Intercity Commuting and Labor Market Integration: The Impact of Dual-City Lifestyle in Shanghai and Suzhou on Human Capital Allocation

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Abstract: With the development of transportation infrastructure, commuting between Shanghai and Suzhou has become increasingly convenient, leading to a more prominent dualcity lifestyle. Existing research has provided detailed analysis on the influencing mechanisms of intercity commuting and the behavioral patterns of commuters, whereas this paper further explores the economic implications of intercity commuting between Shanghai and Suzhou, driven by the growing dual-city lifestyle. It examines how high-speed rail and complementary industrial structures between the cities enhance labor mobility and human capital allocation. The study finds that the dual-city lifestyle optimizes labor distribution, with professionals commuting from Suzhou to Shanghai for better career opportunities, while benefiting from Suzhou's lower housing costs. This phenomenon promotes economic efficiency by matching workers' skills with job opportunities across sectors. This study identifies the complementary industrial structures between Shanghai and Suzhou, revealing correlations between cross-city commuting and enhanced efficiency in human capital allocation. By depicting the image of dual-city lifestyle, this study contributes to further analysis on its economic impact.

Keywords: intercity commuting, labor market, dual-city lifestyle, human capital

1. Introduction

Since the reform and opening-up, China has experienced rapid economic growth, with its urbanization rate rising from 17.92% in 1978 to 67% in 2024. During this process, city clusters, as the primary form of China's new urbanization strategy, have significantly accelerated regional economic development and improved resource allocation efficiency through high-level integration. Since the 14th Five-Year Plan proposed the integrated coordination development mechanism for urban agglomerations, China's urbanization has advanced continuously, fostering stronger interregional connections. As one of China's most economically dynamic and regionally integrated areas, the Yangtze River Delta (YRD) shows close economic bonds among cities and mobility of various production factors.

The economic network of YRD exhibits a clear "core-periphery" structure centered around Shanghai [1]. Among its 26 cities, Suzhou has the closest economic connection with Shanghai, with a straight-line distance of less than 100 kilometers [2]. Under the background of deepening regional economic integration, the "dual-city lifestyle" phenomenon between Shanghai, Suzhou, and adjacent areas has become increasingly prominent. A growing number of residents choose a lifestyle characterized by living in one city while working in another, commuting between the two cities daily or weekly. According to the 2024 Annual Report on Cross-City Commuting in Yangtze River Delta Cities, approximately 708,000 people engage in intercity commuting within the YRD region, whereas cities in the Shanghai metropolitan area accounting for about 47.5%.

Current research closely relates to this study's theme can be divided into three main strands. The first is on the role of high-speed commuting in labor mobility. Studies on China's high-speed rail (HSR) network demonstrate that HSR alleviates intercity labor misallocation and enhances overall economic efficiency by reducing commuting costs and expanding market potential [3, 4]. Research on Spain's HSR system reveals that shortened commute times broaden labor market reach, promote cross-regional job matching, and help workers find occupations in distant locations during economic downturns [5]. The second is on Shanghai-Suzhou urban integration. Study on the economic basis of Shanghai-Suzhou urban integration finds out the need to strengthen transportation infrastructure and reduce costs of productive factor mobility [6]. Meanwhile, the talent flows between Shanghai and southern Jiangsu are bi-directional, noting that both industrial structure and talent policies determine Shanghai's spillover and siphoning effects [7]. The third focuses on intercity commuting between Shanghai and Suzhou. Research analyzing commuter behavioral patterns concludes that Shanghai's economic dominance attracts peripheral populations while minimizes reverse commuting, aggravating regional imbalances [8]. Investigation on the spatial non-stationarity of intercity commuting finds out that commuting time is a more accurate indicator of intercity commuting cost than geographical distance [9]. Transport mode choice and infrastructure are important determinants of commuting time [10]. Additionally, most commuters are in the middle to high income class with high education level and spouses [11].

However, existing researches limit their views solely on the commuting phenomenon. This phenomenon not only reflects functional complementarity between cities, but also embodies a new model of human capital allocation. This study takes a more holistic perspective and discusses the economic impact of the dual-city lifestyle.

2. Overview of labor market and industrial structure of Shanghai and Suzhou

Shanghai demonstrates a service-oriented labor market structure with a large highly educated population and massive demand for high-skilled professionals. According to the 2023 Shanghai Statistical Yearbook, the working-age population (15 to 59 years) numbered 16.6191 million, accounting for 66.8% of permanent residents. It declined by 9.5% from 2010, suggesting a shrinking core workforce. Despite increasing aging population, the total labor supply remains adequate. Migrant workers from other provinces (10.4797 million, 42.1% of residents) support foundational industries. Geographically, central districts saw a 3.4% population decrease as traditional service sectors (for example commerce and finance) move to suburbs, while suburban areas and Pudong New Area now concentrate on technological innovation and advanced manufacturing. Pudong New Area, as a strategic development zone, hosts 22.8% of the city's permanent residents.

As a global financial and technological center, Shanghai's core industries focus on financial services, high-tech sectors, and consumer goods and retail. The tertiary sector contributes 74.1% to Gross Domestic Product (GDP), employing 3.4937 million workers (50% of total employment), where finance and Information Technology (IT) services act as growth engines. The secondary sector accounts for 25.7% of GDP, with 1.7133 million industrial jobs. Professional and technical positions constitute 28.5% of service sector employment, while management and professional positions take 26.7% of manufacturing positions.

Suzhou, in contrast, centers on manufacturing and supply chains, with key industries including new energy, semiconductor equipment, electronic components, and biopharmaceuticals. Industries dominate its labor distribution, while services rapidly expand. According to the 2023 Suzhou Statistical Yearbook, secondary sector employment accounted for 51.9% in 2022. High-tech industries are thriving, generating 52.4% of industrial output, driven by electronics and telecommunications equipment and intelligent manufacturing. Tertiary sector employment (45.7%) is rapidly converging with the secondary sector, driven by high-value industries like IT and finance.

Regional disparities characterize Suzhou's development. Suzhou Industrial Park specializes in high-end manufacturing, with 50% tertiary sector employment and the city's highest per capita GDP; Kunshan, reliant on export-oriented economies, maintains 56.1% secondary sector employment dominated by electronics manufacturing; Gusu District focuses on services (93.9% tertiary employment), centered on cultural tourism and commerce; Wujiang District retains traditional industries (61.2% secondary employment), while Zhangjiagang faces restructuring pressures in heavy industries.

3. Influencing mechanism of intercity commuting between Shanghai and Suzhou

The dual-city living phenomenon between Shanghai and Suzhou represents a novel lifestyle emerging in the YRD region. This pattern has gradually become the choice of many people due to the proximity of the two cities, developed transportation networks and economic complementarity. Cross-YRD commuters entering Shanghai surged from 9,812 individuals in 2019 to 14,841 in 2022 [12, 13]. By 2024, Kunshan, a county-level city of Suzhou, contributed 14,633 commuters to Shanghai alone, accounting for 62.01% of total YRD inflows [14]. Kunshan's geographic adjacency to Shanghai and its integration with Metro Line 11 contributed to its dominance, with 2024 commuter volumes exceeding that of 2019 by 54% [12, 14].

Infrastructure (HSR networks), industry (producer services/manufacturing), and residential cost are the three primary driving factors for intercity commuting. These factors interact through policy frameworks, infrastructure development, industrial specialization, and housing market dynamics to reshape labor allocation and urban integration between Shanghai and Suzhou.

The spatial and temporal compression effect of HSR networks is a critical factor in driving crosscity commuting between Shanghai and Suzhou. The introduction of HSR networks has dramatically reduced commuting time and expanded commuting ranges, significantly enhancing commuting flows [9]. Concurrently, the densification of HSR networks—with over 100 daily departures between Suzhou and Shanghai and an average travel time of 30 minutes—has made it a primary option for commuters. As commuting time decreases, the volume of cross-city commuting increases, indicating a negative correlation between commuting time and flow volumes. HSR serves as a physical conduit for labor movement, facilitating the daily exchange of workers between the two cities [9]. With reduced travel times, more frequent services, and a growing number of daily commuters, the ease of travel between Shanghai and Suzhou has dramatically increased the intercity labor mobility.

Shanghai's concentration of high-added-value industries plays a key role in attracting skilled professionals, further driving commuting flows. Compared to Suzhou's technology-intensive manufacturing base, Shanghai's economic structure provides more career advancement opportunities, particularly in finance and research and development, making it a more attractive destination for skilled workers [9, 15]. The financial and research sectors, as well as other producer services, have a strong pull on labor, thus professionals often choosing to live in Suzhou while pursuing career opportunities in Shanghai. As a result, employment-driven commuting patterns emerge, where workers are motivated by job prospects rather than just the cost of living. This market-driven agglomeration phenomenon highlights the difference in career opportunities between the two cities and illustrates why many professionals choose long commutes for higher salaries and career progression [15].

The disparity in living costs between Shanghai and Suzhou is another significant factor for dualcity lifestyle. The skyrocketing housing prices in Shanghai's core areas, coupled with restrictive home purchase policies, push many middle-class residents to settle in Suzhou, where housing costs are considerably lower [15]. Suzhou's residential cost advantage, combined with the city's competitive public services, makes it an attractive option for families seeking affordable housing and a good quality of life [9].

New residential developments in Suzhou, characterized by weaker social networks, also contribute to higher commuting willingness among residents. People in these areas are more likely to endure long commutes for the sake of higher-income opportunities in Shanghai. The relationship between residential stability and sustainable commuting patterns indicates that as residents become more established in their living environments, they are more willing to accept the costs of commuting for better economic prospects [9].

4. The economic impact of dual-city lifestyle

The dual-city lifestyle optimizes human resource allocation. The intercity commuting population predominantly consists of young males with high skills, advanced education, and substantial income. Data reveals that 98% of commuters hold bachelor's degrees or higher, 44% earn over 20,000 yuan monthly, and their occupations are concentrated in management, technical roles, and specialized professions. These commuters primarily flow into IT and science industry, manufacturing industry, and finance and business industry. This pattern demonstrates that intercity commuting effectively promotes cross-regional labor allocation. Shanghai attracts high-skilled talent for core industries like finance and research and development, while Suzhou absorbs mid-to-high-level technical professionals. Additionally, the high-income profile of commuters may drive consumption structure upgrading in both cities, such as making purchases in their residential areas after earning salaries in Shanghai.

Housing price is simultaneously affecting and being affected by dual-city lifestyle. According to 2024 data from Anjuke, a real estate rental and sales service platform in China, Shanghai's average housing price (58,010 yuan/m²) is approximately 2.5 times that of Suzhou (23,502 yuan/m²), with prices in Shanghai's peripheral districts like Qingpu and Jiading also significantly exceeding those in Huaqiao, Kunshan (22,414 yuan/m²). These price differences cause commuters to settle in lower-cost Suzhou while earning higher incomes in Shanghai. Notably, Huaqiao exhibits slightly higher housing prices (22,414 yuan/m²) than Kunshan's average (22,163 yuan/m²), benefiting from its geographic adjacency to Shanghai and convenient transportation system. In long term, the expansion of commuting scale may impact the balance of local housing supply and demand and raise real estate price in Suzhou.

Dual-city lifestyle is not only caused by pursuit of higher salary, but also a result of deepened regional industrial specialization. Shanghai's 14th Five-Year Plan prioritizes high-end services like finance and artificial intelligence, while Suzhou's "1030" industrial system focuses on manufacturing sectors such as electronics and biopharmaceuticals. This structural differentiation creates complementary talent demands between the two cities. Such synergy not only alleviates high-skilled talent competition pressure in Shanghai but also enhances Suzhou's technological capacity in manufacturing.

5. Conclusion

With the development of high-speed rail infrastructure, commuting between these two cities has become more efficient, facilitating a dual-city lifestyle where workers live in Suzhou but work in Shanghai. The complementary industrial structures of Shanghai's high-tech and financial sectors and Suzhou's manufacturing base create a favorable environment for skilled professionals to commute for better career opportunities while enjoying the lower cost of living in Suzhou. The study reveals that this dual-city commuting model promotes efficient allocation of labor, as it allows workers to access high-value jobs in Shanghai while helping Suzhou attract skilled professionals in technical fields. This flow of labor can not only enhance economic growth but also drive consumption in both cities, contributing to regional economic integration. The findings underscore the importance of maintaining and expanding transportation infrastructure and suggest that strategic policy development can further optimize labor mobility, benefiting both cities. This study highlights the vital role of intercity commuting in fostering economic efficiency and human capital allocation within the YRD region.

However, this study has its limitations. First, the data available is limited, thus the scope of discussion is limited. Detailed record of information such as trends in wage changes across various industries are not accessible. Despite this, the figures cited in this study are reliable and it is valid to infer a relationship between intercity commuting and human capital allocation. Second, this research is a qualitative analysis. It did not apply complex modelling or methodology for in-depth data analysis. Nevertheless, the discussion is innovative, and it provides the possibility for deeper exploration of the economic impact of the dual-city lifestyle in future research.

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