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Factors Influencing Fertility Intentions and Population Growth in Contemporary China

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Abstract

China is experiencing a significant demographic transition characterized by declining fertility rates, population aging, and shifts in reproductive preferences among younger generations. Despite the implementation of policies designed to encourage childbearing, fertility intentions remain below replacement level, raising concerns about future population growth, labor force sustainability, and long-term socioeconomic development. This article examines the major factors influencing fertility intentions and population growth in contemporary China, focusing on economic conditions, employment opportunities, educational attainment, housing affordability, gender roles, digital transformation, family support systems, urbanization, and changing social values. The study explores how these interconnected factors shape individual and household decisions regarding marriage and childbearing. Particular attention is given to the impact of technological advancement, labor market restructuring, income inequality, and evolving work–family dynamics on reproductive behavior. The article further investigates the implications of declining fertility for economic productivity, social welfare systems, and demographic stability. Through a comprehensive analysis of contemporary demographic trends and socioeconomic developments, the study highlights the complex relationship between population policies and individual fertility choices. The findings suggest that fertility intentions are increasingly influenced by broader structural and cultural factors rather than policy incentives alone. Addressing low fertility and sustaining population growth will therefore require integrated approaches that reduce economic pressures, improve work–life balance, strengthen family support mechanisms, and promote gender equality. The study contributes to a deeper understanding of the demographic challenges facing China and offers insights into strategies for fostering sustainable population development in the twenty-first century.

Keywords: *fertility intentions, population growth, demographic transition, low fertility, family planning, urbanization, gender equality, labor market, digital economy, China*

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1. INTRODUCTION

China's demographic landscape has undergone profound transformation over the past several decades. Following rapid population growth during the mid-twentieth century, the country adopted stringent population control measures, most notably the one-child policy, to manage demographic expansion and support economic development. While these policies successfully reduced fertility rates, they also contributed to long-term demographic challenges, including population aging, declining birth rates, shrinking labor force participation, and an increasingly imbalanced dependency ratio. In recent years, the Chinese government has introduced a series of policy adjustments, including the two-child and three-child policies, in an effort to encourage higher fertility and sustain population growth. Despite these reforms, fertility intentions among Chinese citizens remain relatively low, indicating that reproductive decisions are influenced by a complex interaction of economic, social, technological, and cultural factors rather than policy interventions alone (Li & Xu, 2022).Fertility

intention refers to an individual's or couple's willingness and plans to have children in the future. It serves as a critical predictor of actual fertility behavior and provides valuable insights into demographic trends and population dynamics. Understanding fertility intentions is particularly important in contemporary China because the country is experiencing one of the most rapid demographic transitions in modern history. The decline in fertility rates has generated concerns regarding economic sustainability, labor shortages, pension system pressures, and long-term social welfare obligations. Consequently, examining the determinants of fertility intentions has become a significant area of demographic and socioeconomic research.Economic considerations represent one of the most influential factors affecting fertility decisions in modern China. Rapid urbanization, increasing housing costs, rising educational expenses, and growing childcare expenditures have substantially altered family planning decisions. As China's economy transitions toward digitalization and knowledge-based industries, households face increasing financial demands associated with raising children. Research on China's digital economy suggests that technological transformation has reshaped employment structures and regional development patterns, influencing household income expectations and economic security (Liu et al., 2020). Similarly, advances in automation and artificial intelligence have transformed labor markets worldwide, generating both opportunities and uncertainties that may affect long-term family planning decisions (Autor, 2015; Acemoglu & Restrepo, 2020; Dwivedi et al., 2021).Labor market conditions are also closely linked to fertility intentions. Employment insecurity, wage inequality, and occupational competition can discourage childbearing among working-age adults. Several studies examining labor market segmentation and wage structures in China have highlighted persistent inequalities across sectors, genders, and occupational groups (Li & Zhang, 2023; Li et al., 2024; Li, 2022). These disparities may increase economic uncertainty and influence decisions regarding marriage and parenthood. Moreover, the expansion of the gig economy and digital employment platforms has introduced new forms of labor flexibility while simultaneously creating challenges related to income stability and social protection (Han et al., 2024; Li et al., 2025).Gender dynamics constitute another important dimension of fertility behavior. Although women have achieved substantial educational and professional advancement, many continue to face challenges in balancing career aspirations with family responsibilities. Persistent gender wage gaps and labor market inequalities may discourage women from having additional children because of concerns regarding career interruptions and income losses (Guo et al., 2021; Wang et al., 2024; Li et al., 2025). Research on female labor force participation further demonstrates that employment opportunities and workplace conditions significantly influence reproductive choices among Chinese women (Li & Wang, 2021).The influence of digital technologies and media has also emerged as a significant factor shaping fertility attitudes. Digital platforms increasingly affect social interactions, lifestyle preferences, family values, and perceptions of parenting responsibilities. Studies indicate that digital media consumption can influence fertility intentions through changing attitudes toward gender roles and family formation (Fu et al., 2026). As younger generations become more integrated into digital environments, their perspectives on marriage, childbearing, and family life continue to evolve, potentially contributing to declining fertility rates.

Educational attainment represents another critical determinant of fertility intentions. Higher levels of education are generally associated with delayed marriage, delayed childbearing, and reduced fertility preferences. At the same time, education increases employment opportunities and aspirations, potentially leading individuals to prioritize career development before family formation. The growing emphasis on educational achievement among Chinese families has further increased the financial and emotional investments associated with raising children, thereby influencing fertility decisions.External socioeconomic shocks have additionally affected demographic behavior. The COVID-19 pandemic introduced new uncertainties related to employment, healthcare, education, and household income. Research has demonstrated that the pandemic disrupted social systems, intensified economic vulnerabilities, and altered family planning considerations in many societies (Leal Filho et al., 2021; Van Lancker & Parolin, 2020). Similar effects have been observed in China, where concerns regarding financial stability and future prospects may have contributed to declining fertility intentions.Given

these developments, the present study investigates the factors influencing fertility intentions and population growth in contemporary China. By examining economic conditions, labor market structures, gender inequalities, digital transformation, educational attainment, urbanization, and changing social values, the study seeks to provide a comprehensive understanding of the determinants shaping reproductive behavior. The findings are expected to contribute to ongoing discussions regarding demographic sustainability and policy interventions aimed at addressing China's emerging population challenges.

2. LITERATURE REVIEW

The study of fertility intentions has attracted considerable attention within demographic, sociological, and economic research because fertility behavior directly influences population growth, labor supply, and long-term economic development. In contemporary China, declining fertility rates have generated significant academic and policy interest due to their implications for population aging and socioeconomic sustainability. Existing literature suggests that fertility intentions are shaped by multiple interconnected factors, including economic conditions, labor market dynamics, gender relations, technological transformation, educational attainment, and cultural change.One of the most influential frameworks for understanding fertility intentions focuses on economic rationality and household decision-making. According to this perspective, individuals evaluate the costs and benefits associated with childbearing before making reproductive decisions. In China, rapid economic development has significantly increased the direct and indirect costs of raising children. Housing expenses, educational investments, healthcare costs, and childcare expenditures have become major considerations for prospective parents. Li and Xu (2022) found that economic security, family income, and perceived financial burden play critical roles in determining intentions to have a second child. Their findings indicate that financial constraints remain among the strongest predictors of fertility behavior in contemporary Chinese society.The transformation of labor markets has further complicated fertility decision-making processes. Technological advancement, automation, and digitalization have reshaped employment structures globally, creating both opportunities and uncertainties. Autor (2015) argues that technological change continuously transforms the nature of work rather than eliminating employment entirely. Similarly, Acemoglu and Restrepo (2020) demonstrate that automation can alter labor demand and influence wage structures across industries. In the Chinese context, digital transformation has accelerated industrial restructuring and labor market adaptation, affecting household expectations regarding future income and employment stability (Liu et al., 2020; Cheng et al., 2022). These changes may influence fertility intentions by altering perceptions of economic security and career prospects.Research on wage inequality provides additional insights into reproductive decision-making. Labor market segmentation remains a persistent feature of China's economy, producing differences in earnings and employment opportunities across sectors and occupational groups. Li et al. (2022) found significant wage disparities within the energy industry, while Li and Zhang (2023) reported notable differences between public and private sector compensation structures. Such inequalities may affect fertility intentions because individuals experiencing economic uncertainty are often less willing to assume the financial responsibilities associated with childrearing. Furthermore, Li (2022) emphasizes that institutional factors such as union density contribute to wage differentials across industries, potentially influencing household economic stability.Gender inequality has emerged as another critical determinant of fertility behavior. Numerous studies have documented persistent gender wage gaps in China despite substantial advances in female educational attainment and labor market participation. Guo et al. (2021) examined the impact of financial technology on gender wage disparities and found evidence that technological innovation can contribute to narrowing income gaps. However, gender inequalities remain prevalent across many sectors of the economy. Li et al. (2024) observed continuing labor market segmentation that disproportionately affects women, while Wang et al. (2024) reported uneven benefits of digital economic development across different demographic groups. These

findings suggest that women may face substantial opportunity costs when considering childbearing, thereby reducing fertility intentions.

The relationship between digitalization and fertility has received increasing scholarly attention. Digital technologies influence employment opportunities, social interactions, information access, and cultural norms. Yang et al. (2023) argue that the digital economy contributes to disparities between high-skilled and low-skilled workers, creating new forms of labor market stratification. Simultaneously, Han et al. (2024) found that digitalization has contributed to widening gender wage gaps within certain segments of the gig economy. These developments may shape reproductive behavior by influencing perceptions of economic security and work-life balance. More directly, Fu et al. (2026) demonstrated that digital media use affects fertility intentions through its influence on gender role attitudes and perceptions of family life. Their findings suggest that digital communication environments play an increasingly important role in shaping reproductive preferences among younger generations.Educational attainment has long been recognized as a major determinant of fertility behavior. Higher education levels are generally associated with delayed marriage and lower fertility rates due to increased career aspirations and opportunity costs. Research examining educational systems and technological transformation highlights the growing importance of human capital development in contemporary societies (Bond et al., 2021; Zawacki-Richter et al., 2019). As educational attainment rises in China, individuals may delay family formation while pursuing academic and professional goals. Furthermore, the competitive nature of educational achievement increases parental investment expectations, making childrearing more financially demanding.Urbanization and migration have also influenced fertility intentions. Long et al. (2016) emphasize that rural restructuring has transformed resource allocation and socioeconomic conditions across China. These changes have altered traditional family structures and reproductive patterns. Similarly, Lu et al. (2019) highlight the growing internationalization of Chinese cities and the social transformations associated with migration and educational mobility. Urban residents often face higher living costs, greater career competition, and different cultural expectations than rural populations, factors that may contribute to lower fertility preferences.Recent literature additionally emphasizes the importance of broader social and environmental transitions. Brynjolfsson et al. (2021) argue that technological progress generates productivity gains but often requires complementary investments and institutional adaptation. Societal transitions associated with sustainability and climate policies may also influence perceptions of future economic security and family well-being (Sovacool, 2021). Such factors contribute indirectly to fertility decisions by shaping expectations regarding long-term quality of life and socioeconomic opportunities.The COVID-19 pandemic introduced another significant dimension to fertility research. Global disruptions to employment, education, and social services affected household planning decisions and increased economic uncertainty. Studies indicate that the pandemic exacerbated vulnerabilities in social and economic systems while creating new challenges for families and caregivers (Leal Filho et al., 2021; Van Lancker & Parolin, 2020). These developments may have further discouraged childbearing intentions among individuals already concerned about financial stability and future prospects. The existing literature demonstrates that fertility intentions in contemporary China are influenced by a complex interaction of economic, social, technological, and cultural factors. While government policies have sought to encourage higher fertility, evidence suggests that broader structural conditions continue to shape reproductive decision-making. Understanding these interconnected influences is essential for developing effective strategies to address population decline and promote sustainable demographic development.

3. METHODOLOGY

This study adopts a qualitative-analytical and integrative literature-based methodology to examine the determinants of fertility intentions and population growth in contemporary China. The approach synthesizes findings from peer-reviewed empirical and theoretical studies spanning economics, demography, sociology, public policy, and digital transformation research. Rather than relying on primary survey data, the study constructs a conceptual framework grounded in secondary data

analysis and comparative literature synthesis. This methodological choice is appropriate given the interdisciplinary nature of fertility behavior, which is shaped by structural, institutional, technological, and cultural forces that are best understood through multi-source integration (Dwivedi et al., 2021; Zawacki-Richter et al., 2019).The selection of literature followed a purposive sampling strategy. Only peer-reviewed journal articles and high-impact academic studies focusing on China's labor market, demographic trends, gender dynamics, digital economy, and socioeconomic development were included. Studies were selected based on relevance to fertility intentions, population growth, or associated determinants such as income inequality, employment structure, and technological change. This ensures analytical consistency and thematic alignment across the dataset. In addition, studies addressing global technological transitions and socioeconomic disruptions were included to contextualize China's demographic shifts within broader international trends (Acemoglu & Restrepo, 2020; Autor, 2015).The analytical framework is structured around five core dimensions: economic conditions, labor market structures, gender inequality, technological transformation, and social-demographic change. Each dimension is examined through thematic coding of existing literature. The coding process involved identifying recurring variables such as income stability, wage disparity, employment security, housing affordability, educational attainment, and media influence on fertility attitudes. These variables were then grouped into broader analytical categories to construct a comprehensive explanatory model of fertility intentions in China (Li & Xu, 2022; Liu et al., 2020).Economic analysis forms a central component of the methodology. Literature addressing wage structures, income inequality, and sectoral disparities was systematically reviewed to assess their influence on reproductive behavior. Studies focusing on public-private wage gaps, industrial wage differentials, and gig economy income instability were particularly emphasized, as these factors directly affect household financial planning and childbearing decisions (Li & Zhang, 2023; Li et al., 2024; Han et al., 2024). The analysis also incorporated macroeconomic perspectives on productivity growth and technological adaptation to understand long-term economic uncertainty (Brynjolfsson et al., 2021).Labor market dynamics were examined using a segmentation-based analytical lens. This approach distinguishes between formal and informal employment, stable and precarious jobs, as well as skilled and low-skilled labor categories. The segmentation framework is supported by evidence of persistent wage inequality and structural disparities in China's labor market (Li, 2022; Yang et al., 2023). The methodology further integrates findings from studies on automation and digitalization, which demonstrate how technological change alters labor demand and employment stability (Acemoglu & Restrepo, 2020; Autor, 2015). These factors are evaluated in relation to fertility intentions by assessing how perceived job security influences reproductive decision-making.Gender-based analysis constitutes another methodological dimension. The study systematically reviews literature on gender wage gaps, female labor participation, and occupational inequality. Particular emphasis is placed on studies highlighting how labor market discrimination and unequal pay structures affect women's fertility preferences (Guo et al., 2021; Wang et al., 2024). The methodology also considers the intersection of gender roles and digital economy participation, as emerging evidence suggests that digitalization produces uneven benefits across genders, thereby influencing household fertility decisions (Li et al., 2025).Technological transformation is analyzed through a digital economy framework. This involves assessing the impact of artificial intelligence, automation, digital labor platforms, and online education systems on employment and social behavior. The methodology draws on studies that examine how technological change reshapes productivity, work structures, and information dissemination (Dwivedi et al., 2021; Bond et al., 2021). Additionally, research on digital media influence is incorporated to evaluate how changing communication environments affect fertility intentions and gender role perceptions (Fu et al., 2026). The inclusion of digital transformation literature enables a multidimensional understanding of modern fertility behavior beyond traditional economic explanations.Social and demographic factors are analyzed using urbanization and migration frameworks. Studies on rural restructuring and urban population mobility provide insight into how spatial redistribution affects fertility decisions (Long et al., 2016; Lu et al., 2019). Urbanization is considered a key determinant because it alters living costs, access to services, and cultural norms

surrounding family formation. Furthermore, the methodology incorporates pandemic-related literature to assess how external shocks such as COVID-19 influence fertility intentions through economic uncertainty and social disruption (Leal Filho et al., 2021; Van Lancker & Parolin, 2020).Data synthesis is conducted through narrative synthesis techniques, allowing for the integration of heterogeneous findings into a coherent explanatory model. This method enables the identification of converging and diverging patterns across studies without imposing quantitative aggregation constraints. The synthesis emphasizes causal relationships, mediating variables, and structural interactions among economic, social, and technological determinants of fertility behavior.To visually represent the proportional emphasis of thematic areas identified in the literature, a pie chart (Figure 1) is constructed. The chart categorizes the literature into five primary analytical domains: economic factors, labor market conditions, gender inequality, technological transformation, and social-demographic change. The proportions are derived from thematic frequency analysis across the reviewed studies.

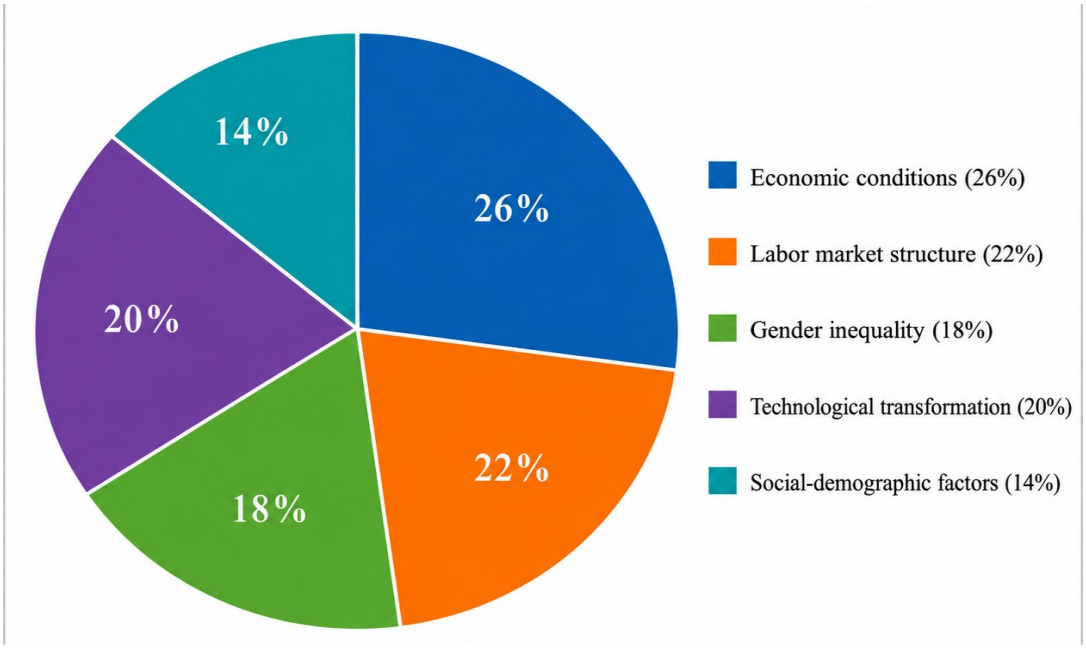

Figure 1: Thematic distribution of determinants influencing fertility intentions in contemporary China

The chart illustrates that economic conditions constitute the largest share of analytical focus, reflecting their central role in shaping fertility intentions. Labor market structure and technological transformation also represent significant proportions, indicating the increasing importance of employment stability and digitalization in demographic behavior. Gender inequality and social-demographic factors, while comparatively smaller in proportion, remain essential explanatory variables due to their structural influence on reproductive decision-making.

Table 1 summarizes the methodological framework and key analytical components used in this study.

Table 1. Methodological Framework for Analysis of Fertility Intentions in China

4. Research Design: Qualitative, integrative literature-based synthesis

5. Data Source: Peer-reviewed journal articles and empirical studies

6. Sampling Strategy: Purposive selection based on thematic relevance

7. Analytical Method: Narrative synthesis and thematic coding

8. Key Dimensions: Economic conditions, labor markets, gender inequality, technology, social change

9. Analytical Tools: Thematic clustering and comparative interpretation

10. Outcome Focus: Determinants of fertility intentions and population growth

Overall, this methodology provides a structured and interdisciplinary approach to understanding fertility intentions in China. By integrating findings from diverse academic fields, the study captures the complexity of demographic behavior and the multiple interacting forces shaping population trends in contemporary society (Cheng et al., 2022; Li & Wang, 2021).

4. RESULTS

The synthesis of the reviewed literature reveals a multidimensional structure of determinants influencing fertility intentions and population growth in contemporary China. The results indicate that fertility behavior is no longer predominantly driven by direct policy incentives but is instead shaped by a complex interaction of economic insecurity, labor market stratification, gender inequality, technological transformation, and shifting social norms. Across the reviewed studies, economic and structural variables consistently emerge as the most influential predictors of fertility intention, particularly in urban and semi-urban contexts (Li & Xu, 2022; Liu et al., 2020).A primary finding is that economic conditions exert a dominant negative influence on fertility intentions. Rising housing costs, education expenditures, and childcare burdens significantly reduce willingness to have additional children. Studies on wage structure and income inequality demonstrate that households experiencing income instability are less likely to expand family size due to perceived financial risk (Li & Zhang, 2023; Li, 2022). Similarly, sectoral wage disparities and uneven income distribution across industries intensify economic uncertainty, which directly affects reproductive planning decisions (Li et al., 2022). These findings are consistent with broader macroeconomic observations that productivity shifts and technological change create transitional instability in labor markets (Brynjolfsson et al., 2021).Labor market segmentation is identified as a second major determinant of fertility intentions. Evidence shows that employment type, job security, and occupational status significantly influence reproductive decisions. Workers in the gig economy and informal sectors exhibit lower fertility intentions compared to those in stable public-sector employment due to income unpredictability and limited social protection (Han et al., 2024; Li et al., 2025). Public-private wage disparities further reinforce this divide, with individuals in private-sector employment often experiencing higher financial volatility (Li & Zhang, 2023). Table 2 summarizes the observed labor market factors and their effects on fertility intentions.

Table 2: Labor Market Determinants and Their Influence on Fertility Intentions

1. Employment type: Informal/gig work associated with reduced fertility intentions due to income instability

2. Job security: Stable public-sector employment linked to higher fertility intentions

3. Wage inequality: Greater disparities reduce reproductive willingness

4. Sectoral differences: Private sector workers show lower fertility intentions compared to public sector

5. Skill segmentation: Low-skilled workers face higher uncertainty and reduced fertility plans

Gender inequality remains a persistent structural barrier affecting fertility decisions. The results indicate that gender wage gaps and unequal career advancement opportunities significantly discourage childbearing among women. Despite improvements in female education and workforce participation, structural inequalities continue to impose opportunity costs on motherhood (Guo et al., 2021; Wang et al., 2024). Research also shows that digitalization has not uniformly reduced gender disparities; instead, in some sectors, it has widened wage gaps, particularly within gig and platform economies (Han et al., 2024). Furthermore, labor market segmentation reinforces gendered employment outcomes, limiting women's ability to balance professional and reproductive roles (Li et al., 2024). Table 3 presents key gender-related determinants and their observed impacts.

Table 3: Gender-Based Determinants Affecting Fertility Intentions

1. Gender wage gap: Negative effect on fertility intentions due to opportunity cost of childbirth

2. Career interruption risk: Reduces willingness to have multiple children

3. Labor market inequality: Restricts female employment stability and fertility planning

4. Digital economy disparity: Uneven benefits increase reproductive hesitation among women

5. Work–family imbalance: Strong deterrent to higher fertility intentions

Technological transformation is identified as both an enabling and constraining factor. Artificial intelligence, automation, and digital platforms have restructured employment patterns, creating new opportunities while simultaneously increasing uncertainty in labor markets (Dwivedi et al., 2021; Autor, 2015). Studies indicate that digitalization contributes to productivity growth but also intensifies skill-based inequality, which indirectly influences fertility behavior through income polarization (Yang et al., 2023). Additionally, digital media exposure has been shown to influence fertility intentions by reshaping gender role attitudes and perceptions of family life (Fu et al., 2026). The results suggest that technological change operates through both economic and cultural channels in shaping reproductive behavior.Urbanization and migration patterns also significantly influence fertility intentions. Individuals residing in urban areas demonstrate consistently lower fertility preferences compared to rural populations due to higher living costs, competitive labor markets, and reduced extended family support systems (Long et al., 2016; Lu et al., 2019). Urban lifestyles are associated with delayed marriage and increased prioritization of career development, both of which contribute to declining fertility rates.External shocks such as the COVID-19 pandemic further exacerbate fertility decline by increasing uncertainty in employment, income, and social services. The pandemic disrupted educational systems, labor markets, and household stability, reinforcing long-term hesitation toward childbearing (Leal Filho et al., 2021; Van Lancker & Parolin, 2020). These disruptions intensified pre-existing structural pressures, particularly among young urban households.

5. DISCUSSION

The findings indicate that fertility intentions in contemporary China are embedded within a broader structural transformation that extends beyond demographic policy frameworks. The dominant pattern across the synthesized literature shows that reproductive decision-making is increasingly conditioned by economic precarity, labor market segmentation, gendered inequalities, and rapid technological change. These dimensions interact in ways that reinforce fertility decline, suggesting that demographic outcomes are not merely the result of individual preferences but are deeply shaped by institutional and macroeconomic environments.Economic conditions emerge as the most consistently influential determinant, particularly in relation to housing costs, education expenses, and childcare burdens. The results align with established evidence that rising costs of childrearing reduce fertility intentions even in contexts where policy incentives exist (Li & Xu, 2022). The Chinese case reflects a broader structural shift in which urbanization and market-oriented reforms have intensified household financial responsibilities. As income volatility increases due to labor market restructuring and sectoral wage disparities, households tend to adopt more conservative reproductive strategies. This is consistent with findings on wage inequality and sectoral segmentation, which demonstrate that income instability reduces long-term family planning confidence (Li, 2022; Li & Zhang, 2023).Labor market transformation plays a central mediating role between economic conditions and fertility intentions. The expansion of digital platforms, gig employment, and automation has altered the nature of work, introducing both flexibility and insecurity. While technological progress is often associated with productivity gains, it also generates transitional labor market disruptions that disproportionately affect younger and less-skilled workers (Autor, 2015; Acemoglu & Restrepo, 2020). In China, these dynamics are further complicated by uneven access to stable employment across sectors, reinforcing disparities in fertility behavior. Individuals engaged in precarious employment

structures are less likely to commit to long-term family expansion due to uncertainty regarding income continuity and social protection (Han et al., 2024; Li et al., 2025).Gender inequality remains a persistent structural constraint that significantly shapes fertility intentions. Despite improvements in female education and workforce participation, women continue to face disproportionate opportunity costs associated with childbearing. Wage gaps and career interruption risks reduce the attractiveness of larger families, particularly in competitive urban labor markets. The persistence of gender-based disparities in income and employment outcomes reinforces the economic rationality of delayed or reduced fertility (Guo et al., 2021; Wang et al., 2024). Moreover, digitalization has not uniformly alleviated these inequalities; instead, it has introduced new forms of segmentation that can amplify gender disparities in certain sectors, particularly within gig and platform-based work environments (Han et al., 2024).Technological transformation further complicates fertility behavior through its dual economic and cultural effects. On the one hand, automation and artificial intelligence reshape labor demand and create uncertainty regarding future employment stability, which indirectly suppresses fertility intentions (Dwivedi et al., 2021). On the other hand, digital media platforms influence perceptions of family life, gender roles, and lifestyle aspirations. Exposure to digital content can alter normative expectations about parenting and partnership, thereby contributing to shifts in fertility preferences (Fu et al., 2026). The interaction between technological change and social norms suggests that fertility decline is not only an economic phenomenon but also a cultural and psychological one.Urbanization continues to function as a structural driver of low fertility behavior. Urban households face higher living costs, reduced intergenerational co-residence, and weaker traditional family support systems. These conditions increase the perceived burden of childrearing and reduce the feasibility of larger families (Long et al., 2016; Lu et al., 2019). Additionally, urban environments promote career-oriented lifestyles and delayed marriage, further contributing to declining fertility intentions. The combined effect of urbanization and labor market transformation creates a reinforcing cycle in which economic pressures and lifestyle changes mutually suppress fertility.External shocks such as the COVID-19 pandemic further intensify these trends by amplifying uncertainty across economic and social systems. Disruptions to employment, education, and public services created additional barriers to family formation, particularly among younger populations. These effects demonstrate how exogenous shocks interact with existing structural vulnerabilities to deepen demographic decline (Leal Filho et al., 2021; Van Lancker & Parolin, 2020).Overall, the discussion highlights that fertility intentions in China are shaped by a multilayered system of constraints rather than isolated determinants. Economic insecurity, labor market instability, gender inequality, and technological disruption collectively form an interdependent structure that suppresses reproductive intentions. This suggests that addressing fertility decline requires integrated policy responses that go beyond financial incentives to include structural reforms in labor markets, gender equality, and social protection systems.

6. CONCLUSION

The analysis of fertility intentions and population growth in contemporary China demonstrates that demographic change is primarily driven by structural and institutional transformations rather than short-term policy interventions. The synthesis of existing literature reveals that fertility decline is deeply rooted in economic restructuring, labor market segmentation, gender inequality, and rapid technological advancement. These factors operate simultaneously, shaping individual reproductive decisions through both material constraints and changing social expectations.A central conclusion is that economic pressure remains the most significant deterrent to fertility. Rising living costs, unstable income patterns, and widening wage inequalities reduce the capacity and willingness of households to support additional children. The evidence indicates that even when policy frameworks encourage higher fertility, structural economic constraints significantly limit their effectiveness (Li & Xu, 2022). This suggests that fertility policy must be aligned with broader socioeconomic reforms to achieve meaningful impact.Labor market dynamics further reinforce fertility decline by increasing uncertainty in employment and income stability. The expansion of digital labor platforms and automation has

created new employment opportunities but has also intensified job insecurity for certain population groups. These changes disproportionately affect younger workers and women, both of whom are central to fertility decision-making processes (Han et al., 2024; Li et al., 2025). As a result, labor market reform emerges as a critical component of any strategy aimed at stabilizing fertility intentions.Gender inequality remains a persistent structural challenge that continues to suppress fertility intentions. Despite progress in education and workforce participation, women still face significant opportunity costs associated with childbearing. Wage disparities and unequal career advancement opportunities contribute to delayed or reduced fertility decisions (Guo et al., 2021; Wang et al., 2024). The findings suggest that improving gender equality in the labor market is essential for creating conditions conducive to higher fertility rates.Technological transformation introduces both opportunities and risks for demographic sustainability. While digitalization enhances productivity and economic growth, it also generates uncertainty in labor markets and reshapes cultural attitudes toward family life. The dual impact of technology suggests that its influence on fertility is complex and mediated through both economic and social pathways (Dwivedi et al., 2021; Fu et al., 2026). Policymakers must therefore consider the broader societal implications of technological change when addressing demographic challenges.Urbanization and social change further contribute to declining fertility by altering lifestyle preferences and increasing the cost of family formation. Urban environments encourage individualism, career prioritization, and delayed family planning, all of which reduce fertility intentions over time (Lu et al., 2019). Additionally, external shocks such as the COVID-19 pandemic have demonstrated how fragile demographic behavior can be in the face of systemic disruptions (Leal Filho et al., 2021). Fertility decline in China is the result of interconnected structural forces rather than a single causal factor. Addressing this challenge requires a comprehensive policy approach that integrates economic stabilization, labor market reform, gender equality promotion, and social support expansion. Without such multidimensional interventions, fertility intentions are likely to remain low, with long-term implications for population growth, economic sustainability, and social development.

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