Paradoxical Gender Choice in Child Custody: Evidence from Divorce Court Judgments in China

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Abstract:
This study analyzes gender dynamics in child custody decisions in China, using 220,994 divorce court judgments from 289 cities (2000–2025). Unlike the maternal preference common in Western societies, custody outcomes in China appear balanced, with mothers and fathers each receiving custody in about half of the cases. However, beneath this balance lies a structural inequality: fathers maintain an advantage in custody allocation, while mothers are significantly more likely to be awarded custody of daughters than sons—a "daughter effect" that has grown over time, reflecting persistent patriarchal norms. Regional variation further highlights the influence of social and economic contexts. In urbanized and developed regions, mothers are more likely to receive custody, and the father's advantage decreases. These findings show that custody allocation is not only guided by the "best interests of the child" but also shaped by cultural traditions, gendered power dynamics, and evolving social structures in contemporary China.

Keywords: Child Custody; Divorce; Son Preference; Family Law; China

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Introduction

Child custody is a central issue in the post-divorce stage. Decisions regarding custody not only shape the immediate developmental environment of children, but also exert long-term effects on their psychological, educational, and social outcomes (Amato, 2000; Amato & Keith, 1991). Understanding the mechanisms through which custody is determined is therefore essential for assessing whether children are placed in the most nurturing and supportive environments possible.

At the same time, custody allocation reflects and reproduces broader patterns of gender equity. When courts disproportionately favor one parent over another, they reinforce gendered expectations of caregiving and economic provision (Costa et al., 2019), which in turn structure the post-divorce life trajectories of men and women (McNeely, 1997; Graham, 2001). Moreover, the gender of both child and parents introduces an additional layer of complexity, as gendered norms may differentially shape custody outcomes depending on whether the child is a son or a daughter (Raley & Bianchi, 2006).

In the western literature, research has long documented a historical preference for awarding custody to mothers, often based on the child's best interests. Evidence from the United States shows that in the late 1980s and early 1990s, over 80% mothers overwhelmingly received sole custody, while fathers were awarded custody only in a small minority of cases. This maternal advantage in custody allocation was closely linked to women's social roles in childbearing and home production (Meyer, Carlson, & Ul Alam, 2022). Joint custody was relatively rare during this period, but it exhibited an upward trend (Fox & Kelly, 1995; Cancian & Meyer, 1998). Beginning in the late 1990s and accelerating into the 2000s, the proportion of mothers receiving sole custody declined sharply, while joint custody rose substantially from around 10% to over 30%; the share of fathers receiving sole custody, by contrast, remained relatively stable (Cancian et al., 2014; Meyer et al., 2022).
This trend reflects not only fathers' increasing involvement in childcare but also broader cultural changes, including the rise of gender equality norms, women's growing labor force participation, and the expanding recognition of paternal caregiving responsibilities (Andreasson & Johansson, 2019; Melli & Brown, 2008). Today, custody determinations are generally framed in terms of the best interests of the child (Meyer et al., 2022).

Beyond Western trends, China faces unique challenges in its custody arrangements. The allocation of family roles in China has historically been shaped by patriarchal traditions, with mothers primarily associated with childrearing and fathers with financial provision and default on carrying on family lineage (Yang, 2023). These patriarchal norms grant fathers greater decision-making authority and priority over the child's custody. Additionally, women who are awarded custody often encounter significant barriers in the remarriage market (Hu & To, 2018) and career development (He & Wu, 2021). These gendered social norms create structural advantages for men in custody disputes, reinforcing traditional expectations. Furthermore, patriarchal values intersect with child gender preferences, as husbands' families

are more likely to seek custody of boys rather than girls (Zhang, Chen, & Wang, 2024).

However, recent social changes might have reshaped the social landscape in complex ways. On the one hand, the Chinese Marriage Law of 2001, which explicitly incorporates the "best interests of the child" principle, has increased the focus on children's wellbeing in custody decisions. Although its implementation remains far from perfect in practice (Xia, 2020), it marks a significant shift. On the other hand, women are increasingly asserting their rights to custody (Zhang et al., 2024), creating a counterforce to patriarchal traditions. This evolving dynamic presents a puzzle, as it appears to conflict with entrenched patriarchal structures while also suggesting a gradual shift in the balance of power in custody decisions.

Building on these insights, this study focuses on one-child families and examines custody outcomes in contested divorces in the Chinese context. Specifically, it addresses three interrelated questions: (1) Who gets custody, and how has this changed over time? (2) Is there a difference in custody outcomes based on the child's gender? (3) Does the social context moderate the relationship between the child's gender and custody outcomes? By systematically analyzing custody outcomes, this study contributes to the understanding of how institutional practices align or conflict with the goals of promoting both children's best interests and gender fairness within families and society.

Background

Child's Custody Trend: Mutual Consent Divorce vs. Court Divorce

In the United States, long regarded as a bellwether of family change, the crude divorce rate (CDR) rose sharply between 1960 and 1980, stabilizing thereafter at a level where roughly half of marriages ended in divorce (Martin & Bumpass, 1989; Raley & Bumpass, 2003). Although divorce rates have declined in recent decades, particularly among younger cohorts, the U.S. crude divorce rate (CDR) remains comparatively high[1] by international standards. This high divorce rate has led to a significant number of studies on child custody, primarily focused on the United States. By contrast, China historically has exhibited a relatively low CDR, with the rate even falling below 1 prior to the 21st century. However, alongside rapid economic development and social transformation, China has experienced a significant rise in CDR[2] over the past two decades (Li, 2020). The marriage-to-divorce ratio shows a similar pattern. Since 1978, this ratio has steadily risen over time, reaching 57.5% by 2024[3]. In other words, for every 100 new marriages registered, there were nearly 58 divorces in the same year, indicating the growing prevalence of marital dissolution in contemporary China and highlighting the increasing significance of divorce as a feature of family change.
Divorce in China can take two primary forms: mutual consent divorce and court divorce.

[1] According to the Centers for Disease Control and Prevention (CDC), the most recent data (2023) shows a crude divorce rate of 2.4 per 1,000 population. (Excludes data for California, Hawaii, Indiana, Minnesota, and New Mexico).
[2] According to the data from the National Bureau of Statistics of China, the CDR had peaked at 3.36 by 2019.
[3] According to the data from the National Bureau of Statistics of China, there were 6.106 million registered marriages and 3.513 million divorces (including both civil and court-registered cases) by 2024.

Mutual consent divorce occurs when both parties voluntarily agree to end the marriage through administrative registration, while court divorce applies when one party petitions the court due to a failure to reach an agreement. According to official statistics from the Ministry of Civil Affairs of the People's Republic of China, mutual consent divorces account for approximately 80% of all divorce cases, making it the dominant form of marital dissolution in China. However, it is noteworthy that with the implementation of the Divorce Cooling-off Period for mutual consent divorces, the proportion of court divorces has decreased. In 2020, the share of mutual consent divorces was 86.10%, but by 2023, this had declined to 71.94%. This shift indicates that the significance of court divorces is gradually increasing.

While mutual consent divorce constitutes the majority of marital dissolutions in China, it involves voluntary agreements between spouses, including those related to matters of child custody. As such, custody arrangements reached through mutual consent may be less reflective of contested gendered power dynamics or judicial decision-making. In contrast, court divorces occur when spouses are unable to reach an agreement, necessitating judicial intervention to resolve custody, property division, and related disputes. This distinction makes court divorce a particularly valuable setting for examining how custody outcomes are shaped by law, gender norms, and broader social contexts. Notably, while women face significant disadvantages in Chinese divorce courts (He, 2021), fathers still appear considerably less likely to obtain custody in court divorces than in mutual consent divorces (Cheng, 2024). One plausible explanation for this discrepancy is that fathers who are less engaged in family responsibilities are more likely to be involved in contested court divorces. This interpretation is further supported by evidence that in the majority of court divorces, the plaintiff is the mother (Zhang et al., 2024). However, official data on custody outcomes in both court and mutual consent divorces is not readily available, and previous research has rarely compared these two types of divorce in terms of custody allocation.

In this study, we focus solely on custody outcomes in one-child families within the context of court-divorced couples in China. This choice is largely based on the data availability, and we acknowledge the limitations in the discussion section.

Theoretical Framework

(1) The Best Interests of the Child

The central legal principle guiding all child custody decisions is the "best interests of the child" (BIC). This standard is crucial because extensive sociological and demographic research consistently demonstrates that parental divorce is associated with a range of adverse outcomes for children. Classic studies found that divorce is associated with lower academic achievement, weaker psychological adjustment, and higher risks of behavioral problems (Amato, 2000; Hetherington & Kelly, 2002). More recently, U.S.-based studies have confirmed these disadvantages, showing persistent impacts on children's economic security, educational trajectories, and mental health (McLanahan et al., 2013; Strohschein, 2020; Härkönen, Bernardi, & Boertien, 2017; Strohschein, 2020). Consequently, judicial

intervention in contested custody cases is fundamentally aimed at mitigating these long-term harms by placing the child in the most nurturing and supportive environment possible.

The BIC principle encompasses a holistic assessment of the child's age, existing emotional bonds, stability of the living environment, parental capacity, safety, and the child's own expressed wishes (Banach, 1998; Kelly, 1997; Lamb, 2004; Goldstein, 2015; Bagenda & Carbonilla, 2024). In China, the Marriage Law of 2001 formally adopted the BIC principle, making it a critical foundation for custody disputes. While the law mandates that courts prioritize the child's welfare, specific judicial guidelines offer a tiered, age-dependent approach to its practical application. According to the current law in China, for children under two years old, the principle often defaults to a strong maternal preference to ensure foundational care. For children aged two to eight, courts make decision based on the BIC standard, considering factors like the continuity of care, the presence of siblings, and the absence of other parental disadvantages. For children aged eight and above, their genuine wishes must be formally respected and incorporated into the court's decision.

However, despite the comprehensive legal structure and its theoretical importance, the concept of BIC remains inherently vague and ambiguous in judicial practice (Charlow, 1986; Kelly, 1997; Salter, 2012). Courts lack a scientific consensus on its exact components and struggle with how to flexibly apply and balance the needs of the child against the rights and capacities of the two parents. In China, this ambiguity often allows factors beyond the immediate needs of the child, such as objective parental resources and ingrained socio-cultural norms concerning gender and family roles, to exert significant, and often decisive, influence (Xia, 2020; Michelson, 2020). The imperfect, non-uniform application of the BIC principle across different regions thus creates the space for the paradoxical gender dynamics examined in this study.

(2) Gender Influence in Custody Decisions

Custody allocation is fundamentally linked to and reflective of broader patterns of gender equity and the division of labor. Historically, Western legal systems often exhibited a strong maternal preference for sole custody, rooted in the "Tender Years Doctrine" which reinforced the traditional gender role of women as primary caregivers and home producers (Klaff, 1982; Maccoby & Mnookin, 1992). However, this trend has shifted dramatically in Western contexts over the last three decades toward gender neutrality and the normalization of joint custody. This shift is primarily driven by rising gender egalitarianism, increased female labor force participation, and fathers' greater involvement in childcare (Coltrane, 1996; Tamm, 2019; Meyer et al., 2022). While courts now legally operate under gender-neutral standards, mothers often retain an advantage, particularly due to persistent societal stereotypes that associate women more strongly with caregiving capacity than men (Costa et al., 2018). The tension for the Chinese context lies in how these global shifts interact with a deeply entrenched patriarchal system, leading to unique and often paradoxical custody outcomes.

In China, the persistence of patriarchal traditions creates a structural advantage for fathers that complicates the application of the BIC principle. While mothers are socially positioned as having primary responsibility for daily caregiving, fathers are traditionally associated with economic provision, structural stability, and legal decision-making power (Li, 2020; Shu, Zhu & Zhang, 2013; Li & Lamb, 2015). When courts conduct a holistic BIC assessment, the father's position, often supported by the financial resources and family network of the husband's patrilineal family, can outweigh the mother's caregiving history in contested environments (Xia, 2020). The paternal advantage is especially pronounced in judgement. For instance, in divorce cases involving domestic violence, courts award child custody to the parent with physical possession of the child, while rewarding domestic violence perpetrators and punishing victims who flee abusers (Michelson, 2020). These results favor fathers in a custody pattern that diverges sharply from Western norms. We thus propose:

Hypothesis 1 (Father Advantage Effect): Compared to Western societies, there is a stronger and more persistent tendency for fathers to obtain custody in China.

Furthermore, the influence of gender extends to the specific sex of the child, acting as a powerful moderator in custody disputes. The deeply ingrained cultural preference for sons in China is a core mechanism driving the need for patrilineal continuation (Murphy, Tao & Lu, 2011; Lu & Tao, 2015; Santo & Harrell, 2016). This son preference motivates husbands and their families to pursue custody of sons far more aggressively than they pursue custody of daughters (Zhang et al., 2024), as obtaining a male heir is crucial for intergenerational family continuity and security. This differential effort creates a counterintuitive outcome. Accordingly, we propose:

Hypothesis 2 (Daughter Effect): Custody outcomes are influenced by the child's gender, and specifically, mothers are more likely to be awarded custody of daughters than of sons.

(3) Social and Cultural Context in Custody Decisions

Custody decisions, while nominally based on the individual parent-child relationship, are fundamentally nested within and constrained by the broader socio-economic and cultural context of the jurisdiction (DiMaggio & Powell, 1983). According to Modernization Theory, increases in economic development and educational attainment are associated with the erosion of traditional family structures and the rise of gender egalitarian values (Goode, 1963; Thornton & Lin, 1994). To test this idea, we utilize case-level indicators of urban or rural family, and region-level indicators, specifically economic development (e.g., regional GDP per capita) and educational investment (e.g., government education expenditure per capita). We hypothesize that these factors are not merely descriptive characteristics but are active forces that promote female economic independence and reduce the dominance of patriarchal family norms, thereby altering the outcomes of individual custody disputes.

This contextual variation is expected to significantly moderate the Father Advantage Effect we discussed earlier. In urbanized regions characterized by higher GDP and greater educational level, mothers are structurally more empowered and less economically dependent

on the traditional family system. This context typically offers better employment opportunities, higher personal earnings, and stronger, more egalitarian social networks for women (Bauer et al., 1992). When a mother in a modern, urbanized region contests custody, her increased economic stability (Zhao, 2018) directly addresses the structural advantage traditionally held by the father concerning "financial capacity" under the BIC standard. We therefore explicitly state:

Hypothesis 3a (Social Cultural Effect): The Father Advantage Effect will be significantly weaker in regions with higher levels of economic development and educational level, resulting in a higher likelihood of mothers obtaining custody in these contexts.

Finally, the social context is expected to moderate the underlying son preference that drives the Daughter Effect. The patrilineal imperative to secure a male heir is a feature of deeply rooted traditional culture, which tends to be more intensely maintained in rural or less economically developed areas (Lei & Pals, 2011; Lin, Sun & Xing, 2021). In regions with high educational level and economic development, these traditional values are generally diluted, and gender preferences become less pronounced (Thornton & Lin, 1994; Zhang et al., 2024). Consequently, the father's motivation to aggressively pursue the son (and concede the daughter) is expected to weaken. We therefore propose:

Hypothesis 3b (Social Cultural Effect): The Daughter Effect will be significantly less pronounced in urban, high-GDP, and high-education regions.

To effectively isolate and test these cross-level interaction effects, we will employ a Multilevel Regression Framework that explicitly incorporates the variation across courts and regions.

Data and Method

Data

Our dataset includes two-level variables, i.e., case (family) level and region (city) level. Case-level variables are cleaned and encoded from court judgement documents, which are obtained from professional legal databases *China Judgements Online* (中國裁判文書網) and *PKU Law* (北大法寶). Region-level variables are from *China City Statistical Yearbook 2000-2024* (中國城市統計年鑒). The two levels of variables are combined by city coding.

In recent years, the use of court judgments for quantitative social science research has become increasingly common (e.g., Cai et al., 2018; Xia et al., 2020; Wang, 2025). A potential concern in the literature is the representativeness of the judgments due to selective uploading. Lin, Xia, and Cai (2024) propose a method to assess the severity of this issue, and in this study, we consider the resulting measurement error to be acceptable, as divorce cases tend to have less security concern.

Case level: We obtained raw judgment documents from *China Judgements Online* and *PKU*

Law, and after a series of cleaning steps, constructed a usable judgment dataset. Variables of interest were extracted using a large language model (Deepseek-R1) with JSON-formatted prompts.[4] LLMs have recently been applied to text annotation in social science research, and in many contexts, they have even outperformed human experts in accuracy. Yet their use also raises concerns.[5] To address these risks, we adopt two widely recommended strategies: improving prompts and sampling with author verification of inference accuracy (Abraham et al., 2025; Lin & Zhang, 2025). The overall process is illustrated in Figure 1.

Since there is no established format for judgment documents, some variables have missing data. In particular, custody under Chinese law is more likely to be awarded to the other parent if one party (1) has shown negligence in child rearing, (2) has children from another marriage, or (3) suffers from a serious illness that hinders child rearing; by contrast, impaired fertility is often given priority consideration. These circumstances are typically introduced as evidence in court, while their absence is treated as the default case (Ng & He, 2017).

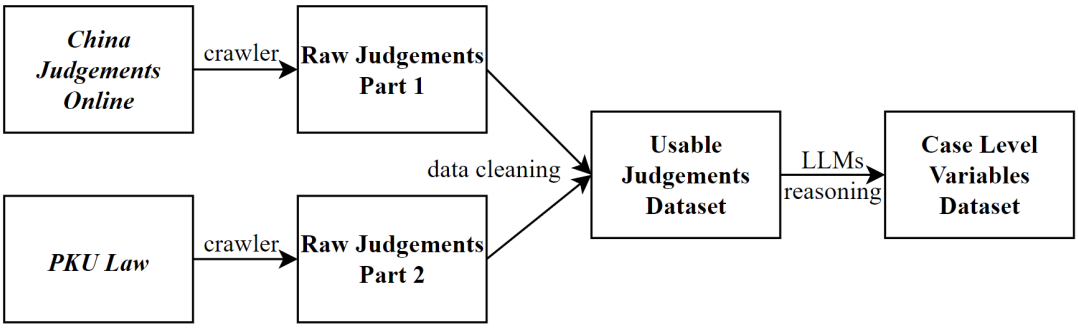

Figure 1. Workflow of Case-Level Variables Extraction

Region Level: According to Chinese law, divorce proceedings follow the principle of territorial jurisdiction, meaning that the case is heard in the court of the defendant's household registration or habitual residence.[6] The region level mentioned here is the region where the court is located. We draw on the *China City Statistical Yearbook (2000-2024)* to construct measures of the regional social and cultural context. Two representative dimensions are selected: **GDP per capita** (CNY), which captures the level of local economic development, and **education expenditure per capita** (CNY), which reflects investment in the educational and cultural sphere. To address skewness in the distribution, these two variables are log-transformed prior to analysis.

[4] DeepSeek-R1, which uses reinforcement learning to enhance reasoning in LLMs, outperforms traditionally trained models and was featured as a *Nature* cover story (Guo et al. 2025).

[5] Examples of using LLMs for text annotation can be found in Linegar, Kocielnik & Alvarez (2023); Ollion et al. (2023); Ziems et al. (2024); Alizadeh et al. (2025); examples comparing LLMs with human experts are reported in Törnberg (2024) and Parfenova et al. (2025); concerns about potential biases are discussed in Egami et al. (2024); Rossi et al. (2024); and Lin & Zhang (2025).

[6] See in *Civil Procedure Law of the People's Republic of China*, article 22.

The final dataset contains 220,994 observations (judgment documents) from year 2000 to 2025, covering 289 cities. Table 1 presents the variables used in this study. The dependent variable is custody assignment, and the key independent case-level variables are child gender, year group, and urban family, while region-level variables include GDP per capita and education expenditure. Additional control variables comprise divorce reason, family plaintiff, father/mother duty, father/mother other children, and father/mother health status. The selection of control variables takes into account the circumstances of both parents in divorce litigation and corresponds to the basic principles of child custody allocation.

Table 1. Descriptive Statistics of Case- and Region-Level Variables (N = 220,994)

Variable	Description	Type[1]	Mean / Percent(%)						Missing (%)[2]
			Overall	2000-2005	2006-2010	2011-2015	2016-2020	2021-2025	
Case Level									
Custody Outcome	Custody awarded to parent (1 = mother, 0 = father)	Dum.	0.516	0.550	0.483	0.508	0.545	0.497	3.37
Child Gender	Gender of the child (1 = daughter, 0 = son)	Dum.	0.480	0.504	0.489	0.479	0.480	0.483	6.65
Divorce Reason	Main reason for divorce (1 = incompatibility, 2 = cheating, 3 = lack of duty, 4 = violence, 5 = crime)	Cat.	1 = 45.7, 2 = 5.8, 3 = 19.4, 4 = 21.2, 5 = 7.9	1 = 29.2, 2 = 10.4, 3 = 22.0, 4 = 28.6, 5 = 9.8	1 = 42.3, 2 = 9.2, 3 = 20.3, 4 = 7.8, 5 = 10.3	1 = 44.0, 2 = 5.9, 3 = 21.0, 4 = 21.0, 5 = 8.1	1 = 49.1, 2 = 5.2, 3 = 5.6, 4 = 22.9, 5 = 7.2	1 = 67.7, 2= 3.3, 3 = 11.1, 4 = 14.4, 5 = 3.6	13.38
Family Plaintiff	Who files for divorce (1 = mother, 0 = father)	Dum.	0.631	0.594	0.579	0.615	0.680	0.681	1.95
Father Duty[3]	Father's legal negligence in child rearing (1 = unfulfilled; 0 = fulfilled)	Dum.	0.244	0.175	0.186	0.246	0.266	0.105	0
Mother Duty[3]	Mother's legal negligence in child rearing (1 = unfulfilled; 0 = fulfilled)	Dum.	0.175	0.135	0.142	0.195	0.146	0.049	0
Father Other Children[3]	Father has children from another marriage (1 = yes; 0 = no)	Dum.	0.018	0.009	0.010	0.017	0.025	0.010	0
Mother Other Children[3]	Mother has children from another marriage (1 = yes; 0 = no)	Dum.	0.017	0.013	0.009	0.016	0.022	0.014	0
Father Health Status[3]	Father's health status (1 = healthy; 2 = other health problems; 3 = impaired fertility)	Cat.	1 = 96.4, 2 = 3.6, 3 = 0.1	1 = 96.0, 2 = 3.8, 3 = 0.2	1 = 97.3, 2 = 2.7, 3 = 0	1 = 96.3, 2 = 3.6, 3 = 0.1	1 = 96.1, 2 =3.9, 3 = 0.1	1 = 99.0, 2 = 0.9, 3 = 0	0
Mother Health Status[3]	Mother's health status (1 = healthy; 2 = other health problems; 3 = impaired fertility)	Cat.	1 = 95.0, 2 = 4.8, 3 = 0.3	1 = 93.3, 2 = 6.7, 3 = 0	1 = 95.8, 2 = 4.0, 3 = 0.3	1 = 94.9, 2 = 4.8, 3 = 0.3	1 = 94.6, 2 = 5.1, 3 = 0.3	1 = 97.9, 2 = 2.1, 3 = 0.1	0
Year Group	Judgment year of the case (1 = 2000-05, 2 = 2006-10, 3 = 2011-15, 4 = 2016-20, 5 = 2021-25)	Cat.	1 = 0.2, 2 = 4.9, 3 = 66.4, 4 = 25.3, 5 = 3.2	-	-	-	-	-	0
Urban Family	Family residence (1 = urban; 0 = rural)	Dum.	0.446	0.644	0.568	0.430	0.458	0.582	42.58
Region Level									
GDP per capita	Natural log of city GDP per capita in the case year	Num.	10.64	9.639	10.253	10.623	10.765	10.861	12.44
Edu. Exp. per capita	Natural log of education expenditure per captica in the case year	Num.	7.128	5.488	6.499	7.090	7.315	7.342	12.35

Notes: Detailed coding examples are reported in Appendix 1. [1] Dum. = Dummy, Cat. = Categorial, Num. = Numerical; [2] Missing values occur when a variable is not mentioned in the judgment text; [3] For those variables, the absence of mentions does not indicate missing but the default condition (e.g., child-rearing duties fulfilled, no

other children, healthy).

Method

Before modeling, we use descriptive analysis of the overall custody split addresses the baseline assumption of Hypothesis 1 (Father Advantage Effect).

STAGE 1: Baseline and Temporal Analyses

In the first step, we test Hypothesis 2 (Daughter Effect). We begin with a baseline logistic regression that examines whether daughters are more likely than sons to be awarded to mothers, without accounting for temporal or contextual moderators. Let Y_i denote whether custody in case i was awarded to the mother ($Y_i = 0$) or the father ($Y_i = 0$). The baseline model is:

$$\text{logit}\big(P(Y_i = 1)\big) = \beta_0 + \beta_1 \text{Daughter}_i + \sum_{k=2}^{K} \gamma_k C_{ki} \tag{1}$$

Where $\text{Daughter}_i = 1$ if the child is female, 0 otherwise; C_{ki} are case-level control variables include: year group, divorce reason, litigation role (plaintiff), parental duty, presence of other children, and parental health status.

Next, to evaluate whether the daughter effect varies across time, we introduce interactions between child gender and five-year period dummies:

$$\text{logit}\big(P(Y_i = 1)\big) = \beta_0 + \beta_1 \text{Daughter}_i + \sum_{t} \delta_t \text{YearGroup}_{it} + \sum_{t} \theta_t (\text{Daughter}_i \times \text{YearGroup}_{it}) + \sum_{k=2}^{K} \gamma_k C_{ki} \tag{2}$$

Where YearGroup_{it} indexes the five-year intervals. The five-year periods are defined as 2000-2005, 2006-2010, 2011-2015, 2016-2020, and 2021-2025. This grouping balances sample size disparities across years, particularly the sparsity of early cases, and ensures greater statistical stability. We use 2011-2015 as the reference category, since it has the largest sample size and sits at the midpoint, allowing comparisons in both directions.

Finally, to probe temporal heterogeneity more directly, we estimate separate regressions for each year-group subsample:

$$\text{logit}\big(P(Y_i = 1 \mid \text{YearGroup} = t)\big) = \beta_0^{(t)} + \beta_1^{(t)} \text{Daughter}_i + \sum_{k=2}^{K} \gamma_k^{(t)} C_{ki} \tag{3}$$

which yields period-specific estimates of the daughter effect without imposing pooled interaction structures. Examining the coefficients of Daughter_i across subsamples provides an intuitive picture of how the daughter effect evolves over time, complementing the full-sample interaction model by highlighting both cross-period contrasts and overall temporal trends.

STAGE 2: Multilevel Logistic Regression with Social Cultural Context

In addition to temporal variation, custody decisions may be shaped by broader regional socio-economic environments. We therefore adopt a *two-level logistic regression framework* in which individual custody cases (Level 1, families/cases) are nested within prefecture-level cities (Level 2, judicial regions). Although the raw custody dataset records three administrative tiers (province, prefecture-level city, and county/district), we use the prefecture-level city as the clustering unit because regional covariates are most complete at this level and because it yields sufficiently large cluster sizes for reliable estimation. The binary outcome is an indicator that custody was awarded to the mother, ($Y_{ijt} = 1$) for case *i* in region *j* at time *t*. Based on the work of Sommet and Morselli (2017), we construct following three steps modeling.

(A) Mundlak within-between method

To process clustered data we follow the Mundlak within-between approach (Mundlak, 1978), as elaborated in subsequent applied work (Dieleman & Templin, 2014; Bell, Fairbrother & Jones, 2019) and applied to comparative longitudinal or repeated cross-sectional settings (Fairbrother, 2014; Schmidt-Catran & Spies, 2016; Duncan et al., 1996). The classical advantage of the Mundlak decomposition is that it permits the analyst to estimate within-cluster (time-varying) effects and between-cluster (cross-sectional) effects simultaneously by introducing cluster means of time-varying covariates, rather than relying solely on high-dimensional fixed effects or on a random-effects specification that assumes strict exogeneity.

To account for both temporal dynamics within regions and cross-sectional differences between regions, we adopt the two-way Mundlak (TWM) formulation (Wooldridge 2025). For a region-level time-varying covariate X_{jt}, the definition takes the form:

$$\boldsymbol{f}(X_{jt}) = \beta_W X_{jt} + \beta_{B1}\bar{X}_j + \beta_{B2}\bar{X}_t \tag{4}$$

where $\bar{X}_j$ denotes the temporal mean of X_{jt} for region *j*, $\bar{X}_t$ denotes cross-sectional mean across all regions at time *t.* We denote this specification compactly as $\boldsymbol{f}(X_{jt})$, and in what follows we refer back to this shorthand. In a logistic specification this yields the following compact model:

$$\text{logit}\left(P(Y_{jt} = 1)\right) = \beta_0 + \boldsymbol{f}(X_{jt}) + \sum_k \gamma_k C_{kjt} \tag{5}$$

where β_W captures the within-region (time-varying) association, while β_{B1} and β_{B2} captures the between-region and year association, respectively. C_{kjt} denotes additional controls if included. This formulation makes the two-way within-between structure explicit: β_W reflects how deviations of a city's covariate from its own mean affect custody outcomes, β_{B1} captures how differences in long-run city averages relate to outcomes across regions, and β_{B2} captures how period-specific averages shape outcomes across years.

A number of methodological considerations are worth noting. First, the equivalence between random-effects and fixed-effects estimators that holds in linear models does not generally extend to generalized linear models: under nonlinear link functions such as the logit, RE and

FE estimands can diverge (Bell et al., 2019). Wooldridge's recent work on two-way Mundlak specifications demonstrates useful equivalences with two-way fixed effects in OLS settings (Wooldridge 2021, 2025), but these results do not imply identical estimands in logistic models. Second, although including cluster means does not perfectly partition higher-level processes from within effects in every GLM application, simulation and applied research suggest that resulting biases are usually modest (Goetgeluk & Vansteelandt 2008; Brumback 2010; Allison 2014). Moreover, biostatistical applications indicate that the Mundlak within-between correction often reduces bias substantially and yields interpretable within- and between-cluster estimates (Allison 2014; Zhao, O'Hagan, & Salter-Townshend, 2024). Third, a simple alternative is to replace time-varying covariates with their overall regional means across all periods (e.g., Grafova, Monheit, & Kumar, 2020). However, when the temporal span is long or when temporal dynamics are substantively important, it is preferable to report both the within-region (time-varying) and between-region (cluster-mean) coefficients. This dual reporting avoids conflating temporal change with cross-sectional differences and enhances interpretability.

(B) Baseline Multilevel Model

After confirming the appropriateness of using a multilevel logistic regression framework, we proceed to examine the influence of the socio-cultural context on custody outcomes by incorporating variables from both levels of analysis. At Level 1, we include information on whether the district (county) in which the family resides is classified as urban or rural. At level 2, we merged custody cases with regional indicators: GDP per capita and education expenditure per capita. The general two-level specification is:

$$\text{logit}\left(P\left(Y_{ijt}=1\right)\right)=\beta_0+\beta_1\text{Daughter}_i+\beta_2\text{FamilyUrban}_i+\sum_k\gamma_k C_{kij}+\boldsymbol{f}(\text{GDP}_{jt})+\boldsymbol{f}(\text{EduExp}_{jt}) \quad (6)$$

where Daughter_i indicates whether the child is female, FamilyUrban_i is an individual-level dummy for urban families, $\boldsymbol{f}(\text{GDP}_{jt})$ and $\boldsymbol{f}(\text{EduExp}_{jt})$ denote the two-way Mundlak decompositions of per capita GDP and education expenditure for region j, time t. C_{kij} represents additional family-level controls, including year group, divorce reason, litigation role (plaintiff), parental duty, presence of other children, and parental health status.

(C) Interaction Models

After examining the influence of the socio-cultural context on custody awards to mothers versus fathers, we further investigate how the daughter effect is conditioned by specific socio-cultural factors. To this end, we estimate three models, each introducing one theoretically motivated interaction term:

1. Urbanicity interaction (Same Level)：

$$\text{logit}\left(P\left(Y_{ijt}=1\right)\right)=\beta_0+\beta_1\text{Daughter}_i+\beta_2\text{FamilyUrban}_i+(\text{GDP}_{jt})+\boldsymbol{f}(\text{EduExp}_{jt})+\sum_k\gamma_k C_{kij}+\boldsymbol{f}\theta_1(\text{Daughter}_i\times\text{FamilyUrban}_i) \quad (7)$$

2. Economic Development interaction (Cross-level):

$$\text{logit}\left(P\left(Y_{ijt}=1\right)\right)=\beta_0+\beta_1\text{Daughter}_i+\beta_2\text{FamilyUrban}_i+\boldsymbol{f}(\text{GDP}_{jt})+\boldsymbol{f}(\text{EduExp}_{jt})+\sum_k\gamma_k C_{kij}+\theta_2(\text{Daughter}_i\times\overline{\text{GDP}_j}) \quad (8)$$

3. Education investment interaction (Cross-level):

$$\text{logit}\left(P\left(Y_{ijt}=1\right)\right)=\beta_0+\beta_1\text{Daughter}_i+\beta_2\text{FamilyUrban}_i+\boldsymbol{f}(\text{GDP}_{jt})+\boldsymbol{f}(\text{EduExp}_{jt})+\sum_k\gamma_k C_{kij}+\theta_3(\text{Daughter}_i\times\overline{\text{EduExp}_j}) \quad (9)$$

After examining how each contextual factor moderates the daughter effect separately, we fitted a comprehensive specification including all three interactions simultaneously to evaluate robustness and net effects:

$$\text{logit}\left(P\left(Y_{ijt}=1\right)\right)=\beta_0+\beta_1\text{Daughter}_i+\beta_2\text{FamilyUrban}_i+\boldsymbol{f}(\text{GDP}_{jt})+\boldsymbol{f}(\text{EduExp}_{jt})+\sum_k\gamma_k C_{kij}+\text{Daughter}_{ij}\left(\theta_1\text{FamilyUrban}_{ij}+\theta_2\overline{\text{GDP}_j}+\theta_3\overline{\text{EduExp}_j}\right) \quad (10)$$

Results

Balanced Custody Patterns in China

Figure 2 shows the distribution of custody awards across all cases. Overall, mothers were awarded custody in 49.9% of cases and fathers in 46.8%, with 3.4% of cases missing outcome information, indicating that custody was distributed nearly evenly between parents.

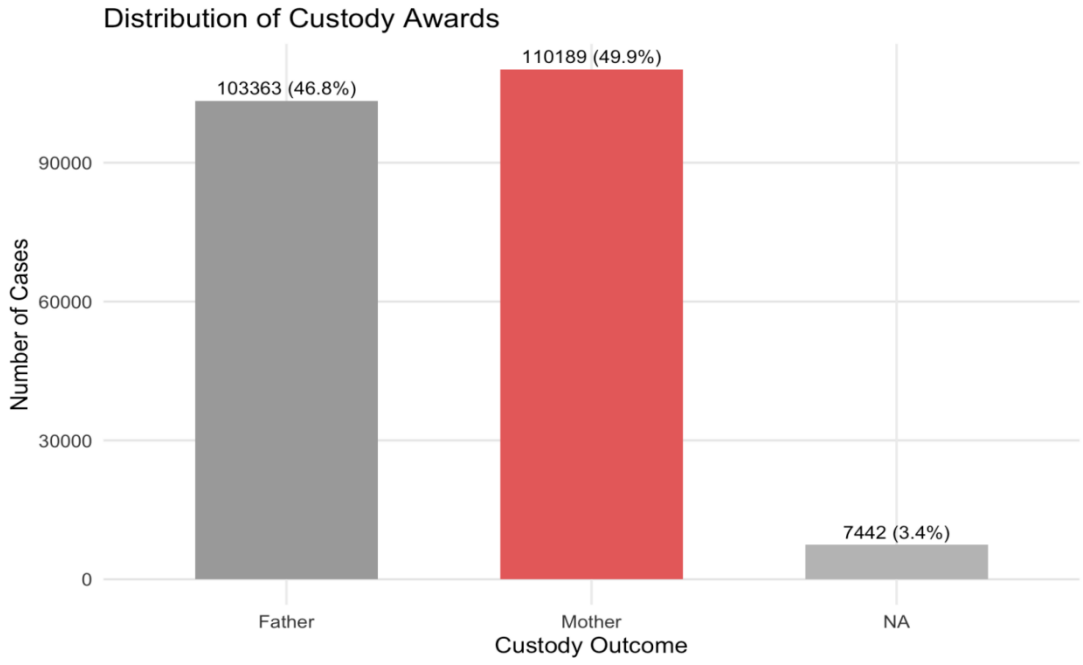

Figure 2. Distribution of Custody Outcome Between Mothers and Fathers

Notes: Colored bars indicate the number of cases for each outcome (gray = father, red = mother), and text labels above the bars show both counts and percentages.

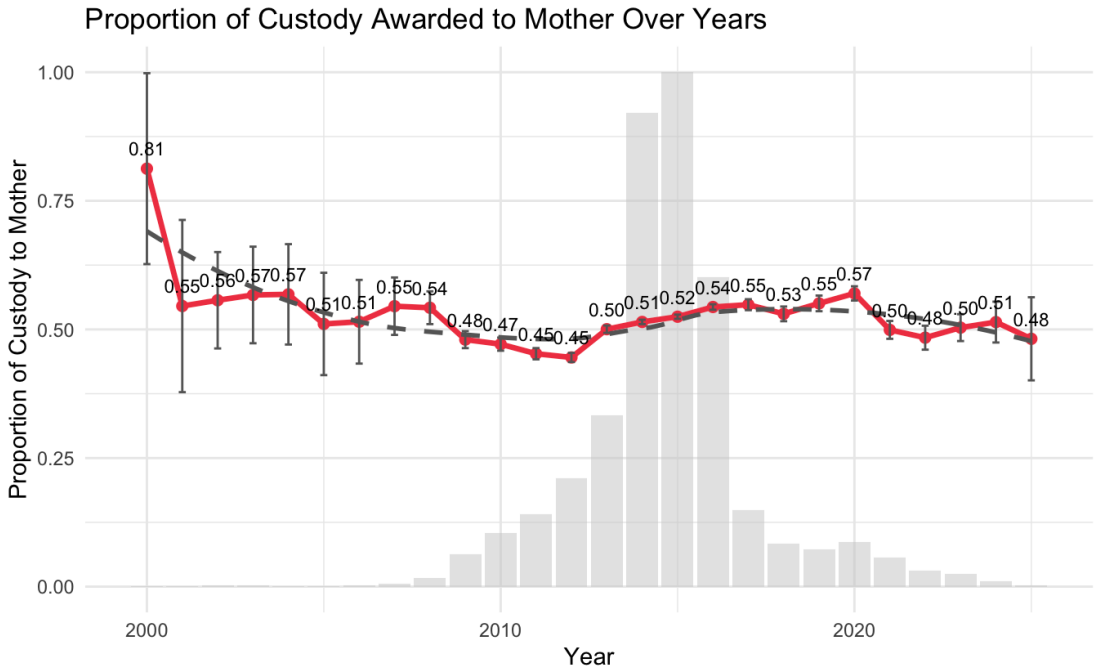

Figure 3. Annual Proportion of Custody Awarded to Mothers

Notes: Red line and points show observed proportions; gray bars indicate relative case counts per year; error bars represent 95% confidence intervals. Dashed gray line shows LOESS-smoothed trend. Note that sample sizes in early years (2000-2006) are very small (less than 300 observations per year), leading to wider confidence intervals and greater uncertainty in estimated proportions for these years.

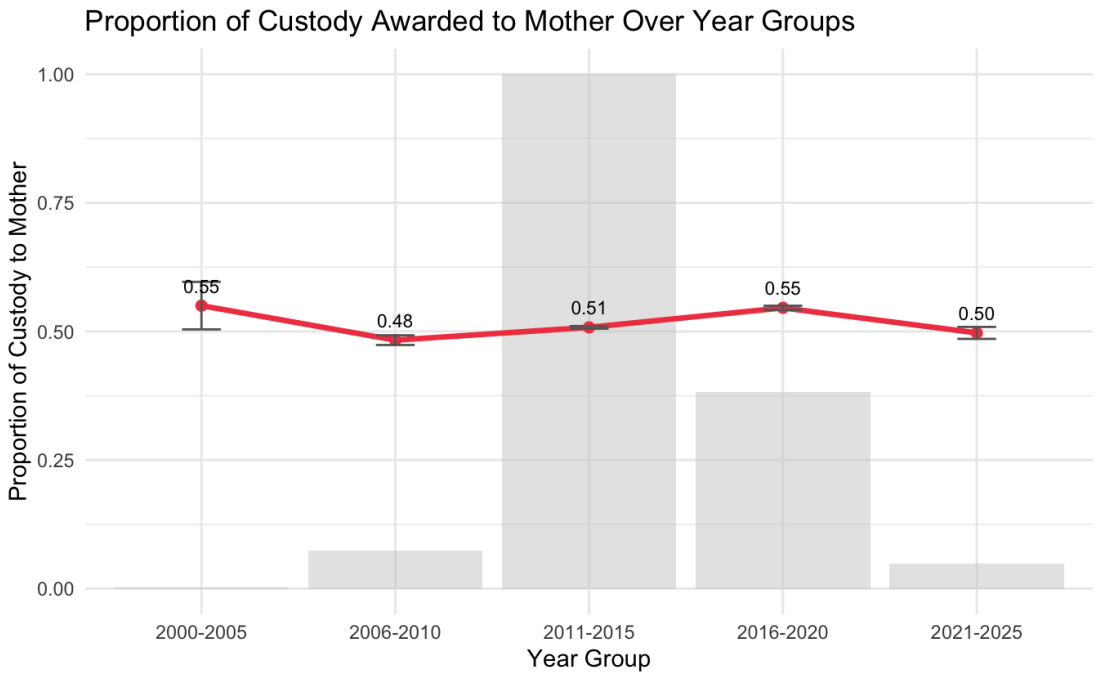

Figure 4. Proportion of Custody Awarded to Mothers Across Five-year Groups

Notes: Red line and points show observed proportions; gray bars indicate relative case counts per group; error bars represent 95% confidence intervals. Proportions fluctuate between 48% and 55%, showing no clear upward or downward trend.

The annual (yearly) plot of custody awards (Figure 3 and Figure 4) shows the proportion of cases in which mothers were granted custody for each calendar year. However, the early years (2000-2007) contain very few cases, resulting in highly variable estimates and wide confidence intervals. To address this limitation and obtain more stable estimates, the data were aggregated into five-year groups (year_group). The proportion of custody awarded to mothers fluctuates between 48% and 55% across these year groups. While there is a slight decline in the 2006-2010 group, the proportion rebounds in 2011-2020 and stabilizes around 50% in 2021-2025. Overall, there is no clear upward or downward trend, indicating that mothers and fathers have roughly comparable chances of being granted custody over time.

However, although custody outcomes in court divorces appear relatively balanced between fathers and mothers, it is important to note that fathers are generally less likely to be awarded custody in court cases than in the overall post-divorce average. This suggests that even within the courtroom setting, potential structural advantages may still operate in favor of men. Moreover, the fact that nearly 50% of custody awards go to fathers is striking; compared with Western contexts, this proportion is relatively high. This finding speaks directly to Hypothesis 1, underscoring that in the Chinese context, fathers continue to enjoy a substantial advantage in obtaining custody.

The Daughter Effect on Custody Outcomes

Table 2 reports logistic regression results for custody awarded to mothers (1 = Mother, 0 = Father). When the child is a daughter, the mother is about twice as likely to be awarded custody compared to when the child is a son ($\beta = 0.697$, OR = 2.01, $p < 0.001$), controlling for year group, divorce reasons, family plaintiff, parental duty, other children, and parental health. Key controls behave as expected, for instance, father's failure to fulfill duty increases maternal custody probability, while mother's failure reduces it. Multicollinearity is minimal (all standardized GVIF < 2).

Table 2. Logistic Regression of Child Custody Outcome on Child Gender

Dependent variable: Custody awarded to mother (1 = Mother, 0 = Father)

Variable	Coefficient	Std. Error
Independent Variable		
Child Gender (Daughter = 1, Son = 0 ref.)	0.697***	(0.012)
Control Variables		
Year Group (ref = 2011-2015)		
─ 2000-2005	0.312*	(0.143)
─ 2006-2010	-0.185***	(0.029)
─ 2016-2020	0.020	(0.014)
─ 2021-2025	-0.186***	(0.038)
Divorce Reason (ref = Mutual incompatibility)		
─ Cheating	-0.083**	(0.027)
─ Lack of Duty	-0.188***	(0.021)
─ Domestic Violence	-0.358***	(0.016)
─ Crime (Drugs/Gambling/Other Illegal)	-0.208***	(0.026)
Family Plaintiff (Mother = 1, Father = 0 ref.)	0.049***	(0.014)
Father Duty (Unfulfilled = 1, Fulfilled = 0 ref.)	2.573***	(0.020)
Mother Duty (Unfulfilled = 1, Fulfilled = 0 ref.)	-3.920***	(0.040)
Father Other Children (Yes = 1, No = 0 ref.)	0.873***	(0.051)
Mother Other Children (Yes = 1, No = 0 ref.)	-0.240***	(0.050)
Father Health Status (ref = Healthy)	0.306	(0.283)
─ Other Health Problems	0.228***	(0.035)
─ Impaired Fertility	0.313	(0.282)
Mother Health Status (ref = Healthy)		
─ Other Health Problems	-0.564***	(0.029)
─ Impaired Fertility	0.395***	(0.109)
Constant	-0.230***	(0.014)
Observations	176,197	
Log Likelihood	-80,274	
Akaike Inf. Crit.	160,600	

*Notes: Standard errors in parentheses. Significance levels are indicated by p<0.05, ** p<0.01, *** p<0.001.*

Table 3. Logistic Regression of Custody Awarded to Mother: Full Sample and Year-Group Subsamples

Dependent variable: Custody awarded to mother (1 = Mother, 0 = Father)

Variable	Full Sample	Year-Group Subsamples				
		00-05	06-10	11-15	16-20	21-25
	(1)	(2)	(3)	(4)	(5)	(6)
Independent Variables						
Child Gender (Daughter=1, Son=0 ref.)	0.673***	0.644*	0.559***	0.679***	0.760***	0.865***
	(0.015)	(0.294)	(0.057)	(0.015)	(0.025)	(0.073)
Year Group (ref = 2011-2015)						
─ 2000-2005	0.325	-	-	-	-	-
	(0.201)					
─ 2006-2010	-0.119**	-	-	-	-	-
	(0.040)					
─ 2016-2020	-0.026	-	-	-	-	-
	(0.020)					
─ 2021-2025	-0.303***	-	-	-	-	-
	(0.053)					
Child Gender × Year Group						
─ daughter × 00-05	-0.025	-	-	-	-	-
	(0.286)					
─ daughter × 06-10	-0.134*	-	-	-	-	-
	(0.058)					
─ daughter × 16-20	0.098***	-	-	-	-	-
	(0.029)					
─ daughter × 21-25	0.244**	-	-	-	-	-
	(0.077)					
Control Variables (folded)	-	-	-	-	-	-
Constant	-0.219***	0.085	0.618***	0.270***	-0.068*	-0.243**
	(0.015)	(0.319)	(0.060)	(0.016)	(0.028)	(0.080)
Observations	176,197	293	7,630	120,556	43,994	3,724
Log Likelihood	-80,260	-142	-3,718	-53,894	-20,187	-2,172
Akaike Inf. Crit.	160,565	312	7,466	107,817	40,404	4,374

*Notes: Standard errors in parentheses. Significance levels are indicated by p<0.05, ** p<0.01, *** p<0.001. Column (1) reports the pooled model with year-group indicators and interactions between child gender and year group. Columns (2)-(6) report separate regressions for each year group. All models control for Divorce Reason, Family Plaintiff, Father/Mother Duty, Father/Mother Other Child(ren), and Father/Mother Health Status. Results for early years should be interpreted with caution due to small N.*

Table 3 examines how the daughter effect in custody allocation evolved across time. The full-sample model shows that, compared to 2011-2015, the daughter advantage was weaker in 2006-2010 but became stronger in 2016-2020 and especially in 2021-2025. This indicates that although the overall likelihood of custody being awarded to mothers remained relatively stable across year groups, the role of child gender in shaping custody decisions became more salient.

The year-group subsamples confirm this pattern. As Figure 5 shows, estimates for the early 2000s are less stable due to the small sample size, but across all periods the daughter effect remains positive and strengthens in the more recent cohorts, peaking in 2021-2025. Taken together, these results suggest that maternal preference is increasingly contingent on the child being a daughter, reinforcing gendered expectations of caregiving, even in a context where the overall distribution of custody between mothers and fathers has stayed roughly balanced.

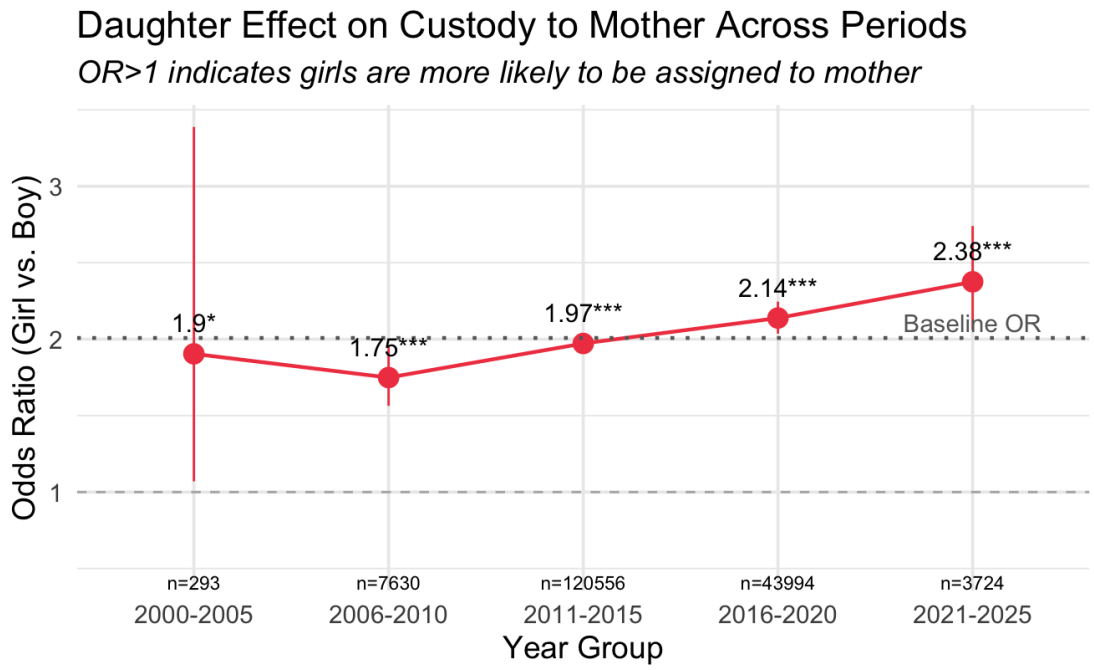

Figure 5. Daughter Effect on Custody Awarded to Mothers Across Across Five-year Groups

*Notes: Points show estimated odds ratios (OR) from year-group subsamples (2)-(6) with 95% confidence intervals. The red line connects the estimates to highlight the temporal trend. The gray dotted line and shaded area represent the baseline OR from the model without interaction. Sample sizes for each period are shown below the x-axis. Significance levels are indicated by * p<0.05, ** p<0.01, *** p<0.001.*

This result supports Hypothesis 2, demonstrating the existence of a daughter effect in custody outcomes and its gradual strengthening over time. It suggests that custody decisions in Chinese divorce litigation are influenced by an implicit rule tied to the child's gender: while the overall pattern reflects a balanced distribution shaped by fathers' structural advantage, daughters are more likely to be awarded to mothers, whereas sons are more often placed in the custody of fathers.

Socio-Cultural Context and Heterogeneity in Custody Decisions

The results in Table 4 highlight the significant roles of child gender and socio-economic context in shaping custody outcomes. Consistently across all model specifications, the coefficient for Child Gender (Daughter = 1, Son = 0) is positive and highly significant, indicating a robust daughter effect: daughters are substantially more likely than sons to be

awarded to their mothers. This effect persists even when interactions with urbanicity, GDP per capita, and education expenditure per capita are introduced, confirming that child gender has an independent influence on custody decisions in Chinese litigation divorce cases.

Regarding the socio-economic context, urban residence is associated with substantially higher odds of maternal custody, as children from urban households ($\beta = 0.737$, OR = 2.09, $p < 0.001$) are approximately 2.1 times more likely to be placed with their mothers than those from rural households. This pattern may reflect better access to resources, social services, and labor-market opportunities for urban mothers, which strengthens their ability to secure custody. GDP per capita (city) ($\beta = 0.511$, OR = 1.67, $p < 0.001$), representing the long-term regional economic average, is also positively associated with maternal custody, revealing that a one-unit increase in the city-level long-run economic indicator is associated with approximately 67% higher odds of custody being awarded to the mothers. Similarly, Education Expenditure per capita (city) ($\beta = 0.164$, OR = 1.18, $p < 0.1$), the long-term regional average of educational investment, shows a positive effect, indicating that regions with higher investment in education provide an environment conducive to maternal custody. In contrast, the short-term, year-specific GDP per capita ($\beta = -0.270$, OR = 0.76, $p < 0.01$) exhibits a negative coefficient, implying that temporary increases in local economic output do not necessarily translate into higher maternal custody, highlighting a distinction between long-term structural advantages and short-term economic fluctuations. Overall, these findings support Hypothesis 3, demonstrating that the social and cultural context significantly influences custody outcomes. In more developed regions, courts are more likely to award custody to mothers, and the influence of patriarchal norms appears to be attenuated.

Notably, the daughter effect is moderated by the social and cultural context. All three related interactions Child Gender × Urban Family ($\beta = -0.140$, OR = 0.87, $p < 0.001$), Child Gender × GDP per capita (city) ($\beta = -0.064$, OR = 0.94, $p < 0.05$), and Child Gender × Education Expenditure per capita (city) ($\beta = -0.102$, OR = 0.90, $p < 0.05$) are negative and statistically significant, indicating that the daughter effect is attenuated in more developed regions. Specifically, in urban households and regions with higher long-term economic or educational investment, the gender-based disparity in custody outcomes is smaller. This pattern suggests that structural advantages in wealthier, more urbanized, and education-invested regions mitigate traditional patriarchal norms, leading to more balanced custody outcomes across child gender. Together, these findings support Hypothesis 3, demonstrating that the social and cultural context can substantially influence the extent of gender bias in custody decisions.

Table 4. Child Gender, Social Cultural Context, and Custody Outcomes: Main and Interaction Effects

Dependent variable: Custody awarded to mother (1 = Mother, 0 = Father)

Variable	Main Effect	Interaction Effect			
	Baseline (1)	Urban Family (2)	GDP per capita (3)	Edu. Exp. per capita (4)	All Interactions (5)
Independent Variable					
Child Gender	0.737***	0.798***	1.420***	1.463***	1.234***
(Daughter=1, Son=0 ref.)	(0.018)	(0.023)	(0.359)	(0.348)	(0.390)
Urban Family	0.487***	0.551***	0.487***	0.487***	0.546***
(Urban = 1, Rural = 0 ref.)	(0.018)	(0.025)	(0.018)	(0.018)	(0.025)
GDP per capita	-0.270**	-0.269**	-0.268**	-0.269**	-0.269***
	(0.096)	(0.096)	(0.096)	(0.096)	(0.096)
GDP pc (city)	0.511***	0.510***	0.539***	0.510***	0.513*
	(0.100)	(0.100)	(0.101)	(0.100)	(0.103)
GDP pc (year)	0.455*	0.454*	0.457*	0.455*	0.454*
	(0.196)	(0.196)	(0.196)	(0.196)	(0.196)
Edu. Exp. per capita	-0.181*	-0.181*	-0.182*	-0.181*	-0.181*
	(0.090)	(0.090)	(0.090)	(0.090)	(0.090)
Edu. Exp. pc (city)	0.164!	0.165!	0.164!	0.210*	0.189!
	(0.094)	(0.094)	(0.094)	(0.094)	(0.099)
Edu. Exp. pc (year)	0.361*	0.361*	0.360*	0.360*	0.361*
	(0.158)	(0.158)	(0.158)	(0.158)	(0.158)
Child Gender × Urban Family	-	-0.140***	-	-	-0.130***
		(0.035)			(0.037)
Child Gender × GDP pc (city)	-	-	-0.064*	-	-0.005
			(0.032)		(0.050)
Child Gender × Edu. Exp. pc (city)	-	-	-	-0.102*	-0.054
				(0.049)	(0.072)
Control Variables (folded)	-	-	-	-	-
Constant	-10.290***	-10.290***	-10.606***	-10.618***	-10.503***
	(1.186)	(1.186)	(1.197)	(1.197)	(1.120)
Observations	94,003	94,003	94,003	94,003	94,003
R^2					
Akaike Inf. Crit.	79,152	79,138	79,151	79,150	79,141

*Notes: Standard errors in parentheses. Significance levels are indicated by !<0.1, p<0.05, ** p<0.01, *** p<0.001. Models examine main and interaction effects of child gender with urbanicity, GDP per capita, and education expenditure; all models control for Divorce Reason, Family Plaintiff, Father/Mother Duty, Father/Mother Other Children, and Father/Mother Health Status.*

Discussion

This study reveals three key findings. First, in Chinese court divorces, custody is distributed roughly evenly between mothers and fathers. Despite this apparent balance, compared with Western contexts, Chinese fathers continue to enjoy a notable structural advantage, indicating that gendered power dynamics remain influential. Second, child gender exerts a clear effect: mothers are more likely to receive custody of daughters than sons. This daughter effect has strengthened over time, suggesting that patriarchal norms continue to shape judicial

decisions, even within a seemingly balanced custody system. Third, the broader socio-cultural context has a significant impact on custody allocation. In more developed, urban, and education-invested regions, maternal custody is more common, and gender-biased effects are attenuated. This implies that structural advantages and progressive socio-cultural environments can mitigate traditional patriarchal norms and promote more equitable custody outcomes.

This study positions its findings against existing Western research on child custody, demonstrating that China's custody system produces distinctive gendered patterns. One of the main theoretical insights is the continued impact of patriarchal structures within the Chinese legal system, despite the increasing recognition of the BIC principle. For instance, while China's custody law increasingly embraces the child's best interests compared to U.S. (Wan, 2023), the practice of awarding custody remains influenced by gender norms, especially in the absence of widespread joint custody. The father's advantage in custody decisions, which contrasts with Western norms of maternal preference, suggests that China's court divorces do not exhibit a clear preference for either maternal or paternal custody. However, the daughter effect and son preference remain strongly tied to patriarchal values, challenging the ideal of gender neutrality embedded in the BIC principle.

The gender dynamics observed in custody decisions are both complex and intergenerational. Custody outcomes are influenced not only by the gender of the parents but also by the gender of the child. Fathers' structural advantages in custody disputes contrast with mothers' caregiving roles, and these dynamics are further shaped by the child's gender. A recent study by Zhang et al. (2024), which utilized court data from 10,093 cases between 2014 and 2016, found that Chinese mothers are generally more likely to obtain custody, with a distinct advantage in cases involving daughters. Additionally, in rural areas, fathers tend to have a clear advantage when seeking custody of sons. In this study, based on large-scale data over an extended period, we challenge the long-standing belief in a maternal preference in custody decisions, finding instead a relatively balanced distribution of custody between parents. At the same time, this study confirms the existence of the daughter effect and son preference, and further develops the concept of paradoxical gender dynamics. Our findings demonstrate a significant intensification of gender inequality over the past two decades, revealing how traditional gender biases in custody decisions have become more pronounced, particularly in the context of child gender.

This study affirms previous evidence supporting the modernization theory, which suggests that processes of modernization, including urbanization, economic growth, and educational investment, tend to reduce patriarchal influence. Building on this theory, the study further develops a puzzling gender dynamic: over time, while the influence of parental gender remains relatively stable, the bias favoring daughters in maternal custody decisions has intensified. However, in regions with long-term socio-cultural and economic development, this gender bias appears to diminish. To some extent, these findings challenge the core

principle of modernization theory, which posits that as societies modernize over time, patriarchal influence should naturally decrease. The study highlights how certain regions, with more advanced and sustained modernization, exhibit a significant reduction in patriarchal influence compared to others. This paradox suggests a need for further research to understand why, despite broader modernization, patriarchal dynamics persist in some areas and evolve in unexpected ways.

The findings of this study have important policy implications for child custody law in China. Although the BIC principle is increasingly recognized in Chinese family law, its application in judicial practice remains inconsistent, with gender stereotypes often influencing decisions. Objective guidelines and judicial training are needed to ensure that the child's best interests are prioritized without undue influence from entrenched gender biases. Further reforms should focus on promoting joint custody arrangements and shared caregiving norms, which could help to counterbalance the father advantage and reduce gender discrimination in custody decisions. Moreover, regional inequality in custody outcomes underscores the need for policies that enhance economic opportunities and educational resources for women, particularly in rural areas. Such reforms would empower women in the custody process and challenge traditional gender roles, ultimately leading to more equitable outcomes.

This study faces several limitations. First, there may be selection bias due to the availability of court judgments, with discrepancies in the accessibility of cases across different years. For example, there were fewer public judgments in the early years (2000-2005), and since 2016, privacy concerns have resulted in a reduced number of publicly available cases. Second, the analysis focuses on one-child families, which may not be fully representative of families with multiple children. Future research should consider the more complex custody arrangements in multi-child families, where factors such as the child's age and gender may influence custody outcomes. Additionally, the socioeconomic context was measured using city-level proxies, such as GDP per capita and education expenditure, rather than individual-level data. This limitation arises because the court judgments do not consistently provide detailed personal information about parents' education, occupation, or income. Future studies could benefit from utilizing household-level data to gain a deeper understanding of the economic conditions of parents and their impact on custody decisions.

Several important avenues for future research exist. First, a systematic comparison is needed between court divorces and mutual consent divorces. Evidence suggests that fathers are more likely to obtain custody in mutual consent divorces than in contested court divorces (Cheng, 2024); however, little research has explored the reasons behind these differing custody outcomes. Second, cross-national comparisons within East Asia would be valuable. Regions such as South Korea, Japan, and Hong Kong employ different approaches to joint custody, and comparing these contexts with China's system can provide deeper insights into regional variations in gendered custody practices. Finally, future studies could investigate the long-term post-custody outcomes for children, particularly the impact of BIC decisions on their

education and well-being. This is especially important given that the shift toward gender-neutral custody laws in the U.S. in the 1980s and 1990s was associated with negative impacts on children's educational attainment (Chen & Logan, 2008).

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Appendix

Table 5. Trend in Child Custody in the Mainstream Literature

Location	Year	Type	Mother	Father	Joint	*N*	Resource
Wisconsin, US	1980-1985	court divorce	88.5%	9.2%	2.3%	4,038	Fox & Kelly 1995[a]
Wisconsin, US	1986-1987		88.0%	5.7%	6.3%	-	Cancian & Meyer 1998[b]
	1988-1990		85.6%	5.6%	8.8%		
	1991-1994		82.5%	5.3%	12.2%		
Santa Clara & Santa Mateo, CA, US	1984-1985		67.2%	8.6%	20.2%	896	Fox & Kelly 1995
Oakland County, MI, US	1982-1983		88.6%	9.5%	1.9%	519	Fox & Kelly 1995
US	1990-1994		-	-	19.0%	4,407	Meyer er al. 2022
	1995-1999				23.7%	3,450	
	2000-2004				26.0%	3,752	
	2005-2009				29.1%	2,194	
	2010-2014				33.6%	764	
England	2010-2011	court & consent divorce	74.3%	9.5%	10.9%	1,515	Kalmijn 2015[c]
German	2010-2011		70.5%	12.9%	9.8%	2,154	Kalmijn 2015
Netherlands	2010-2011		70.6%	6.4%	17.6%	597	Kalmijn 2015
Sweden	2010-2011		51.6%	7.6%	36.0%	277	Kalmijn 2015

Notes: a Fox & Kelly's (1995) study is essentially a meta-analysis rather than an original dataset.
b Cancian & Meyer (1998)'s work of estimating probabilities of custody outcomes by selected characteristics in their model. c In Kalmijn's (2015) work, the proportions for mother, father, and joint custody do not sum to 100% because an additional category, Neither (child resides with neither parent), is included. Since the author did not provide raw distributions, the presented figures were derived by solving a system of linear equations based on the coefficients reported in Table 2 (Living arrangement).