

Double Reduction in China: Demand-Supply Mismatch, On-Campus Substitution, and Policy Rebalancing

Xinghe Fang*

Beijing No.4 High School (International Campus), Beijing 100029, China

**Author to whom correspondence should be addressed.*

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Abstract: This review takes stock of China's Double Reduction. In the short run, it lowered visible burden and pushed demand from subject tutoring toward on-campus and non-subject services. But with high-stakes selection unchanged, demand reappears as small-group/one-to-one provision, advantaging families with high socioeconomic status and strong schools. Lasting relief will require tighter oversight and admissions reform with targeted, well-funded in-school support.

Keywords: Double Reduction; Shadow education; After-school services; Demand rigidity; Equity; Income heterogeneity

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1. Introduction

On July 24, 2021, the General Office of the CPC Central Committee and the General Office of the State Council jointly issued the "Double Reduction" policy. The policy sought to reduce students' pressure and after-school burdens for primary and middle-school students by capping homework time (typically targeted at around 1.5 hours) and by strictly regulating off-campus tutoring, while promising quality improvements inside schools. In practice, however, the policy did not touch the root of demand. With competitive pressure from school transitions and especially the *zhongkao* and *gaokao* unchanged, family demand for tutoring persisted. Administrative suppression of subject-based tutoring thus generated a classic demand-supply mismatch. The impacts have been heterogeneous across income groups and across schools.

2. The purposes of the Double Reduction policy

Since the reform era, marketization and privatization have created a thriving shadow education sector. Light-touch governance for many years left tutoring in a gray zone^[1]. Rapid growth in shadow education exacerbated

inequality and educational “arms races,” enabling high-income families to secure more and better tutoring, to the disadvantage of low-income students and especially rural and left-behind children—a trajectory at odds with the state’s longstanding equity rhetoric ^[2]. Meanwhile, teacher pay in public schools did not keep pace with urban living costs; some teachers moonlighted in tutoring institutions or opened their own businesses despite prohibitions, reducing incentives to provide high-quality support inside the classroom and pushing students outward to after-school markets ^[2]. At the same time, national health statistics flagged youth mental health risks: the *Report on National Health Development in China (2019–2020)* documented a 24.6% prevalence of depression among Chinese adolescents, with 7.4% severe ^[3], and provincial studies observed declining onset ages for mental disorders ^[4]. Against this backdrop, the policy’s “two-pronged” intention—to raise in-school quality and strictly regulate off-campus tutoring—was a reasonable starting point.

3. Theoretical baseline: Demand rigidity and supply suppression

For many Chinese families, educational success remains paramount, historically rooted in the logic of examination-based selection. With *zhongkao* and *gaokao* acting as stark bottlenecks and elite seats scarce, the perceived returns to marginal study time remain high. In game-theoretic terms, parents face a prisoners’ dilemma-type choice: under strategic rivalry, “not tutoring” is weakly dominated if others do tutor.

When policy suppresses subject-based supply administratively, demand does not disappear; it migrates to: (1) on-campus channels (after-school services, homework guidance, custodial care); (2) non-subject or “quality-oriented” activities (sports, arts, coding); and (3) hidden or individualized provision (small groups, one-to-one, cross-district or online private arrangements). This is the core “demand-unchanged / supply-transformed” mismatch ^[5].

4. Short-run effects, 2021–2023: Less burden, spending reallocation, channel migration

National micro evidence shows a rough 25% decline in academic burden after policy rollout; family spending and parental time inputs fell by about 15%; several mental health indicators improved; gains were larger among families with parents holding a bachelor’s degree or below ^[5]. Longitudinal CIEFR–HS tracking (2017–2023) documents structural reallocation: subject tutoring participation fell from 36.1% (2017) to 16.5% (2022) and 13.5% (2023); after-school services inside schools rose from 25.0% (2019) to 30.8% (2023), with their share in household education outlays rising from 3.5% to 7.8% ^[6]. In short, off-campus subjects contracted; on-campus services and non-subject activities expanded. Importantly, short-run effects concentrated among middle-upper-income households, with weaker or nonsignificant changes at the bottom and very top ^[7].

5. 2024–2025: Categorized regulation and “structural rebalancing”

Roughly two years in, regulation became more fine-grained. The center continued strict limits on subject tutoring and cracked down on “concealed and mutated” forms ^[8]. At the macro level, service consumption policies favored non-subject segments, but no “opening” of compulsory-stage subjects occurred. As subject tutoring shifted inward (schools) and sideways (non-subjects), pre-existing inequalities in resources across regions and schools implied uneven on-campus tutoring efficiency. Annual overviews emphasize uneven benefits by region and group, unequal supply and quality in after-school services, and insufficient teacher

incentives and capacity ^[9]. Administrative tasks (checks, reporting) multiplied for schools; teachers' on-duty hours and stress rose without commensurate fiscal or performance compensation ^[8]. A primary reason teachers previously participated in, or organized, off-campus tutoring was insufficient income. If on-campus remedial hours expand without commensurate improvements in compensation and benefits, teachers' livelihood pressures intensify—risking a robbing-Peter-to-pay-Paul dynamic over time. Meanwhile, the policy-induced downturn of the tutoring industry has reduced tax revenues from this sector. By contrast, raising fiscal subsidies and welfare for teachers increases government budgetary outlays.

6. Distributional impacts by income: Admissions and “winner-take-more” dynamics

After Double Reduction took effect, most large, subject-based tutoring firms either pivoted or shut down, and mass classes splintered into small groups or one-to-one coaching ^[10]. While big providers are comparatively easy to monitor, micro-providers and private one-to-one tutors are far harder to police—and families, as consumers and beneficiaries, rarely self-report such services ^[11]. Under the combination of restricted supply and intense competition, high-income households invested more and captured greater admissions gains, whereas low-income households moved in the opposite direction: the bottom decile's probability of entering an academic high school fell by 9.3 percentage points, the top decile's rose by 5.3 points; household education spending changed by -21% versus +66.6%; and weekly study time by -9.19 hours versus +10.37 hours ^[12]. Current governance emphasizes “strict regulation of subject tutoring, standardized development of non-subject training, and stronger in-school provision.” National admissions metrics are not yet in a clean evaluation window, but on-campus and non-subject substitution continues to carry equity risks: well-resourced schools and high-SES families are best positioned to benefit, while weaker schools and low-income families face thin supply and rising prices ^[9]. While addressing students' psychological and after-school stress, the dual-reduction policy should also prioritize the exacerbated inequality it creates. For lower-income families, the resulting shortage of educational resources is a foregone conclusion. For middle- and upper-income families, these increases are less sensitive to rising educational costs and can circumvent regulations imposed by the double reduction policy by purchasing one-on-one tutoring, which is more difficult to control. Strengthening oversight of this sector is particularly crucial. The disparity in teacher quality between schools is significant, and the amount of tutoring received by students in school remains significantly different. If off-campus academic tutoring inevitably shifts to in-school tutoring, reducing inequality in educational resources becomes a crucial issue.

7. Conclusion

Supply constraints do not equal demand disappearance. In the short run, Double Reduction lowered measured burdens and reallocated spending while improving some health indicators. Yet without altering the selection regime, demand reappears inside schools and in non-subject/individualized channels, with marked heterogeneity by income and school resources. Prior nationwide evidence suggests that, under unchanged competition, restricting formal supply risks widening inequality and admissions gaps. Future policy should jointly reform admissions, expand high-quality on-campus support with differentiated finance and teacher incentives, and reduce the differentiation of educational resources, so that “on-campus substitution” becomes both effective and equitable.

Disclosure statement

The author declares no conflict of interest.

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