunities elsewhere, especially if migration reflects a strong entrepreneurial spirit.

5.3.1 Staying to benefit from social networks and social capital

We first focus on the importance of traditional clans for the pre-revolution elite and on how involvement in those networks affects their earnings.

Traditional clan-based networks Our baseline study of the pre-revolution elite income premium in the children generation incorporates both movers and stayers.⁶¹ Table 4, Panel A decomposes the elite income premium between stayers and cross-province migrants. We observe that among those who stay in their birthplaces, the pre-revolution elite exhibit a considerable income premium relative to the rest of the population as well: The income premium remains sizable and statistically significant at the 10% level among stayers.

We now examine heterogeneity by a local characteristic that may systematically benefit the elite and foster the rebound among non-migrants. Specifically, we investigate whether the presence of strong local networks based on traditional families and kinship clans is associated with the extent to which the pre-revolution elite manage to rebound when they physically remain in these networks. Kinship clans and family-based networks in general are vital fabrics of traditional society in China, where they still sustain cooperation, public goods provision, and resource allocation in rural areas. We capture kinship clan strength using a Hirschman-Herfindahl index of surname concentration among historical civil service examination top scorers (*jins**hi*) born in the county.⁶²

⁶¹Using such a pooled sample ensures that our results are not driven by selective emigration from (e.g., rural) survey counties. International migrants are not observable in our data; they are however likely to be positively selected based on income, which should lead us to underestimate the elite premium. We discuss selection through international emigration in Section 4.4.4 and Appendix D.4.6.

⁶²This measure captures the structure of the local social network and can be interpreted as the probability that two individuals randomly selected in one county belong to the same clan. It is strongly correlated with another measure of surname concentration from a completely independent source: A 1 standard deviation increase in *jins**hi* surname concentration is associated with a 0.80 standard deviation decrease in the number of genealogies kept in the county, normalized by population (p-value = 0.069). It is also strongly predictive of network strength among the pre-revolution elite: A 1 s.d. increase in *jins**hi* surname concentration is associated with a 0.10 s.d. increase in the likelihood of asking non-relatives for financial help (p-value = 0.011). See Appendix B.2.3 for details about the data.

We estimate the heterogeneous pattern of the income gap in the children generation between the pre-revolution elite and non-elite who have not moved away from their birthplaces, with respect to kinship clan strength in the corresponding county. The coefficient estimates are presented in Table 4, Panel B, columns 1–3. We find that the pre-revolution elite who reside in their birthplaces experience a significantly more substantial rebound in counties that have stronger kinship clan presence: On average, a one standard deviation increase in surname concentration in the local population is associated with about a 60% increase in the observed income gap between the pre-revolution elite and non-elite in the children generation.⁶³ It is noteworthy that belonging to the elite does not automatically involve benefiting from traditional clan-based networks: The post-revolution elite are, if anything, hurt by the social networks that allow the pre-revolution elite to thrive.⁶⁴

Social capital: family-based social networks The pre-revolution elites' ability to benefit from the traditional social fabric reflects the greater social and family-based networks that they sustain more broadly.

We first examine attitudes related to social and family networks. In Table 3, Panel B.1, one observes that compared to the rest of the population, the pre-revolution elite are substantially more likely to consider social networks as important and social connections as critical to success. This is particularly striking for the children generation. Interestingly, the post-revolution, Communist elite do not exhibit similarly strong attitudes concerning social networks and connections (see columns 7–9).

The differences in attitudes are consistent with behavior. We begin by examining the composition of households. Specifically, we ask whether members of the pre-revolution elite households are more likely to marry other descendants of the pre-revolution elite. Table 3, Panel B.2, presents the estimated likelihood of assortative matching based on the pre-revolution elite status. One observes that controlling for birth cohort and county of residence fixed effects, which hold fixed many factors related to the marriage candidate pool, the pre-revolution elite are significantly more likely to marry within their class background.⁶⁵ This suggests that homogeneous households are (still) formed and neither the revolutions nor the subsequent Reform and Opening period led to a thorough reshuffling of the marriage market.

Table 3, Panel B.2 further shows that the pre-revolution elite are (if anything) more likely to interact with non-family members financially. The children generation of the pre-revolution elite, compared with their peers in the rest of the population, are more likely to ask for financial and

⁶³Stronger clan presence also reduces migration — see Appendix D.5 and Table D.22 in particular.

⁶⁴See Appendix Table D.23.

⁶⁵The probability to marry within the elite is even higher, and also statistically significant, for both the parents and grandparents generations. Similarly, the post-revolution, Communist elite are significantly more likely to marry within their class, and significantly less likely to intermarry with the descendants of the pre-revolution elite (see columns 1, 4, and 7).

career help from non-relatives, although this is estimated with noise, and they provide a greater amount of family gifts each year. Interestingly, we do not observe substantial differences in financial transfers exchanged with relatives, which stands in stark contrast with the fact that social networks are largely coextensive with the extended family and strong ties are more usually leveraged than weak ties in China (Bian, 1997). Again, one cannot infer values and behavior from socioeconomic status: The children generation of the post-revolution elite are *less* likely to exchange financial or career help with non-relatives.

5.3.2 Moving to opportunities

The pre-revolution elite, if they stayed in their birthplaces, benefited from the clan-based social networks that the revolutions did not eradicate. The elite's stronger clan-based social networks enjoyed at birthplace raise the threshold at which individuals become willing to migrate, implying an elite income premium to be observed among migrants as well.⁶⁶ Indeed, migration explains about 30% of the baseline pre-revolution elite income premium, and migrating is associated with a staggering 8-fold increase in the income gap between the pre-revolution elite and the rest of the population (Table 4, Panel A).

As moving to opportunities represents an important channel to improve one's livelihood, we may expect migration choices to reflect the pre-revolution elite's entrepreneurship in a broader sense — their willingness to take risks and ability to identify economic opportunities (see Kerr and Kerr, 2020, for a review of the link between entrepreneurship and migration). We examine whether the descendants of the pre-revolution elite are more likely to display such traits in Appendix D.5.⁶⁷ We find that the children of pre-revolution elite households differ in their responsiveness to push and pull factors,⁶⁸ although they exhibit a similar or lower probability to migrate, which may reflect access to stronger social safety nets at origin (Munshi and Rosenzweig, 2016), consistently with the evidence on clan-based networks.

Moreover, heterogeneity in the pre-revolution elite's migration probability shows that they are more likely to leave low-productivity origin regions and sort into high-productivity places, reflecting their ability to seize opportunities.⁶⁹ We find that pre-revolution elite individuals in the children generation react more strongly to pull factors than the rest of the population, which we interpret as evidence of the pre-revolution elite's higher responsiveness to economic incentives or ability to identify opportunities. This ability to move to opportunity is not a characteristic that all elite groups necessarily share. We indeed find that the children generation of the post-revolution

⁶⁶We document a slightly lower migration probability among the pre-revolution elite in Appendix Table D.22.

⁶⁷See in particular Appendix Table D.22.

⁶⁸For details about the data sources and measurement of migration push and pull factors, please refer to Appendix B.2.2.

⁶⁹Migration decisions and wages may be simultaneously determined. In Appendix Table D.22, we use arguably exogenous innovations in agricultural commodity prices on international markets (Imbert et al., 2022) as push shocks and a Bartik-style variable to capture pull factors — see Appendix D.5 for details.

elite do *not* earn a higher premium when they migrate.⁷⁰

Taken together, these patterns suggest that while the Communist and Cultural Revolutions eradicated the elite class's physical assets and opportunities to accumulate human capital through formal channels of schooling, the basic social fabrics within elite families and their kinship clans may have survived. The descendants of the elite families who stayed in their birthplaces benefited from such kinship networks; trading off such benefits, some elite families seized migration opportunities, reflecting their broad entrepreneurship. These factors in turn facilitate the elite's rebound.

5.4 Quantitative assessment of the relative importance of informal human capital

A question remains: What is the relative importance of v — and of the informal human capital and social capital that we focused on as its key components — in explaining the elite's rebound in the children generation? In this section, we implement a horse race between drivers of intergenerational transmission that are standard in the literature and the new factors that we put forward in this paper.

To this end, we resort to a decomposition exercise based on the omitted variable bias formula (Gelbach, 2016). This approach considers factors mediating the role of the elite status on income as potential omitted covariates; the stronger the association between those covariates and both the elite status and income, the larger the share of the income premium that they can account for. Importantly, the resulting contributions are correlations and should not be interpreted causally. They can however constitute suggestive evidence of the role of different factors in mediating the elite rebound after the revolutions.

We consider three broad classes of factors that may drive the elite rebound.⁷¹ First, we look at the direct contribution of v . As in the previous sections, we highlight two components of v : informal human capital and social capital. In both cases, we include proxies that reflect both attitudes and behavior. We capture informal human capital using the first principal component of the respondent's opinion about the importance of hard work for success, their opinion about the importance of being rich, and the number of hours worked on weekends; we interpret the resulting index as a measure of work ethics. We complement this index with the migration variables of Table 4, as migration can be seen as a manifestation of entrepreneurial spirit. We proxy for social capital with the first principal component of the respondent's opinion about the importance of social connections for success, the number of visits paid to relatives and to friends during Spring Festival, and answers to hypothetical questions about whether they would ask non-family acquaintances for (financial, career, or any) help if they needed to. We additionally include the interaction of the elite status with our measure of the strength of local clans, as in Table 4.

⁷⁰See Appendix Table D.23.

⁷¹The variables included in the decomposition under those three classes need not constitute a comprehensive list: Other factors may be left out, but the exercise accommodates such a misspecification through the unexplained share.

Second, we study the role of factors commonly seen as major determinants of socioeconomic status in the literature: education and occupational choices. Education most closely reflects the formal human capital investments y in the conceptual framework. However, we showed in Proposition 3 that parental investments y after the revolutions did not arise from larger financial resources but from complementarities with v . The contribution of education, which we capture with years of schooling and an indicator variable for education above senior high school, should thus be interpreted as the indirect effect of informal human capital. Similarly, while occupational choices may be the consequence of an educational trajectory, they may also reflect an individual's ability to identify more rewarding labor market opportunities. We capture such choices with indicator variables for SOE employment, self-employment, broad employment types (own business, work unit, and agriculture), and granular industrial sectors.

Third, we use this decomposition exercise as an opportunity to test for alternative factors not taken into account in the conceptual framework and that may affect our interpretation of the elite rebound. We thus allow for parental self-employment to explain the elite premium in the children generation. The rationale is that the rebound could be due to the fortuitous concomitance between high private sector growth in the Reform and Opening era and the fact that pre-revolution elite parents were forced into self-employment by labor market discrimination and lower educational attainment during the revolutions, although this difference is not obvious when measured in 2010 (Table 1). We also include indicator variables for the (both pre- and post-revolution) elite status of the respondent's spouse to capture the role of assortative matching in (potentially) inflating the elite rebound. Finally, we add variables on subsidies (both indicator variables and information on the amounts received) from various institutional sources, e.g., work units or local governments, to investigate hypothetical implicit compensations that would have mechanically allowed the descendants of the pre-revolution elite to overcome a generation of persecution.

We present the results of the decomposition in Table 5. The first row provides for reference the elite income premium in the children generation, restricting the estimation to the sample for which the covariates considered in the decomposition are not missing. We then display the contribution of each set of factors, which we further decompose into subsets. The final row of the table shows the sum of all the contributions of the covariates. All the results are net of fixed effects: In columns 1 and 2, we include county and cohort fixed effects as in our baseline specification, and in columns 3 and 4 we add employment sector, province sector, and birth province fixed effects.

The direct contribution of (proxies for) v explains a sizable portion of the elite's rebound. Between 42% and 45% of the income premium can be directly traced to informal human capital and social capital. While the contribution of the former is large and statistically significant at the 5 or 10% level, that of the latter is smaller in magnitude and more noisily estimated. Education and occupational choices, which we label "Intermediate factors" as a group to highlight the fact that they should be interpreted as the indirect contribution of v in the conceptual framework, account each for around 20–30% of the income premium. Finally, parents' self-employment, marital choices,

and subsidies explain very little of the elite income premium and do not enter the regressions significantly. Other, unobserved factors do not seem to matter either, as the total explained by the covariates is of the order of magnitude of the premium to be explained.

These suggestive results indicate that v may play a major role in explaining differences in socioeconomic status, both directly — as it encompasses productive values and behaviors — and indirectly — through complementary investments in y and an enhanced ability to make high-earning occupational choices.

6 Conclusion

This paper investigates the extent to which efforts to eradicate inequality in wealth and education can shut off intergenerational persistence of socioeconomic status. We find that the Communist and Cultural Revolutions in China — among the most radical social transformations in recent human history — prevented the elite from transmitting to their children physical capital and human capital acquired from formal schooling. Nonetheless, the individuals whose grandparents belonged to the pre-revolution elite, growing up after the revolutions ended, systematically bounce back and earn substantially higher incomes than their peers. Quite strikingly, we find that the pre-revolution elite managed to rebound, albeit to different degrees, across broad sectors of activity and whether in situ or by seizing economic opportunities outside of their provinces of birth.

We show that the transmission of “informal” human capital — an emphasis on effort, an entrepreneurial spirit materializing in an ability to migrate to opportunities, and the survival of social capital manifested in kinship-based networks — contributes to the pre-revolution elite’s persistence despite the revolutions. These channels, centered on families, have been extraordinarily resilient despite such broad and deep institutional and political changes as the Chinese revolutions brought about. Thus, these channels may be largely and generally immune to policy interventions that aim to level the playing field, making them powerful sources of persistence across generations.

One may only speculate that had the Chinese revolutions involved mass killing of the elites themselves, lasted for more than one generation, or directly targeted transmission within the family sphere, the younger generation would have been prevented from exchanging with those who grew up prior to the revolutions. As a result, human capital transmission within families as well as family-based social capital among the elite may have become severely undermined. Since policies targeting intergenerational mobility as extreme as the Chinese revolutions — let alone more extreme ones — are exceptionally rare, intergenerational persistence will likely endure.

Would instilling the right set of values and social capital in non-elite children allow them to converge with elite peers in terms of income? Our results indeed hint at a non-negligible portion of inequalities being due to productive traits nurtured by parents in their children. While our conceptual framework assumes a utility cost of nurturing demanding values in one’s chil-

dren (and that this cost is alleviated by parents' holding such values themselves), other hurdles may constrain the possibility to "become elite." Such hurdles, which have so far received little attention within economics, range from forces that prevent parents from making productive (informal) investments, — e.g., beliefs about children's abilities (Duhon, 2025), stigma associated with mobility (Piketty, 1995, 1998), or social structures favoring elite reproduction (Bourdieu and Passeron, 1970), — to those that prevent children from benefiting from their parents' investments — e.g., reference groups (Merton, 1953; Boudon, 1974) or self-worth (Covington, 2000) and other psychological mechanisms that undermine motivation (as reviewed in Eccles and Wigfield, 2002).

Moreover, although our paper suggests general mechanisms for what makes the elite remain elite, it is beyond our scope to investigate what makes them elite in the first place. An important limitation is the lack of information on elite households' values and social capital before the revolutions, so we take inequality in the first generation as given. A comprehensive assessment of intergenerational transmission of income and education — from the perspective of both individual households and society at large — would require a thorough investigation into the origin of elite status, a task we hope future research will address.

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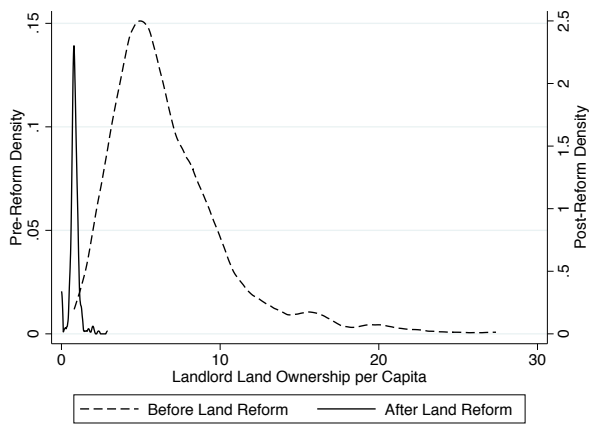
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Yap, Ko-Hua, "Mainland Chinese in Taiwan: number, origins, and distribution [in Chinese]," *Newsletter of Taiwan Studies*, 2018, 103, 15–17.

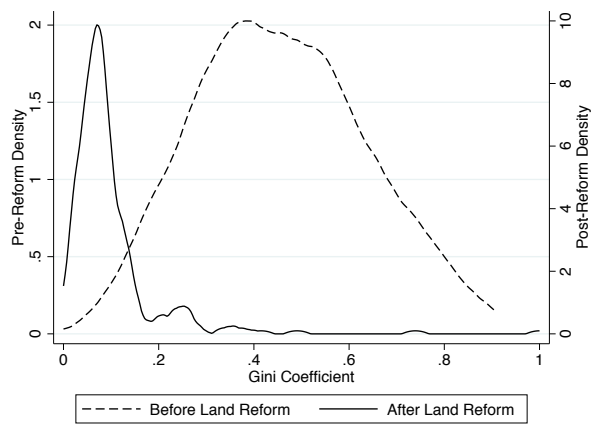
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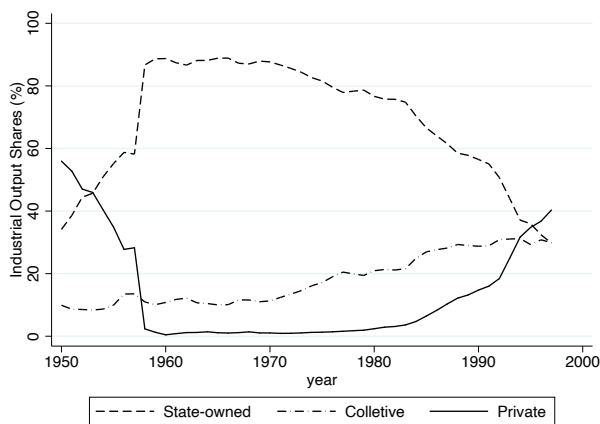
Figures and tables



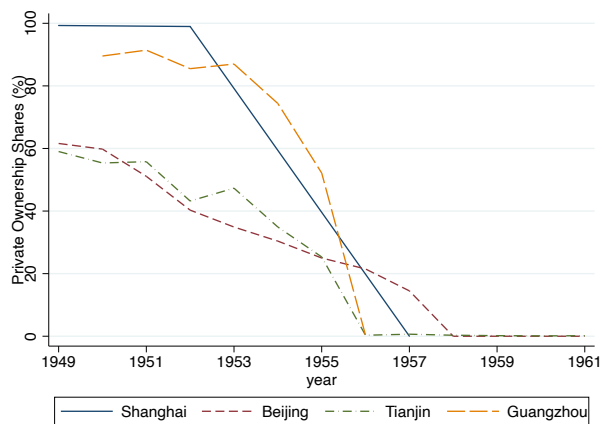
A. Landlord land ownership per capita



B. Gini coefficient



C. Industrial output shares by ownership



D. Private ownership in four major cities

Figure 1: This figure shows indicators of asset ownership before and after the Communist Revolution. Panels A and B display measures of the land distribution across rural Chinese counties, from *County Gazetteers*. Panel A plots the number of acres of land owned per landlord household member before and after the Land Reform. Panel B plots the Gini coefficient of land ownership before and after the Land Reform. The dashed (solid) line is the probability density function before (after) the Land Reform. Panels C and D display (urban) industrial output shares by ownership type and private ownership shares by city, respectively. Panel C presents the average shares across all provinces between 1950 and 1993, based on the report on the *Socialist Transformation of Capitalist Industry and Commerce in China*. Panel D presents city-level shares across 4 major industrial cities: Beijing, Shanghai, Tianjin, and Guangzhou, based on data from the corresponding *City Gazetteers*.

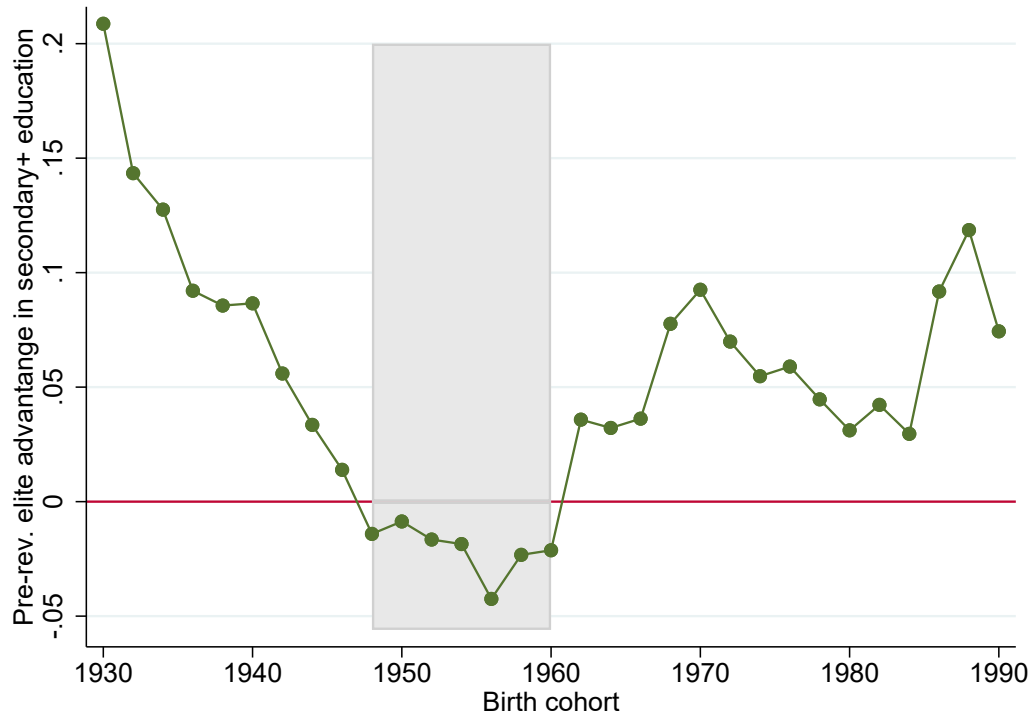


Figure 2: This figure plots the pre-revolution elite’s advantage in educational attainment — the average difference in the probability of completing at least secondary education between the pre-revolution elite and the rest of the population. The shaded area indicates the birth cohorts whose education could be potentially affected by the Cultural Revolution, i.e., those who would have completed or entered secondary school (age 12–18) between the start of the Cultural Revolution in 1966 and the normalization of education in 1972. County fixed effects are controlled for.

Table 1: Parents and children generations of the pre-revolution elite

	Both generations		Parents generation			Children generation			
	Mean	Std. dev.	Elite diff.		Overall		Elite diff.		Overall Mean
			Coef.	Std. err.	Mean	Std. err.	Coef.	Std. err.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
<i>Panel A: Income</i>									
Annual labor income	12917.073	28411.019	-411.787	521.122	10211.254	2,176.578**	895.169	15687.079	
<i>Panel B: Labor market sector choices</i>									
Currently employed	0.543	0.498	0.071***	0.018	0.474	0.063***	0.019	0.617	
Non-agricultural job	0.463	0.499	-0.002	0.020	0.333	0.042**	0.020	0.572	
Change to non-agricultural job from parents	0.170	0.558	-0.025	0.027	0.082	0.042	0.030	0.244	
Self-employed or employer	0.104	0.306	0.019	0.014	0.077	0.044**	0.021	0.127	
Career prestige score (ISEI)	31.914	14.177	-0.414	0.594	29.201	2.111***	0.789	34.177	
<i>Panel C: Educational performance</i>									
Years of education completed	6.195	4.871	0.222	0.158	5.080	0.830***	0.186	7.388	
Completed at least junior high school	0.493	0.500	0.006	0.017	0.405	0.075***	0.019	0.587	
Completed at least senior high school	0.198	0.399	-0.017	0.012	0.152	0.065***	0.019	0.247	
Above median math test score (2010)	1.308	0.462	-0.013	0.014	1.213	0.081***	0.020	1.410	
Above median reading test score (2010)	1.482	0.500	0.057***	0.019	1.355	0.046**	0.018	1.618	

Notes: Columns 1 and 2 present the mean and standard deviation, respectively, of the variable for the parents and children generation combined. Columns 3 and 6 (4 and 7) present regression coefficients (standard errors) of estimated differences between members of the pre-revolution elite and the rest of the population for the parents and children generations, respectively, controlling for cohort fixed effects and residence county fixed effects. Columns 5 and 8 present the means of the corresponding outcome variables in the parents and children generations, respectively. Standard errors are clustered at the county level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: parents (1940–1965 birth cohorts; $N = 11,436$ in Panels A and B, and $N = 12,113$ in Panel C) and children generations (1966–1990 birth cohorts; $N = 11,171$ in Panels A and B, and $N = 11,313$ in Panel C). Note that in Panel B, we examine all outcomes except “Currently employed” conditional on being employed, leading to a reduced sample (parents generation: $N = 5,618$; children generation: $N = 6,735$).

Table 2: Decomposing income differences among the children generation

	Total income				
	(1)	(2)	(3)	(4)	(5)
<i>Panel A: pre-revolution elite</i>					
Elite	2176.578** (895.169)	2226.804** (896.360)	2202.577** (902.716)	2183.462** (895.486)	2410.995** (929.176)
<i>Panel B: post-revolution elite</i>					
Elite	1437.658 (1273.853)	1365.409 (1294.624)	1282.384 (1303.959)	1437.268 (1272.002)	1458.525 (1239.565)
County FE	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
Sector FE	No	Yes	No	No	No
Province by sector FE	No	No	Yes	No	No
Migration FE	No	No	No	Yes	No
Birth province FE	No	No	No	No	Yes

Notes: This table shows elite income differences with a set of control variables. All specifications include cohort fixed effects and county fixed effects. Column 1 presents the baseline income difference on the basis of elite status. Column 2 additionally includes employment sector fixed effects; column 3 includes province sector fixed effects; column 4 includes a migrant indicator variable, defining migrants as individuals whose current county of residence is different from their birthplace; column 5 includes birth province fixed effects. Standard errors are clustered at the county level. The mean of the dependent variable is RMB 15,687 (std. dev. 34,362). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: children generation (1966–1990 birth cohorts); $N = 11,171$.

Table 3: Values for the parents and children generations of the elites

	Pre-revolution elites						Post-revolution elites		
	Parents generation			Children generation			Children generation		
	Elite class diff.		Overall	Elite class diff.		Overall	Elite class diff.		Overall
	Coef.	Std. err.	(3)	Coef.	Std. err.	(5)	Coef.	Std. err.	(8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
<i>Panel A.1: Work ethics – attitudes</i>									
Hardwork is critical for success	0.011	0.026	3.919	0.072***	0.027	3.902	-0.030	0.025	3.902
Important to become rich	-0.104*	0.054	3.631	0.094*	0.057	3.628	-0.014	0.048	3.628
<i>Panel A.2: Work ethics – behaviors</i>									
Average hours working on weekdays	0.279**	0.135	1.411	0.668***	0.194	3.131	0.614***	0.169	3.131
Average hours working on weekends	0.577***	0.151	2.804	0.390**	0.178	3.141	-0.091	0.140	3.141
<i>Panel B.1: Social network – attitudes</i>									
Network is more important than ability	0.111***	0.041	3.583	0.139***	0.048	3.543	-0.005	0.043	3.543
Connection is critical for success	-0.020	0.040	3.569	0.072*	0.041	3.413	-0.050	0.049	3.413
<i>Panel B.2: Social network – behaviors</i>									
Spouse is pre-revolution elite	0.085***	0.021	0.051	0.046**	0.022	0.031	-0.013**	0.006	0.031
Spouse is post-revolution elite	-0.039***	0.012	0.108	-0.005	0.011	0.068	0.159***	0.022	0.068
Financial help from non-relatives	-0.005	0.011	0.087	0.022	0.015	0.120	-0.001	0.013	0.120
Career help from non-relatives	0.008	0.009	0.027	0.013	0.015	0.088	-0.018*	0.010	0.088
Annual gift value	158.106	154.723	2,144.428	547.667***	208.704	2,371.102	444.287**	215.915	2,371.102

Notes: Columns 1 and 4 (2 and 5) present regression coefficients (standard errors) of estimated differences between members of the pre-revolution elite and the rest of the population for the parents and children generations, respectively, controlling for cohort fixed effects and residence county fixed effects. Column 7 (8) presents regression coefficients (standard errors) of estimated differences between members of the post-revolution elite and non-elite households for the children generation, controlling for cohort fixed effects and residence county fixed effects. Standard errors are clustered at the county level. Columns 3, 6, and 9 present the mean of the corresponding outcome variables. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: parents (1940–1965 birth cohorts; N = 10,304, except in Panel A.2, where N = 12,130, and for marital choices in Panel B.2, where N = 9,215) and children generations (1966–1990 birth cohorts; N = 10,615, except in Panel A.2, where N = 11,321, and for marital choices in Panel B.2, where N = 7,582).

Table 4: Decomposing elite income along migration and local kinship network

	Total income		
	(1)	(2)	(3)
<i>Panel A: Elite income differences due to migration</i>			
Elite	1662.404*	1694.791*	1689.803*
	(930.231)	(921.850)	(931.647)
Elite migration	13846.611***	14697.206***	14674.450***
	(5230.405)	(5341.153)	(5400.607)
Migration	49.385	75.418	-86.241
	(1886.511)	(1876.001)	(1826.985)
<i>Panel B: Clan network and income differences among non-migrants</i>			
Elite	1978.302	2087.612*	2083.956*
	(1202.975)	(1179.367)	(1217.567)
Elite clan	1334.854**	1285.665**	1308.670**
	(522.837)	(490.285)	(493.837)
Birthplace FE	Yes	Yes	Yes
Residence FE	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes
Sector FE	No	Yes	Yes
Province sector FE	No	No	Yes

Notes: Panel A decomposes the pre-revolution elite's income premium among the children generation by migrants and stayers; migrants are defined as those who reside in provinces different than their birth provinces. Panel B decomposes the pre-revolution elite's income premium among those who do not migrate, based on their residence county's local clan network strength. Clan network strength is measured by the normalized Hirschman-Herfindahl index of *jinshi* surnames at the county level, during the entire period of Ming and Qing dynasties. All columns control for birthplace province and cohort fixed effects, as well as residence county fixed effects. Column 2 additionally controls for employment sector fixed effects; and column 3 additionally controls for province sector fixed effects. Standard errors are clustered at the county level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: Panel A: children generation (1966–1990 birth cohorts); $N = 11,154$; Panel B: non-migrants among the children generation; $N = 8,867$.

Table 5: Decomposition of the elite wage premium in the children generation

	Total income			
	(1)	(2)	(3)	(4)
Elite income premium	2235.861**	2235.861**	2658.047***	2658.047***
	(943.196)	(943.196)	(1008.244)	(1008.244)
<i>...of which, explained by:</i>				
v (direct)	975.916	948.675	1198.819	1176.646
	(733.043)	(735.327)	(737.221)	(739.457)
Informal human capital	508.826*	513.046*	795.717**	796.597**
	(299.693)	(300.616)	(366.319)	(365.328)
Social capital	467.090	435.629	403.101	380.048
	(622.450)	(623.535)	(635.754)	(635.476)
Intermediate factors	1266.407***	1255.988***	1263.210***	1254.096***
	(391.515)	(390.133)	(359.081)	(357.104)
Education	692.370***	683.687***	663.229***	655.112***
	(195.619)	(193.594)	(187.862)	(185.386)
Occupational choices	574.038*	572.301*	599.981*	598.984*
	(333.935)	(334.997)	(309.263)	(310.203)
Alternative factors		80.446		79.636
		(82.806)		(81.226)
Parents self-employed		88.444		84.858
		(70.801)		(66.652)
Marital choices		11.978		18.381
		(33.629)		(34.383)
Subsidies		-19.976		-23.603
		(29.075)		(30.285)
<i>Total explained by covariates</i>	<i>2242.323</i>	<i>2285.108</i>	<i>2462.028</i>	<i>2510.377</i>
# observations	10,154	10,154	10,154	10,154
County FE	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes
Sector FE	No	No	Yes	Yes
Province by sector FE	No	No	Yes	Yes
Birth province FE	No	No	Yes	Yes

Notes: This Table follows Gelbach (2016) to decompose the elite income premium in the children generation. The first row displays the premium in the restricted model (no additional covariates), considering the sample where the covariates added below are not missing. Each row under “...of which, explained by” corresponds to a set of variables, further decomposed into subsets — please refer to the text for details. “Total explained by covariates” displays the sum of the contributions of the covariates. All columns control for county and cohort fixed effects. Columns 3–4 additionally control for employment sector, province sector, and birth province fixed effects. Standard errors are clustered at the county level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

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A Historical background

In this section, we provide additional information on the Communist Revolution and the Cultural Revolution. Many books have been written about the historical details of these two revolutions (e.g., MacFarquhar and Schoenhals, 2006; Dikötter, 2016); here we focus on the particular aspects of the revolutions that intended to eradicate the advantages of the pre-revolution elite, including confiscating their assets, removing their access to secondary and higher education, and even stigmatizing attitudes and values that they might have held prior to the revolutions.

A.1 The Communist Revolution

A.1.1 The Communist Revolution in rural areas: the Land Reform

The Communist Revolution was a series of movements that allowed the Chinese Communist Party to consolidate political power throughout China toward the end and in the immediate aftermath of the Chinese Civil War (1945-1949). The most important of these movements was the Land Reform.¹ We complement Section 2 here by briefly describing the land ownership context prior to the Land Reform, how the Land Reform was implemented, and its effect on land distribution and rural China in general.

First, the context of rural China differed from other settings where land reforms have been implemented or considered. Before the Land Reform, landlords owned on average 6 acres per capita, or 6 times more land than poor peasants — see Section 4.3, — and 9.0% of the population owned 47.99% of the land. In other words, while land assets were unequally distributed prior to the Land Reform, the Chinese context does not resemble the extreme land concentration observed in Latin America, characterized by the predominance of large plantations or latifundia — e.g., prior to the 1952 land reform in Bolivia, only 6% of landowners owned 92% of all cultivated land, consisting of estates over 1,000 hectares (Wagner, 1989). Landlords in China owned a relatively small amount of land, working on the land themselves, and sometimes hiring labor (Fei et al., 1992). Thus, Chinese landlords were closer to well-off farmers in small-scale farming economies than rentiers who own huge plots of land. The rules established by the State Council to distinguish between landlords and rich peasants confirms this specific feature of rural China in the 1940s — see the discussion of class labels below.

Second, the Land Reform was designed to apply to the whole country, while adapting to local circumstances. The Land Reform started in 1947 in the newly “liberated” regions under the Communist Party’s rule and concluded in 1953 when the reform applied to the entire country. It was formalized and implemented as a nationwide policy by the *Agrarian Reform Law* in late 1950. The law was based on *China’s Agrarian Reform Law Framework* approved in 1947 and built upon the Party’s earlier land reform experiences. Article 1 of the law, quoted in Section 2, emphasizes the Communist Party’s commitment to expropriate the class of landlords and rich peasants and advocate the proprietorship of the peasantry. The rest of the law lays out specific guidelines for transferring land ownership from landlords to poor peasants. Section 2, titled “Confiscation and Requisitioning of Land,” orders the landlords’ land, cattle, “excessive production tools,” and real estate properties to be confiscated (e.g., Article 2). Section 3, “Distribution of Land,” further instructs that the confiscated land and other assets should be distributed uniformly, fairly, and reasonably among landless peasants and poor peasants who owned very limited assets (e.g., Article

¹Some of the background description here is also shown in Chen et al. (2017).

10).

To guide decision-making and the implementation of the Land Reform across China, the *Agrarian Reform Law* established a set of uniform principles. The *Agrarian Reform Law* was nationally oriented in tone and content, so that more detailed rules and explicit regulations pertaining to implementation needed to be provided in the form of supporting documents, including implementation legislation and important speeches by the central government and provincial authorities. To maximize the chances that implementation would go smoothly and efficiently, the central government devolved all land reform responsibilities to local governments, leaving considerable flexibility to interpret, adapt, plan, and carry out the Land Reform in each locality. This heavy emphasis on the informal and often personalized approach of implementing the Land Reform reflects the reality that the core field staff of the reform — local cadres complemented by the Peasants' Association — were technically under-trained but politically dedicated (Wong, 1973a).

The redistribution process typically consisted of two stages. First, the locality formed *ad hoc* committees and teams, mobilizing the rural masses via propaganda and indoctrination, and crucially, assigning *class labels* to families based on investigations of land holdings and discussions in mass meetings (Hinton, 1966). Second, based on the class labels, land and other production tools were confiscated from the landlords and rich peasants, and redistributed to the landless and poor peasants. The expropriation and redistribution were operationally one process, and in the vast majority of the cases, what was expropriated was entirely redistributed (Wong, 1973b). Appendix Figure A.1 presents a photograph taken during the Land Reform when rural residents were measuring the land in preparation for the redistribution.



Figure A.1: Measuring land during the Land Reform.

The Land Reform was a zero-sum game, and the government made sure that the victims complied and the beneficiaries indeed received asset transfers. Both physical and psychological violence (or the threat of violence) were deployed during the confiscation process to suppress opposition from the expropriated households. A militia was organized for the purpose of the Land Reform, and it is estimated that for every landlord there were 8 organized peasants assisting the

Land Reform implementation, among whom one was armed (Wong, 1973a). Forced confessions in small groups and mass trials attended by tens of thousands were also employed to induce submission through intense psychological pressure.

Third, the Land Reform achieved a thorough reshuffling of land assets and durably transformed the Chinese countryside. The Land Reform confiscated land from the landlords and rich farmers, and redistributed the land to the poor and landless. While scholars debate on the exact magnitude of land redistribution during the Land Reform, it has undeniably resulted in a “monumental and profound” socioeconomic revolution that affected almost every rural resident in China (Huang, 1995). In 1953, the central government declared that the Land Reform had achieved its goals in most of China. The landlord class was essentially eliminated, and their asset level brought down to that of middle or even poor peasants. Landless, poor, and middle peasants received farmland for cultivation amounting to 43% of total land acreage in China, according to some estimates (among others, see Wong, 1973b; Guillermaz, 1976; Perkins, 2013), which makes the Chinese Land Reform one of the most extreme examples of wealth equalization in a short period of time in human history (Wong, 1973a). The far-reaching social impact of the Land Reform is described by Schurmann (1971) as follows:

[...] as a social revolution, land reform succeeded in destroying the traditional system of social stratification in the rural areas. The old rural gentry, whether based on the village or residing in towns, was destroyed. A social element, which had exercised leadership in the village by virtue of its status, its ownership of land, and its access to power had ceased to exist.

Subsequent policies reinforced the Land Reform by further compressing the land distribution and reducing inequalities. This can be seen by looking at the evolution of property and use rights over land. During the Land Reform period, effective private ownership over land was still allowed: The new owners held title deeds and had the right to use, purchase, sell, or rent the land as they pleased (Article 30 of the *Agrarian Reform Law*). In 1954, the first Constitution of the People’s Republic of China abolished private land ownership. Individual farmers could lease land from the state and grow crops, although no rents were effectively paid to the state. The endowed land that individual farmers could grow food on was essentially land (re)allocated to them during the Land Reform (Lardy, 2008). The collectivization movement that occurred in parallel and accelerated in the mid-1950s gradually introduced restrictions in land use rights. By the end of 1956, all Chinese peasants were affiliated to a cooperative; however, collectivization was not complete. Cooperatives indeed fell into two categories (elementary or semi-socialist cooperatives and advanced or socialist cooperatives) offering different levels of ownership rights, and even in the advanced cooperatives peasants were allowed to retain small plots of land, some tools, and some animals to raise (Guillermaz, 1976). Collectivization was thus complete only during the Great Leap Forward starting in 1958, but as soon as the fall of 1959 rural trade fairs were reopened, and in the summer of 1960 private plots were restored (Perkins, 1966).

A.1.2 The Communist Revolution in urban areas: the Socialist Transformation of Capitalist Enterprises

With the success of the land reform and increasing consolidation of political power in the rural sector, the Communist Party of China initiated the 1st Five Year Plan in 1953, with the full-fledged transition to socialism as a primary goal. The urban sector, which was excluded from many pre-

vious reforms and redistributive policies, finally experienced a major episode that fundamentally reshaped its enterprise ownership landscape.

In 1953, the United Front Work Department of the Peoples' Congress Central Committee issued a report titled "Advice on Utilizing, Restricting, and Remolding the Capitalist Enterprises," which marked the beginning of a three-year-long movement of socialist reform in the urban sector. The report provided guidelines to the movement. Mao Zedong, in his comments to this report, asserted that the capitalist class "needs to be eliminated and transformed." He further emphasized the two-step procedure of remolding capitalist enterprises: first, turn the unrestricted private enterprises into state capitalism characterized by a highly restricted ownership structure; second, transform the ownership structure of state capitalism into one that is full socialism. These policies were formalized into the 1st Constitution of China (1954), affirming the goal that "ownership by the public should gradually replace ownership by the capitalists" (Article 10).

Between 1953 and 1956, private enterprises across China went through profound transformations. Following the Central Committee's guidelines, by 1956, the transformation process had been basically completed in all major urban centers (Teiwes, 1987). Capitalist enterprises were restructured into joint public-private management entities. These newly formed business entities featured three defining characteristics: (i) enterprises were jointly owned by public and private capitalists, with the public ownership occupying the leading position; (ii) previous owners were gradually deprived of management rights; and (iii) enterprises' profits were distributed according to the "dividing the fat among four horses" principle, where previous owners received a fixed rate of 5% annual interest from their ownership shares. By 1956, however, the entire private economy in urban areas had been effectively nationalized. All urban firms were first *de facto* and then *de jure* state- or collectively owned and managed. Interest payments — based on what the government calculated to be capitalists' remaining shares of capital — continued to be paid until the Cultural Revolution, but the dividends could be neither freely reinvested nor bequeathed (Meisner, 1986).

A.1.3 Class labels

In order to facilitate asset confiscation and subsequent redistribution during the Communist Revolution, each household was assigned a class label based on what they owned. The specific class labels (in both rural and urban sectors) are listed as follows:

	Rural	Urban
<i>Non-elite</i>	Hired labor Poor peasants Middle peasants	Poor peasants in the city Workers Employees
<i>Elite</i>	Rich peasants Landlords	Enterprise owners Capitalists

More specifically, to supplement the *Agrarian Reform Law* and to aid the implementation of the Land Reform, the State Council issued a document titled "Decisions on Assigning the Class Labels in the Rural Sector" in 1950. It called local reform committees to divide up all rural residents into the broad classes listed above, and these uniform class labels would act as the basis for redistributive decisions during the Land Reform.

The class label was the only criterion used for asset redistribution. Those who were classified as landlords or rich peasants had their “excessive” assets confiscated, and those classified as middle peasants, poor peasants, and hired labor received asset transfers. Landlords and rich peasants were also the joint target of class-based discrimination until the 1980s (see Bian, 2002, for a review). We thus group the landlords and rich peasants as the pre-revolution elite — approximately 9% of the population in the rural sector (National Bureau of Statistics, 1980) — and the rest as non-elite, according to the asset redistribution (during the Communist Revolution) and discrimination (until after the Cultural Revolution) that they faced. Our baseline results are robust to considering only the rich peasants, who were often depicted as the “working” elite, without the rentiers.

While the exact cutoffs used to assign class labels were often left to the discretion of local Land Reform committees, the document titled “Decisions on Assigning the Class Labels in the Rural Sector” (1950) provides general guidelines. For example, regarding household labeling as landlord versus rich peasants, the document stipulated that “in the landlord households, if there were people who regularly worked, and at the same time hired people to work on some of the land, then as long as the land rented out was more than 3 times as large as the land tilled by household members, these households should be classified as landlords rather than rich peasants.” Such a rule suggests that landlords working on the land they owned was a common phenomenon in rural China. Importantly, these labels were determined by family asset ownership prior to the reform,² and particularly land assets in rural areas: All members of a family shared the same label.

Until the *Agrarian Reform Law* was repealed in 1987, the label was stable over time and through generations, making it a major element of family and personal identity: Once a label was assigned it was rarely revised (Unger, 1984), and forging class labels was nearly impossible, for three reasons. First, class labels were common knowledge in villages (Wemheuer, 2019), and the new elite with “good” class backgrounds had little incentive to collude with “bad” elements. Second, a double record of class labels was kept: one in individual dossiers, which in rural areas were held by the collective (4,000–5,000 households on average), and another, separate record held by central security organs for Party cadres (Cheng and Selden, 1994; Wemheuer, 2019); both records were inaccessible to the individuals concerned. Third, class background was subject to potential rechecks by external teams during political campaigns (Brown, 2015), and “providing false or misleading information could lead to serious consequences if, for example, a “landlord who had escaped the net” was uncovered” (Wemheuer, 2019). While the initial assignment of the class labels signaled the regime’s judgment about the “inherent loyalties of families” (Walder and Hu, 2009), class labels were preserved along patriarchal lines regardless of the actual political inclination and behavior of individuals. Moreover, each citizen was required to know her own class label. The elicitation of class labels thus allows researchers to trace family lineages, in particular the broad level of household assets prior to the revolutions. We describe in greater detail the elicitation of class labels in our data in Section 3.

The motivation behind class labels was to identify and therefore discriminate against the former elite and eliminate any educational or income advantage they might retain over the masses, consistent with the overarching goal of the Communist Revolution and the subsequent Cultural Revolution. Class labels determined in particular the likelihood of admission to high school and college, job assignments, promotions, the valuation of work points, and access to Party membership (Kraus, 1981; Unger, 1982; Lee, 1991). One unintended consequence of the system was,

²Contrary to later political campaigns, no quotas were set during the Land Reform — e.g., in terms of a number or share of landlord labels (Kung et al., 2012). Local leaders may have however felt pressure to identify at least some “targets for class struggle” (Friedman et al., 1991).

however, to remind people of who their parents and grandparents were, perhaps making family history and identity more salient.

A.1.4 The eradication of land inequality and private enterprise

We now provide quantitative evidence from the *County/City Gazetteers* on the extent of the Communist Revolution and its effect on the distribution of wealth in China. The data collected for this exercise are described — and their quality and representativeness are assessed — in depth in Appendix B.1.³

We focus on the Land Reform in rural areas, where the vast majority of the Chinese population was living in the 1950s, and then provide some additional interpretation on the Socialist Transformation of Capitalist Enterprises in urban areas.

Land Reform We begin by comparing the size of land owned by pre-revolution elite and non-elite households, immediately before and after the Land Reform.

On the eve of the Land Reform, landlord households owned on average 6 acres of land per capita (with a long right tail — in some counties the average landlord households owned as much as 25 acres of land per capita) — see Figure 1, Panel A. In relative terms, landlord households owned approximately 6 times more land than poor peasants before the Land Reform — see Figure A.2. This reflects the fact that while land assets were unequally distributed prior to the Land Reform, landlords in China owned a relatively small amount of land, often working on the land themselves, and sometimes hiring labor (Fei et al., 1992); see Appendix A.1.1 for more historical details. In other words, Chinese landlords were closer to well-off farmers in small-scale farming economies than rentiers who own huge plots of land in plantation economies.

Interestingly, land inequality on the eve of the Communist Revolution is strongly associated the medium-run distribution of land in rural China. Table A.1 relies on an independent data source, which measures the land ownership distribution in the 1930s,⁴ to show that the share of land area owned by landlords in the 1930s is positively, significantly, and robustly correlated with the corresponding measures in the late 1940s. In other words, the land distribution on the eve of the Land Reform reflects an agricultural landscape in China that had prevailed for at least several decades, and potentially for even longer periods.

³This section expands on Section 4.3.1 in the main text.

⁴The source is *Land Utilization in China: A Study of 16,786 Farmers in 168 Localities, and 38,256 Farm Families in Twenty Two Provinces in China, 1929–1933*, compiled by John L. Buck in 1937. We aggregate these reports from villages to the county level, covering 142 counties. The counties are not representative of China, but these reports are the most comprehensive data available on China’s agricultural sector prior to 1949. See Appendix B.2.5 for details.

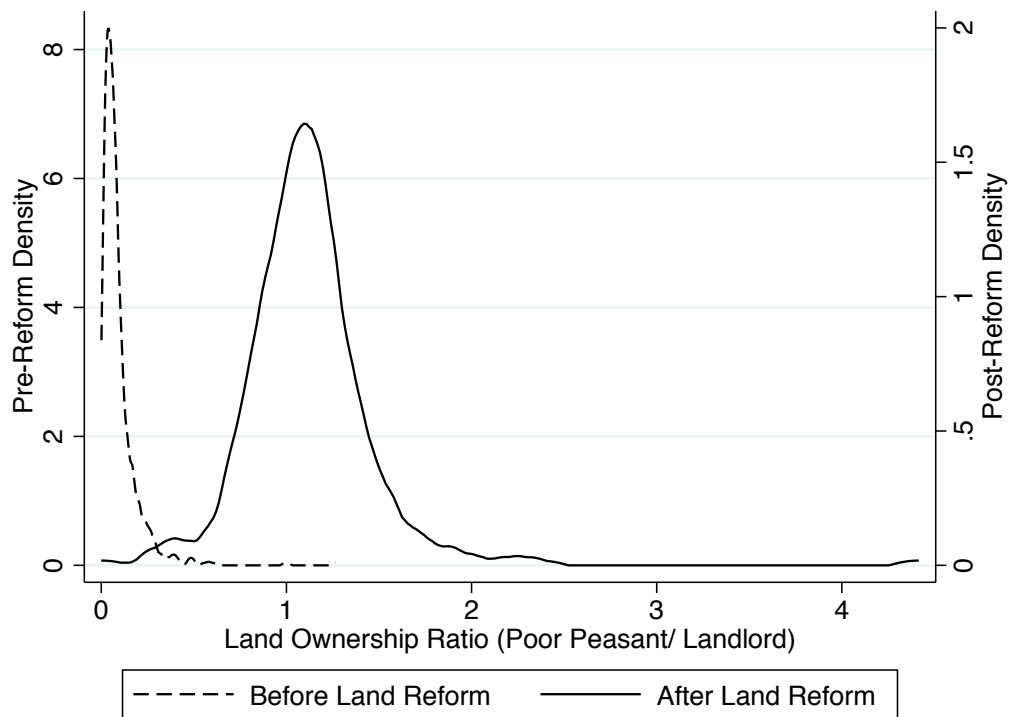


Figure A.2: This figure displays the distribution of the land ownership ratio (poor peasant/landlord) across Chinese counties. This is the ratio of land ownership per poor peasant to the land ownership per landlord before and after the Land Reform. The dashed (solid) line is the probability density function before (after) the Land Reform.

Table A.1: Land ownership inequality: 1930s vs. 1950s

	Share of land area per landlord (pre-Land Reform)				
	(1)	(2)	(3)	(4)	(5)
Share of land area per owner (1930)	0.078** (0.037)	0.074* (0.040)	0.083** (0.039)	0.082** (0.039)	0.075** (0.036)
Observations	50	50	50	50	41
Control for geographic attributes	No	Yes	Yes	Yes	Yes
Control for region FEs	No	No	Yes	Yes	Yes
Control for night light level	No	No	No	Yes	Yes
Control for 2000 GDP	No	No	No	No	Yes

Notes: The land ownership data in 1930 is based on Buck's (1937) agricultural survey — see Appendix B.2.5 for more details. Each cell is the result of a separate regression of the share of land area per landlord reported in the *County Gazetteers* on the share of land area per landowner reported in Buck (1937), with various controls. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The disruption of this economic landscape is all the more dramatic, as apparent from the swift and extreme reduction in land owned by landlord households after the Land Reform. The distribution of the ratio of land holdings between poor peasants and landlords shifted substantially to the right after the Land Reform, centered just above 1 which indicates equal land holdings — see Figure A.2.

Figures A.3 and A.4 help shed light on the equalization of the land ownership distribution across counties. Figure A.3 plots the distribution of land gained by the households in hired, poor, and middle peasant categories after the Land Reform. One can see that the entire distribution lies above 0 — namely, non-elite households across all counties in China experienced net land gains, on average, after the Land Reform. Figure A.4 shows that the land gains of the poor households after the Land Reform were larger in more unequal counties prior to the reform.

Translating these patterns to Gini coefficients, we plot the distribution of Gini coefficients in land ownership across counties in Figure 1, Panel B, before (dotted line) and after (solid line) the Land Reform. One observes that within half a decade, the Land Reform sharply reduced the Gini coefficient from on average 0.5 to an unprecedentedly low level of 0.1. Moreover, the entire cross-county distribution is compressed: Very little cross-county variation in landlord land ownership remained after the Land Reform. Figure A.5 plots the pre-Land Reform Gini coefficients (x-axis) against the changes in Gini coefficients after the Land Reform. Each dot represents a county, and these dots largely fall along the 45-degree line: Counties that were more unequal in terms of land ownership experienced a larger reduction in Gini coefficients after the Land Reform. The residual inequality after the Land Reform is *not* due to the limited implementation of land asset equalization; but rather, it is primarily driven by the fact that in about 67% of the counties, landlords were aggressively deprived of their land, and the poor peasants ended up with slightly *more* land per capita than landlords.

Figure A.6, Panel A, maps the Gini coefficients on land ownership across China prior to the Communist Revolution, with darker shades indicating counties that were more unequal prior to the revolutions.⁵ One observes substantial spatial heterogeneity in inequality — inequality was

⁵For the purpose of clearer visual illustration, we impute the Gini coefficients of the counties with missing data with prefecture averages. When a prefecture-level average cannot be computed, we take the provincial average. Provinces

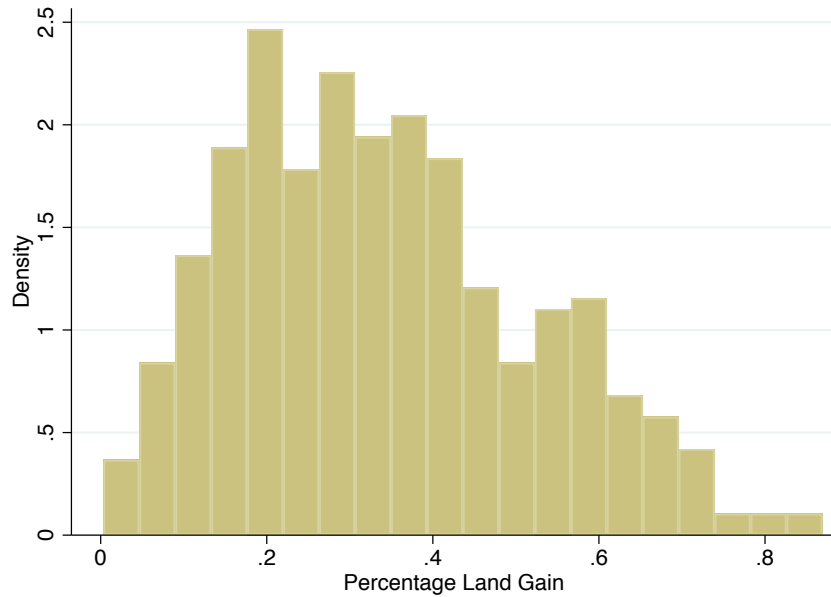


Figure A.3: This figure plots the probability density function of the average percentage land gain (% arable land in the county) for every 1 percent of the peasant population (in the hired, poor, and middle peasant categories) after the Land Reform across counties.

particularly high in the northeast and the south, likely resulting from a combination of geography and historical incidents.⁶

Thus, the Land Reform during the Communist Revolution was extremely successful at eradicating inequality in land asset ownership across China: it homogenized land ownership not only *within* but also *across* counties. The pre-revolution elite's land assets were largely wiped out and redistributed to the poor, and the distribution of land ownership inequality became compressed throughout the country. Such a success should not be taken for granted. Many countries attempted land reforms in recent history, but often failed to achieve equality in land holdings even in the short run: e.g., Philippines (1930s), Colombia (1930s), Brazil (1930s), Mexico (1940s), Indonesia (1960s), Chile (1960s-1970s), and more recently, Zimbabwe (2000s) and South Africa (2010s). In fact, land asset confiscation and redistribution are extremely challenging, especially when state capacity is relatively weak, and the wealthy are politically entrenched and able to evade or even revolt.

with no data are shown in gray. We do not use imputed data in any of the econometric analyses.

⁶Northeastern provinces were closed to Han Chinese settlers until 1860; early movers enjoyed easy access to land, while late movers worked as tenants, creating high inequality in land ownership (Gottschang, 1987; Kung and Li, 2011). Higher inequality in the South than in the North is the result of both historical and geographical differences. Historically, more remote southern provinces were less subject to the Ming and Qing imperial governments' attempts to reduce land concentration, and civil servants had to cooperate with powerful landed gentry to collect taxes (Bernhardt, 1992). Geographically, the South is much more fertile than the North, and production surpluses were high enough to make land rental agreements economically attractive to both landlords and tenants (Kung et al., 2012).

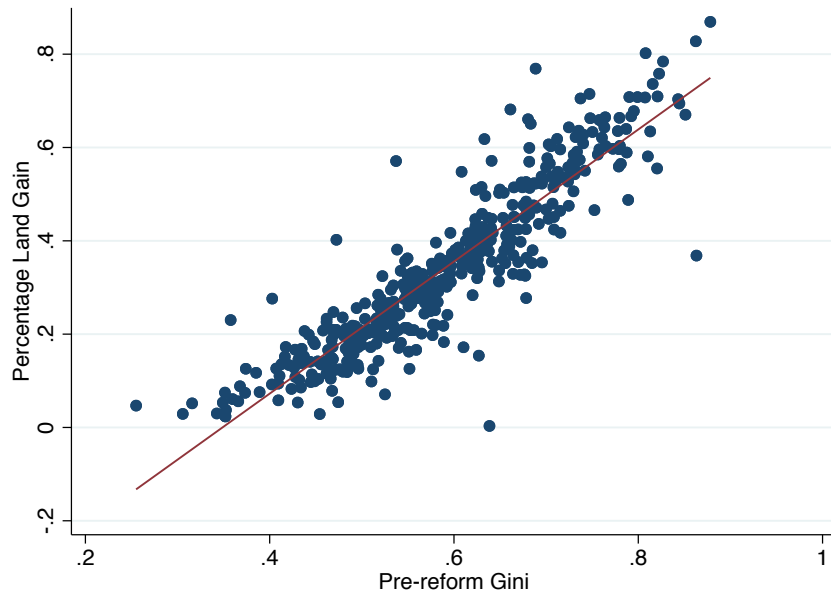


Figure A.4: This figure plots the pre-Reform land ownership Gini coefficient and the average percentage land gain (% arable land in the county) for every 1 percent of the peasant population (in the hired, poor, and middle peasant categories) after the Land Reform. The red line is the fitted line.

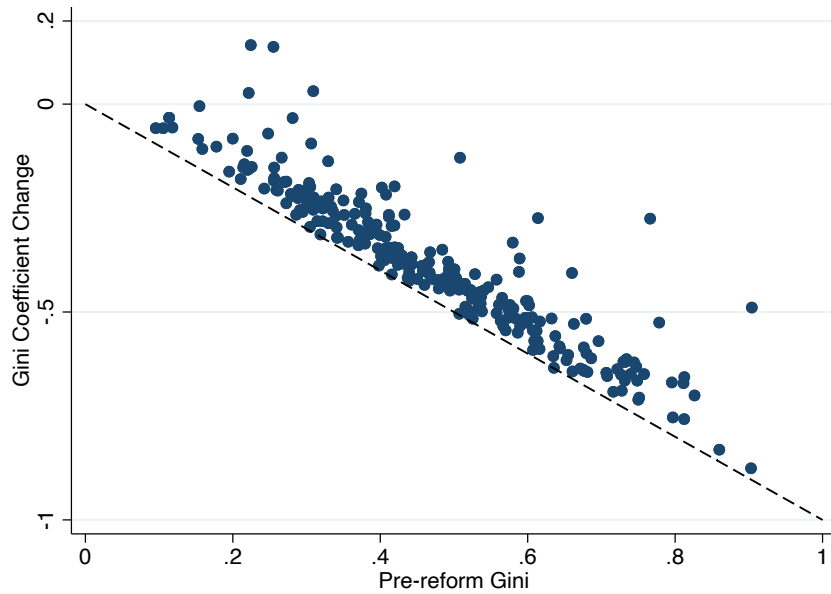


Figure A.5: This figure plots changes in the land ownership Gini coefficient after the Land Reform (a negative number means a decrease in Gini coefficient) relative to the pre-reform Gini coefficients. There are 252 counties that provide valid post-reform population and land data.

A. Pre-Land Reform

B. Post-Land Reform

Figure A.6: This figure displays Gini coefficients across Chinese counties. Darker color indicates higher within-county inequality. Panel A: Gini coefficients in land ownership prior to the Land Reform; counties with missing observations are imputed using prefecture averages (province averages if all counties in a prefecture have missing data); provinces with no data are shown in gray. Panel B: Gini coefficients in land ownership just after the Land Reform; same imputation strategy for counties with missing values. Imputation is used only in Figures A.6 and D.8 to facilitate data visualization.

Socialist Transformation of Capitalist Enterprises We then compare the extent of privately-owned enterprises — the most important assets of the pre-revolution elites in the urban sector — before and after the Socialist Transformation of Capitalist Enterprise during the Communist Revolution. Figure 1, Panel A, traces the share of industrial output across (urban) China by different ownership types between 1950 and 1993. One can see that on the eve of the Communist Revolution, privately-owned enterprises made up 55.94% of national industrial output, while state-owned counterparts accounted for 34.15%. Over the next decade as the Communist Revolution progressed in urban China, the share of industrial output contributed by privately-owned enterprises dropped to zero, and that of state-owned enterprises surged to 90%. These patterns remained throughout the 1960s and much of the 1970s.

Panel B provides a closer look at privately-owned enterprises in four of China’s biggest industrial hubs. While the share of privately-owned enterprises in Beijing and Tianjin was similar to the national average prior to the revolution, the industrial landscape in Shanghai and Guangzhou was much more skewed toward the private sector (99.30% and 89.54% in 1951, respectively). The restructuring of privately-owned enterprises in Shanghai and Guangzhou was similarly thorough and speedy: By 1957, privately-owned enterprises were eradicated in both cities.

A.2 The Cultural Revolution

The Cultural Revolution was a massive sociopolitical movement launched by Mao Zedong in 1966, intended to preserve the fruits of the Communist Revolution. While it began as a purge of “disloyal” Communist Party officials, its scope quickly widened to target all elite groups and au-

thority figures, leading to a decade long of chaos and violence until Mao's death in 1976. We focus here on two main aspects of the Cultural Revolution: its stance toward the pre-revolution elite, and its disruptive education policy.⁷ In this section, we complement Section 2 by (i) providing more details about the motivation behind the Cultural Revolution, (ii) comparing discrimination against the pre-revolution elite in their access to higher education during the Cultural Revolution with the rest of the Mao era, and (iii) describing briefly the Cultural Revolution's onslaught on pre-Communist culture and beliefs.

First, discrimination against the pre-revolution elite was a key component of the Cultural Revolution. Since its inception, the Cultural Revolution was concerned with status inheritance. One of its primary goals was to prevent the pre-revolution or emerging elite from passing down their privileges to their offspring (Whyte, 1973; Deng and Treiman, 1997; Andreas, 2009) and thus “de-stratify” Chinese society (Parish, 1984). The initial motivation was to prevent the entrenchment of a bureaucratic elite, whom Mao viewed as a threat to the revolution. He feared that they became “a ‘privileged stratum’ and take the capitalist road, as allegedly [had] happened in the Soviet Union” (Bernstein, 1977). The scope of the Cultural Revolution quickly widened to encompass all high-status groups. Pre-revolution elite households often managed to secure elite professional occupations in the Communist regime (Rosen, 1982; Unger, 1982; Andreas, 2002; Walder and Hu, 2009). This fact, combined with the view that individuals with a “bad” class background — namely those with elite class labels — were inherently “revisionist,” or hostile to the revolution, justified in Mao's eyes further discrimination and violence during the Cultural Revolution. In an interview given in 1965 to the French Minister of Cultural Affairs André Malraux, Chairman Mao claimed that there was a broad “revisionist layer” in China, “large not in numbers but in the influence it exerts. This layer is made up of the former landlords, former rich peasants, former capitalists [...], and part of their children” (Andrieu, 1996). The goal then was to completely eliminate any remaining advantage of the pre-revolution elite and their descendants over the masses.⁸

The risk that the elite maintain their influence through education lies behind the radical and disruptive educational policy initiated during the Cultural Revolution (MacFarquhar and Schoenhals, 2006). The revolution severely disrupted higher education in two main ways. First, almost all high schools and colleges were shut down between 1966 and 1968, and most universities remained closed until 1972 (Bernstein, 1977; Unger, 1982). Appendix Figure A.7 presents a photograph of students at Peking University, one of the best universities in China, during the Cultural Revolution, where students gathered to chant revolutionary slogans. Second, merit-based admission into higher education was suspended throughout the Cultural Revolution. When universities reopened in 1972, admission was primarily based on class labels (at the expense of the pre-revolution elite, of course) and political achievements rather than academic credentials (Shirk, 1982). The only eligible applicants were workers, peasants, and soldiers, except for small quotas (officially 5%, but probably much lower in practice) established for the “educable children [of class enemies]” (Deng and Treiman, 1997). Such a discrimination against the descendants of landlords and rich peasants remained until a meritocratic university entrance exam was reestablished in 1977 (see Chen, 2007;

⁷The mass mobilization at the core of the Cultural Revolution led to large-scale disorganization. Before the imposition of martial law, the Cultural Revolution caused in less than two years a complete collapse of the state apparatus and severely disrupted production. Industry value added dropped from 44.6 to 12.6 million Chinese yuan (in constant 1990 prices) between 1966 and 1967, and it would not recover until 1980 (Dong and Wu, 2004).

⁸Recent research suggests that all of Chinese society was affected by the Cultural Revolution. While an earlier scholarly consensus regarded it as a mostly urban phenomenon (Baum, 1971), contributions since Walder and Su (2003) have investigated post-Mao sources, including sections of the gazetteers we use in this paper, and suggest an extensive rural impact.

Roland and Yang, 2017, for more details about the resumption of the gaokao

Figure A.7: Students chanting revolutionary slogans at Peking University during the Cultural Revolution.

Second, discrimination against the descendants of the pre-revolution elite was the most extreme during the Cultural Revolution, but it characterizes the whole period between the Communist Revolution and the end of the Cultural Revolution. From the outset, the Chinese Communist Party oscillated between promoting mass education (and ostracizing “class enemies”) and a meritocratic elite with the technical skills and expertise necessary for economic development (Deng and Treiman, 1997; Andreas, 2009; Chen et al., 2015). In some years, admission into higher education was granted by “recommendation only,” and priority was given to workers, peasants, and children of “revolutionary cadres and martyrs” (Deng and Treiman, 1997). In other periods, the national college recruitment examination was re-established. Applicants with an undesirable class background were, however, systematically discriminated against (policy of “priorities among equivalents”).

Third, besides disrupting education, the Cultural Revolution induced a wide range of disturbances across Chinese society. The inheritance of culture and values from the pre-Communist era was regarded with suspicion: Teachers became the targets of “struggle sessions,” which included public humiliations, beatings, and torture (Wang, 2001). Children were also often encouraged to expose their parents' counter-revolutionary behaviors, representing a broad effort to weaken the nuclear family structure. An entire generation of urban students was sent to the countryside for political reeducation through manual work and contact with the masses (the “Sent-Down Movement”). Zhou (2004) shows that the probability of being sent down increased with the father's

educational attainment. The separation of children and parents during formative years of their lives could have significant implications on the vertical transmission of cultural values. However, this is less of a concern for our study, as most of the Chinese population at the time lived in rural areas, where no children were sent away during the Cultural Revolution since there were already residing in the countryside, and our finding of a resurgence of the pre-revolution elite holds when we focus on the rural sample.

A.3 The Reform and Opening Era

After Mao's death in 1976, discrimination against the pre-revolution elite gradually receded, and the economic liberalization characterizing the "Reform and Opening era" brought about unprecedented growth, especially after China joined the World Trade Organization in December 2001.

Importantly, the former elite did not benefit from compensatory favoritism after the end of the revolutions. This probably owes to the fact that this transition did not coincide with a change in political regime. The 1981 Resolution on Certain Questions in the History of Our Party since the Founding of the People's Republic of China did not fault with some of Mao's policies (primarily with the Cultural Revolution), but it did not lead to a fundamental critique of the Communist project; it instead concluded that Mao's contributions "far outweigh[ed] his mistakes" and called for "upholding the socialist road." As far as the pre-revolution elite is concerned, this milestone Resolution merely mentions the "announcements" made by the Third Plenum of the Eleventh Central Committee (1978). In the words of the Committee, "solving the problem of the class status of the sons and daughters of landlords and rich peasants" was limited to "removing hats," i.e., abolishing class labels, which was only enshrined with the repeal of the Agrarian Reform Law in 1987.

Thus, there was no compensation for the decades of persecution that the pre-revolution elite had experienced. There were, however, limited cases of restitution in Shanghai for belongings confiscated during house raids by the Red Guards at the beginning of the Cultural Revolution (Engman, 2023). Shanghai constituted a special case, as this was where most raids took place and order was restored earlier there, allowing some of the belongings that had not been destroyed to be traced back to their owners.

Similarly, the major changes to land use rights introduced in China in the late 1970s and 1980s did not allow former landlords and rich peasants to recover the land confiscated during the Land Reform. In 1979, the household responsibility system was first experimented, and it included virtually all Chinese peasants in 1983. Under this system, which still dominates Chinese agriculture today, ownership rights over land remained illegal, but private land use rights were reestablished. Importantly, the land confiscated during the Land Reform was not returned to their previous owners — land allocation is determined at the village level based on household demographics, and transfer rights are limited (Kung, 1995; Vendryes, 2010), — and the farming tools that had been confiscated during the Land Reform were typically allocated through lotteries or auctioned off, rather than returned to their original owners (Unger, 1985).

However, the pre-revolution elite families persecuted during the revolutions might have indirectly benefited from the reforms, and in particular from the economic take-off that characterizes the post-Mao period after China's accession to the WTO. This take-off first materialized in the private sector, which may matter for the trajectories of pre-revolution elite families. Their members (in the parents generation) were indeed largely barred from public sector jobs and subject to layoffs during the Cultural Revolution (Engman, 2023), which led them to concentrate in the nascent private — and, sometimes, informal — sector.

B Additional details on data sources

B.1 Measuring asset distributions before and after the Communist Revolution

In Section 3.2, we briefly described the data we collected to measure asset inequality before and after the Communist Revolution. Here, we first present the sources and context; second, we describe the methodology we followed to collect the County Gazetteer data; third, we discuss sample selection; and fourth, we present the methodology to compute Gini coefficients from the County Gazetteer data.⁹

B.1.1 Sources and context

In order to document the immediate effect of the Communist Revolution on wealth distribution, we manually collected data on land assets, the most important form of wealth in rural China, and on enterprise ownership, to cover the effect of the revolution on urban areas. We measure the land distribution and enterprise ownership by digitizing the County/City Gazetteers and the report on the Socialist Transformation of Capitalist Industry and Commerce in China. The Gazetteers, published in the 1990s, are the county- or city-level archives that cover the historical period from 1949 to 1986. The report on the Socialist Transformation of Capitalist Industry and Commerce in China documents the transition from capitalism to socialism for each province.

The timing of these publications can be explained by the push to shed more light on the history of the Revolutionary era in the wake of Deng Xiaoping's accession to power shortly after the end of the Cultural Revolution. The incentives faced by local officials at the time thus differed greatly from their predecessors', and it is unlikely that they felt pressured to inflate the achievements of the Land Reform — we nonetheless assess the representativeness and quality of the data below.

B.1.2 Data collection

We manually collected land distribution information around 1950 throughout rural China. Specifically, we collected information on land ownership and population by the five subgroups of the rural population corresponding to the class labels assigned during the Communist Revolution: landlords, rich peasants, middle peasants, poor peasants, and landless peasants. The distribution of land ownership is available both immediately before and after the Land Reform.¹⁰ Due to the decentralized nature of the gazetteer compilation, such land ownership information is not always recorded in the same format. For example, some counties record land ownership information in table format (see Appendix Figure B.1 for such a case), while others embed such information in unstructured narratives (see Appendix Figure B.2). We standardize the records to the same units across counties.

Our data collection effort followed the following steps to maximize coverage. We start with all areas named “counties” in the 2000 administrative records. This ensures that all County Gazetteer counties can be readily matched to contemporary census data. Next, we expand our efforts to areas named “cities” and add the data to our sample if the pre-Land Reform ownership distribution

⁹The data described in this section are used to show evidence of the equalization of assets in rural and urban areas during the Communist Revolution in Section 4.3.1 and — in greater detail — in Appendix Section A.1.4

¹⁰Before the Land Reform, landlords sometimes lived in cities. Such absentee landlordism should have little effect on our estimates of pre-Land Reform inequality, as they accounted for only a very small share of the landlord population (Huang, 1985; Kung et al., 2012).

is available in the County Gazetteers. We regard the two as the same if they are documented under the same historical narratives in the most comprehensive Chinese online encyclopedia, Baidu Baike; this approach allows us to take into account the massive urbanization that China has experienced since the 1950s. Urban districts without documentation about the Land Reform are excluded. Note also that we exclude Tibet, Xinjiang, and Inner Mongolia due to different land policies designed for minority groups.

Overall, we identify 639 counties in the gazetteers with the pre-Land Reform land distribution data necessary to calculate within-county inequality.¹¹ We construct various inequality measures to describe the landscape of wealth inequality across Chinese counties just before and after the Land Reform, such as the Gini coefficient based on county-level land ownership (see Appendix B.1.4 for details).

Due to the small size of the industrial sector in 1950s China, most County Gazetteers do not systematically report information on enterprise ownership in cities. We manually collected data on the share of private enterprises in four major cities between 1949 and 1961 (Beijing, Shanghai, Tianjin, and Guangzhou), for which the information is available. We supplement this information with provincial-level industrial output shares by ownership type from 1950 to 1997.

Figure B.1: Sample of County Gazetteers record (table) on land distribution before and after the Land Reform.

B.1.3 Sample selection

As some County Gazetteers contain no or incomplete information on the land distribution prior to the Land Reform, sample selection may affect our findings. We discuss this issue by first compar-

¹¹Out of the 1,434 rural counties in China in the 1950s, 465 have no pre-Land Reform records, and 330 do not provide sufficient information to construct reliable county-level inequality measures.

Figure B.2: Sample of County Gazetteer record (text) on land distribution before and after the Land Reform.

ing counties along the degree of completeness of the information available on land distribution prior to the Land Reform, and then we further assess selection by comparing the data with a distinct source of information, the Province Gazetteers

To assess sample selection, we begin by comparing counties that differ in terms of the availability of the data we need to compute measures of inequality. Appendix Table B.1, Panel A, presents summary statistics for counties in the sample along the following dimensions: geographical characteristics (distance to the coast, longitude, latitude), economic development (contemporary GDP per capita, average nighttime luminosity,¹² average and median years of education, average educational attainment for cohorts born before 1950), average contemporary housing area (adjusted for housing amenities and non-adjusted), and contemporary housing Gini coefficient.¹³

Panel B presents the p-values from three balance t-tests to check for potential sample selection based on observable features: between the counties with complete data and those with either incomplete or no data, between the counties with complete and incomplete data, and between the counties with at least some data and those without any data. Among all the 11 variables that we examine, counties with complete historical land ownership data differ from other counties only along median contemporary housing area (both raw and amenity-adjusted) and the average nighttime luminosity. Importantly, contemporary housing inequality is not associated with the availability of complete archival records on land ownership inequality prior to the Land Reform. Counties with complete and incomplete or no land distribution data are thus balanced along most dimensions.

To further assess the importance of selection in the County Gazetteer data, we compare them with data from a separate source. We collect data from the Province Gazetteers on land ownership by social classes, both before and after the Land Reform, as well as the number of counties that the provincial averages are based on. Although province and county gazetteers should draw on the same primary data, the average shares computed from these two sources differ, as they cover different subsets of counties. This allows us to assess the representativeness of the County Gazetteer data used in this paper.

We compute average land shares at the province level based on the province and county gazetteers, and plot them against each other, as shown in Appendix Figure B.3. Each dot corresponds to one province-period-class, e.g., it shows the average land share of poor peasants just before the Land Reform in Zhejiang province; we can match 64 such statistics at the province-period-class level. We see from Panel A that there is some variation, but most observations fall on or near the 45-degree line. We can further weight each observation by the number of counties used to compute the average share in the province gazetteer, which we do in Panel B. When a Province Gazetteer does not specify the number of counties used in the computation, we assume it is the same as the number of available County Gazetteers. This suggests that outliers are mostly due to provincial averages based on few county-level statistics.

Table B.2 provides similar evidence in regression format. Column 1 regresses the provincial averages from the Province Gazetteers on the provincial averages from the County Gazetteers; column 2 introduces the same weights as in Appendix Figure B.3, Panel B; and columns 3, 4, and 5 introduce province, class, and period fixed effects, respectively. In all five specifications, the coefficient is statistically indistinguishable from 1 at conventional confidence levels and quite precisely estimated. The similarity between these two separate data sources suggests that the data collected

¹²Nighttime luminosity as a proxy for regional development level has been widely used: see Alesina et al. (2016) as an example and Donaldson and Storeygard (2016) for a review.

¹³Contemporary data are extracted from a random 1% micro sample of the 2000 Population Census.

from the County Gazetteer, while unable to cover the entire country, are unlikely to suffer from severe distortions due to sample selection.

B.1.4 Calculating county Gini coefficients in land ownership

We now describe how we calculate the county-level Gini coefficients in land ownership based on the County Gazetteer data.

We assume that land ownership among households within each of the five social classes is homogeneous. We assume that land ownership for landless hired peasants is zero if the value is missing. Some counties also list other special classes, for example, small land renters and half-landlord rich peasants; the land owned by these special classes, government, and other organizations is not included.

We define the county-level Gini as 1 minus twice the area under the (discrete) cumulative distribution function of land ownership. Appendix Figure B.4 illustrates the construction of the Gini coefficients, where we normalize total population and total land ownership to 1 and plot the cumulative land ownership for each social class.

Given that land ownership statistics are only available in aggregate (by category), we make the following adjustment to re-scale the Gini coefficient to [0,1]. We define adjusted-Gini = 1 as the unequal world where landlords own all land, and adjusted-Gini = 0 as the equal world where everybody holds the same land share. Specifically, we re-scale the Gini as follows:

$$\text{Gini} = \frac{\max\text{CDF} - \text{CDF}(\text{Land})}{\max\text{CDF} - \min\text{CDF}}$$

where $\text{CDF}(\text{Land}) = \sum_{\text{Class}} \left(\frac{\text{Pop}_{\text{Class}}}{\text{Pop}_{\text{Total}}} \cdot \text{CumulativeLand}_{\text{Class}} \right)$ is the cumulative density function of land ownership; $\max\text{CDF}$ is the maximum value of CDF (i.e., extreme equality) under discrete distribution of population sub-groups, where everyone owns the same share of land in the society; and $\min\text{CDF}$ is the minimum value of CDF (i.e., extreme inequality) under discrete distribution, where all land is owned by landlords. The numerator ensures that the Gini coefficients are bounded below by 0, and the denominator scales the Gini coefficients so they are between 0 and 1.

B.2 Auxiliary data sources

We deploy a number of additional data sources, which we briefly describe below.

B.2.1 Chinese Household Income Project (CHIP)

The Chinese Household Income Project (CHIP) does not rely on the younger generation co-residing with older generations, which allows us to obtain the full record of family class labels. Two caveats are however in order. First, CHIP sampled urban and rural areas separately and it is representative of rural areas in 22 provinces but of urban areas in only 12 provinces, as against 25 provinces for both urban and rural areas in CFPS. Second, class labels are available from CHIP only for 2002, which considerably reduces the respondents' experience of the economic reforms and thus puts a lower bound on our measure of the elite's rebound.¹⁴

¹⁴Additionally, CFPS and CHIP differ markedly in their income definitions (Xu et al., 2012).

A. Unweighted

B. Weighted

Figure B.3: Comparison of province and county gazetteer land ownership data. The data are from the Province Gazetteer and County Gazetteer, respectively. Each observation is a province-period-class — see Appendix B.1.3 for further details. Weights in Panel B are the number of counties based on which the province-level data in the Province Gazetteer are computed (when this information is missing, we assume it is the same as the number of counties available in the County Gazetteer).

B.2.2 Migration push and pull factors

We assess individuals' responsiveness to economic incentives with measures of migration push and pull factors. For push factors, we rely on shocks to agricultural revenues measured as the interaction of innovations in agricultural commodity prices on international markets with local suitability for growing different crops. We borrow this measure from Imbert et al. (2022).

For pull factors, we create a shift-share measure of nominal hourly wages based on industrial composition for each destination, and we take a weighted average of those shift-share measures at the origin level with weights corresponding to emigrant shares across destinations. Formally, we measure pull shocks as $S_d S_i m_{od} a_{id} w_i$, where w_i is the logarithm of hourly wage in industry i , a_{id} is the share of employment in industry i in destination d , and m_{od} is the share of emigrants from origin o who go to d . All these variables and weights are computed from a random 20% extract of the 2005 1% Population Survey, a nationally representative survey collected by the National Bureau of Statistics.

B.2.3 Clan-based local network strength

In order to capture the strength of clan-based local networks, we create a normalized Hirschman-Herndahl index to quantify surname concentration among the highly educated individuals in the past, based on the roster of top imperial examination graduates (jinshi) throughout the Ming and Qing dynasties. These data come from the Index of Jinshi Graduates from the Imperial Examination Stelae of the Ming and Qing Dynasties (Zhu and Xie, 1980),¹⁵ which records all imperial examination top scorers' names and birthplaces between 1644 and 1905.

To cross-validate this measure of the strength of local kinship networks, we use the Comprehensive Catalogue of Chinese Genealogies which we obtained through the Harvard Dataverse (Wang, 2020, accessed on Oct. 22, 2020). The catalogue records all the genealogies kept in China up to 2007, along with the associated surname and geographical coordinates. We use the over 45,000 records that can be unambiguously mapped to contemporary counties and create a measure of genealogy density by dividing the number of genealogies by total population in the county as measured by CFPS in 2010. This measure is highly correlated with our Hirschman-Herndahl index of jinshi surnames ($p=0.069$).

B.2.4 Population at the time of the Communist Revolution

In Table D.17, we study the heterogeneous effect of elite status in terms of the share of 1950s émigrés to Taiwan in individuals' birthplaces. To meaningfully capture the intensity of emigration, we need to normalize the raw numbers of émigrés by province from Lin (2018) by total province population at the time. We use data from the 1953 Population Census, recast to 2010 county boundaries (which we use throughout the paper) using the administrative maps corresponding to the 1953 and 2010 censuses. Appendix D.6 also uses the 1953 Population Census in the denominators of some variables.

B.2.5 Inequality decades prior to the revolutions

The main analysis that we present in the paper takes land inequality in the late 1940s, just before the Land Reform, as the starting point. To gauge whether land inequality on the eve of the Land

¹⁵These data have been used by Hao and Clark (2015) and Chen et al. (2020), among others.

Reform reflects the medium-run distribution of land in rural China, we complement our baseline analysis with a data source on land distribution that is independent from the County Gazetteers. Specifically, we measure the land ownership distribution in the 1930s, the earliest period for which data on land distribution across Chinese counties exist. The source is *Land Utilization in China: A Study of 16,786 Farmers in 168 Localities, and 38,256 Farm Families in Twenty Two Provinces in China, 1929–1933* compiled by John L. Buck in 1937. Buck, the head of the Department of Agricultural Economics at the University of Nanking, sent his students to different villages across China to survey land utilization. We aggregate these reports from villages to the county level, which covers 142 counties. The counties are not representative of China, but these reports are the most comprehensive data available on China's agricultural sector prior to 1949.

We examine in Appendix A.1.4 whether the land distribution in the 1930s is predictive of that in the late 1940s just before the Land Reform. Overall, 50 counties can be matched to the pre-Land Reform Gazetteer data.

Table B.1: County-level summary statistics and balance table

Panel A: Summary Statistics												
Variable	Sample 1: Counties with sufficient data			Sample 2: Counties with insufficient data			Sample 3: Counties with no data					
	Mean	SD	Obs.	Mean	SD	Obs.	Mean	SD	Obs.			
Distance to Shore	5.203	4.943	576	5.472	3.986	296	5.570	4.884	418			
Longitude	112.419	6.968	576	112.56	6.650	296	111.628	8.818	418			
Latitude	31.21	4.966	576	32.958	5.815	296	33.184	7.202	418			
2000 GDP per capita	5279.456	4171.236	531	4665.502	3309.318	269	4655.372	3279.397	37			
2000 Avg. Night lights	2.707	5.306	576	3.274	6.629	296	2.970	6.479	418			
2000 Avg. Years of Edu.	6.926	0.908	576	7.051	0.986	296	6.964	1.209	418			
2000 Median Years of Edu.	6.979	0.975	576	7.083	1.040	296	6.955	1.396	418			
2000 Avg. Y. of Edu. (b. < 1950)	4.344	1.195	576	4.438	1.332	296	4.348	1.519	418			
2000 Median Housing Area	24.266	7.339	576	21.628	5.482	296	21.239	5.495	418			
2000 Median Adj. Housing Area	30.163	10.200	576	26.526	7.248	296	26.123	7.697	418			
2000 Housing Gini	0.324	0.029	576	0.315	0.028	296	0.306	0.030	418			

Panel B: Balanced Test

Variable	Sample 1 = Sample 2 + Sample 3			Sample 1 = Sample 2			Sample 1 + Sample 2 = Sample 3		
	Diff.	SE	p-value	Diff.	SE	p-value	Diff.	SE	p-value
Distance to Shore	0.030	0.093	0.750	0.055	0.079	0.483	0.07	0.084	0.404
Longitude	-0.044	0.122	0.718	0.053	0.102	0.605	0.132	0.109	0.224
Latitude	-0.125	0.094	0.182	-0.053	0.079	0.498	0.038	0.084	0.653
2000 GDP per capita	-61.583	249.495	0.805	126.573	193.903	0.514	254.603	207.672	0.222
2000 Avg. Night lights	-0.979	0.354	0.006	-0.582	0.327	0.075	-0.078	0.349	0.823
2000 Avg. Years of Edu.	-0.092	0.058	0.113	0.006	0.052	0.901	0.092	0.056	0.101
2000 Median Years of Edu.	-0.049	0.059	0.408	0.061	0.055	0.268	0.127	0.058	0.030
2000 Avg. Y. of Edu.	-0.012	0.079	0.876	0.089	0.068	0.187	0.151	0.072	0.037
2000 Median Housing Area	0.8	0.398	0.045	0.903	0.308	0.003	0.589	0.329	0.074
2000 Median Adj. Housing Area	0.927	0.543	0.088	1.124	0.422	0.008	0.821	0.451	0.069
2000 Housing Gini	-0.001	0.003	0.858	0.002	0.003	0.493	0.004	0.003	0.165

Notes: This table checks potential county selection bias due to partial unavailability of inequality data. Panel A reports summary statistics for three samples: Counties with complete data (Sample 1), Counties with incomplete data (Sample 2), and Counties with no data (Sample 3). Panel B executes three balance tests: Sample 1 = Sample 2, Sample 1 = Sample 2 + Sample 3, Sample 1 + Sample 2 = Sample 3. (b < 1950) refers to the average educational attainment for cohorts born before 1950.

Table B.2: Comparison of province and county gazetteer land ownership data

	Province gazetteer				
	(1)	(2)	(3)	(4)	(5)
County gazetteer	1.055*** (0.068)	1.019*** (0.079)	0.976*** (0.103)	1.010*** (0.117)	1.015*** (0.113)
Weights	No	Yes	Yes	Yes	Yes
Province FE	No	No	Yes	Yes	Yes
Class FE	No	No	No	Yes	Yes
Period FE	No	No	No	No	Yes

Notes: This table regresses average land shares from Province Gazetteers on average land shares from County Gazetteers. Each observation is a province-period-class, where period can be pre- or post-Land Reform, and class refers to the five class labels. The weights are the number of counties based on which the province-level data in the Province Gazetteers are computed (when this information is missing, we assume it is the same as the number of counties available in the County Gazetteers). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: all matched province-period-class observations in province and county gazetteers; $N = 64$.

Figure B.4: This figure gives a graphical illustration of the Gini coefficient calculation.

C Conceptual framework: proofs

C.1 Proof of Proposition 1

If the borrowing constraint does not bind, the first-order conditions entail:

$$p \frac{1}{c_{i,t}} = d(1 + R_k) = dr_{i,t+1} b y_{i,t+1}^{b-1}.$$

The marginal utility gain from consumption equals the return to human or monetary capital, discounted by the altruistic parameter. Thus, the optimal education investment y_{t+1} , consumption c_t , and income I_{t+1} are the following:

$$y_{i,t+1} = \left(\frac{1 + R_k}{r_{i,t+1} b} \right)^{\frac{1}{b-1}},$$

$$c_{i,t} = d^2 (1 + R_k)^2, \text{ and}$$

$$I_{i,t+1} = r_{i,t+1} \left(\frac{r_{i,t+1} b}{1 + R_k} \right)^{\frac{b}{1-b}}.$$

For parents with wealth below $W_{i,t} = d^2 (1 + R_k)^2 + \left(\frac{1 + R_k}{r_{i,t+1} b} \right)^{\frac{1}{b-1}}$, the budget constraint becomes binding: $c_{i,t} + y_{i,t+1} = W_{i,t}$, and $y_{i,t+1} < \left(\frac{1 + R_k}{r_{i,t+1} b} \right)^{\frac{1}{b-1}}$, as parents cannot invest sufficiently in their children. The maximization problem becomes the following:

$$\max_{c_{i,t}, y_{i,t+1}} 2^p \frac{1}{W_{i,t} - y_{i,t+1}} + d E_t \left[r_{i,t+1} y_{i,t+1}^b e_{i,t+1} \right].$$

The first-order conditions yield:

$$p \frac{1}{W_{i,t} - y_{i,t+1}} = dr_{i,t+1} b y_{i,t+1}^{b-1}$$

$$\left(\frac{1}{W_{i,t} - y_{i,t+1}} + d^2 r_{i,t+1}^2 b^2 y_{i,t+1}^{2(1-b)} \right) = W_{i,t}.$$

The education attainment level is monotonically increasing in W_t :

$$\frac{dy_{i,t+1}}{dW_{i,t}} = \frac{1}{1 + 2(1-b)d^2 r_{i,t+1}^2 b^2 y_{i,t+1}^{2(1-b)}} > 0.$$

QED

C.2 Proof of Proposition 2

We take derivatives with respect to $v_{i,2}$ for elite (E) and non-elite (N) households:

$$E : r_{E,2} y_{E,2}^b g v_{E,2}^{g-1} = q_{E,1}, \text{ and}$$

$$N : r_{N,2} y_{N,2}^b g v_{N,2}^{g-1} = q_{N,1}.$$

Dividing the expression for the elite with that for the non-elite:

$$\frac{v_{E,2}^{1-g}}{v_{N,2}} = \frac{r_{E,2}}{r_{N,2}} \frac{y}{y_{N,2}} \frac{q_{N,1}^b}{q_{E,1}}.$$

Thus, for (i) b low enough, (ii) small differences between y and $y_{N,2}$, (iii) small differences between $r_{E,2}$ and $r_{N,2}$, or (iv) large differences between $q_{E,1}$ and $q_{N,1}$, we obtain: $v_{E,2} > v_{N,2}$ as $q_{E,1} < q_{N,1}$ and $g < 1$.

As $I_{E,2} = r_{E,2} y_{E,2}^b v_{E,2}^g$ and $I_{N,2} = r_{N,2} y_{N,2}^b v_{N,2}^g$, $I_{E,2} = I_{N,2}$ implies that:

$$\frac{v_{E,2}}{v_{N,2}} = \frac{r_{N,2}}{r_{E,2}} \frac{y_{N,2}}{y} \frac{v_{N,2}^g}{v_{E,2}^g} > 1.$$

QED

C.3 Proof of Proposition 3

The household optimization problem can be written as follows:

$$\max_{y_{i,3}, v_{i,3}} \frac{1}{2} \bar{y} y_{i,3} + d E r_3 y_{i,3}^b v_{i,3}^g e_{i,3} q_{i,2} v_{i,3}.$$

We take the partial derivative with respect to the informal human capital investment $v_{i,3}$ and to $y_{i,3}$:

$$d r_3 y_{i,3}^b g v_{i,3}^{g-1} = q_{i,2}, \text{ and} \quad (\text{C.3.2})$$

$$p \frac{1}{\bar{y} y_{i,3}} = d b r_3 y_{i,3}^{b-1} v_{i,3}^g. \quad (\text{C.3.3})$$

Express $v_{i,3}$ as a function of $y_{i,3}$ using C.3.2 and substitute for $v_{i,3}$ in C.3.3:

$$p \frac{1}{\bar{y} y_{i,3}} = d b r_3 \left(\frac{d r_3 g}{q_{i,2}} \right)^{\frac{g}{1-g}} y_{i,3}^{\frac{b+g-1}{1-g}}.$$

Then, we further re-arrange the equation with respect to $y_{i,3}$:

$$y_{i,3} + (d b r_3)^{-2} \left(\frac{q_{i,2}}{d r_3 g} \right)^{2 \frac{g}{1-g}} y_{i,3}^{2 \frac{1-b-g}{1-g}} = \bar{y}.$$

We can simplify the F.O.C. condition as $y_{i,3} + C(q_{i,2}) y_{i,3}^a = \bar{y}$, where $C(q_{i,2}) = (d b r_3)^{-2} \left(\frac{q_{i,2}}{d r_3 g} \right)^{2 \frac{g}{1-g}}$ and $\frac{dC(q_{i,2})}{dq_{i,2}} > 0$, and $a = 2 \frac{1-b-g}{1-g} > 0$.

Take the derivative with respect to $q_{i,2}$:

$$(1 + a C(q_{i,2}) y_{i,3}^{a-1}) y_{i,3}^0 + C^0(q_{i,2}) y_{i,3}^a = 0 \Rightarrow y_{i,3}^0 = \frac{C^0(q_{i,2}) y_{i,3}^a}{1 + a C(q_{i,2}) y_{i,3}^{a-1}} < 0.$$

From C.3.2, we have: $\frac{dv_{i,3}}{dq_{i,2}} = \frac{1}{1-g} (d r_3 g)^{\frac{1}{1-g}} q_{i,2}^{\frac{g}{1-g}-1} y_{i,3}^{\frac{b}{1-g}} \frac{1}{y} b y^0 \frac{1}{q_{i,2}} < 0$ as $g < 1$ and $y^0 < 0$. QED

D Complementary empirical evidence

In this section, we provide additional empirical evidence that complements, checks the robustness of, or tests mechanisms behind our main results. We (i) present auxiliary outcomes, (ii) provide supporting evidence on class labels, (iii) check the robustness of the equalization of the parents generation, (iv) shed additional light on the rebound of the pre-revolution elite in the children generation, and (v) provide additional evidence on attitudes and behaviors reflecting v in the conceptual framework of Section 5.1.

D.1 Auxiliary outcomes

In this Section, we provide evidence on auxiliary outcomes used to provide a more comprehensive picture of the experiences of pre-revolution elite families and to discuss the interpretation of the main results.

Table D.3 follows the same format as Table 1 and offers additional outcome variables: an indicator equal to 1 if the respondent is retired and 0 otherwise (Panel A); variables capturing the post-revolution social status, i.e., whether one belongs to the post-revolution elite, is a member of the Chinese Communist party, or works for a State-Owned Enterprise (Panel B); an indicator variable for having experienced hunger during the Great Famine (Panel C); an indicator for receiving any remittances from relatives — these can be based abroad or not — and a variable capturing the amount received (Panel D); a variable capturing the respondent's view on the role of competition in society (Panel E); and house value as a share of income (Panel F). Note that some outcomes are relevant only for the parents generation.

Table D.4 also follows the format of Table 1 but focuses on perceptions of unfairness over the last 12 months and on the amounts received as subsidies from the government.

Table D.3: Auxiliary outcomes for the parents and children generations of the pre-revolution elite

	Both generations			Parents generation			Children generation		
	Mean		Std	Elite class diff.		Overall	Elite class diff.		Overall
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Panel A:retirement									
Retired	0.105	0.307	-0.050***	0.011	0.161				
Panel B:post-revolution status									
Post-revolution elite	0.123	0.329	-0.072***	0.015	0.175	-0.020*	0.011	0.068	
CCP member	0.084	0.277	-0.055***	0.010	0.102	0.016	0.012	0.065	
SOE employment	0.037	0.189	0.011	0.007	0.027	-0.007	0.009	0.048	
Panel C:famine hunger									
Experienced hunger during famine	0.121	0.326	0.033*	0.017	0.209				
Panel D:remittances from relatives									
Any Remittance from relatives	0.186	0.389	0.029	0.029	0.174	0.002	0.020	0.193	
Amount of remittance from relatives	2,151.248	12583.760	-281.143	455.996	1,850.116	-26.255	499.351	2,316.139	
Panel E:additional values									
Competition is desirable	3.793	0.747	0.035	0.032	3.806	0.072**	0.034	3.781	
Panel F:housing									
House value as share of income	3.323	63.627	-0.147	0.948	2.852	-2.772**	1.261	3.746	

Notes: Columns 3 and 6 (4 and 7) present regression coefficients (standard errors) of estimated differences between members of the pre-revolution elite households and the rest of the population for the parents and children generations, respectively, controlling for cohort fixed effects and residence county fixed effects. Column 1 (2) presents the mean (standard deviation) across the parents and children generations, while columns 5 and 8 present sample means for the respective generations. Remittances are defined as transfers from non-co-resident relatives; we restrict the sample to co-resident parents and children to ensure that the variable of interest does not include transfers between them. *** p < 0.01, ** p < 0.05, * p < 0.1. Sample: parents (1940–1965 birth cohorts; N = 12,130 in Panels A–C, 12,043 in Panel D, 10,585 in Panel E, and 5,366 in Panel F) and children generations (1966–1990 birth cohorts; N = 11,321 in Panels A and B, 10,948 in Panel D, 10,169 in Panel E, and 5,991 in Panel F).

Table D.4: Parents and children generations of the pre-revolution elite

	Both generations			Parents generation			Children generation		
	Mean	Std. dev.		Elite diff.	Std. err.	Overall	Elite diff.	Std. err.	Overall
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Panel A: Perception of unfairness over the last 12 months									
Unfair treatment due to inequality	0.114	0.318	0.001	0.013	0.108	-0.002	0.015	0.121	
Unfair treatment due to Hukou	0.050	0.219	0.011	0.009	0.047	0.002	0.011	0.054	
Unfair treatment due to gender	0.023	0.149	0.011	0.008	0.021	0.009	0.009	0.025	
Unfair treatment from government of cials	0.090	0.286	0.008	0.013	0.089	0.028*	0.014	0.092	
Conflict with government of cials	0.037	0.190	0.001	0.009	0.039	0.012	0.009	0.036	
Unreasonable delay, and buckpassing from government of cials	0.121	0.326	0.003	0.014	0.104	0.033*	0.017	0.140	
Unreasonable fees from government of cials	0.063	0.242	-0.003	0.009	0.051	0.010	0.013	0.076	
Panel B: Government subsidy									
Household government subsidy in 2010	169.846	772.298	3.943	23.559	181.950	-3.357	28.317	156.881	
Household government subsidy in 2012	209.679	937.654	-10.195	30.562	212.519	-47.176	34.717	206.636	

Notes: Columns 1 and 2 present the mean and standard deviation, respectively, of the variable for the parents and children generations combined. Columns 3 and 6 (4 and 7) present regression coefficients (standard errors) of estimated differences between members of the pre-revolution elite and the rest of the population for the parents and children generations, respectively, controlling for cohort fixed effects and residence county fixed effects. Standard errors are clustered at the county level. *** p < 0.01, ** p < 0.05, * p < 0.1. Sample: parents (1940–1965 birth cohorts; N = 12,130) and children generations (1966–1990 birth cohorts; N = 11,321).

D.2 Class labels

This Section provides complementary evidence on class labels from the CFPS data.

Figure D.5 plots the percentage of respondents who know the class label assigned to their families at the time of the Communist Revolution, against their birth cohorts.

Figure D.5: This figure plots the percentage of survey respondents who report themselves their class label, by birth cohort smoothed across a 3-year sliding window.

D.3 Cohort definitions and the elite income premium over time

The goal of this Section is to show the income and education premia (or the lack thereof) for all three generations by birth cohort and the robustness of observed patterns (the equalization of the parents generation and the rebound of the pre-revolution elite among the children generation) to reasonable changes in generation cut-offs.

Figure D.6 shows the elite's advantage in 2010 income as a function of birth cohorts.

Table D.5 shows the income and education premia by birth cohorts, using five-year bins. Column 1 (Column 2) is the regression equivalent of Figure D.6 (Figure 2).

Table D.6 revisits the finding of a negative (if anything) income premium for the pre-revolution elite among the parents generation. Panel A focuses on pre-retirement age parents; Panel B restricts the sample to non-retired parents, regardless of their age; and Panel C includes pension income in our definition of total income.

Figure D.6: This figure plots the pre-revolution elite class's advantage in contemporary income — the average difference in 2010 income between the elite class (defined as individuals from landlord or rich peasant households) and the rest of the population. The shaded area indicates the birth cohorts belonging to the “parents” generation.

Table D.5: Cohort-specific income and education premium

	Income	Education
	(1)	(2)
Pre-revolution elite (1930-1934)	5648.301 (6302.214)	0.113 (0.078)
Pre-revolution elite (1935-1939)	737.906 (1889.718)	0.033 (0.040)
Pre-revolution elite (1940-1944)	-769.245 (1128.040)	0.012 (0.033)
Pre-revolution elite (1945-1949)	-2298.666** (932.870)	-0.028 (0.017)
Pre-revolution elite (1950-1954)	558.009 (1611.404)	-0.037* (0.022)
Pre-revolution elite (1955-1959)	153.373 (1396.044)	-0.054 (0.036)
Pre-revolution elite (1960-1964)	-928.707 (1169.687)	0.009 (0.039)
Pre-revolution elite (1965-1969)	765.423 (1707.940)	0.061** (0.027)
Pre-revolution elite (1970-1974)	2848.675* (1668.830)	0.031 (0.032)
Pre-revolution elite (1975-1979)	1878.911 (2567.674)	0.026 (0.043)
Pre-revolution elite (1980-1984)	2589.046 (3904.707)	0.090* (0.049)
Pre-revolution elite (1985-1989)	3293.816 (2424.814)	0.072 (0.051)
Pre-revolution elite (1990-1994)	802.247 (1234.105)	0.043 (0.041)

Notes: The table presents regression coefficients (standard errors) of estimated differences between members of the pre-revolution elite and the rest of the population. The outcome in column 1 is the total annual labor income. The outcome in column 2 is the probability of completing secondary education. Each row represents a separate regression. All specifications include county fixed effects. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Finally, Table D.7 provides information, for various outcomes, on the elite difference for the grandparents generation. Panel A considers annual labor income, for the subset of respondents who are not yet retired; Panel B sheds light on employment (for the non-retired subsample); and Panel C provides several variables capturing educational attainment as well as standardized test scores.

Table D.6: Income differences among the parent generation, accounting for retirement

	Total income				
	(1)	(2)	(3)	(4)	(5)
Panel A: Parents younger than 55					
Elite	-724.492 (797.371)	-895.999 (776.946)	-927.648 (791.018)	-662.368 (800.947)	-812.821 (803.077)
Panel B: Parents not retired					
Elite	-447.660 (796.953)	-607.125 (772.207)	-632.469 (790.890)	-386.065 (799.925)	-480.067 (796.126)
Panel C: Including pension income					
Elite	-340.752 (459.771)	-462.136 (456.584)	-441.113 (446.795)	-254.730 (453.810)	-310.766 (461.653)
County FE	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
Sector FE	No	Yes	No	No	No
Province by sector FE	No	No	Yes	No	No
Migration FE	No	No	No	Yes	No
Birth province FE	No	No	No	No	Yes

Notes: All specifications include cohort fixed effects and county fixed effects. Column 2 additionally includes sector fixed effects; column 3 includes province sector fixed effects; column 4 includes a migrant indicator variable, defining migrants as individuals whose current county of residence is different from their birthplace; and column 5 includes birth province fixed effects. The mean of the dependent variable is RMB 11,467, 10,731, 9,568, for panels A, B and C, respectively. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: 1940–1965 birth cohorts; N = 4,328 (Panel A), 4,078 (Panel B), 11,523 (Panel C).

Table D.7: Differences in the grandparents generation

	Pre-revolution elite Grandparents generation		
	Elite diff.		Overall
	Coef.	Std. err.	Mean
Panel A: Income			
Annual labor income	2,000.537	1,731.501	8,486.578
Panel B: Labor market choices (only N=133 from row C.2)			
Currently employed	0.007	0.033	0.104
Non-agricultural job	-0.118*	0.067	0.068
Change to non-agricultural job from parents	-0.231	0.240	-0.075
Self-employed or employer	-0.110	0.071	0.043
Career prestige score (ISEI)	-3.047*	1.709	24.615
Panel C: Educational performance			
Years of education completed	1.766***	0.456	2.590
Completed at least junior high school	0.164***	0.043	0.164
Completed at least senior high school	0.078**	0.032	0.091
Above median math test score (2010)	0.099***	0.035	1.111
Above median reading test score (2010)	0.122***	0.040	1.205

Notes: Columns 1 and 2 present regression coefficients (standard errors) of estimated differences between members of the pre-revolution elite and the rest of the population for the grandparents generation, respectively, controlling for cohort fixed effects and residence county fixed effects. Column 3 presents the means of the corresponding outcome variables. Standard errors are clustered at the county level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: grandparents (cohorts born before 1940; $N = 1,519$ in Panel A and $1,598$ in Panels B and C). Note that in Panel B, we examine all outcomes except “Currently employed” conditional on being employed, leading to a reduced sample ($N = 133$).

D.4 Elite rebound in the children generation

This Section provides complementary evidence on the main finding of a rebound of the pre-revolution elite in the children generation. We: (i) vary our definition of income; (ii) investigate the heterogeneity of the results by the respondent's urban vs. rural status; (iii) put the magnitude of the rebound in perspective and discuss the results in some detail; (iv) present the results from a different, within-family specification; (v) introduce various robustness checks; and (vi) provide additional evidence about selection.

D.4.1 Income definition

Here, we vary the components of total income to check the robustness of the results to definition choices.

Table D.8 considers wage income (Panel A) and the sum of wage and agricultural incomes (Panel B) across four subsamples.

Table D.9 zooms in on agricultural income. We investigate the elite premium in the children generation in terms of total household agricultural income and per capita household agricultural income.

Table D.8: Different definitions of total income

	Total income			
	(1)	(2)	(3)	(4)
Panel A: Wage income				
Elite	3289.846*** (1117.092)	3138.936*** (1006.205)	3248.642*** (920.605)	2099.412** (820.406)
Mean of DV (children gen.)	17,236.29	16,381.67	14,437.25	13,539.15
Panel B: Wage income + agricultural income				
Elite	3160.404*** (1205.448)	3106.169*** (1073.858)	3390.875*** (993.073)	2176.578** (895.169)
Mean of DV	20,712.59	19,408.34	17,003.18	15,687.08
County FE	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes
Subsample	Employed	(1)+ Job hunting	(1)+(2)+Full- time homemaker	Everyone

Notes: This table explores the pre-revolution elites' income premium of the children generation across different types of participation in the labor market and different income sources. In column 1 we only include the employed subset. In column 2 we additionally include those who are unemployed but actively seeking jobs. Column 3 additionally includes the subsample of people who stay at home caring for children. Column 4 shows full sample results. In Panel A, we restrict the income definition to include only labor income; in Panel B, we assign household-level average agricultural income to all household members. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: children generation (1966–1990 birth cohorts); $N = 11,321$.

D.4.2 Urban-rural heterogeneity

We next decompose income differences in the children generation by the urban status of the sample.

Table D.10, Panel A restricts the estimation to the rural sample, while Panel B focuses on the sample of individuals residing in urban areas.

Table D.9: Elite income premium in the agricultural sector

	Household agricultural income			
	Total		Per capita	
	(1)	(2)	(3)	(4)
Pre-revolution elite	1949.579*** (665.476)	2753.717*** (859.761)	308.026** (125.893)	439.733*** (150.185)
Observations	11,119	6,503	11,119	6,503
Mean of DV	5,146.175	8,777.307	1,147.498	1,956.732
Std. dev. of DV	11771.053	14245.089	2,863.407	3,507.562

Notes: The table presents regression coefficients (standard errors) of estimated agricultural income differences between members of the pre-revolution elite households and the rest of the population for the children generation, using CFPS (2010). Columns 1 and 3 (2 and 4) include the full sample (focus on individuals reporting positive agricultural income); columns 1–2 (3–4) use household agricultural income (per capita household agricultural income) as their dependent variable. Standard errors are clustered at the prefecture level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: 1966–1990 birth cohorts.

Table D.10: Decomposing income differences among the children generation: rural and urban subsamples

	Total income				
	(1)	(2)	(3)	(4)	(5)
Panel A: Rural sample					
Elite	2149.365** (964.256)	2258.353** (961.843)	2232.854** (961.428)	2152.841** (964.158)	2340.709** (979.386)
Panel B: Urban sample					
Elite	2619.135 (3012.585)	2633.864 (3030.165)	2261.220 (3126.276)	2643.649 (3001.544)	2581.588 (3010.326)
County FE	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
Sector FE	No	Yes	No	No	No
Province by sector FE	No	No	Yes	No	No
Migration FE	No	No	No	Yes	No
Birth province FE	No	No	No	No	Yes

Notes: All specifications include cohort fixed effects and county fixed effects. Column 2 additionally includes sector fixed effects; column 3 includes province sector fixed effects; column 4 includes a migrant indicator variable, defining migrants as individuals whose current county of residence is different from their birthplace; and column 5 includes birth province fixed effects. The mean of the dependent variable is RMB 15,687 (std. dev. 34,362). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: 1966–1990 birth cohorts; $N = 9,586$ (panel A); 1,589 (panel B).

D.4.3 Magnitude of the rebound in perspective

To put the income gap between the children generation of the pre-revolution elite and the rest of the population in perspective, we compare it with a number of cross-sectional and intergenerational benchmarks.

We begin by comparing the income premium enjoyed by the descendants of the pre-revolution elite with that enjoyed by the emerging, post-revolution, Communist elite (see Table D.11, Panel A). The pre-revolution elite are largely excluded from the post-revolution, Communist elite — in fact, the correlation coefficient between these two elite memberships remains at around -0.956 (s.e. = 0.006) across the parents and children generations. We find that the pre-revolution elite's income premium is 151.0% of that exhibited among the post-revolution, Communist elite (see Table 2, Panel B). This indicates that the descendants of the pre-revolution elite have regained their elite status, at least in the economic domain, to a level that is comparable to or above that of the new elite of the current Communist incumbent who directly benefit from many structural factors such as preferential access to jobs in the public sector and state-owned enterprises¹⁶

We consider two more sources of cross-sectional income differences (Panel B). First, based on the same national survey data, Heshmati and Su (2017) find a gender income gap in China of 21% (as of 2010). The pre-revolution elite premium is thus more than two thirds of the gender gap. A second benchmark is the rural-urban income gap within China. In 2010, an average urban hukouholder earned a 38.3% higher income than their peers with rural hukou status. Thus, the magnitude of the elite premium that we identify is about a third of the overall rural-urban gap one observes in China.

Another way to benchmark the income gap and the resurgence of the pre-revolution elite is through intergenerational transition probabilities — in particular, the chance that one stays in the top decile in terms of income if one's grandparents were in the top decile. We compare the implied transition probability based on the income gap we estimate in China's context, with other contexts where comparable data is attainable (Panel C; Appendix E describes in detail the procedure for recovering the transition matrix from regression coefficients).¹⁷ Our estimated income gap implies that individuals whose grandparents were in the top decile of the distribution have a 14.3% chance of staying in the top decile. This is much higher than the persistence rate of the top decile in Taiwan (10.1%; Yu, 2019), Canada (11.1%; Corak and Heisz, 1998), Russia (13.0%; Popkin, 2016), and the U.S. (14.1%; Chetty et al., 2014)¹⁸

Thus, China's two major revolutions, despite their explicit goals of eliminating class privileges and removing inequality, did not manage to increase social mobility substantially above what is observed in other economies that have transitioned away from the socialist system, or several exemplifying capitalist economies with no such revolutions.

¹⁶Ample evidence highlights the premium associated with Communist Party patronage, either via a persistent effect on economic outcomes of belonging to a household with a revolutionary cadre or martyr, or through the economic benefits and rents received by those who join the Communist Party during their lifetime (e.g., Li and Walder, 2000).

¹⁷A three-generation transition matrix is rarely estimated in other contexts due to data limitations. We thus extrapolate from the two-generation transition matrix, assuming the same transition probability between grandparents and parents as between parents and children.

¹⁸One may argue that without the revolutions, social mobility in China might have been much lower than what it is today. Such a counterfactual is inherently difficult to assess. Existing genealogical evidence shows that intergenerational mobility was quite low in imperial China (Shiue, 2025).

Table D.11: Magnitude of income differences in perspective

Reference group	Magnitude	Source
(1)	(2)	(3)
Panel A: cross-sectional differences in income, elite		
pre-revolution elite	13.9%	CFPS
post-revolution elite	9.2%	CFPS
Panel B: cross-sectional differences in income, other dimensions		
Gender gap	21.2%	Heshmati and Su (2017)
Urban-rural gap	38.3%	CFPS
Panel C: intergenerational mobility (probability of staying in top decile)		
China	14.3%	CFPS
Taiwan	10.1%	Yu (2019)
Canada	11.1%	Corak and Heisz (1998)
Russia	13.0%	Popkin (2016)
U.S.	14.1%	Chetty et al. (2014)

Notes: Panel A displays cross-sectional differences in income among the children generation, based on elite status. Panel B displays cross-sectional differences in income among the children generation, based on demographic differences. Panel C displays the probability that the grandchild of a grandparent in the top income decile will remain in the top income decile — see Appendix E for the detailed procedure for recovering the transition matrix from regression coefficients.

D.4.4 Within-family estimation

In this Section, we introduce a new specification with parent-child pair fixed effects. The outcomes are information elicited from all parents generation respondents who have adult descendants who belong to the children generation, regardless of whether they co-reside or not — and regardless of whether they are covered in the CFPS surveys or not.

Table D.12 estimates the following equation:

$$Y_{igpf} = b_0 + b_1 \text{Elite}_f + \text{Children}_{ig} + \eta_{pf} + d_{\text{cohort}} + \epsilon_{igpf},$$

where g is the generation (parents or children), p is a parent-child pair, Children_{ig} is an indicator equal to 1 if i belongs to the children generation and 0 otherwise, and η_{pf} are pair fixed effects.

Panel A presents unweighted results, i.e., each parent-child pair is considered as a separate experiment. Panel B weights the regression so that each family, i.e., co-resident parents and (co-resident or non-co-resident) children, contribute equally to the results.

We study four outcomes: the ISEI career prestige score, an indicator for having at least senior high school education, income, and the income rank. All outcomes are elicited from the parents-generation respondents. Income and the income rank are derived directly from self-reports for the parents and are predicted for the children, based on (i) the career prestige score and education level extracted from their parents' reports and (ii) coefficients from a regression of self-reported total income on the career prestige score and education level in the children generation.

Table D.12: Elite premium among children of the parents generation

	ISEI career prestige	Senior education	Income (pred.)	Income rank (pred.)
	(1)	(2)	(3)	(4)
Panel A: Unweighted				
Pre-rev. elite * Children gen.	0.945 (0.790)	0.044** (0.019)	1906.995*** (574.654)	4.206** (1.699)
# of obs.	[13,340]	[46,622]	[28,204]	[28,204]
Panel B: Weighted				
Pre-rev. elite * Children gen.	1.448 (1.100)	0.031 (0.021)	1602.450** (645.728)	3.369** (1.590)
# of obs.	[13,340]	[46,622]	[28,204]	[28,204]
Mean of DV (children gen.)	34.95	0.32	23,093.94	50.00
County FE	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes

Notes: This table explores the pre-revolution elites' income and education premia among the children of the "parents" generation. All children, regardless of whether they co-reside with their parents, are included in the sample. Each cell is the result of a separate regression that estimates the premium within parent-child pairs, i.e., with pair fixed effects. Panel A considers each pair as a separate experiment. Panel B weights the regressions by the inverse of the family size (i.e., of the sum of the number of parent respondents and their children) so all households contribute equally to the estimation. "Pre-rev. elite" corresponds to the class label reported by the (parent-generation) respondent, and county fixed effects capture the parent's county of residence. The dependent variable in column 3 is the total income reported in the survey for the parents and the predicted income for the children, based on (i) the career prestige score and education level extracted from their parents' reports and (ii) coefficients from a regression of self-reported total income on the career prestige score and education level in the children generation. Similarly, the dependent variable in column 4 is the (predicted) income rank percentile. The number of observations is reported in square brackets. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

D.4.5 Robustness

This Section provides a wide array of checks to assess the robustness of the elite rebound in the children generation.

We first check in Figure D.7 that the elite income premium is observed across deciles of the children's income distribution.

Next, we present in Table D.13 the tests described briefly in the “Robustness of the income rebound” paragraph of Section 4.4. Panel A changes the cut-offs to define the children generation. Panel B offers alternative class label definitions. Panel C implements the same specification but takes the logarithm of total income as the outcome. Panel D investigates the robustness of the results to different assumptions about the (spatial) correlation of the errors. Panel E introduces controls, restricts the estimation to various subsamples, weights the results, and uses an alternative survey to circumvent representativeness and class label inference issues raised by the CFPS sampling design. Panel F implements a different specification, leveraging the panel dimension of CFPS to control for life-cycle dynamics:

$$Y_{ift} = b_0 + b_1 \text{Elite}_f + X_{ift} \beta + \text{Age}_{ift} + m_{\text{county}} + d_{\text{cohort}} + \epsilon_{ift},$$

where t is a survey wave (2010, 2012, 2014, or 2018). Panel G controls for province-specific cohort fixed effects. Finally, Panel H controls for the self-employed or entrepreneur status of the respondents' parents.

Figure D.7: This figure plots the pre-revolution elite class's advantage in contemporary income — the average difference in 2010 income between the elite class (defined as individuals from landlord or rich peasant households) and the rest of the population — by decile.

Table D.13: Robustness of pre-revolution elite's rebound

	Total income			
	(1)	(2)	(3)	(4)
Panel A.1:children generation as 1963–1987 birth cohorts				
Pre-revolution elite	1961.840** (788.986)	1946.045** (790.211)	1865.694** (790.095)	1968.934** (790.663)
Panel A.2:children generation as 1969–1993 birth cohorts				
Pre-revolution elite	1988.330** (886.012)	2045.697** (893.701)	1988.183** (904.197)	1989.134** (886.584)
Panel A.3:children generation as 1961–1990 birth cohorts				
Pre-revolution elite	1592.077** (758.934)	1573.449** (758.136)	1496.973** (756.304)	1600.401** (760.694)
Panel B.1:alternative class label definition: relying on parents' reports only				
Pre-revolution elite	2794.629* (1507.307)	2995.093** (1516.234)	2994.170* (1522.027)	2808.551* (1504.788)
Panel B.2:alternative class label definition: rich peasant households				
Pre-revolution elite	1949.963 (1188.010)	1989.095* (1185.633)	1939.202 (1195.201)	1955.799 (1187.042)
Panel C.1:outcome is log income				
Pre-revolution elite	0.139** (0.064)	0.143** (0.065)	0.144** (0.066)	0.143** (0.064)
Panel D.1:spatial autocorrelation for counties within 50 KM				
Pre-revolution elite	1919.225** (905.057)	1997.858** (887.680)	2011.327** (900.102)	1921.305** (909.257)
Panel D.2:spatial autocorrelation for counties within 300 KM				
Pre-revolution elite	1919.225** (956.228)	1997.858** (983.835)	2011.327** (1017.680)	1921.305** (965.461)
Panel D.3:cluster at province level				
Pre-revolution elite	2176.578** (964.422)	2226.804** (983.151)	2202.577** (994.454)	2183.462** (962.490)
Panel E.1:controlling for number of siblings				
Pre-revolution elite	2058.268** (884.571)	2120.631** (884.970)	2099.677** (891.160)	2066.078** (885.011)
Panel E.2:controlling for number of generations				
Pre-revolution elite	2525.494*** (905.773)	2555.186*** (905.343)	2530.319*** (906.750)	2527.989*** (902.976)
Panel E.3:excluding Shanghai				
Pre-revolution elite	2151.531** (911.107)	2116.601** (909.107)	2155.516** (917.278)	2198.842** (910.444)

Panel E.4:weighted regression				
Pre-revolution elite	1721.358 (1171.151)	1784.193 (1188.113)	1770.807 (1194.765)	1753.747 (1161.925)
Panel E.5:oversampled provinces				
Pre-revolution elite	3321.616 (2120.632)	2934.340 (2084.057)	2676.155 (2148.115)	3240.438 (2139.868)
Panel E.6:CFPS 2010 sample				
Pre-revolution elite	2824.018*** (1044.585)	2814.704*** (1019.330)	2791.024*** (1035.649)	2839.237*** (1040.942)
Panel E.7:alternative survey: CHIP (2002)				
Pre-revolution elite	381.907** (160.596)	376.146** (158.503)	374.898** (155.959)	
Panel F.1:controlling for life cycle				
Pre-revolution elite	2136.762*** (770.162)	2226.804** (896.360)	2202.577** (902.756)	2183.462** (895.486)
Panel G.1:controlling for province-specific cohort fixed effects				
Pre-revolution elite	2127.911** (923.012)	2204.733** (916.070)	2206.920** (919.396)	2132.497** (919.466)
Panel H.1:controlling for parents being self-employed				
Pre-revolution elite	2063.786** (904.540)	2117.502** (905.098)	2097.543** (908.244)	2070.946** (904.502)
Panel H.2:controlling for parents being entrepreneurs				
Pre-revolution elite	2168.910** (898.054)	2217.011** (899.340)	2195.342** (905.585)	2175.631** (898.507)
County FE	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes
Sector FE	No	Yes	No	No
Province Sector FE	No	No	Yes	No
Migrants FE	No	No	No	Yes

Notes: The table presents regression coefficients (standard errors) of estimated differences between members of the pre-revolution elite households and the rest of the population for the children generation. Panel A.1 changes the sample birth cohorts from 1966–1990 to 1963–1987; Panel A.2 changes the sample birth cohorts to 1969–1993; and Panel A.3 changes it to 1961–1990, i.e., starting with the first cohort not directly affected by the disruption of secondary education in the Cultural Revolution (see Figure 2). Panel B.1 defines the pre-revolution elite as those for whom either parent reports being an elite; and Panel B.2 restricts the pre-revolution elite label to only rich peasant households. Panel C.1 uses log(income) as the outcome. Panel D.1 accounts for arbitrary spatial autocorrelation at the county level (Colella et al., 2019) assuming any two counties further than 50 KM apart have zero correlation; Panel D.2 accounts for spatial autocorrelation at the county level, assuming any two counties further than 300 KM apart have zero correlation; and Panel D.3 clusters standard errors at the province level. Panel E.1 controls for the number of siblings; Panel E.2 controls for the number of generations living in the household; Panel E.3 excludes respondents from Shanghai; Panel E.4 applies the weights provided by the CFPS team to achieve nationally representative estimates; Panel E.5 restricts the regressions to the 5 provinces oversampled to

make them self-representative of the populations at the county level; Panel E.6 uses the 2010 sample of CFPS and the income information provided in that wave ($N = 16,341$); and Panel E.7 replicates the exercise on another survey, the China Household Income Project (CHIP), 2002 ($N = 21,219$) — note that migrants are surveyed independently in CHIP, so we do not have estimates for column 4. Panel F.1 uses panel data for the years 2010, 2012, 2014, and 2018 (the 2016 sample is much smaller than the others) to include both cohort and age xed effects in the regression. Panel G.1 adds province cohort xed effects. Panel H.1 controls for a dummy for whether either parent is self-employed; and Panel H.2 controls for a dummy for whether either parent is an entrepreneur (runs a “getihu”). All specifications include cohort xed effects and county xed effects. Column 2 additionally includes sector xed effects; column 3 includes province sector xed effects; and column 4 includes a migrant indicator variable, defining migrants as individuals whose current county of residence is different from their birthplace. The mean of the dependent variable is RMB 15,687 (std. dev. 34,361). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Baseline sample: 1966–1990 birth cohorts; $N = 11,171$ (note that $N = 7,828$ in Panel C.1).

D.4.6 Selection

In this Section, we investigate the possibility of selective survival of the pre-revolution elite during the revolutions. We focus on three major episodes that generated large mortality across the population and may have differentially affected the pre-revolution elite: the Great Chinese Famine and selective violence against the elite during the Communist and Cultural Revolutions. We study the impact of those episodes in two steps: First, we study the relationship between historical inequality and the severity of those episodes; and second, we decompose the pre-revolution elite income premium in terms of the intensity of the Famine and Cultural Revolution.

Table D.14 correlates various measures of casualties for those three episodes with measures of pre-Land Reform inequality at the county level. Our right-hand side variable is the landlord share of the population or the land ownership Gini coefficient, both derived from the County Gazetteers. We consider three sets of dependent variables. In column 1, we examine the relationship between historical inequality and famine severity — measured by abnormal cohort size reduction in each county, following Meng et al. (2015). In columns 2–6, we study various measures of the intensity of violence during the Communist Revolution, using newly extracted information from the County Gazetteer¹⁹. The violence data allow us to distinguish between the number of deaths, the population that experienced struggles (douzheng), and the number of people labeled as anti-revolutionary (fangeming), who were at high risk of experiencing violence during the Land Reform. In columns 7–10, we use statistics on mass killings during the Cultural Revolution from Walder and Su (2003). For all three high-mortality episodes, we observe that the severity of the episode in a given county is not statistically significantly associated with local inequality prior to the revolutions. More importantly, the systematic killing of landlords and rich peasants was limited in scale as most of the pre-revolution elite survived the revolutions. The observed overall level of violence, albeit not zero, was too low to drive the persistence pattern that we document. Conversely, the size of the average famine-induced cohort loss at the county level is large and may have generated selection within the elite: Such a selection would jeopardize our interpretation of the elite income premium as a rebound if elite members with a lower earnings potential were more likely to perish.

Table D.15 zooms in on the Great Famine and investigates the heterogeneity of the elite income premium in the children generation along the intensity of the Famine in the county.

¹⁹We extract data on persecution cases during the Land Reform from the text description of the Land Reform. We find 67 counties that document the violence quantitatively.

Table D.14: Great Famine casualties and violence during the Land Reform and Cultural Revolution

	Famine										
	Violence during Land Reform					Violence during Cultural Revolution					
	Any report		Number of victims		Violence during Land Reform		Revolutionary casualties		Violence during Cultural Revolution		
Cohort loss	Death	Struggle	Violence	Death	Struggle	Number	Ratio	Number	Ratio	Number	Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(9)	(10)
Pre-Reform landlord share	0.0010 (0.002)	0.0013 (0.002)	-0.0006 (0.002)	0.00003 (0.002)	0.00004 (0.0004)	0.0001 (0.0001)	0.0663 (1.805)	-0.000004 (0.00001)	-23.1104 (93.588)	-0.0002 (0.0002)	
Pre-Reform Gini	-0.0398 (0.089)	-0.0142 (0.052)	-0.0896 (0.084)	-0.0618 (0.088)	0.0002 (0.001)	0.0050 (0.006)	27.8865 (68.720)	0.0001 (0.0002)	-3,939.2425 (2,665.901)	-0.0083 (0.0066)	
# observations	637	639	639	639	639	639	519	533	519	533	
Mean of DV	0.237	0.0112	0.0300	0.0321	0.000140	0.00287	97.44	0.000291	4489	0.0130	

Notes: In column 1, we proxy for famine severity with abnormal natality rates following (Meng et al., 2015) and regress it on the pre-reform landlord share and the pre-reform Gini coefficient. The dependent variables in columns 2–6 capture different types of persecution perpetrated during the Land Reform (death, struggle sessions, and other violence) using original data from the County Gazetteers and columns 7–10 capture different types of persecution perpetrated during the Cultural Revolution, using data from Walder and Su (2003). Columns 2–4 regress indicator variables equal to 1 if any persecution of the specified type is reported in the County Gazetteers and 0 otherwise, on pre-Land Reform measures of land inequality. Columns 5 and 6 use as dependent variables the percentage of victims of the specified persecution type as a share of total population. Columns 7 and 9 regress the number of people affected by the Cultural Revolution on pre-Land Reform measures of land inequality; Columns 8 and 10 use as dependent variable the percentage of victims of the specified persecution type as a share of total population. Each row corresponds to a separate regression. Province fixed effects are controlled for across all columns. *** p < 0.01, ** p < 0.05, * p < 0.1.

Table D.15: Decomposing income differences by famine intensity

		Total income		
		(1)	(2)	(3)
Panel A: Children generation				
Elite		1940.484** (923.051)	1980.348** (921.371)	1989.929** (924.698)
Elite	cohort loss	-980.910 (946.031)	-1022.306 (939.567)	-1158.022 (957.903)
Panel B: Parents generation				
Elite		-740.315 (521.237)	-829.135 (526.232)	-799.497 (517.287)
Elite	cohort loss	-64.238 (438.266)	-51.965 (436.336)	-14.873 (434.338)
County FE		Yes	Yes	Yes
Cohort FE		Yes	Yes	Yes
Sector FE		No	Yes	No
Province	sector FE	No	No	Yes

Notes: We follow Meng et al. (2015) to compute the ratio of Famine-hit cohort size (1959–1961) over regular cohort size (1954–1957), from the 1990 Population Census. The difference in natality rates can be seen as a proxy for the severity of the Famine. County fixed effects and cohort fixed effects are controlled for across the columns. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: children generation (1966–1990 birth cohorts), $N = 9,385$; parents generation (1940–1965 birth cohorts), $N = 9,751$.

Table D.16 performs a similar exercise for the Cultural Revolution, investigating the heterogeneity of the elite income premium in the children generation along the intensity of the Cultural Revolution (measured by the deaths-to-population ratio) in the county.

Another potential source of selection is international migration. As the Communist forces took control of mainland China, pre-revolution elite households were more likely to emigrate to Taiwan, which remained a Nationalist stronghold, or to Hong Kong, then a British colony. If émigrés were characterized by a higher earnings potential across the generations, then emigration could bias our results. Table D.17 studies the selectiveness of emigration to Taiwan and its effects on the elite income premium in the children generation. More specifically, it investigates the heterogeneity of the elite premium along the share of the 1950s population (at the province level) that emigrated to Taiwan, according to Taiwanese census data.

Table D.16: Decomposing income differences by Cultural Revolution in uence

		Total income		
		(1)	(2)	(3)
Panel A:Children generation				
Elite		2530.993** (1118.245)	2684.992** (1132.833)	2628.769** (1142.762)
Elite	death ratio	425.937 (802.603)	490.388 (814.929)	429.313 (804.941)
Panel B:Parents generation				
Elite		-896.815* (537.322)	-1012.193* (546.809)	-974.457* (541.599)
Elite	death ratio	-340.725 (463.293)	-338.822 (465.371)	-359.152 (461.540)
County FE		Yes	Yes	Yes
Cohort FE		Yes	Yes	Yes
Sector FE		No	Yes	No
Province	sector FE	No	No	Yes

Notes: We use data from Walder and Su (2003) to compute a prefecture-level Cultural Revolution fatality ratio. County fixed effects and cohort fixed effects are controlled for in all columns. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: children generation (1966–1990 birth cohorts), $N = 7,442$; parents generation (1940–1965 birth cohorts), $N = 7,631$.

Table D.17: Emigration to Taiwan

		Income		Completed high school	
		(1)	(2)	(3)	(4)
Elite		-467.417 (596.160)	2,043.449** (865.399)	-0.016 (0.018)	0.076*** (0.026)
Elite	% emigration	-362,358.391 (308,474.209)	-366,239.486 (766,318.034)	-7.198 (8.946)	-20.667* (11.574)
County FE		Yes	Yes	Yes	Yes
Cohort FE		Yes	Yes	Yes	Yes
Generation		Parents	Children	Parents	Children

Notes: The table presents regression coefficients (standard errors) of income (columns 1–2) and high-school completion (columns 3–4) on the pre-revolution elite status and the elite status interacted with the share of émigrés to Taiwan by 1956 at the province level. All specifications include cohort fixed effects and county fixed effects. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: children generation (1966–1990 birth cohorts); $N = 11903, 11100, 11978, \text{ and } 11233$; mean of dependent variable = 8338, 13539, 0.152, and 0.247, for each column respectively.

D.5 Manifestations of v

This Section provides complementary evidence on proxies for v in the conceptual framework.

Table D.18 shows the self-declared emphasis on hard work as key to success among three different age groups: the children generation (Panel A), a younger generation (born between 1987 and 1995) that has not yet entered the labor market, and the grandparents generation.

Table D.19 examines the response of the self-declared valuation of hard work in the children generation to income changes between 2010 and 2018, using the panel dimension of CFPS.

Table D.20 correlates total income in the children generation from the non-elite with proxies for parental work ethics. Panel A uses on the right-hand side an indicator variable for whether one's parents belong to the top quartile in terms of valuing hard work, while Panel B proxies work ethics with an indicator variable for whether one's parents belong to the top quartile in terms of working hours.

Table D.21 decomposes the elite income premium in the children generation in terms of co-residence with parents, using the 2002 wave of the CHIP survey. Column 1 includes everybody; column 2 focuses on co-living parents and children; column 3 restricts the sample to children whose parents are alive but live in different households; and column 4 focuses on members of the children generation whose parents prematurely passed away and therefore cannot co-reside.

Table D.18: Work ethics of the pre-revolutionary elite

	Hardwork leads to success			
	(1)	(2)	(3)	(4)
Panel A: Children generation				
Pre-revolution elite	0.076*** (0.027)	0.075*** (0.027)	0.073*** (0.027)	0.076*** (0.027)
Panel B: 1987–1995 birth cohorts				
Pre-revolution elite	0.091* (0.055)	0.097* (0.055)	0.094* (0.055)	0.090 (0.055)
Panel C: Grandparents generation				
Pre-revolution elite	0.064 (0.060)	0.064 (0.060)	0.061 (0.061)	0.068 (0.061)
County FE	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes
Gender FE	No	Yes	No	No
Control family income	No	No	Yes	No
Migrants FE	No	No	No	Yes

Notes: The table presents regression coefficients (standard errors) of estimated differences between members of the pre-revolution elite households and the rest of the population, considering different generations in each panel. All specifications include cohort fixed effects and county fixed effects. Column 2 additionally includes gender fixed effects; column 3 controls for mean family income; column 4 includes a migrant indicator variable, defining migrants as individuals whose current county of residence is different from their birthplace. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: Panel A, children generation ($N = 10,979$); Panel B, children born between 1987 and 1995 ($N = 2,729$); Panel C, grandparents generation (1919–1939 birth cohorts, $N = 1,323$).

Table D.19: Elasticity to shocks

	Hard work leads to success			
	(1)	(2)	(3)	(4)
Income difference	0.027*	0.032*	-0.026	0.028
	(0.015)	(0.018)	(0.033)	(0.019)
Pre-revolution elite		-0.039	-0.073	-0.031
		(0.070)	(0.131)	(0.072)
Income difference elite		-0.030	-0.022	-0.032
		(0.024)	(0.039)	(0.025)
N	3817	3817	436	3144
County FE	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes
Comparison group	N/A	All	Post-revolution elite	High education

Notes: The table presents regression coefficients (standard errors) of estimated differences between members of the pre-revolution elite households and the rest of the population for the children generation. The income difference interacted with elite status is the standardized difference in income between 2018 and 2010. The outcome is the change in the standardized valuation of hard work between 2018 and 2010. All specifications include cohort fixed effects and county fixed effects. The sample in columns 1 and 2 contains all individuals in the children generation, the sample in column 3 contains only pre- or post-revolution elites in the children generation, and the sample in column 4 contains only above-median educated respondents and descendants of the pre-revolution elite in the children generation. The mean of the dependent variable is -0.850 (std. dev. 0.876). ***p < 0.01, **p < 0.05, *p < 0.1.

Table D.20: Income premium of high work ethics among the non-elite

	Total income			
	(1)	(2)	(3)	(4)
Panel A: parents with high value for hard work				
Parents value hard work	2208.369 (1439.117)	2274.181 (1449.012)	2260.321 (1441.786)	2210.550 (1442.399)
Panel B: parents with high hours worked				
Parents worked long hours	2982.464** (1298.620)	3089.598** (1290.559)	3055.180** (1254.510)	2987.287** (1336.983)
County FE	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes
Sector FE	No	Yes	No	No
Province Sector FE	No	No	Yes	No
Migrants FE	No	No	No	Yes

Notes: The sample includes only non pre- or post-revolution elites. The independent variable in Panel A (B) is a dummy for whether one parent is in the top quartile in terms of valuing hard work (hours worked). All specifications include cohort fixed effects and county fixed effects. Column 2 additionally includes sector fixed effects; column 3 includes province sector fixed effects; and column 4 includes a migrant indicator variable, defining migrants as individuals whose current county of residence is different from their birthplace. The mean of the dependent variable is RMB 15,687 (std. dev. 34,362). *** p < 0.01, ** p < 0.05, * p < 0.1. Sample: 1966–1990 birth cohorts that do not belong to the pre-revolution elite; N = 9,903.

Table D.21: Co-residence and elite income premium

	Total income (CHIP, 2002)			
	All	Parents alive and co-living	Parents alive and not co-living	Parents not alive
	(1)	(2)	(3)	(4)
Pre-revolution elite	381.907** (160.596)	746.172** (290.123)	423.510* (231.165)	-153.217 (369.085)
Observations	21,219	6,441	10,842	3,931
Mean of DV	4,738.700	4,276.288	5,120.071	4,439.723
Std. dev. of DV	5,521.105	5,488.708	5,665.771	5,077.634

Notes: The table presents regression coefficients (standard errors) of estimated income differences between members of the pre-revolution elite households and the rest of the population for the children generation. We use the rural and urban samples of the China Household Income Project (CHIP), 2002; regressions are weighted to take into account the different sampling probabilities in urban and rural areas. Column 1 includes the full sample; column 2 restricts the sample to the children whose parents are alive and co-living with them; column 3 to those whose parents are alive and not co-living with them; and column 4 to those whose parents are not alive. Standard errors are clustered at the prefecture level. *** p < 0.01, ** p < 0.05, * p < 0.1. Sample: 1966–1990 birth cohorts.

The next exhibits investigate the responsiveness of the pre-revolution elite to migration push and pull factors, and the role of migration and traditional clan-based networks in the income premium of the post-revolution elite.

We first examine whether the pre-revolution elite are more likely to remain in their birthplaces if local kinship clan networks are strong. Appendix Table D.22, columns 5–6 present the results. One observes that indeed pre-revolution elite are substantially more likely to stay when kinship clan networks are stronger.

In Appendix Table D.22, we investigate whether the children of pre-revolution elite households differ in their probability to migrate and their responsiveness to push and pull factors,²⁰ by regressing an indicator variable equal to 1 for emigrants and 0 for stayers on the elite variable and comparing respondents from the same birth province. The first striking finding (columns 1–2) is that the pre-revolution elite in the children generation do not statistically significantly differ from the rest of the population in their migration probability — if anything, they are less likely to emigrate. This lower migration probability may reflect access to stronger social safety nets in their places of origin (Munshi and Rosenzweig, 2016), consistently with the evidence on clan-based networks presented in columns 5–6 and discussed previously.

Moreover, heterogeneity in the pre-revolution elite's migration probability shows that they are more likely to leave low-productivity origin regions and sort into high-productivity places, reflecting their ability to seize opportunities. We show this in Appendix Table D.22, columns 3–4 by interacting the elite status indicator variable with measures of economic push and pull shocks, which capture revenue shocks at origin and at destination. As migration decisions and (both origin and destination) wages may be simultaneously determined, we rely on the literature to obtain proxies of push and pull factors that alleviate endogeneity concerns. In column 3, we measure push shocks, following Imbert et al. (2022), as innovations in agricultural commodity prices on international markets, interacted with the local suitability for growing different crops in individuals' birthplaces. We multiply this measure by -1 , so that it captures a relative decrease in agricultural productivity and should therefore increase emigration. We find that push factors have a stronger effect on elite individuals. In column 4, we study the effect of pull factors. We measure, for each birthplace, the attractiveness of typical migrant destinations by combining a standard shift-share measure of nominal hourly wages based on industrial composition for each destination with weights corresponding to emigrant shares across destinations.²¹ We find that pre-revolution elite individuals in the children generation react more strongly to pull factors than the rest of the population. We interpret the results of Appendix Table D.22, columns 3 and 4 as evidence of the pre-revolution elite's higher responsiveness to economic incentives or higher ability to identify opportunities.

The ability to move to opportunity that we document for the pre-revolution elite is not a characteristic that all elite groups necessarily share. Appendix Table D.23, Panel A shows that the children generation of the post-revolution elite do not earn a higher premium when they migrate. While the interaction of the post-revolution elite and migration indicator variables is noisily estimated, its point estimate is large and negative. This may indicate heterogeneity in the post-revolution elite's ability to move to opportunities, and possibly that the income premium of the

²⁰For details about the data sources and measurement of migration push and pull factors, please refer to Appendix B.2.2.

²¹Formally, we measure pull shocks as $S_d S_i m_{bd} a_{id} w_i$, where w_i is the logarithm of hourly wage in industry i , a_{id} is the share of employment in industry i in destination d , and m_{bd} is the share of emigrants from origin b who go to d . All of these variables and weights are computed from the 2005 1% Population Survey.

Table D.22: Differential migration decisions among the children generation

		Across-province migration					
		(1)	(2)	(3)	(4)	(5)	(6)
Elite		-0.003 (0.004)	-0.003 (0.004)	-0.014 (0.009)	-0.018** (0.009)	0.001 (0.004)	0.001 (0.003)
Elite	push factors			0.018* (0.011)			
Elite	pull factors				0.013* (0.008)		
Elite	clan					-0.004* (0.002)	-0.004* (0.002)
Birthplace FE		Yes	Yes	Yes	Yes	No	No
Cohort FE		No	Yes	Yes	Yes	No	Yes

Notes: Columns 1–2 present the estimated coefficients (standard errors) regressing out-of-province migration on pre-revolution elite status. Column 3 examines the differential response to push factors among elites. We measure push factors by agricultural income shocks as in Imbert et al. (2022), i.e., using innovations in international crop prices interacted with local suitability for growing different crops; we match this measure of push factors with the prefecture of birth. Column 4 examines the differential response to pull factors among elites. We measure pull factors by the weighted average of a shift-share measure (based on industrial composition) of hourly wages in logarithm, where the weights correspond to shares of emigrants to the different destinations, for emigrants from the respondent's prefecture of birth. Formally, we measure pull shocks as $S_d S_i m_{bd} a_{id} w_i$, where w_i is the logarithm of hourly wage in industry i , a_{id} is the share of employment in industry i in destination d , and m_{bd} is the share of emigrants from origin o who go to d . Columns 5–6 interact elite status with clan density in the county of birth. The clan density proxy is constructed as the normalized Hirschman-Herndahl index of jinshi surnames at the county level, during the entire period of Ming and Qing dynasties. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: children generation (1966–1990 birth cohorts); $N = 11,321$.

new elite's children is linked to a specific location.

In contrast with the pre-revolution elite, the post-revolution elite's income premium is not significantly associated with local kinship clan strength (see Appendix Table D.23, Panel B, columns 1–3). While the new, post-revolution elite might have formed separate networks through which they thrive (e.g., the formal organization structure of the Communist Party and its extensive local branches), they do not generically benefit from the local kinship clan networks that the pre-revolution landed elite participate in. If anything, the presence of strong local clans slightly hurts the post-revolution elite.

Table D.23: Decomposing elite income along migration and local kinship network: post revolution elites

	Total income		
	(1)	(2)	(3)
Panel A: Elite income differences due to migration			
Elite	2,097.985*	1,975.070	1,900.204
	(1,197.264)	(1,229.864)	(1,238.306)
Elite migration	-10,592.285	-9,701.559	-9,507.029
	(7,315.586)	(7,238.400)	(7,410.836)
Migration	1,293.202	1,284.528	1,114.909
	(2,165.521)	(2,148.412)	(2,100.538)
Panel B: Clan network and income differences among non-migrants			
Elite	1,760.023	1,608.731	1,580.961
	(1,266.464)	(1,303.981)	(1,252.452)
Elite clan	-375.942	-340.602	-360.304
	(717.946)	(763.359)	(742.693)
Birthplace FE	Yes	Yes	Yes
Residence FE	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes
Sector FE	No	Yes	Yes
Province sector FE	No	No	Yes

Notes: Panel A decomposes the post-revolution elite income premium among the children generation by migrants and stayers. We use out-of-province migration. Panel B decomposes the income premium among those who do not migrate along local kinship network strength. The clan density proxy is constructed as the normalized Hirschman-Herndahl index of jinshi surnames at the county level, during the entire period of Ming and Qing dynasties. Birthplace and cohort fixed effects are controlled for across the columns. Column 2 additionally controls for sector fixed effects, column 3 additionally controls for province-specific sector fixed effects. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: Panel A: children generation (1966–1990 birth cohorts); $N = 11,321$; Panel B: non-migrants among the children generation; $N = 10,523$.

D.6 Reversal in county-level inequality

In Section 4.4.4, we discuss explanations for the pre-revolution elite's rebound that our data do not support. One may additionally speculate that the pre-revolution elite rebound simply because they ride the tide of the general resurgence in inequality across China and local conditions that favor inequality. In order to examine the persistence (or lack thereof) in inequality at the aggregate level, we ask whether contemporary inequality (proxied by inequality in housing size) in a given county is associated with land ownership inequality prior to the Communist Revolution, and find a robust negative association between pre-Land Reform inequality and inequality today.

We first document this reversal. We next analyze the long-run effect of the revolutions on collective preferences.

D.6.1 Long-run effect of the Land Reform at the county level: reversal

Figure D.8, Panel C, maps the real estate housing Gini coefficients in 2000 across counties. Relative to the land ownership inequality just after the Land Reform (Panel B), inequality had begun to re-emerge throughout China by 2000. Moreover, regions that were more unequal prior to the Land Reform (Panel A), such as the northeastern provinces, became relatively more equal in 2000; we can also note that inequality seems less spatially correlated in 2000, which may be partly due to the removal of historical determinants of land inequality prior to the Land Reform.

In Appendix Table D.24, we regress the real estate housing Gini coefficients from the 2000 Population Census at the county level on the corresponding land ownership Gini coefficients just prior to the Land Reform.²² We include province fixed effects throughout. We exclude counties with less than 80 households in the random 1% extract of the 2000 Census to reduce measurement error in within-county inequality, restricting the sample to 572 counties; we carry out extensive robustness checks to show that our results are not sensitive to this cutoff.²³ Column 1 presents the baseline coefficient estimates. We observe a strong and sizable negative relationship between the pre-Land Reform inequality and contemporary inequality (measured in 2000). In other words, the Land Reform and Cultural Revolution were successful in the long run at the county level: Past inequalities were not only suppressed; the Land Reform reversed the pattern across China and made historically more unequal places relatively more equal today. Note that since this analysis is conducted at the county level, the reversal we document does not suggest that counties more unequal prior to the Land Reform become more equal in 2000 in absolute terms, but rather, they become more equal relative to other counties.

D.6.2 Long-run effect of the revolutions on collective preferences

Finally, the Communist and Cultural Revolutions may have had a persistent impact by altering local collective preferences (and norms). We investigate whether the revolutions affected the overall preference toward inequality and redistribution in a given county. Specifically, we examine the county-level average answer to the following survey question related to redistribution and inequality, as elicited in the CFPS in 2010:

To what extent do you agree with the following statement:
For the economy to thrive, one needs to enlarge income inequality in the population.
1 = extremely disagree
... 5 = extremely agree

In Appendix Table D.25, we look at the relationship between pre-revolution land ownership

²²While different bases of the inequality measures (land assets in the 1950s and housing sizes in 2000) could mechanically affect the overall level of inequality due to measurement, such differences would not necessarily affect the relative position of inequality with respect to other counties in the country. In unreported results, we find that the baseline pattern we observe is robust to taking into account the differential urbanization rate, which could affect the association between land assets and housing size.

²³In unreported results, we confirm that the patterns observed in Appendix Table D.24 are robust to alternative thresholds and to alternative approaches to account for housing amenities.

A. Pre-Land Reform

B. Post-Land Reform

C. 2000

Figure D.8: This figure displays Gini coefficients across Chinese counties. Darker color indicates higher within-county inequality. Panel A: Gini coefficients in land ownership prior to the Land Reform; counties with missing observations are imputed using prefecture averages (province averages if all counties in a prefecture have missing data); provinces with no data are shown in gray. Panel B: Gini coefficients in land ownership just after the Land Reform; same imputation strategy for counties with missing values. Imputation is used only in Figures A.6 and D.8 to facilitate data visualization. Panel C: Gini coefficients in housing size in 2000.

inequality (measured by the Gini coefficient) and the contemporary average attitude toward inequality in the corresponding county. One sees that counties that were more unequal prior to the Land Reform display substantially lower tolerance toward inequality. This association is robust to even controlling for cohort and income at the time of the survey, as shown in columns 2 and 3. In other words, the Communist Revolution and the Cultural Revolution appear to have generated a lasting impact across Chinese rural counties: Rural counties that were more unequal prior to the

Table D.24: Reversal of county-level inequalities between 1950 and 2000

	Gini coefficient in 2000 (Amenity-adjusted housing area per capita)					
	(1)	(2)	(3)	(4)	(5)	(6)
Pre-revolution land Gini	-0.019** (0.008)	-0.018** (0.008)	-0.018** (0.008)	-0.019** (0.008)	-0.020** (0.008)	-0.024*** (0.009)
N	572	572	572	572	572	411
Control for province FEs	Yes	Yes	Yes	Yes	Yes	Yes
Control for 2000 night light level	No	Yes	Yes	Yes	Yes	Yes
Control for 1950 education level	No	No	Yes	Yes	Yes	Yes
Control for geographic attributes	No	No	No	Yes	Yes	Yes
Control for market access	No	No	No	No	Yes	Yes
Regions	All	All	All	All	All	Non-coastal

Notes: This table reports the relation between the pre-reform land Gini and the 2000 Gini of the amenity-adjusted housing area per capita. All specifications include province fixed effects. The geographic attributes (columns 4–6) include distances (km) to the shore, fast-speed road network, and major rivers, as well as the means and standard deviations of elevation and slope. Market access (columns 5 and 6) includes both external and internal market access: external (resp., internal) market access is defined as the weighted sum of the populations (from the 1953 Census) in coastal (resp., non-coastal) counties; the weights are the inverse of the exponential of distance, measured in km; coastal counties are defined as counties in provinces with access to the sea. Standard errors accounting for arbitrary spatial correlation (Colella et al., 2019) within a 300-km radius are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: counties with more than 80 households in the random 1% extract of the 2000 Census and valid pre-Land Reform inequality data ($N = 572$, except in column 6, where $N = 411$).

revolutions have become collectively less tolerant of inequality.

Taken together, these county-level patterns suggest that instead of riding the tide of increasing inequality in recent decades, the pre-revolution elite rebound in spite of the fact that the local environment becomes relatively more equal and more hostile toward inequality.

Table D.25: Historical inequality and contemporary tolerance of inequality

	Tolerance of inequality		
	(1)	(2)	(3)
Pre-revolution Gini	-0.657*** (0.156)	-0.617*** (0.158)	-0.620*** (0.157)
DV mean	3.025	3.025	3.025
DV std. dev.	0.974	0.974	0.974
Cohort FE	No	Yes	Yes
Income control	No	No	Yes

Notes: This table shows the correlation between the county-level Gini coefficients in land ownership prior to the Land Reform and today's preference toward inequality. All regressions include province fixed effects. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Sample: all birth cohorts; $N = 4,612$.

E Measures of intergenerational mobility: transition matrix

E.1 Theoretical derivation: the correspondence from transition matrix to regression coefficients

For a transitional matrix,

	Young Top X	Young Bottom 1-X
Old Top X	a	b
Old Bottom 1-X	c	d

we solve b, c, d as functions of a and X first:

$$b = 1 - a,$$

$$c = \frac{(1 - a)X}{1 - X}, \text{ and}$$

$$d = 1 - \frac{(1 - a)X}{1 - X}.$$

Consider the following two regressions linking the rank of the young generation to the social status of the old generation. The first regresses a dummy equal to 1 for being in the top X of the young generation and 0 otherwise on a dummy capturing the top X of the old generation:

$$D_{\text{young}}(\text{Top X}) = b_0 + b_1 D_{\text{old}}(\text{Top X}) + e,$$

where the coefficient is the expectation of the probability difference of entering in the top X rank:

$$b_1 = a - \frac{X}{1 - X}(1 - a) = \frac{a - X}{1 - X}.$$

The second regression associates the rank of young generation with the dummy equal to 1 for being in the top X of the old generation and 0 otherwise:

$$\text{Rank}_{\text{young}}(\text{Top X}) = g_0 + g_1 D_{\text{old}}(\text{Top X}) + e,$$

where the coefficient g_1 is the expectation of the rank difference.

To compute g_1 , we extract the relative ranking of the cohort whose parents belong to the bottom $1 - X$ from the relative ranking of the cohort whose parents belong to the top X. The former can be expressed as $\frac{(1 - a)X}{1 - X} \left(1 - \frac{X}{2}\right) + \left(1 - \frac{(1 - a)X}{1 - X}\right) \frac{1 - X}{2} = \frac{1 - X + \frac{X(1 - a)}{1 - X}}{2}$, and the latter can be expressed as $a\left(1 - \frac{X}{2}\right) + \left(1 - a\right) \frac{1 - X}{2} = \frac{1 + a - X}{2}$. Taken together,

$$g_1 = \frac{a - \frac{X(1 - a)}{1 - X}}{2} = \frac{a - X}{2(1 - X)}.$$

E.2 Empirical implementation

We compare our individual-level persistence estimates with data from other countries, in particular from the U.S. and Canada.

In the U.S., we compute the decile-by-decile parent-child matrix based on the 100 × 100 matrix provided by Chetty et al. (2014).²⁴ Corak and Heisz (1998) report the decile-by-decile transition matrix from Canadian income tax data. Additionally, we manually compute the decile-by-decile parent-child matrix using family panel data from Taiwan (Yu, 2019) and Russia (Popkin, 2016).

Next, we need to compute a three-generation decile-by-decile transition matrix. As there are no data capturing the persistence from grandparents to grandchildren for those countries, we compute the three-generation transition matrix from the parent-child transition matrix. We assume that the transmissions are independent from generation to generation. Thus, the three-generation matrix M_3 would be simply the squared parent-child matrix M_2 :

$$M_3 = M_2^2.$$

We reproduce below the three-generation transmission matrix in the U.S., based on Chetty et al. (2014):

	Dec1	Dec2	Dec3	Dec4	Dec5	Dec6	Dec7	Dec8	Dec9	Dec10
Dec1	0.1406	0.1191	0.111	0.1055	0.0988	0.0923	0.0871	0.0821	0.0818	0.0815
Dec2	0.1264	0.1149	0.1095	0.1054	0.1006	0.0955	0.0911	0.0863	0.0856	0.0847
Dec3	0.1172	0.1112	0.1076	0.1047	0.1013	0.0974	0.0938	0.0898	0.0891	0.0880
Dec4	0.1094	0.1074	0.1054	0.1036	0.1015	0.0990	0.0964	0.0932	0.0926	0.0916
Dec5	0.1022	0.1034	0.1029	0.1022	0.1014	0.1002	0.0988	0.0969	0.0964	0.0956
Dec6	0.0953	0.0991	0.1001	0.1005	0.1010	0.1013	0.1012	0.1008	0.1006	0.1001
Dec7	0.0882	0.0943	0.0968	0.0985	0.1004	0.1023	0.1038	0.1051	0.1052	0.1053
Dec8	0.0806	0.0890	0.0930	0.0961	0.0996	0.1033	0.1066	0.1100	0.1105	0.1111
Dec9	0.0738	0.0839	0.0893	0.0936	0.0986	0.1041	0.1092	0.1148	0.1157	0.1169
Dec10	0.0663	0.0776	0.0843	0.0900	0.0967	0.1044	0.1120	0.1209	0.1226	0.1252

We reproduce below the three-generation transmission matrix in Canada, based on Corak and Heisz (1998):

	Dec1	Dec2	Dec3	Dec4	Dec5	Dec6	Dec7	Dec8	Dec9	Dec10
Dec1	0.1117	0.1059	0.1031	0.1003	0.0989	0.0972	0.0963	0.0963	0.0964	0.0967
Dec2	0.1083	0.1045	0.1025	0.1004	0.0994	0.0979	0.0971	0.0970	0.0968	0.0968
Dec3	0.1055	0.1035	0.1023	0.1008	0.1000	0.0986	0.098	0.0978	0.0973	0.0970
Dec4	0.1032	0.1023	0.1017	0.1009	0.1004	0.0995	0.0991	0.0989	0.0985	0.0982
Dec5	0.1007	0.1009	0.1009	0.1006	0.1004	0.0998	0.0995	0.0994	0.0988	0.0985
Dec6	0.0988	0.0999	0.1004	0.1006	0.1008	0.1006	0.1005	0.1004	0.0999	0.0998
Dec7	0.0960	0.0983	0.0995	0.1005	0.1011	0.1013	0.1016	0.1015	0.1011	0.1009
Dec8	0.0939	0.0967	0.0985	0.1001	0.1011	0.1018	0.1024	0.1025	0.1023	0.1024
Dec9	0.0911	0.0945	0.0967	0.0991	0.1006	0.1021	0.1034	0.1036	0.1041	0.1045
Dec10	0.0916	0.0941	0.096	0.0984	0.1001	0.102	0.1038	0.1042	0.1056	0.1069

²⁴The 100 by 100 transition matrix can be downloaded from the data library of Opportunity Insights. See: <https://opportunityinsights.org/data/>

We reproduce below the three-generation transmission matrix in Taiwan, with data sourced from Yu (2019):

	Dec1	Dec2	Dec3	Dec4	Dec5	Dec6	Dec7	Dec8	Dec9	Dec10
Dec1	0.1056	0.0979	0.1016	0.1301	0.0671	0.0967	0.1174	0.0872	0.1018	0.0946
Dec2	0.1056	0.0979	0.1016	0.1301	0.0671	0.0967	0.1174	0.0872	0.1018	0.0946
Dec3	0.1003	0.0961	0.1030	0.1295	0.0721	0.0973	0.1167	0.0881	0.1012	0.0957
Dec4	0.0993	0.0981	0.1000	0.1314	0.0681	0.0982	0.1124	0.0904	0.1056	0.0964
Dec5	0.1037	0.0963	0.1038	0.1283	0.0681	0.0995	0.1116	0.0869	0.1054	0.0963
Dec6	0.1048	0.0944	0.1042	0.1275	0.0731	0.0982	0.1164	0.0851	0.0991	0.0972
Dec7	0.0940	0.0973	0.1014	0.1335	0.0768	0.0981	0.1185	0.0898	0.0975	0.0931
Dec8	0.0996	0.0960	0.1018	0.1313	0.0748	0.0963	0.1184	0.0876	0.0994	0.0948
Dec9	0.0981	0.0992	0.0988	0.1310	0.0698	0.0988	0.1120	0.0916	0.1035	0.0972
Dec10	0.1077	0.0893	0.1046	0.1191	0.0731	0.0922	0.1144	0.0857	0.1111	0.1026

We reproduce below the three-generation transmission matrix in Russia, with data sourced from Popkin (2016):

Dec1	0.1253	0.1127	0.1311	0.1161	0.0877	0.0982	0.0947	0.1000	0.0508	0.0835
Dec2	0.1207	0.0983	0.1244	0.1158	0.0888	0.1043	0.0992	0.1072	0.0568	0.0844
Dec3	0.1205	0.0952	0.1177	0.1132	0.0874	0.1063	0.0986	0.1089	0.0614	0.0909
Dec4	0.1162	0.0840	0.1093	0.1057	0.0842	0.1078	0.0984	0.1170	0.0712	0.1063
Dec5	0.1149	0.0813	0.1075	0.1060	0.0853	0.1102	0.0994	0.1199	0.0720	0.1036
Dec6	0.1165	0.0837	0.1123	0.1080	0.0853	0.1083	0.1004	0.1173	0.0677	0.1004
Dec7	0.1154	0.0800	0.1027	0.1015	0.0808	0.1083	0.0984	0.1235	0.0745	0.1149
Dec8	0.1143	0.0757	0.1046	0.1026	0.0833	0.1113	0.1003	0.1242	0.0749	0.1088
Dec9	0.1132	0.0779	0.0987	0.0991	0.0795	0.1114	0.0962	0.1240	0.0809	0.1190
Dec10	0.1173	0.0680	0.0841	0.0781	0.0719	0.1055	0.0939	0.1331	0.0927	0.1554

In the context of rural China and with $X = 10\%$ for the pre-revolution elite, we have: $a_{\text{Canada}, X=10\%} = 0.1117$, $a_{\text{US}, X=10\%} = 0.1406$, $a_{\text{Taiwan}, X=10\%} = 0.1012$, and $a_{\text{Russia}, X=10\%} = 0.1554$:

$$b_{1, \text{Canada}, X=10\%} = \frac{0.01117}{0.9} = 0.0124$$

$$g_{1, \text{Canada}, X=10\%} = \frac{0.01117}{1.8} = 0.0062$$

$$b_{1, \text{US}, X=10\%} = \frac{0.01406}{0.9} = 0.0156$$

$$g_{1, \text{US}, X=10\%} = \frac{0.01406}{1.8} = 0.0078$$

$$b_{1,\text{Taiwan},X=10\%} = \frac{0.0026}{0.9} = 0.0029$$

$$g_{1,\text{Taiwan},X=10\%} = \frac{0.0026}{1.8} = 0.0014$$

$$b_{1,\text{Russia},X=10\%} = \frac{0.0554}{0.9} = 0.0616$$

$$g_{1,\text{Russia},X=10\%} = \frac{0.012}{1.8} = 0.0308$$

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