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**A Generalized Mediation Analysis
of Intergenerational Income Elasticity
(IGE)**

By

Jiachen Jin

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Faculty Advisor: Steven N. Durlauf

Preceptor: Jingyuan Qian

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Abstract

This study systematically examines the determinants and pathways of intergenerational income elasticity (IGE) in China, highlighting the explanatory power of parental occupations. Using data from the China Family Panel Studies (CFPS) (2010–2022), we employ decomposition frameworks and layered mediation analysis to disentangle the complex mechanisms underlying income persistence. The findings reveal that parental income alone explains a limited portion of income mobility, while parental occupations emerge as significant independent contributors, even after controlling for education, urban-rural status, and regional economic conditions. Through mediation analysis, education years, industry selection, and social capital are identified as key channels through which parental occupations influence child income. The results underscore the importance of addressing structural advantages embedded in occupational hierarchies, suggesting that policy interventions should extend beyond educational improvements to include targeted measures addressing occupational barriers and inherited advantages.

1 Introduction

Intergenerational income elasticity (IGE) has long been used as a key measure to understand the persistence of economic advantages across generations. Yet focusing on a single statistic like IGE can oversimplify a complex reality. The parent–child income correlation captures the outcome of many intertwined factors – education, social networks, occupational opportunities, and even luck. A high IGE tells us that economic advantages persist across generations, but it does not reveal how or why this persistence arises. Is it because wealthy parents invest more in their children’s education? Because certain jobs are effectively handed down within families? Or because broader social structures favor those who start ahead? These questions point to the importance of looking beyond the raw correlation to the mechanisms of social mobility.

Understanding these mechanisms is especially salient in the context of China. Since launching market-oriented reforms in 1978, China has experienced breathtaking economic growth and social transformation. Hundreds of millions of people have been lifted out of poverty, yet income inequality has surged to levels comparable with the most unequal countries. This steep rise in inequality has raised concerns that China’s newfound prosperity is not being shared evenly. A growing body of evidence suggests that China’s high inequality is mirrored by low social mobility: children’s fortunes are increasingly tied to their family background in the post-reform era. Recent research finds, for example, that the IGE in China rose from around 0.39 for those born in the 1970s to about 0.44 for those born in the 1980s. In practical terms, this means nearly half of a young adult’s economic status can now be predicted by their parents’ income – a level of persistence higher than in many European countries and approaching that of the United States. This rise in intergenerational persistence has been most pronounced among urban and coastal families, reflecting how the gains of development have been unevenly distributed across regions and social groups. China’s experience thus echoes a worrying global pattern: when inequality rises, mobility tends to fall.

These trends have not gone unnoticed. Concerns about social mobility now loom large in China’s public discourse and policy agenda. In recent years, the Chinese leadership has emphasized achieving “common prosperity” – a vision of broad-based affluence that explicitly includes improving equality of opportunity. Policymakers are grappling with how to ensure that the next generation’s success is not overly predetermined by their parents’ status. In this context, measuring intergenerational mobility is not just an academic exercise but a pressing societal question. It speaks to the heart of China’s social contract in the reform era: can rapid economic growth deliver on the promise of upward mobility for all, or will advantages (and disadvantages) become entrenched within families? Answering this question requires moving beyond summary measures and delving into the actual channels of advantage transmission. By doing so, we can better inform policies that aim to make growth more inclusive – policies that, for instance, target educational inequality, labor market access, or regional disparities in opportunity.

In light of these concerns, this thesis examines the extent and the pathways of intergenerational income persistence in China. We focus on unpacking how family background influences children’s economic outcomes. In particular, the study poses two main research questions:

- **Mediating Factors:** How do individual and contextual factors mediate the relationship between parental income and children’s income? In other words, through which channels – such as the child’s education, the family’s urban or rural context, or other advantages – is economic status transmitted from one generation to the next?
- **Role of Parental Occupation:** Why do parental occupations appear to have such significant explanatory power in shaping children’s economic outcomes, even after accounting for parental income and the child’s education? What distinct advantages are conferred by a parent’s occupation, and how do these operate to influence the child’s future prospects?

By addressing these questions, we aim to unravel not just how much advantage is passed from parents to children, but how and through what mechanisms this transmission occurs. While a large literature has examined intergenerational mobility in China, much of it has emphasized factors like educational attainment, regional disparities, and the urban–rural divide. The children of well-educated parents tend to obtain more schooling themselves and secure better-paying jobs, perpetuating the cycle of advantage. Location and institutional factors also play a role: for instance, a child from an urban household often enjoys better schools and job opportunities than a rural child with similar abilities, due in part to the hukou system and uneven development. Empirical analyses using CFPS data have confirmed that young adults from urban, better-educated families earn significantly higher incomes in adulthood, largely thanks to these disparities in education and opportunity. However, researchers also find that even after accounting for a child’s own education, a substantial gap in outcomes remains between those from advantaged families and those from less advantaged ones. In other words, two young adults with the same degree can land on very different rungs of the income ladder depending on whether their parents were high-status professionals or low-income laborers. This suggests that direct forms of social reproduction – through networks (“guanxi”), cultural capital, or even subtle labor market discrimination – are at work, above and beyond what formal schooling can explain. Yet, the role of parental occupation as a distinct channel of advantage has received comparatively limited attention in past research. Parental occupation is often intertwined with income and education, making it challenging to isolate its unique impact. This study aims to bridge that gap by focusing specifically on how parents’ occupations shape children’s outcomes, independently and in combination with other factors.

Despite intuitive expectations, the link between a parent’s occupation and a child’s eventual income is far from obvious or predetermined. One might assume that once parental income and education are accounted for, little additional influence remains for what parents actually do for a living. In reality, however, parental occupation represents a bundle

of less tangible factors that are not captured by income alone. Unpacking this bundle is significant and novel because prior research has rarely isolated occupation from other family background variables. By interrogating the specific role of parental occupation, this study addresses an underexplored question: does a parent’s job confer unique advantages to their child, beyond the more visible resources of money and schooling? The answer is not straightforward, precisely because any occupational influence is interwoven with social norms and hidden privileges. In short, examining parental occupation as a distinct factor allows us to discover mechanisms of persistence that would remain invisible if we looked only at parental income or educational attainment.

Parental occupation may encapsulate many of the advantages (or disadvantages) that family background provides. A parent’s job can influence a child’s trajectory in myriad ways beyond the paycheck it brings into the household. Occupational status often translates into access to social networks, insider information, and reputational signals that can ease a child’s entry into good schools or desirable industries. In China’s context, there are structural advantages embedded in occupational hierarchies, which is an array of benefits that stem from a parent’s position in the occupational structure – advantages that systematically favor children from higher-status occupational families. These benefits take multiple forms. First, there is the network-based capital (*guanxi*) that comes with prestigious jobs: parents in elite occupations often possess extensive personal connections, insider contacts, or influence in their field, which they can leverage on behalf of their children. Such *guanxi* networks are particularly crucial in China’s context, where personal ties frequently mediate job opportunities and career advancement. Second, high-status occupations carry symbolic prestige – an aura of credibility and social esteem that can spill over to the next generation. The child of a renowned professor, top executive, or senior official may enjoy a reputational boost or higher expectations in the eyes of teachers and employers, simply by virtue of the parent’s standing. This prestige acts as a signal of “belonging” in elite circles, potentially opening doors or garnering trust more readily. Third, parents embedded in a particular profession

accumulate embedded career knowledge (or industry-specific know-how) that they can pass to their children. A parent’s familiarity with the unwritten rules of a professional field – whether it’s how to prepare for a civil service exam, navigate corporate hierarchies, or run a business – constitutes an informational asset for the child. Learning these tacit lessons at home gives the child an early roadmap to success that peers from lower-status backgrounds typically lack. Each of these channels – *guanxi*, symbolic prestige, and embedded career knowledge – represents a structural advantage attached to the parent’s occupation. They are “structural” in the sense that they derive from the social and institutional hierarchy of jobs, and they are “advantages” in that they systematically enhance the child’s prospects. Together, these factors help explain how occupational status gets transmitted across generations, beyond what can be attributed to income alone.

Emerging evidence supports the idea that occupational status itself as a vehicle of advantage transmission – possibly through exclusive networks, occupation-specific knowledge, or simply the confidence and aspirations that come from being raised in a higher-status milieu. They also resonate with classic sociological insights about the inheritance of social capital and cultural capital within families (Bourdieu 1986; Blau and Duncan 1967), as well as with economists’ recognition that not all intergenerational advantages work through monetary transfers (Becker and Tomes 1979; Bowles and Gintis 2002).

To investigate these dynamics systematically, we draw on rich micro-data from the China Family Panel Studies (CFPS), a nationally representative longitudinal survey that has tracked thousands of Chinese families from 2010 through 2022. The CFPS data provide detailed information on both generations: parental characteristics (incomes, education levels, occupations, whether they live in urban or rural areas, etc.) and the adult outcomes of their children (including the children’s own education, occupation, industry of employment, and income). With multiple waves of data spanning over a decade, we are able to construct more reliable measures of parents’ long-term income (mitigating concerns about short-term

fluctuations) and observe children’s economic outcomes in their prime working years. This longitudinal structure strengthens our measurement of IGE and related statistics, and it also allows us to observe changes over time – for example, capturing parents’ income in the early 2010s and the child’s income by the early 2020s – which is crucial for measuring persistence accurately in a fast-changing economy like China’s. Using this dataset, we first estimate the overall IGE for China in recent years to benchmark the degree of mobility. But rather than stopping at a single number, we then open up the black box of that parent–child correlation by applying a decomposition and mediation analysis framework.

In essence, our analysis breaks down the intergenerational income link into various components corresponding to different transmission channels. We take a layered approach: starting with a basic model of how parents’ income predicts children’s income, and then progressively introducing potential mediating factors to see how the picture changes. First, we account for the educational attainment of the child – asking how much of the parent–child income resemblance can be explained by the fact that richer parents tend to have better-educated children who then earn more. Next, we incorporate parental occupation alongside income, to gauge the additional explanatory power of what parents do (their job sector or prestige) over and above how much they earn. We then consider the industries and sectors in which children find employment – for example, are children of certain parents more likely to end up in high-paying industries, and does that mediate the income advantage? By adding mediators step by step, we can observe how the direct impact of parental background on child income diminishes (or persists) as each channel is accounted for, thereby quantifying the importance of each pathway in turn. This comprehensive approach – combining decomposition with sequential mediation analysis – provides a detailed map of the routes by which economic status is transmitted from Chinese parents to their children.

The results offer new insights into the anatomy of economic mobility in China. We find that parental income alone explains only a limited portion of the intergenerational persistence,

and much of the apparent parent–child income link can be attributed to other factors once those are accounted for. Notably, parental occupation emerges as a significant independent contributor to children’s income status. In fact, even after we control for children’s years of schooling, whether they grew up in a city or the countryside, and broad regional economic conditions, who one’s parents are in terms of occupation still has a sizeable effect on where one lands in the income distribution as an adult. The child of the professionals may benefit from mentorship, internships, or simply insider knowledge about navigating higher-paying careers, whereas the other child might lack these advantages even if money for schooling was similar. Our analysis quantifies this intuitive idea: it shows that ignoring parental occupation undervalues the true persistence of advantage.

By bringing these pieces together, this study makes a twofold contribution. Empirically, it provides one of the most comprehensive examinations to date of intergenerational income mobility in reform-era China, using recent data and a nuanced analytic framework. We integrate what are often separate lines of inquiry – the economist’s focus on measuring IGE and the sociologist’s focus on mechanisms of status transmission – into a unified analysis. In doing so, we shine a light on the often underappreciated role of parental occupation as a conduit for advantage, alongside the usual suspects like education.

Furthermore, our findings carry important implications for policy. If a substantial portion of economic advantage is being reproduced through channels like occupational segregation and network-based opportunities, then efforts to foster equal opportunity must look beyond simply expanding access to education. Policy interventions in China’s quest for common prosperity will need to address structural barriers in the labor market and society – the “hidden curriculum” of opportunity that advantaged families navigate with ease but others cannot. This could include measures to broaden professional networks for youth from less connected backgrounds, more transparent and merit-based hiring practices in elite sectors, or regional development programs to reduce the opportunity gaps between coastal cities and

interior rural areas. In line with our evidence, policies should extend beyond schooling to tackle occupational barriers and inherited advantages that currently give children of affluent or well-placed parents a head start. By targeting the specific pathways of advantage revealed in this study – whether it is unequal education quality, nepotistic job recruiting, or the urban–rural divide – policymakers can more effectively chip away at the intergenerational transmission of inequality. Ultimately, promoting greater social mobility in China will require leveling the playing field not just in classrooms, but also in workplaces and communities where careers are built.

In sum, this research underscores that understanding intergenerational mobility is not only about measuring the correlation between parent and child incomes, but about uncovering the lived processes that link one generation’s fate to the next. In the case of contemporary China, those processes are complex and multifaceted, rooted in the country’s unique history of socialist egalitarianism followed by market-driven inequality. By dissecting the roles of parental income, education, occupation, and other factors, this thesis offers a deeper insight into why the children of prosperous families often remain prosperous, and why those from poor families so often struggle to rise.

2 Literature Review

2.1 Intergenerational Mobility: Concepts and Global Measures

Intergenerational income elasticity (IGE) is a key metric quantifying the persistence of economic status between parents and children. A higher IGE indicates that a greater share of parents’ income advantages (or disadvantages) is passed on to children, signifying low mobility. Foundational economic studies in the United States established baseline methods for estimating IGE. For example, Solon (1992) pioneered the use of panel data to obtain a

lifetime measure of parental income, addressing transitory earnings fluctuations by averaging multiple years or using instruments. This approach yielded an IGE around 0.4 for the U.S., much higher than earlier estimates around 0.2 that failed to correct for life-cycle and attenuation bias (Becker and Tomes 1979; Bowles and Nelson 1974). Subsequent research confirmed that early estimates understated true persistence, as children’s incomes must be measured in mid-career to proxy lifetime resources (Haider and Solon 2006; Mazumder 2005). Methodological advances – including using tax data and long panels – have solidified a consensus that the U.S. exhibits quite high intergenerational persistence by international standards (Black and Devereux 2011; Corak 2013). Cross-country comparisons show that mobility tends to be lower in high-inequality countries like the U.S. and U.K. and higher in more egalitarian societies like the Nordic countries. This empirical pattern, dubbed the “Great Gatsby Curve,” suggests that greater income inequality is associated with lower mobility, feeding debates on equal opportunity (Corak 2013). The interaction between family advantages and broader structures (labor markets, public policies) is now seen as central to understanding why mobility varies across societies.

Beyond income-based measures, sociologists have long examined mobility through occupational class and social stratification frameworks. Classic stratification research distinguished between structural mobility – changes in the occupational distribution due to economic development – and exchange (relative) mobility – the fluidity of social rank exchanges net of structural shifts (Erikson and Goldthorpe 1992). In industrialized countries, a substantial portion of observed mobility is “structural,” arising from shifts like the decline of farming or rise of white-collar jobs (Blau and Duncan 1967). Comparative studies found remarkably similar relative mobility patterns across Western societies (Featherman, Jones, and Hauser 1975), with some notable exceptions under state socialism. These foundational insights underscore that how we measure socio-economic status (income vs. occupation) and account for structural change can lead to different mobility assessments. Recent scholarship often combines approaches: for instance, Xie et al. (2022) analyze both occupational mobility and

educational mobility alongside income, to obtain a multidimensional view.

2.2 Occupational Stratification and Social Reproduction

A rich sociological literature emphasizes that intergenerational mobility is not only an economic phenomenon but also a process of social reproduction of advantage (Bourdieu 1986). Families transmit not just financial capital, but also social networks, cultural habits, and human capital that shape a child’s life chances. Blau and Duncan’s (1967) seminal status-attainment model demonstrated how a father’s education and occupation influence a son’s occupational status largely via the son’s educational attainment – an early mediation analysis highlighting education as a key channel. Later research extended this to other channels: parents provide home environments, aspirations, and connections that foster children’s success (Hout 1988). Bourdieu (1986) conceptualized these advantages as forms of capital – economic, cultural, social – that enable the dominant class to reproduce its status. The upshot is that high intergenerational persistence can stem from a confluence of mechanisms beyond direct financial inheritance.

Interdisciplinary studies confirm that multiple pathways link parent and child outcomes. Bowles and Gintis (2002) synthesize evidence from economics, behavior genetics, and sociology, concluding that the transmission of economic status is due to a “heterogeneous collection of mechanisms”. These include the genetic and cultural inheritance of cognitive ability and work-related personality traits, the intergenerational transfer of wealth (which can finance better education or buffer setbacks), access to privileged social networks or group memberships, and disparities in childhood nutrition, health, and education quality. Notably, while cognitive skills and schooling are important, a large fraction of advantage transmission remains “in a black box” of less observable factors (Bowles and Gintis 2002). This perspective from Bowles and Gintis resonates with findings that sibling correlations in income (which capture all shared family and community influences) far exceed the portion explained by

education or cognitive skills alone (Solon 1999; Björklund and Jäntti 2012). In short, family background matters through many channels – some policy-malleable (e.g. schooling, health) and others more intractable (e.g. genetics, implicit networks) – which together produce persistent occupational stratification.

These theoretical insights apply globally, but institutional context strongly mediates their impact. In planned economies like Mao-era China, state policies altered the typical mechanisms of status transmission. The Chinese Communist revolution of 1949 drastically flattened the class structure, abolishing private wealth and promoting an ethos of equality. During the Mao period (1949–1978), political criteria often eclipsed family background in determining one’s occupation or education opportunities, and radical shifts such as the Cultural Revolution disrupted the transmission of advantage via education (Whyte 2010; Unger 1982). Research on socialist China found surprisingly high mobility in certain periods due to forced downward mobility of elites and mass redistributions (Walder, Li, and Treiman 2000). For example, urban youths from elite families were “sent down” to rural areas or manual labor, breaking the usual link between parent and child occupations. At the same time, the hukou system (household registration) rigidly separated rural and urban populations, creating a unique barrier to mobility. Wu and Treiman (2004) show that hukou status functioned as an inherited stratification marker in China: rural-born children had extremely limited chances to move into urban jobs, independent of their talent or education. Thus, while China under socialism achieved a level of nominal class leveling, it introduced new forms of stratification (party membership, hukou) that structured opportunities in ways distinct from Western capitalist societies.

Since China’s market reforms began in 1978, the stratification landscape has shifted dramatically. Market-oriented development brought back returns to education and entrepreneurship, fueling rapid inequality increases. Studies find that China’s intergenerational mobility has evolved from the relatively high mobility (and “forced” mobility) of the Mao

era to patterns more resembling other unequal market economies (Zhou and Xie 2019; Fan, Yi, and Zhang 2021). For instance, using national survey data, Xie et al. (2022) document that the overall rate of occupational mobility initially increased with China’s industrialization (as peasants moved en masse into non-farm jobs), but underlying relative mobility has been declining for recent cohorts. In other words, once the effect of structural shifts (like the decline of agricultural jobs) is removed, children’s socio-economic outcomes have become increasingly tied to their family background in post-reform China. Similarly, Fan, Yi, and Zhang (2021) report a rising IGE in China: for those born in the early 1980s, the elasticity of child income with respect to parent income is about 0.44, up from 0.39 for those born a decade earlier. This rise in persistence is more pronounced among urban and coastal populations than among rural, inland groups, aligning with the intuition that market reforms and unequal development benefitted some regions and families more than others. Other studies also underscore regional and sectoral disparities. For example, Fan et al. (2021b) find that provinces with a higher prevalence of state-owned enterprises (SOEs) tend to exhibit lower mobility, as lucrative SOE jobs and their benefits may be distributed through patronage or family ties (a form of network-based transmission).

In contemporary China, education has re-emerged as a prime channel of mobility and reproduction. The expansion of higher education in the 1990s–2000s opened opportunities for many, but advantaged families often capture disproportionate gains from these expansions (Wu 2017). Access to elite universities, for instance, is still heavily skewed by urban residency and parental resources (Jia and Li 2017). The result is that the appearance of meritocratic competition (like the standardized college entrance exam) coexists with persistent background advantages in education and later income. Indeed, education, urban status, and region are repeatedly identified as key mediators in China’s mobility processes (Chetty et al. 2014b; Chen 2023). Studies using the China Family Panel Studies (CFPS) data highlight that children of urban, better-educated parents enjoy substantially higher income ranks in adulthood, partly due to better schooling and job opportunities (Che 2019; He, Huang, and

Tian 2020). However, these studies also suggest that when one controls for education, significant residual effects of parental class or occupation remain on offspring outcomes – pointing to direct social reproduction through networks, cultural capital, or discrimination (Li and Wu 2018).

2.3 Mechanisms of Mobility: Education, Occupation, and Inequality

Given the multitude of pathways through which advantage transmits, a strand of research has tried to decompose the IGE into constituent channels. A classic question is: how much of the parent-child income link is explained by the transmission of education? And what portion is “direct” or via other channels? Early sociological work (Blau and Duncan 1967) already noted that much of the effect of family background on occupational status was mediated by the child’s education. More recent quantitative studies have applied mediation analysis to intergenerational mobility. For instance, education is often found to be the single strongest mediator of economic status transmission – in the U.S., educational attainment differences can explain perhaps 30–50 percent of the parent–child income association (Björklund, Jäntti, and Solon 2007; Breen and Jonsson 2005). However, significant residual correlations remain even after controlling for education, leading researchers to investigate other mediators: cognitive skills, non-cognitive traits, social capital, occupational networks, marital sorting, etc. Bowles and Gintis (2002) estimate that observed measures (education, test scores, race, etc.) together account for only roughly half of the overall persistence, leaving a large unexplained component that could include hard-to-measure factors like motivation, connections, or even luck.

In the context of China, the literature has started to dissect the mechanisms of mobility as well. Education is a major pathway: urban families invest heavily in their only child’s education, from tutoring to college prep, which translates into better jobs. But beyond

education, occupational inheritance appears crucial. Parents’ occupations can determine networks, information, and even direct job offers for their children (the classic “father’s job effect”). In China’s work units (danwei) system, for example, having a parent in a prestigious occupation (say, a government official or a manager in a state firm) may grant a child privileged access to similar positions or to the social capital that eases entry into high-paying sectors. Recent studies find that parental occupation has an independent effect on offspring income even after controlling for education and income. For instance, a parent in a professional or government position predicts higher earnings for the child, net of the child’s own schooling (Zhou, Huang, and Chen 2018). This suggests occupational status itself is a vehicle of advantage transmission, possibly through networks or occupation-specific human capital passed across generations.

Our understanding of these mechanisms is enriched by interdisciplinary approaches. Psychologists highlight how parents in higher socio-economic status (SES) occupations foster “soft skills” and aspirations in children that pay off in the labor market (Heckman and Mosso 2014). Sociologists emphasize the role of social capital – whom you know and the support you can draw from your community. In China, *guanxi* (social connections) are often critical for obtaining lucrative jobs or business opportunities, which can mean a well-connected family gives children a head-start beyond what their formal credentials alone would earn. Economist Xin Meng and colleagues have documented that a significant part of China’s urban income persistence comes from the transmission of employer connections and party membership status (Meng and Zhao 2013). Moreover, structural factors like the urban–rural divide mediate mobility: a rural child with a given education level typically earns less than an urban counterpart, reflecting lower returns to similar qualifications outside of cities (Knight et al. 2011). These patterns underscore that mobility is not just about individual merit; it is deeply embedded in social structures and networks.

Finally, high persistence can become self-perpetuating via broader inequality dynamics.

If wealthy parents can buy the best education, health care, and even marriage partners for their children, those children then dominate the top jobs, further widening income gaps in the next generation. This feedback loop between inequality and mobility is a growing concern. Corak (2013) cautions that rising income inequality “can stifle upward social mobility, making it harder for talented and hard-working people to get the rewards they deserve”. Empirically, periods of rising inequality tend to coincide with declining mobility in many countries (Corak 2013; Fan, Yi, and Zhang 2021). China’s experience is instructive: the post-1978 surge in income inequality has been accompanied by increasing advantages for those born to wealthy or well-positioned parents. As a result, debates on intergenerational mobility in China are now linked to discussions of “common prosperity” and how to ensure broad-based opportunity in an era of stratification (Chen 2023). In sum, the literature situates intergenerational mobility as both a cause and consequence of structural inequality.

2.4 Mediation Analysis in Mobility Studies

Identifying the causal pathways in intergenerational mobility is challenging because families self-select into behaviors and there are myriad confounders. However, researchers have devised creative strategies to isolate certain effects. One approach is to look at natural experiments and policy changes. For example, the expansion of compulsory schooling or college access in different regions can serve as a source of variation to test how increasing children’s education impacts mobility. Several studies exploit China’s educational reforms (such as the Higher Education Expansion of 1999) to see if increased college enrollment for disadvantaged groups improved mobility. The evidence suggests that expanding education does enhance mobility, but not uniformly – elite families often capture disproportionate benefits from new opportunities (Li et al. 2018). Another approach is to examine adoptees or twins. Studies of adoptees compare outcomes of adopted children to their adoptive and biological parents, aiming to separate genetic inheritance from environmental influence (Sacerdote 2007). Such

studies generally find that both matter: genetics have a modest effect on income, but family environment (including parenting, resources, and neighborhood) explains a large share of variance in outcomes, reinforcing that policy can influence mobility by altering environments. Twin studies (identical vs. fraternal) likewise show that shared family factors significantly shape economic outcomes (Bowles and Gintis 2002).

Recently, economists have leveraged big data to gain causal insights. A prominent example is Chetty and Hendren’s (2018) study of neighborhood effects in the U.S., which tracked millions of families who moved across areas. By comparing siblings who spent different portions of childhood in high-mobility vs. low-mobility areas, they estimate that growing up in a more affluent, socially stable neighborhood causally increases a child’s adult earnings. This finding, though from the U.S., is methodologically influential and underscores that community context is a causal factor in intergenerational mobility. It has parallels in China, where urban neighborhood conditions (quality of local schools, social safety, networks) can differentially shape children’s trajectories. Indeed, as Chooli et al. (2021) argue, there is significant heterogeneity in mobility across communities, so accounting for local context and interactions is crucial to avoid one-size-fits-all conclusions. Their work employs neighborhood-level data to show that the “returns” to identical parental income can vary widely by locale, implying that policy interventions should be context-specific.

Mediation analysis has become an important tool to unpack causality in mobility. Traditional regression approaches can tell us that parental income and child income are correlated, but how that correlation is transmitted requires decomposing the total effect. Modern mediation analysis techniques (Pearl 2012; Imai et al. 2011) allow researchers to quantify the indirect effect of parent background that operates through a mediator (e.g. education) versus the direct effect (everything not via that mediator). For example, Brand et al. (2019) apply a causal mediation framework to examine why parental education affects children’s educational attainment. They find that a substantial part of the effect is mediated by family income

and stability, but even accounting for those, there remains a direct effect of parental education—perhaps capturing parenting style or expectations—on the child’s outcomes (Brand et al. 2019). In mobility studies, such techniques have been used to decompose the intergenerational correlation into portions attributable to specific factors like education, cognitive skills, or occupational networks (Beller and Hout 2006; Barone et al. 2019). One influential decomposition is by Bowles and Gintis (2002), who combined results from various studies to estimate shares of the intergenerational earnings correlation accounted for by IQ (no more than 20%), years of schooling (30%), race and other observed factors (20%), leaving around 30% unexplained (which they ascribe to a mix of unobserved factors like wealth, connections, personality, and luck). Such analyses, while approximate, justify a focus on multiple mediators rather than a single silver bullet. They also illustrate the value of high-quality data with rich measures: only by observing, say, detailed schooling histories, cognitive test scores, personality inventories, and family circumstances can we begin to parse the independent contributions of each. In China, the CFPS and similar surveys are now providing this richer data (e.g. tracking children’s education, party membership, occupation, and even psychological traits), enabling scholars to perform more nuanced mediation analyses (Chen 2023). For instance, our study leverages CFPS to examine how much of the parent occupation effect on child income is mediated by the child’s educational attainment, choice of industry, and social capital. This kind of layered analysis follows recent recommendations to integrate causal mechanisms into mobility research.

Overall, the literature demonstrates a move toward methodologically rigorous, multi-factor models of intergenerational mobility. Rather than a single regression of child income on parent income, state-of-the-art studies incorporate: (a) life-cycle adjustments (ensuring incomes are measured at comparable ages or using long-run averages to mitigate bias), (b) alternate metrics like rank–rank slopes (which are less sensitive to extreme values and allow nonlinear analysis of mobility (Chetty et al. 2014a)), (c) multiple generations (e.g., including grandparents’ status to capture multigenerational persistence; Song, Campbell, and Lee 2015),

and (d) decomposition of variance (e.g., sibling correlation approaches that gauge the total family/environment effect). Mare and Song (2023) push this frontier by examining multi-generational mobility in China, finding that influences from grandparents and beyond, as well as demographic factors like differential fertility, make intergenerational influence “much more multi-faceted” than a two-generation model captures. While our thesis stays within the two-generation scope, we heed the insight that a comprehensive view of mobility requires understanding various linkages and not just the parent-to-child income tie in isolation.

2.5 Research Gaps

Research on intergenerational mobility and IGE in China reflects a synthesis of economic and sociological perspectives, enriched by comparative insights from other countries. Despite important advances, several gaps remain. First, while existing studies consistently find that income persistence in China has reached levels comparable to Western countries with entrenched inequality, debates continue about the mechanisms—particularly the interactions between education, occupation, and institutional factors like hukou. Second, researchers agree that education is a key mediator, but parental occupations, social networks, and regional contexts also shape mobility outcomes in ways not fully captured by standard regression approaches. Recognizing this complexity motivates the use of a decomposition and mediation framework—similar to approaches advocated by Bowles and Gintis (2002)—that disentangles direct and indirect paths of advantage transmission. The China Family Panel Studies (CFPS) currently spans only about fourteen years, making it difficult to fully implement age adjustments without sacrificing sample representativeness. This study therefore measures IGE without explicit age adjustments. By employing decomposition and layered mediation models to better identify key channels of mobility, this study addresses a critical gap in the literature by highlighting the independent role of parental occupations—beyond education and regional status—in shaping children’s income, thus providing new evidence

on structural forces that reproduce inequality. The subsequent chapter details the empirical strategy that builds upon these insights, offering a comprehensive analysis of China’s evolving mobility landscape.

3 Research Methodology

This study investigates the factors influencing intergenerational income mobility in China by examining the relationship between parental income and child income, and exploring the mediating effects of variables such as parental occupation, child’s education, industry of employment, urban residency status, and regional economic development. The methodology involves progressively introducing individual and contextual factors to quantify their impact on income mobility. The analysis combines baseline IGE analysis, factors impact analysis, Shapley decomposition, layered mediation analysis, and transmission mechanism to capture both direct and mediated influences on IGE.

3.1 Data Description

The data is sourced from the China Family Panel Studies (CFPS), a biennial longitudinal survey by Peking University’s Institute of Social Science Survey. Covering 2010 to 2022, the dataset provides comprehensive insights into Chinese households and individuals. This study incorporates the latest seventh wave, released in November 2024. From 236,241 observations and 59,728 unique individuals, data cleaning and parent-child matching yielded a final sample of 12,794 observations with valid income records.

Key variables include child and parent incomes, parental occupations, parents’ and child’s education levels, Education Investment, child’s employment industries, urban residency, and regional economic indices. Cases with missing or non-positive parental incomes were excluded

Table 1: Summary Statistics

Variable	N	Mean	Median	SD	P25	P75
Child's Income	7 302	39 012.4	31 000	36 963.12	16 800	50 000
Father's Income	5 881	27 122.17	21 333.33	27 884.07	10 000	37 000
Mother's Income	4 388	16 160.22	12 000	17 587.37	3 310	23 550
Child Occupation Income	6 792	41 951.38	40 209	18 514.80	21 202	60 706
Father Occupation Income	6 096	49 640.64	50 101	16 286.33	40 714	62 202
Mother Occupation Income	5 783	47 270.16	50 101	12 622.87	40 713	50 103
Years of Education	7 298	11.27	12	4.12	9	15
Education Investment	1 577	1 517.85	700	2 183.79	250	2 000
Child Urban Indicator (0/1)	7 192	0.60	1	0.49	0	1
Regional Economic Index	7 092	76.37	72.02	8.67	70.71	82.05

to ensure data validity. These mediating variables are analyzed individually and collectively to assess their contributions to IGE.

3.2 IGE Estimation and Impact Analysis of Multiple Factors

3.2.1 Baseline Models: Establishing a Reference

The baseline regression models estimate the direct relationship between parental income and child income, providing raw measures of IGE. The general specification is:

$$\log(Y_i) = \beta_0 + \beta_1 \log(X_i) + \epsilon_i, \quad (1)$$

where Y_i is the log-transformed income of the child, X_i represents parental income (father, mother, or average), and ϵ_i is the error term. Three specific models are estimated:

1. Father's Income Model:

$$\log(Y_i) = \beta_0 + \beta_1 \log(X_{\text{father},i}) + \epsilon_i, \quad (2)$$

2. Mother’s Income Model:

$$\log(Y_i) = \beta_0 + \beta_1 \log(X_{\text{mother},i}) + \epsilon_i, \quad (3)$$

3. Average Parental Income Model:

$$\log(Y_i) = \beta_0 + \beta_1 \log(X_{\text{avg},i}) + \epsilon_i, \quad (4)$$

where β_1 provides the raw estimates of IGE for each income measure.

3.2.2 Rank-Rank Slope Models: Assessing Relative Mobility

Rank-rank models examine the relationship between the income ranks of parents and children, providing insights into positional mobility across the income distribution. The general model is:

$$R(Y_i) = \beta_0 + \beta_1 R(X_i) + \epsilon_i, \quad (5)$$

where $R(Y_i)$ and $R(X_i)$ represent income percentile ranks of children and parents, respectively. A flatter slope (β_1) indicates greater mobility. Models are estimated for father’s income, mother’s income, and average parental income to compare their relative effects on mobility.

3.2.3 Transition Matrices: Quantifying Mobility Probabilities

Transition matrices measure the likelihood of movement between income quintiles across generations, offering a granular perspective on mobility patterns. The probability of moving from parental quintile Q_i to child quintile Q_j is calculated as:

$$P(Q_{\text{child},j}|Q_{\text{parent},i}) = \frac{\text{Count of } (Q_{\text{parent}} = i, Q_{\text{child}} = j)}{\text{Total Count of } Q_{\text{parent}} = i}. \quad (6)$$

Separate matrices are constructed for father's, mother's, and average parental incomes to examine differences in persistence and mobility across income groups.

3.2.4 Decomposition Models: Isolating Mediating Effects

Decomposition models extend the baseline framework by sequentially introducing mediating variables to assess their contributions to IGE. Each variable's impact is measured by the change in the IGE coefficient:

$$\text{Impact of Variable} = \beta_0 - \beta_k, \quad (7)$$

where β_0 is the baseline IGE coefficient and β_k is the coefficient after including the mediating variable. A larger difference indicates a stronger influence of the variable in reducing IGE. The general model is:

$$R(Y_i) = \beta_0 + \beta_1 R(X_i) + \sum_k \delta_k Z_{k,i} + \epsilon_i, \quad (8)$$

where $Z_{k,i}$ includes variables: Parental Occupation: Categorical variables capturing the influence of parental professions. Education: Years of schooling completed by the child. Urban Residency: Binary variable indicating whether the child resides in an urban area. Industry: Dummy variables for the child's sector of employment. Regional Economic Index: Quantitative measure of local economic conditions. The adjusted β_1 reflects how much of the variation in child income is explained by each mediating variable.

3.2.5 Full Variable Models: Assessing Combined Effects

The full variable model incorporates all mediating variables simultaneously to evaluate their collective impact on IGE. The model is specified as:

$$R(Y_i) = \beta_0 + \beta_1 R(X_i) + \sum_k \delta_k Z_{k,i} + \epsilon_i, \quad (9)$$

where all mediating variables ($Z_{k,i}$) are included. The R^2 value measures the model's explanatory power, with higher values indicating greater ability to account for child income variation.

3.2.6 Generalized Models with Interaction Terms: Exploring Nonlinearities

To capture the interplay between mediators and parental income, the generalized model extends the full variable model by including interaction terms:

$$R(Y_i) = \beta_0 + \beta_1 R(X_i) + \sum_k \delta_k Z_{k,i} + \sum_j \gamma_j (X_i \times Z_{j,i}) + \epsilon_i, \quad (10)$$

where $X_i \times Z_{j,i}$ represents interaction terms: Parental Income \times Education: How parental income interacts with child education levels. Parental Income \times Urban Residency: How the urban-rural divide modifies income mobility. Parental Income \times Regional Economic Index: Contextual variations in mobility across regions.

These interactions reveal heterogeneities in mobility mechanisms and highlight cross-factor effects. The statistical outputs, including coefficients, R^2 , and joint F-tests, assess the significance and explanatory power of these models.

3.3 Layered Mediation Analysis

Building on the multivariate regression analysis in Section 3.2.5, which quantified the direct effect of parental income on child income (β_{ypy}) and estimated the coefficients of mediating variables (β_{v_ky}), this section aims to validate the decomposition formula:

$$r_{ypy} = \beta_{ypy} + \sum_k r_{ypv_k} \cdot \beta_{v_ky}.$$

To achieve this, we first compute the correlation coefficients (r_{ypv_k}) between parental income and each mediating variable, then integrate these results with the previously estimated coefficients to assess the model's fit with the decomposition framework (Bowles, 2002).

3.3.1 Computing Correlations: r_{ypv_k}

To quantify the relationship between parental income, represented as *Average Parent Income Percentile*, and each mediating variable (Z_k), the following correlation coefficients (r_{ypv_k}) are calculated:

- *Education Years ($Educ_{years}$)*,
- *Father's Occupation Categories*,
- *Mother's Occupation Categories*,
- *Urban vs Rural*,
- *Child's Industry Category*, and
- *Regional Economic Index*.

The formula used is:

$$r_{ypv_k} = \text{corr}(\text{Average Parent Income Percentile}, Z_k),$$

where:

- Z_k represents the k -th mediating variable, and
- corr denotes the Pearson correlation coefficient.

This step provides the necessary input to measure the indirect effects of parental income mediated through these variables.

3.3.2 Validating the Decomposition Formula

Once r_{ypv_k} is computed, the decomposition formula is validated by integrating the results with previously estimated coefficients from prior sections:

$$r_{ypy} = \beta_{ypy} + \sum_k r_{ypv_k} \cdot \beta_{v_k y}.$$

Data Sources.

- r_{ypy} : The correlation between parental income and child income, estimated as β_1 from Section 3.2.2.
- β_{ypy} : The direct effect of parental income on child income, obtained from the multi-variate regression in Section 3.2.5.
- r_{ypv_k} : The correlation coefficients computed in Section 3.3.1, capturing the relationship between parental income and each mediating variable.

- $\beta_{v_k y}$: The coefficients for mediating variables, estimated in Section 3.2.5, reflecting their effects on child income.

Validation Procedure.

1. **Calculating Indirect Effects.** For each mediating variable Z_k , the indirect effect is computed as:

$$\text{Indirect Effect}_k = r_{ypv_k} \cdot \beta_{v_k y}.$$

2. **Decomposing Total Effect.** The predicted total effect of parental income on child income is expressed as:

$$r_{ypy}^{\text{Predicted}} = \beta_{ypy} + \sum_k (r_{ypv_k} \cdot \beta_{v_k y}).$$

3. **Assessing Fit.** The model's fit is evaluated by comparing the predicted $r_{ypy}^{\text{Predicted}}$ with the observed r_{ypy} :

$$\text{Error} = r_{ypy} - r_{ypy}^{\text{Predicted}}.$$

A smaller error indicates a better fit of the model to the decomposition formula, suggesting that the selected mediating variables and their associated coefficients adequately explain the mechanisms underlying intergenerational income mobility.

This section systematically integrates the results from prior analyses to validate the decomposition framework and assess the robustness of the mediating variables in capturing the pathways through which parental income influences child income.

3.4 Advantage Transmission Mechanism of Parental Occupations

The analysis of broad factors influencing Intergenerational Income Elasticity (IGE) reveals the significant impact of parental occupations on children’s income, even after controlling for parental income. This impact surpasses that of regional economic levels, urban-rural status, and children’s industry of employment. Furthermore, the effects of father and mother occupations appear to be independent and additive. Understanding why parental occupations exert such explanatory power has become a central question of this study.

Parent Attributes	Childhood Inputs	Childhood Results	Outcomes
Parent Income	Educ Investment	Yrs Educ	Earnings
Parent Occupation	Nurturing	Industry Choices	Other
Parent Education	Other	Other	

Table 2: Mapping of parent attributes to childhood and final outcomes.

We propose a comprehensive framework for understanding the pathways through which parental factors influence children’s income:

1. **Parent Attributes:** Parental income, parental education, and parental occupations.
2. **Childhood Inputs:** Parental caregiving time and educational investments.
3. **Childhood Results:** Children’s educational attainment and industry choices.
4. **Final Outcomes:** Children’s income.

While the effects of parental income and education on children’s income are relatively well-understood, the mechanisms linking parental occupations to children’s income require further exploration. To address this, we propose five hypotheses:

(a) Parental occupations shape parents’ perspectives on education and influence their educational investments in children, which in turn affect educational outcomes and ultimately

children’s income. Based on this hypothesis, the explanatory power of parental occupations should significantly decrease after controlling for educational investments and further decrease after controlling for educational outcomes.

(b) Parental occupations reflect parents’ abilities, which could influence children’s aptitude and learning capacity, leading to higher educational attainment and outcomes. Under this hypothesis, the explanatory power of parental occupations should decrease after controlling for children’s educational outcomes.

(c) Parental occupations influence children’s capabilities through genetic inheritance and social learning, resulting in higher aptitude and income. This overlaps with (b), and the explanatory power of parental occupations should similarly decrease after controlling for educational outcomes.

(d) Parental occupations affect children’s industry choices, which subsequently influence income levels. Based on this hypothesis, controlling for children’s industry choices should reduce the explanatory power of parental occupations. Further analysis will assess whether parental occupations influence children’s industry choices through shared benefits (low intergenerational industry correlation) or inheritance of parental industries (high correlation).

(e) Parental occupations enhance parents’ social networks, which provide advantages in job-seeking and promotion opportunities for children, even after controlling for education and industry choices. If this hypothesis holds, the explanatory power of parental occupations should remain significant after accounting for all other factors.

3.4.1 Regression Framework

To evaluate these hypotheses, we estimate a series of nested regression models:

$$Y_C = \alpha_0 + \alpha_1 P_{Occ} + \alpha_2 Z_k + \epsilon,$$

where:

- Y_C : Child income percentile.
- P_{Occ} : Parental occupations, measured as categorical variables for fathers and mothers.
- Z_k : Mediating variables, including educational investments, years of education, and industry choices.
- ϵ : Error term.

The models progressively control for mediating variables to test their influence:

1. Model 1: Includes only P_{Occ} .
2. Model 2: Adds educational investments ($Educ_{Invest}$).
3. Model 3: Adds children's educational outcomes ($Educ_{Years}$).
4. Model 4: Adds children's industry choices ($Industry$).

	Y_C	Y_C	Y_C	Y_C
Parental Occ	β_1^{**}	β_2^{**}	β_3^*	β_4^*
Educ Investment	✓	✓	✓	✓
Yrs Educ	×	✓	✓	✓
Industry Choices	×	×	✓	✓

Table 3: Summary of variable relationships with Y_C . Significant coefficients are denoted with ** and *. Significant coefficients are made up temporarily.

This regression framework allows us to disentangle the pathways through which parental occupations influence children's income and assess the relative importance of each mediating factor. The diminishing magnitude of α_1 across models will provide evidence for the hypothesized mechanisms.

Table 4: Baseline Regression Results

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Log of Child's Income	Log of Child's Income	Log of Child's Income	Log of Child's Income	Log of Child's Income	Log of Child's Income
Log of Father's Income	0.154*** (0.011)	0.174*** (0.011)				
Gender (1=Male,0=Female)		0.335*** (0.029)		0.345*** (0.037)		0.373*** (0.027)
Log of Mother's Income			0.148*** (0.010)	0.162*** (0.010)		
Log of Average Parental Income					0.168*** (0.009)	0.188*** (0.009)
Constant	8.687*** (0.106)	8.280*** (0.111)	8.783*** (0.095)	8.438*** (0.101)	8.569*** (0.086)	8.139*** (0.091)
Observations	5,881	5,881	4,388	4,388	7,302	7,302
R-squared	0.033	0.055	0.044	0.063	0.045	0.069

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

4 Results and Discussion

4.1 IGE Estimation and Impact Analysis of Multiple Factors

4.1.1 Baseline IGE Estimates and Rank-Rank Slope Models

The initial baseline estimates of IGE, calculated using log-transformed parental and child incomes, suggest a degree of income mobility in China that appears more substantial than one might expect based on its high inequality. As shown in Table 3, these baseline elasticities—generally in the 0.15–0.19 range for both paternal and maternal incomes—are statistically significant but yield fairly modest explanatory power (R-squared values around 0.033 to 0.069). In other words, while parental income clearly matters for a child’s eventual earnings, it alone explains only a limited fraction of the overall variation in children’s adult incomes.

From a purely numerical standpoint, these figures might initially be taken to imply a moderate level of mobility. Yet, as argued in the Introduction, focusing on the raw IGE can obscure the diverse channels through which economic advantage may flow. In particular, such baseline results do not factor in structural heterogeneity—such as urban–rural disparities, regional development gaps, or the influence of parental occupations—which can magnify or diminish the apparent correlation. Indeed, prior studies of China’s intergenerational mobility caution that relatively “low” baseline IGEs can mask deeper forms of persistence driven by

social networks, labor-market entry barriers, and unequal educational opportunities. Consequently, the 0.15–0.19 range should be interpreted with care and contextualized within these broader social and economic realities.

A more distribution-focused perspective can be gleaned from rank–rank slope regressions, where we regress the child’s income percentile on the parent’s income percentile. As reported in Table 4, rank–rank slopes range from around 0.236 for fathers to as high as 0.360 for mothers, with the highest predictive power ($R\text{-squared} = 0.072$) arising when we use average parent income and include gender controls. These findings align with the idea that maternal income rank consistently exerts a comparatively greater influence on the child’s rank than paternal income rank. Such a discrepancy suggests that beyond basic household finances, mothers often shape children’s developmental pathways—potentially by directing educational investments, reinforcing academic aspirations, or providing day-to-day support and social capital in ways that strongly condition the child’s future earnings potential.

Furthermore, the inclusion of gender (i.e., whether the child is male or female) yields a modest but consistent improvement in model fit. This is not surprising given the well-documented gender wage gaps in China and elsewhere. Daughters and sons may respond differently to parental resources, parental expectations, or broader cultural norms, and thus gender can modify how family background translates into adult economic outcomes. The improved $R\text{-squared}$ values with gender included underscore that these intersections of family background and gender merit close attention.

Still, even these rank–rank models leave unanswered the question of how the parent–child income linkage arises. The transition matrices shown in Figure 1, Figure 2, and Figure 3 help visualize the probability that a child ends up in a particular income quintile given the parent’s quintile. Notably, children from top-quintile mothers have a markedly higher probability of staying in the upper-income tiers, reinforcing the observation that maternal attributes—financial, cultural, or social—are critical to shaping intergenerational outcomes.

Table 5: Rank-rank Slope Regression Results

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Child Income Percentile	Child Income Percentile	Child Income Percentile	Child Income Percentile	Child Income Percentile	Child Income Percentile
Father Income Percentile	0.236*** (0.0158)	0.265*** (0.016)				
Gender (1=Male,0=Female)		-0.098*** (0.008)		-0.088*** (0.009)		-0.101*** (0.007)
Mother Income Percentile			0.360*** (0.025)	0.397*** (0.025)		
Average Parent Income Percentile					0.212*** (0.011)	0.238*** (0.011)
Constant	0.396*** (0.00728)	0.448*** (0.008)	0.397*** (0.009)	0.443*** (0.010)	0.391*** (0.007)	0.444*** (0.007)
Observations	5,881	5,881	4,388	4,388	7,302	7,302
R-squared	0.036	0.063	0.045	0.066	0.045	0.072

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

By contrast, children whose mothers were in the bottom quintile exhibit some potential for upward movement, but often less so than might be hoped in a truly fluid society. Meanwhile, paternal patterns mirror these findings but appear slightly less pronounced, highlighting the complexity of maternal influence in Chinese households.

Overall, these baseline and rank–rank estimates paint a picture of at least moderate mobility, yet the very same results point to deeper inequalities under the surface. The higher maternal slopes, the slight gain in explanatory power when both parents’ incomes are considered, and the distinct upward or downward stickiness in quintile transitions all foreshadow that intergenerational persistence is not governed by income alone. Rather, hidden dimensions—such as occupation-specific networks, the quality of a child’s schooling environment, and broader structural barriers—likely form the connective tissue between one generation’s standing and the next. Subsequent sections therefore incorporate these additional variables and interactions, offering a more nuanced look at how and why children from certain backgrounds end up with systematically different income trajectories.

4.1.2 Parental Occupation Effects and Their Independent Contributions

Whereas parental income offers a snapshot of household economic resources, parental occupation often represents a broader bundle of advantages—including social networks, professional know-how, and potentially status-driven cultural capital. To capture these dynamics,

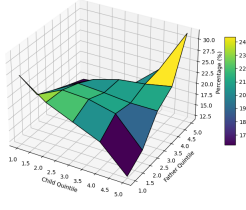


Figure 1: Transition Matrix:
Father's vs Child's Income
Quintile

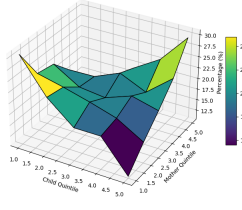


Figure 2: Transition Matrix:
Mother's vs Child's Income
Quintile

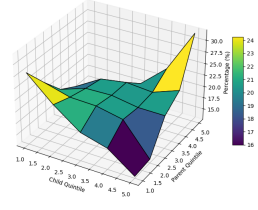


Figure 3: Transition Matrix:
Parent's vs Child's Income
Quintile

Figure 4: Income Rank Quintile Transmission Matrices

we expand the baseline IGE regressions by incorporating paternal and maternal occupation categories. As shown in Table 5, the addition of occupation variables leads to a notable reduction in the estimated coefficients on parental income, while also increasing model fit. These results indicate that what parents do can matter just as much as how much they earn.

A closer look at the regression specifications reveals that certain high-prestige occupations—for instance, government officials, senior managerial roles, or specialized technical positions—are strongly associated with higher income ranks for adult children. Interestingly, this association persists even after controlling for urban status, regional indicators, and the child's own education. In other words, children whose parents occupy such prestigious roles not only benefit from the household's monetary resources but also gain access to occupationally embedded social capital: insider job referrals, familiarity with high-paying industries, and the informal signals that can smooth upward mobility. By contrast, children of parents in lower-tier jobs (e.g., unskilled laborers) generally lack these intangible channels, meaning that even if the parents' incomes are adequate, the absence of occupational connections can stunt the child's long-term earnings trajectory.

An especially striking feature is that maternal and paternal occupations appear to operate in partially independent, additive ways. For example, combining father and mother occupational dummies yields a larger explanatory power than models that include only one parent

Table 6: Combined Parental Occupation Effects (No Gender vs With Gender)

VARIABLES	(1) Child Income Percentile	(2) Child Income Percentile	(3) Child Income Percentile	(4) Child Income Percentile	(5) Child Income Percentile	(6) Child Income Percentile
Average Parent Income Percentile	0.174*** (0.015)	0.190*** (0.015)	0.163*** (0.015)	0.183*** (0.014)	0.141*** (0.017)	0.154*** (0.017)
Father's Occupation Type 1	0.010 (0.025)	-0.000 (0.024)			-0.003 (0.028)	-0.012 (0.027)
Father's Occupation Type 2 = o,	-	-			-	-
Father's Occupation Type 3	-0.016 (0.023)	-0.020 (0.023)			-0.023 (0.026)	-0.022 (0.026)
Father's Occupation Type 4	0.028 (0.023)	0.023 (0.022)			0.022 (0.026)	0.023 (0.025)
Father's Occupation Type 5	0.041* (0.021)	0.042** (0.021)			0.026 (0.024)	0.030 (0.023)
Father's Occupation Type 6	0.050** (0.020)	0.046** (0.020)			0.035 (0.023)	0.035 (0.022)
Gender (1=Male,0=Female)		-0.103*** (0.008)		-0.113*** (0.008)		-0.112*** (0.008)
Mother's Occupation Type 1 = o,			-	-	-	-
Mother's Occupation Type 2			-0.059** (0.027)	-0.063** (0.027)	-0.048* (0.029)	-0.051* (0.028)
Mother's Occupation Type 3			-0.043 (0.033)	-0.045 (0.033)	-0.030 (0.036)	-0.034 (0.035)
Mother's Occupation Type 4			0.030 (0.022)	0.025 (0.021)	0.032 (0.023)	0.026 (0.022)
Mother's Occupation Type 5			0.039* (0.021)	0.042** (0.021)	0.038* (0.022)	0.040* (0.022)
Mother's Occupation Type 6			0.046** (0.023)	0.043* (0.022)	0.034 (0.024)	0.032 (0.024)
Constant	0.368*** (0.020)	0.428*** (0.020)	0.380*** (0.021)	0.442*** (0.021)	0.366*** (0.029)	0.430*** (0.029)
Observations	5,935	5,935	5,659	5,659	5,006	5,006
R-squared	0.036	0.066	0.037	0.072	0.034	0.070
Father Occupation Dummies	YES	YES			YES	YES
Mother Occupation Dummies			YES	YES	YES	YES

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

at a time. Moreover, the joint effect of both parents holding high-prestige positions can be greater than the sum of their separate contributions, suggesting there may be a “synergy” when both parents come from elite occupational backgrounds—possibly because household norms, aspirations, or networks are reinforced from multiple professional vantage points.

These patterns are reinforced by the joint F-tests reported in Table 6, which consistently reject the null hypothesis that parental occupation categories lack explanatory power. Even when education, urban–rural status, and regional economic indices are included, the F-values remain significant (for instance, $F = 3.78$, $p < 0.0000$ in one combined-occupation specification). The resilience of parental occupation to these controls underscores that occupational stratification can introduce social advantages—separate from purely financial resources—that help replicate privilege across generations.

In sum, parental occupation categories do more than refine the baseline income–income correlations; they highlight the multifaceted mechanisms of stratification. Wealth can buy

Table 7: Joint F-Test Results for Parental Occupational Categories

Factor Category	No Gender		With Gender	
	F-value	p-value	F-value	p-value
<i>Baseline Models</i>				
Father’s Occupation Categories	5.7800	0.0000	6.4900	0.0000
Mother’s Occupation Categories	7.2400	0.0000	8.2500	0.0000
Combined Occupation Categories	4.9000	0.0000	5.6800	0.0000
<i>Full Factors Model (includes gender)</i>				
Father’s Occupation Categories	–	–	3.2400	0.0064
Mother’s Occupation Categories	–	–	3.0100	0.0101
Combined Occupation Categories	–	–	3.7800	0.0000

educational opportunities, but certain occupations also provide wide-ranging social capital that translates into labor-market success for the next generation. The Chinese context—marked by a rapid expansion of professional sectors in urban areas—intensifies these occupation-based pathways. Children who inherit privileged occupational milieus likely enjoy better-informed career decisions, more robust mentorship, and smoother entry into high-paying industries.

4.1.3 Comparing Occupational Influences with Education, Urbanization, and Regional Conditions

While parental occupation emerges as a powerful channel of transmission, it is essential to situate its impact relative to other established drivers of intergenerational mobility—specifically the child’s education, urban/rural background, and regional economic level. Tables 7 and 8 summarize how each factor influences the child’s position in the income distribution, as measured by percentile ranks.

A key finding is that child education emerges as one of the single strongest correlates of adult income rank. Introducing years of schooling into the model typically reduces the coefficient on parental income by 20–35 percent, consistent with the large body of literature

Table 8: Effects of Other Factors

VARIABLES	Effects of Other Factors											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Average Parent Income Percentile	0.087*** (0.012)	0.107*** (0.012)	0.111*** (0.014)	0.148*** (0.014)	0.167*** (0.029)	0.172*** (0.029)	0.183*** (0.012)	0.209*** (0.012)	0.152*** (0.012)	0.174*** (0.012)	0.184*** (0.012)	0.211*** (0.011)
Years of Education	-0.022*** (0.001)	-0.025*** (0.001)										
Gender (1=Male, 0=Female)		-0.132*** (0.007)		-0.104*** (0.007)		-0.069*** (0.014)		-0.106*** (0.007)		-0.106*** (0.008)		-0.105*** (0.007)
Father Education			-0.005*** (0.001)	-0.005*** (0.001)								
Mother Education			-0.005*** (0.001)	-0.005*** (0.001)								
Education Investment					-0.000 (0.000)	-0.000 (0.000)						
Child Urban Indicator (1=Urban, 0=Rural)							-0.092*** (0.007)	-0.096*** (0.007)				
Industry Type 1									0.270*** (0.065)	0.252*** (0.065)		
Industry Type 2									-0.018 (0.065)	-0.024 (0.067)		
Industry Type 3									0.035 (0.063)	0.011 (0.062)		
Industry Type 20 = 0												
Regional Economic Index											-0.002*** (0.000)	-0.002*** (0.000)
Constant	0.702*** (0.013)	0.806*** (0.014)	0.480*** (0.011)	0.543*** (0.012)	0.505*** (0.014)	0.530*** (0.016)	0.459*** (0.008)	0.518*** (0.009)	0.359*** (0.063)	0.449*** (0.062)	0.369*** (0.011)	0.567*** (0.030)
Observations	7,298	7,298	6,369	6,369	1,577	1,577	7,192	7,192	6,580	6,580	7,092	7,092
R-squared	0.129	0.173	0.105	0.175	0.022	0.037	0.068	0.077	0.083	0.110	0.083	0.112

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 9: Influence of Various Factors on Child Percentile Rankings

Factor	Impact (No Gender)	R ² (No Gender)	Impact (With Gender)	R ² (With Gender)
Father Occupation Categories	0.0379	0.0359	0.0487	0.0657
Mother Occupation Categories	0.0493	0.0371	0.0552	0.0719
Combined Occupation Categories	0.0710	0.0345	0.0846	0.0699
Education Years	0.1248	0.1288	0.1310	0.1737
Parental Education	0.0808	0.0447	0.0898	0.0747
Education Investment	0.0448	0.0225	0.0664	0.0375
Urban vs. Rural	0.0291	0.0676	0.0291	0.0973
Child's Industry Category	0.0554	0.0833	0.0641	0.1100
Economic Index	0.0277	0.0835	0.0269	0.1125

pointing to education as a central channel of mobility. Children who obtain more years of formal education, or attend higher-quality institutions, enjoy clear labor-market advantages—higher starting wages, faster earnings growth, and broader career pathways. Even so, the child’s own schooling does not fully account for the persistent occupational effects we observe. In other words, high-status parental occupations continue to exert an influence on children’s earnings even after controlling for how much schooling those children receive.

The urban–rural indicator also plays a nontrivial role, with children raised in urban environments tending to rank significantly better in the adult income distribution compared to their rural-born counterparts. However, once parental occupation is included, part of this “urban advantage” diminishes, suggesting that it is at least partially explained by the greater concentration of elite jobs and professional networks in urban areas. Put differently, living in a major city can matter not only for its own resources (e.g., access to better schools or job opportunities) but also because it intersects with whether the parent holds an occupation that supplies extra labor-market leverage.

By contrast, regional economic conditions (e.g., provincial GDP per capita) appear rel-

atively muted in their direct impact on child income ranks. Although children from more prosperous provinces do perform somewhat better, the magnitude of these effects is smaller than one might expect in a country as regionally diverse as China. A plausible explanation is that while macro-level development does create broadly better infrastructure and job opportunities, it is the occupation-specific connections in those developed regions—and the local networks attached to high-status professions—that truly bolster a child’s earnings potential. Thus, merely living in a “rich” part of the country is less consequential than having parents in strategically situated occupations, a pattern consistent with the idea that social and professional linkages can outstrip broader developmental advantages.

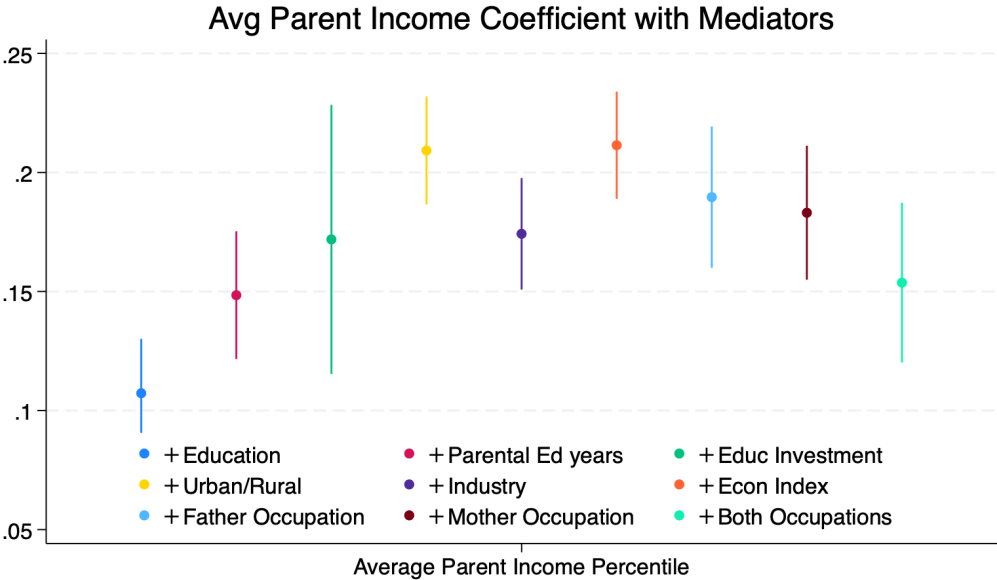


Figure 5: Parental income coefficient over successive mediator models

Altogether, these comparisons highlight how parental occupation can overshadow or reinforce other well-known correlates of mobility. Indeed, high-status occupations seem to offer children distinct forms of nonfinancial capital that can augment the benefits of an urban upbringing or advanced regional development. Meanwhile, child education interacts with parental occupation in ways that amplify social advantage, since well-connected parents can boost both the quantity and quality of schooling their children receive. Put succinctly,

Table 10: Full Variable Model

VARIABLES	(1) Child Income Percentile
Average Parent Income Percentile	0.054*** (0.017)
Years of Education	-0.021*** (0.001)
Industry Type 1	0.142 (0.099)
Industry Type 2	-0.096 (0.101)
Industry Type 3	-0.013 (0.095)
Industry Type 20 = o,	-
Regional Economic Index	-0.006*** (0.000)
Child Urban Indicator (1=Urban, 0=Rural)	-0.052*** (0.008)
Gender (1=Male, 0=Female)	-0.130*** (0.009)
Father's Occupation Type 1	-0.021 (0.026)
Father's Occupation Type 2 = o,	-
Father's Occupation Type 3	-0.025 (0.025)
Mother's Occupation Type 1	0.029 (0.033)
Mother's Occupation Type 2	0.010 (0.032)
Mother's Occupation Type 3 = o,	-
Constant	1.260*** (0.108)
Observations	4,450
R-squared	0.215

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

occupation-based advantages layer on top of the standard channels of income, education, and geography to create a multifaceted—and sometimes compounding—structure of inter-generational inequality.

4.1.4 Full Variables Analysis and Generalized Interaction Model

Having established the individual and comparative impacts of parental income, occupation, education, and geographic context, we now integrate all these factors into a single model to capture their joint explanatory power. In essence, we aim to discern how much more variation in the child's income rank can be explained once each dimension of advantage—ranging from strictly financial resources to occupational networks and urban environments—is included simultaneously. Table 9 presents a representative specification (“Full Factors”) that brings together parental income percentiles, parental occupational categories, child education, child industry indicators, as well as urban–rural and regional variables.

A key observation is that the model’s overall explanatory power (as measured by R square) increases substantially from the earlier baseline of approximately 0.07 (in the simple rank–rank slopes) to around 0.215. This jump suggests that multiple forces—beyond just parental income—jointly shape how children progress (or fail to progress) in China’s labor market. Indeed, controlling for education and occupation alone already accounts for a substantial share of the parent–child correlation, but adding additional covariates such as child’s current industry choice and regional economic indicators refines the story even further.

Despite the strong roles played by education and region, parental occupation continues to matter in the full model. Although the individual coefficients on certain occupational categories may be smaller than in the simpler regressions, they remain statistically significant. This indicates that even after we consider the child’s schooling level, local development conditions, and sector of employment, the occupational status of one’s parents can still tilt the playing field in ways that pure monetary inputs do not capture. A likely interpretation is that certain occupational hierarchies impart intangible social capital—such as insider connections, personalized career advice, or a “stamp of credibility”—that stands apart from both educational qualifications and local market conditions.

To delve deeper into these interplay effects, we implement a Generalized Interaction Model (Table 10). Here, we allow variables like parental occupation and parental income percentile to interact with one another and with child-level characteristics. While the increment in R square (from about 0.215 to roughly 0.220) is not massive, it is meaningful in capturing complexities that linear terms alone cannot address. For instance, one interaction suggests that when the father holds a certain mid-tier occupational category (e.g., Occupation Type 3), having a higher parental income percentile *reduces* the marginal benefit for the child’s income rank—perhaps because those occupations already provide baseline network advantages, rendering extra income less impactful. Conversely, a child’s employment in certain industries (Industry Type 2 or 3) might be more lucrative *if* the parents belong to an elite

Table 11: Generalized Model with Interaction Terms

VARIABLES	(1) Child Income Percentile	(2) Child Income Percentile	(3) Child Income Percentile
Average Parent Income Percentile	0.113 (0.179)	-0.010 (0.180)	0.047 (0.193)
Years of Education	-0.021*** (0.002)	-0.021*** (0.002)	-0.020*** (0.002)
Regional Economic Index	-0.007*** (0.001)	-0.007*** (0.001)	-0.007*** (0.001)
Child Urban Indicator (1=Urban, 0=Rural)	-0.061*** (0.017)	-0.059*** (0.017)	-0.059*** (0.017)
Gender (1=Male,0=Female)	-0.131*** (0.009)	-0.131*** (0.009)	-0.131*** (0.009)
Father's Occupation Type 2	0.011 (0.041)	0.021 (0.026)	0.011 (0.041)
Father's Occupation Type 3	0.050 (0.037)	-0.005 (0.021)	0.056 (0.037)
Mother's Occupation Type 2	-0.015 (0.027)	-0.056 (0.042)	-0.059 (0.042)
Mother's Occupation Type 3	-0.023 (0.033)	-0.068 (0.054)	-0.077 (0.054)
Industry Type 2	-0.199** (0.099)	-0.197** (0.099)	-0.196** (0.099)
Industry Type 3	-0.077 (0.066)	-0.078 (0.066)	-0.076 (0.066)
Father's Occupation Type 2 x Parent Inc	0.051 (0.112)		0.050 (0.112)
Father's Occupation Type 3 x Parent Inc	-0.166* (0.094)		-0.187** (0.094)
Industry Type 2 x Parent Inc	-0.047 (0.168)	-0.063 (0.168)	-0.061 (0.168)
Industry Type 3 x Parent Inc	-0.131 (0.097)	-0.130 (0.097)	-0.132 (0.097)
Edu x Parent Inc	0.000 (0.004)	-0.000 (0.004)	-0.000 (0.004)
EconIdx x Parent Inc	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)
Urban x Parent Inc	0.020 (0.031)	0.015 (0.032)	0.016 (0.032)
Mother's Occupation Type 2 x Parent Inc		0.149 (0.120)	0.149 (0.121)
Mother's Occupation Type 3 x Parent Inc		0.146 (0.153)	0.180 (0.154)
Constant	1.371*** (0.100)	1.405*** (0.101)	1.387*** (0.104)
Observations	4,450	4,450	4,450
R-squared	0.219	0.219	0.220

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 12: R-squared Values from Different Models

Model Description	R-squared
Full Factors Without Interaction	0.2149
Generalized Model: Father Occupations	0.2188
Generalized Model: Mother Occupations	0.2189
Generalized Model: Both Parents Occupations	0.2200

professional group, implying that some job sectors reward or facilitate parental help more effectively than others.

Overall, the synergy (and occasional trade-offs) among these variables underscores that intergenerational mobility is not governed by any single determinant. Instead, it emerges from an accumulation of parental resources—income, occupation-based connections, and geographical context—amplified or dampened by the child’s education and industry selection. The marginal gains from one type of parental capital may vary depending on whether other forms of capital are already in place, generating a nuanced, layered pathway of advantage. From a research perspective, this underscores the need for multifactor models that move beyond baseline IGEs. From a policy perspective (though we postpone detailed implications until later), it highlights how a purely “one-size-fits-all” approach—such as improving schooling alone—might not fully address the entrenched privilege sustained by occupational networks or specific industry linkages.

4.2 Layered Mediation Analysis

Although multivariate regressions can show how parental income, education, occupation, and related factors jointly correlate with children’s income, they do not clarify through which channels parental background exerts its influence. To address this question, we implement a layered mediation analysis, which progressively introduces mediating variables and quantifies how each contributes to explaining the observed correlation between parental and child

incomes. In practice, this “layered” method means we first estimate a baseline parent–child rank correlation (around 0.265), then gradually introduce key mediators—such as the child’s education, parental occupation, urban/rural background, and child’s industry—to see how each channel reduces the remaining direct effect of parental income on the child’s income rank. By matching the sum of direct and mediated effects to the total correlation, we can assess whether the selected variables cover the main transmission channels or if large unexplained components remain.

When we compute the direct effect β_{ypy} , it stands at about 0.0543. The sum of the mediators’ indirect effects is then calculated to be approximately 0.1819, yielding a predicted overall correlation of 0.2363. Although slightly below the empirical parent–child rank correlation of 0.265, this predicted value already captures around 70% of the measured intergenerational persistence—suggesting that the selected mediators (education, occupation, location, industry) collectively account for the majority of how advantage is transmitted.

The residual gap (roughly 0.0287) may stem from a variety of factors not explicitly modeled. For example, intangible forms of social capital, direct wealth transfers that go beyond income (like housing assets or business capital), or unmeasured personality traits may also influence the child’s adult earnings. Nevertheless, the fact that our measured variables explain most of the correlation highlights their central importance in Chinese mobility patterns.

Education consistently emerges as one of the most powerful conduits for parental income. Higher-income parents correlate strongly with more years of child education ($r_{ypv_k} \approx -0.10$), and these educational gains in turn carry a robust negative coefficient (around -0.020 to -0.025) on the child’s income rank, implying a positive effect on upward mobility. In other words, substantial portions of the parent–child correlation operate through schooling pathways—richer parents invest more intensively in their children’s learning and school quality, which yields elevated earnings for the child later on.

However, industry selection also plays a meaningful role. After controlling for education,

Table 13: Mediated Effects by Variable Categories

Variable	β_{vky}	r_{ypvk}	Variable	β_{vky}	r_{ypvk}
Education	-0.0207	-0.1043	Urban	-0.0518	-0.3718
Father2	0.0215	-0.7072	Industry2	-0.2379	0.4152
Father3	-0.0033	-0.3257	Industry3	-0.1554	0.0443
Father4	0.0283	-0.2282	Industry4	-0.1699	0.0760
Father5	-0.0065	1.2135	Industry5	-0.1983	0.4049
Father6	0.0293	-0.6631	Industry6	-0.1666	0.0390
Mother2	-0.0190	-0.8795	Industry7	-0.1894	-0.4405
Mother3	-0.0289	-0.6903	Industry8	-0.1338	-0.1042
Mother4	0.0158	-0.3640	Industry9	-0.0883	0.1075
Mother5	-0.0185	0.7845	Industry10	-0.1738	-0.4715
Mother6	0.0104	-0.4688	Industry11	-0.2002	-0.2096
Economic	-0.0061	-0.0162	Industry12	-0.1564	-0.3089
Industry13	-0.2068	-0.3002	Industry14	-0.1500	-0.0695
Industry15	-0.1394	0.0412	Industry16	-0.1428	-0.2934
Industry17	-0.1622	-0.4019	Industry18	-0.0826	-0.1736
Industry19	-0.1530	-0.0782	Industry20	-0.1420	0.4086

children of wealthier or more highly educated parents still appear more likely to enter high-paying sectors such as finance, technology, or government-related services. This channel is partly reflected in the correlations between parental income and the child’s industry dummy variables (r_{ypvk}), as well as the associated negative coefficients on rank ($\beta_{vky}|0$ for certain lucrative industries). Taken together, these patterns underscore that even if two children hold similar degrees, the one with more advantaged parents often enters better-compensated fields—owing perhaps to insider referrals, professional guidance, or greater familiarity with elite occupational niches.

Finally, urban residence exhibits a mediating effect that both overlaps with and stands apart from occupation. On one hand, part of the “urban advantage” seems to reflect the fact that many high-status jobs are disproportionately concentrated in major cities, boosting local networks and career opportunities. On the other hand, living in an urban context also confers broader benefits, such as easier access to infrastructure, educational resources, and

a denser labor market. As a result, once we incorporate occupation into the mediation framework, the incremental effect of urban/rural status shrinks yet remains significantly different from zero—indicating that city dwellers gain advantages beyond merely having professional parents.

4.3 Advantage Transmission Mechanism of Parental Occupations

Understanding the transmission mechanism through which parental occupations influence children’s income is a critical research question, as demonstrated in the methodology. Despite controlling for parental income, parental occupations exhibit significant explanatory power over children’s income. This finding persists even when accounting for factors such as regional economic levels, urban-rural status, and children’s industry of employment. Furthermore, the effects of the father’s and mother’s occupations appear to be independent and additive, emphasizing the unique role that occupational attributes play in shaping intergenerational outcomes.

Figures 6 illustrate the relationship between parental occupation types and children’s income, measured both as the average and median child income. These figures reveal a clear stepwise pattern, where certain parental occupation categories are associated with substantial increases in children’s income.

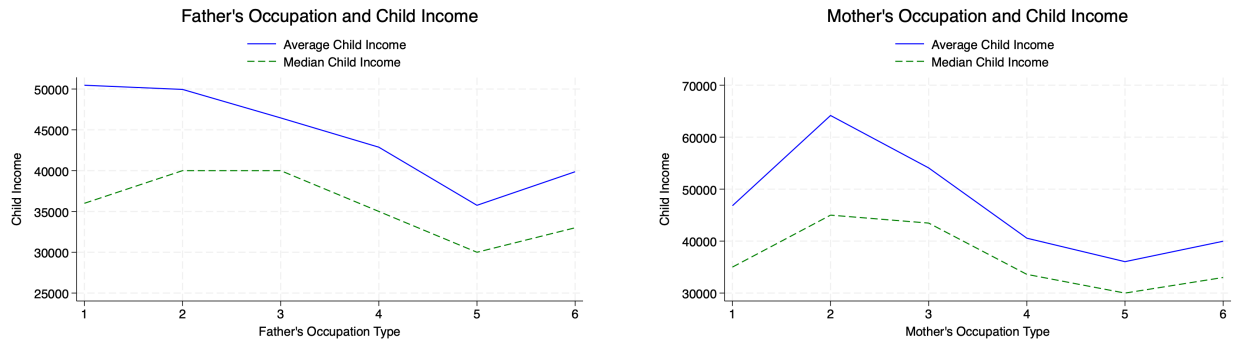


Figure 6: Parental Occupation and Child Income

To explore this phenomenon, we adopt a comprehensive framework that links parental attributes to childhood inputs, childhood outcomes, and final income outcomes. Unlike parental income and education, whose effects on children’s income are relatively direct, the influence of parental occupations operates through more complex pathways. Five hypotheses were proposed to explain these pathways: (a) shaping educational investments, (b) influencing children’s educational outcomes through parental abilities, (c) transmitting advantages via genetic inheritance and social learning, (d) shaping children’s industry choices, and (e) expanding children’s access to social networks, as previously elaborated in Methodology.

The empirical analysis tests these hypotheses by sequentially introducing mediating variables into regression models and examining the explanatory power of parental occupations on children’s income. Tables 14 and 15 present joint F-test results and associated p-values for the father’s and mother’s occupation variables across models that include varying combinations of mediating factors.

The regression results for fathers’ occupations (Table 3) reveal that the joint explanatory power of occupational variables ($F = 22.9158, p < 0.0000$) is substantial in the baseline model (Y_C^1), which includes only educational investments. However, the explanatory power declines significantly ($F = 2.5550, p = 0.0260$) when children’s educational attainment is controlled (Y_C^2), and further diminishes to non-significant levels ($F = 0.9276, p = 0.4620$) after incorporating children’s industry choices (Y_C^3) and additional factors (Y_C^4). A similar pattern is observed for mothers’ occupations (Table 4), where the joint F-statistic starts high ($F = 22.8655, p < 0.0000$) but diminishes as educational outcomes and industry choices are sequentially added.

These patterns give credence to hypotheses (a) and (b), namely that parental occupations shape both the *quantity* and *quality* of educational investments and outcomes. The drop in explanatory power once schooling is factored in implies that parents in higher-status jobs can intensify the human-capital accumulation process—offering richer learning envi-

Table 14: Father Occupation Joint F Test Results Across Models

		Models			
		Y_C^1	Y_C^2	Y_C^3	Y_C^4
Parental Occ	Joint F	22.9158	2.5550	0.9276	0.5708
	p-value	0.0000	0.0260	0.4620	0.7224
Educ Invest	Inclusion	(\times)	(\checkmark)	(\checkmark)	(\checkmark)
Yrs Educ	Inclusion	(\times)	(\times)	(\checkmark)	(\checkmark)
Industry Choices	Inclusion	(\times)	(\times)	(\times)	(\checkmark)

Table 15: Mother Occupation Joint F Test Results Across Models

		Models			
		Y_C^1	Y_C^2	Y_C^3	Y_C^4
Parental Occ	Joint F	22.8655	3.6678	1.3264	1.0166
	p-value	0.0000	0.0027	0.2502	0.4063
Educ Invest	Inclusion	(\times)	(\checkmark)	(\checkmark)	(\checkmark)
Yrs Educ	Inclusion	(\times)	(\times)	(\checkmark)	(\checkmark)
Industry Choices	Inclusion	(\times)	(\times)	(\times)	(\checkmark)

ronments, targeted guidance, or simple familiarity with the pathways to academic success. Hypothesis (c) also gains partial support: the diminished, but still discernible, influence of parental occupation after controlling for educational outcomes suggests that inherent or learned parental competencies (e.g., professional skill sets, motivational climates, or genetic predispositions) likely pass down, albeit largely mediated through education.

Meanwhile, hypothesis (d) receives moderate endorsement: once the child’s industry choice is included, the separate effect of occupation narrows but does not vanish. This implies that parents’ occupational experiences—especially those linked to lucrative fields—can steer children toward specific industries where greater earnings potential resides. Finally, residual significance in some models, even after controlling for all these factors, hints at hypothesis (e): parents’ social networks or contacts associated with certain occupations can confer privileges (like recommendations or insider vacancies) not fully captured by standard regressors.

Taken together, these results illuminate how occupational attributes complement parental income in channeling advantage across generations. Formal schooling emerges as a major

conduit, but industry alignment and social networks also matter. Even once we control for education, family income, and regional variables, parental occupation still registers as an independent driver of children’s economic fortunes. This underscores the broader insight that occupational hierarchies involve structural advantages—ranging from workplace know-how to network-based referrals—that can be decisive in shaping long-term mobility.

5 Conclusion

A core motivation of this thesis, as articulated in the Introduction, is the tension between China’s rapid economic transformation and its enduring inequalities. In a society that prizes upward mobility—where talent and effort should outweigh one’s birth—our findings show that persistent intergenerational income correlations are underpinned by multiple channels, some more visible than others. Our exploration began by questioning how parental attributes, beyond mere income, shape children’s economic trajectories. We homed in on two focal issues: the broader set of mediating factors and the singular role of parental occupations as a conduit of advantage.

Empirically, we have demonstrated that the raw intergenerational income elasticity (IGE) in China, while moderate by certain international comparisons, masks intricate pathways through which family background is reproduced. Decomposition and layered mediation analyses reveal that parental income alone explains only part of the mobility story. Once child education, urban residence, and regional economic levels are considered, the direct impact of parental income on the child’s adult earnings diminishes substantially. Yet far from vanishing, the intergenerational link reappears when we factor in *parental occupation*. Even after accounting for schooling, industry choice, and other contextual variables, a parent’s professional role remains a statistically robust predictor of where a child ultimately lands in the income distribution. This suggests that high-status occupations, especially those concen-

trated in cities or critical industries, generate an intangible set of resources—ranging from insider knowledge to privileged networks—that parents pass on to their children. By tracing how these occupational attributes operate in tandem with parental income and schooling, our research underscores the complexity and resilience of advantage transmission in contemporary China.

In dissecting the parental occupation effect, we find evidence for several interrelated mechanisms. First, occupational status appears to intensify or enhance educational investments, equipping children with superior test preparation, richer academic guidance, and broader horizons. Second, professional parents often steer children toward lucrative career paths, influencing not just the child’s field of study but also the initial entry points in industries like finance, technology, or government service. Third, high-prestige occupations confer social capital—*guanxi*, reputational signals, and sector-specific soft skills—that can translate into smoother promotions and wage growth over the life course. That these mechanisms persist *after* controlling for parental income highlights how intergenerational mobility is not purely about monetary resources, but also about one’s embeddedness in particular occupational structures.

Return to the questions posed at the outset of this thesis: Can rapid economic development foster truly meritocratic mobility, or will existing advantages become entrenched? Our results point to both optimism and caution. On one hand, China has made notable strides in expanding education, modernizing labor markets, and lifting broad swaths of the population out of poverty. These transformations do afford some upward mobility avenues. On the other hand, the strong correlation between parental occupation and child outcomes indicates that social reproduction remains firmly in place, allowing advantaged families to leverage their occupational capital in ways that magnify differences. This bifurcation is most evident in China’s urban regions, where high-income parents in elite professions can tap into a dense network of schooling options, mentorships, and job referrals that remain out of reach for

less-connected families.

While improving school access and quality continues to be a cornerstone for raising mobility, our findings emphasize that efforts aimed *solely* at leveling educational opportunities might not counteract all inherited advantages. Occupational hierarchies can perpetuate resource inequalities in subtler forms—through the “hidden curriculum” of professional guidance, social connections, or preferential hiring practices. If policymakers seek to minimize the extent to which a child’s fate is tied to parental status, they must extend beyond educational reforms to consider how labor-market structures, regional disparities, and sector-specific norms enable privileged families to replicate their advantage. This may entail policies that promote transparent job recruitment in key industries, encourage cross-regional mobility, or build social-capital resources for youths from lower-status families. It could also involve addressing biases that allow entrenched elites to pass along occupational benefits—such as government or high-tier managerial positions—to their children with limited outside competition.

Our work adds to a growing literature on intergenerational mobility that integrates economic and sociological perspectives. Economists who focus on measurable factors like income and education now increasingly acknowledge the importance of structural and cultural features—such as parental occupation or social networks—in shaping mobility outcomes. Sociologists, meanwhile, find in these empirical results fresh validation for theories of social stratification and the inheritance of social and cultural capital. By drawing on both traditions, we bridge the gap between calculating *how much* mobility exists and understanding *how and why* family background persists across generations. For China, this synthesis paints a nuanced picture of a fast-changing economy where individual effort and talent can thrive but are often channeled through inherited occupational pathways that sustain inequality.

The question posed in the Introduction—whether China’s post-reform prosperity delivers upward mobility for all or fortifies the privileges of a select few—remains at the crux of

ongoing debates. Our analysis does not deny that many have moved up the economic ladder, nor does it imply that mobility is unattainable for disadvantaged families. Rather, it illuminates the multiple, intersecting levers—income, education, occupation, location, networks—through which background shapes adult outcomes. The persistence of parental-occupation effects means that, to level the playing field, policymakers must tackle entrenched hierarchies in both the classroom and the workplace. In short, a child’s potential should not be circumscribed by whether their parents are high-ranking officials or white-collar professionals. But bridging that ideal and the empirical reality is a formidable task, one that calls for sustained policy attention and further scholarly inquiry.

Breaking the cycle of occupational inheritance will require a multi-faceted policy strategy that goes well beyond leveling educational opportunities. One critical avenue is to promote meritocratic and transparent hiring practices in both the public and private sectors. This means instituting stricter safeguards against nepotism and favoritism in recruitment and promotions – for example, requiring open competitive examinations or external oversight for appointments in government agencies and state-owned enterprises. If elite positions in civil service and industry are filled through transparent criteria rather than personal connections, it becomes harder for families to simply pass along their occupational status to their children. Relatedly, anti-nepotism regulations and conflict-of-interest rules could be strengthened to prevent the direct placement of officials’ or executives’ relatives into coveted jobs. By making hiring and advancement processes more transparent and performance-based, policymakers can chip away at the inherited advantages that currently give children of high-status parents a head start in the job market.

Another complementary strategy is to build social capital and career access for youths from less-advantaged backgrounds, thereby counteracting the networking gap that exists between them and peers from elite families. This could involve public-private initiatives to provide mentoring, internships, and professional networking programs targeted at students

whose parents are in lower-tier occupations. For instance, partnerships between universities, employers, and government could connect first-generation college students or rural migrants with mentors in desirable fields like finance, technology, or government service. Such programs effectively substitute for the informal “inside track” that children of lawyers, doctors, or officials receive at home, giving disadvantaged youths a foothold in networks that would otherwise be closed to them. In addition, policymakers should address structural barriers that reinforce occupational immobility – notably the urban–rural and regional disparities that map onto job opportunities. Easing restrictions like the hukou system to encourage cross-regional mobility, or investing in quality jobs and industries in less-developed areas, can reduce the geographic component of occupational inheritance by ensuring that talent from anywhere in the country can compete for high-paying roles. Finally, there may be a need to reform organizational cultures and norms that enable “insider” hiring. Employers, especially in elite sectors, could be encouraged (or required in state entities) to adopt diversity and inclusion guidelines that consider candidates from varied backgrounds, not just those with elite pedigrees. Collectively, these interventions – meritocratic hiring reforms, social-capital building programs, and structural measures to widen access to good jobs – would help blunt the advantages currently enjoyed by the sons and daughters of China’s occupational elite. By widening pathways into professional and managerial roles for those without family connections, such policies could gradually erode the entrenched hierarchies in the workplace. The ultimate goal is to ensure that talent and effort, rather than parentage, determine one’s success – a principle that requires systemic changes in labor market practices alongside educational equity.

Ultimately, this thesis advances our understanding of intergenerational mobility in China by quantifying the distinct role of parental occupations alongside more familiar factors like income and education. It reveals the intricate ways structural advantage is embedded in professional networks, local labor markets, and cultural norms, thereby reinforcing or mitigating a child’s economic destiny. If the aim is to uphold a social contract that rewards skill

and dedication, then truly unlocking equal opportunity will demand dismantling the hidden barriers that derive from one's family occupation. In doing so, China's pursuit of "common prosperity" can move beyond rhetoric toward creating a society in which every child—not just those from privileged backgrounds—has a fair shot at translating their abilities into economic success.

6 References Appendix

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