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The Rise and Fall of Commercialized Historical Districts: A Case Study of Tianzifang

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Abstract

This paper takes Tianzifang, a renowned historical district in Shanghai, as a case study to explore the rise and subsequent decline of commercialized historic areas. Building on an analysis of the factors behind Tianzifang's initial popularity, the study further investigates how its competitive edge gradually eroded. It argues that Tianzifang's business model reflects a phenomenon of endogenous industrial selection, driven by market forces and manifested through what this paper terms a rent spiral mechanism. A two-sector general equilibrium model is developed to analyze this mechanism. Additionally, a vertical differentiation framework from the heterogeneous product literature is used to explain how decreasing product heterogeneity among creative firms leads to shrinking profits. Combining the two approaches, the paper suggests that an endogenous trend toward de-creative homogenization has diminished product distinctiveness, resulting in lower profitability for businesses. Finally, the paper reflects on the new challenges facing Tianzifang in the post-pandemic era and outlines possible trajectories for its future development.

Keywords

Historic District Development; Rent Spiral; General Equilibrium Model; Vertical Differentiation Model.

1. Introduction

Once a highly popular internet-famous district, Tianzifang has now become noticeably deserted. Remarks such as "a walk through takes only a few minutes," or "just a few photos and it's done," as well as critiques like "a commercial core with superficial artistic labels" have become increasingly common. Some opinions attribute the decline of Tianzifang to the shock of the COVID-19 pandemic, while others argue that the seeds of its downturn were sown much earlier, with the pandemic merely serving as a catalyst. Therefore, this paper aims to explore why Tianzifang declined, what factors contributed to this process, and how these factors functioned through specific mechanisms.

This study first reviews the reasons behind Tianzifang's rise to popularity from the perspectives of architectural style, creative industry foundations, exogenous demand, and first-mover advantage. It finds that the core competitive edge of early-stage Tianzifang lay in its artistic atmosphere and the provision of heterogeneous cultural and creative products. From the perspective of marginal utility, Tianzifang effectively met the preferences of certain consumer segments. Shifting focus to its decline, this paper proposes that Tianzifang's business model exhibits a phenomenon of "endogenous industrial selection," driven by a market-based mechanism known as the "rent spiral." Strong demand for rental properties led to increasing rents and shorter lease durations, which ultimately filtered and retained high-margin but low-quality merchants. The greater rent-paying ability of these merchants further fueled rent escalation. A two-sector general equilibrium model constructed in this paper shows that when

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excessive market entry occurs and rents are relatively rigid, heterogeneous firms are driven out, resulting in a persistently low level of diversity. This provides theoretical support for the "rent spiral" mechanism.

Furthermore, this paper employs a vertical differentiation model from the heterogeneous product framework to show that shrinking product differences among competitors leads to decreasing profits, supported by a mathematical proof. This demonstrates that the endogenous de-creativization trend within Tianzifang's commercial system has made products easier to replicate and lowered their entry barriers, reducing their differentiation from competitors and intensifying external competition-thus negatively impacting merchant performance. In addition, this paper analyzes the new challenges Tianzifang faces by considering two post-pandemic phenomena: increasingly cautious consumer behavior on the demand side, and fierce branding efforts among scenic areas on the supply side. Finally, following market logic, the paper extrapolates the second phase of the rent spiral and offer.

2. The Rise of Tianzifang

2.1. History and Renovation of Tianzifang

Tianzifang is a traditional Shanghai alleyway (lilong) that originated in the 1920s, serving both residential and industrial functions. Over time, the quality of residential life in the alley deteriorated. As the functional utility of the buildings declined, their cultural and historical significance became more prominent. The crowded alleyways, the arched Western-style doorframes of the shikumen houses, old factory buildings, and overhead pedestrian bridges became tangible carriers of collective memory and traditional urban life. Owing to these unique conditions, Tianzifang was among the first sites to attract the attention of artists. In 1998, painter Chen Yifei established his studio there. This quiet alley soon drew numerous artist studios and local original designers, injecting a strong artistic and creative atmosphere into the district. In the early 21st century, renowned artist Huang Yongyu bestowed the name "Tianzifang," marking its formal transition towards a creative arts district and garnering widespread public attention[4,6].

As Tianzifang's cultural and creative industries flourished, the local government initiated plans for its renewal and redevelopment, originally intending to demolish and rebuild the area entirely[1]. However, this plan coincided with a rise in Shanghai's housing prices, and residents were dissatisfied with the low compensation offered for relocation, leading to strong resistance. Ultimately, through a multi-stakeholder game involving original residents, local authorities, real estate developers, and grassroots organizations, the large-scale demolition plan was replaced with a strategy of incremental renovation. This allowed the preservation of the area's architectural and cultural characteristics. The resulting compromise achieved a Pareto improvement in urban governance [7], though it also laid the groundwork for future disorderly development.

2.2. Reasons for Tianzifang's Popularity

The "celebrity effect" stemming from the early presence of renowned artists attracted a large number of painters, designers, and creatives. Bookstores, art salons, and studios sprang up like mushrooms after rain, gradually forming a cluster of cultural and artistic industries within the city. In sharp contrast to Shanghai's highly commercialized environment, Tianzifang's literary ambiance, petite-bourgeois sentiment, and traditional craftsmanship became its defining features[8]. Cutting-edge trends mixed with whimsical practical creativity, multicultural integration, and a fusion of Eastern and Western aesthetics all resonated with young consumers seeking uniqueness and individuality[2]. Around the time of the 2010 Shanghai World Expo, a large influx of foreign tourists arrived, and Tianzifang, with its strong complementarity to the

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high-end positioning of nearby Xintiandi, became a popular check-in destination for international visitors. Shikumen architecture has both traditional Chinese features and the charm of Western architecture, which is one of the important reasons why Tianzifang can attract a large number of foreign tourists[9].

For foreign tourists, based on the principle of diminishing marginal utility, the appeal of modern skyscrapers-of which they had likely seen many-was relatively low. By contrast, the distinctively local shikumen architecture, rare in other parts of the world, offered high marginal utility, especially for those unfamiliar with similar styles. The layered spatial design of Tianzifang provided an immersive experience akin to the Chinese poetic imagery of "deep courtyards with endless depth," which few foreign visitors had encountered. Consumers will only choose to engage in additional consumption when the marginal utility exceeds the marginal cost. In this regard, attractions like the Oriental Pearl Tower may offer limited appeal to foreign visitors due to lower marginal utility, while places like Xintiandi and Tianzifang deliver a higher perceived value.

This logic also applies to young domestic consumers. Utility is a subjective assessment that encompasses not only physiological needs but also psychological and emotional satisfaction. The younger generation, shaped by growing individualism and greater personal freedom, exhibits a preference for uniqueness-"to have what others do not." If everyone consumes the same thing, individual distinction is lost. In a city saturated with commercial influences, the artistic and cultural atmosphere of early-stage Tianzifang was particularly valuable. At that time, Tianzifang was genuinely a realm of creativity-each small shop was unique in both design and products, radiating the creative ingenuity of its owner. This originality stood in stark contrast to the homogenized offerings of tourist destinations across China and captivated consumers hungry for something different. The distinctive architecture of Tianzifang provided a highly personalized retail environment that complemented the brand image of artistic merchants, helping them showcase their unique style and values. This also supported emotional consumption through the symbolic connection between "this place-this feeling-this object." Furthermore, visiting Tianzifang became a group-distinguishing act, a romantic and idealistic experience in the real world that served as a spiritual outlet for many. Thus, the attraction of early Tianzifang for young people lay not only in its distinctive buildings and handicrafts, but more profoundly in the spiritual satisfaction of expressing individuality.

In addition, as one of the earliest developed characteristic districts, Tianzifang's first-mover advantage and established brand recognition played a key role in solidifying its market position. During the early, unregulated era of cultural district development, Tianzifang stood out as a pioneer, filling an ecological gap in the niche field of creative cultural historical districts. It avoided direct competition with high-end commercial real estate or suburban service centers by differentiating its market positioning. The heterogeneity of its product offerings guaranteed concentrated foot traffic and a generous profit margin. The benefits of early entry and rapid rise in reputation helped Tianzifang first gain popularity in niche communities before expanding to a broader audience. The resulting word-of-mouth and brand image strengthened its appeal to casual visitors and further reinforced its market position, creating natural barriers against competitors. This upward spiral revealed traces of the "Matthew Effect," where the aggregation of industries, traffic, and revenue formed a virtuous cycle-ultimately establishing Tianzifang as a classic case of world-class community revitalization.

3. The Decline of Tianzifang

3.1. Endogenous Industrial Selection: The Rent Spiral

How did Tianzifang gradually decline into its current state of deserted alleyways and dwindling foot traffic? Regardless of the branding or marketing strategies applied, such internet-famous

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districts are, at their core, commercial real estate projects driven by traffic and visibility. These types of real estate developments inherently face a problem of endogenous industrial selection, the specific mechanism of which is referred to in this paper as the “rent spiral”, as illustrated in Figure 1. When demand from merchants to enter the district continues to rise, rent prices inevitably follow. The foundation for this mechanism can be traced back to the original mode of Tianzifang’s redevelopment.

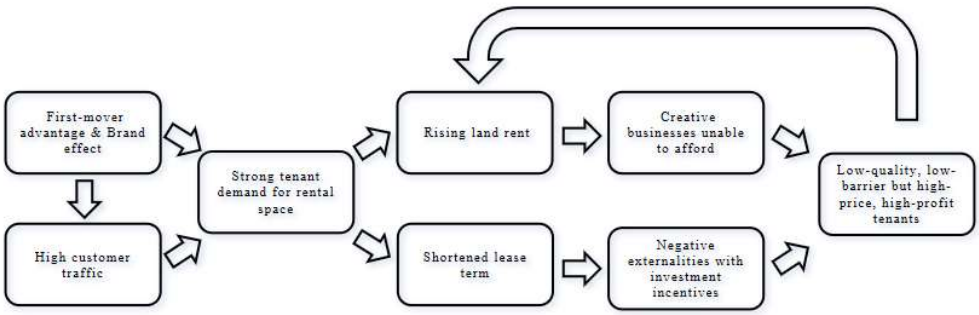

Figure 1. Schematic Diagram of the “Rent Spiral

Due to China’s dual land ownership system-urban land owned by the state and rural land collectively owned by village residents-when the government seeks to develop industrial parks, it typically begins by converting rural land into state-owned land through expropriation, or by compensating the owners of existing buildings on urban land and conducting demolition, thereby gaining full control over the targeted land parcel. The government can then offer or lease the land to enterprises at a relatively low cost to attract investment.

However, Tianzifang’s early development followed a very different path. It originated from grassroots, community-driven entrepreneurship, wherein local residents spontaneously engaged in the transformation of residential units into commercial spaces, a process known in China as “residential-to-nonresidential conversions” [5].With tacit approval from subdistrict offices and other local government entities, this phenomenon gradually spread throughout the district. As more residents became landlords to commercial tenants, their interests became increasingly tied to the continued development of the district. This was one of the key reasons why local residents strongly opposed the government-led demolition and redevelopment plans around 2008. In China, converting residential properties into commercial use without approval is technically illegal. However, under the protection of local governments, combined with strong opposition from residents and lobbying efforts by other civil actors, the demolition order issued by higher-level authorities in 2009 was never enforced. That same year, the Luwan District Housing Authority issued the “Application Procedure for Temporary Conversion of Residential Housing to Mixed-Use in the Tianzifang Area,” which officially recognized the change in property use.

Legalization undoubtedly eliminated the "Sword of Damocles" hanging over the heads of residents. At the same time, it also shifted residents’ mindsets. Previously, because the conversions were technically illegal, residents relied on the informal protection of the subdistrict authorities. In return, they complied with the government’s industrial layout planning. The industry access thresholds set by the subdistrict office were respected by residents, and commercial decorations that undermined the overall style of the district would be removed. This was not based on any formal regulation, but rather on an unspoken “protection–compliance” relationship between the subdistrict authorities and residents. However, once legalization took place, the leasing of properties became a free market contract behavior: residents were now autonomous civil actors, free to sign rental contracts with any merchant, of any industry, at any price-without violating any law. The subdistrict and even the

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district-level government had no authority to intervene. With the threat of administrative enforcement gone, the government's capacity to regulate residents' leasing behavior also vanished. What followed was a situation in which hundreds of individual landlords negotiated directly with hundreds of tenants. This was fundamentally different from a model in which the government could negotiate with a single major developer responsible for managing the entire district. Local authorities had neither the jurisdiction nor the capacity to coordinate and reach consensus with so many individual landlords. At this point, the Tianzifang Management Committee could no longer regulate the types of businesses entering the district, nor enforce a coherent planning style or rental pricing policy-it had effectively been reduced to a property management office.

As a result, market forces came to the fore. The Tianzifang brand was already well-established, and growing tourist traffic created strong commercial appeal. Naturally, more merchants were willing to enter in order to capture this traffic. However, commercial space was limited, and the intensifying demand among merchants gave landlords greater leverage to raise rents. Moreover, each rational landlord had no incentive to consider the long-term development of the district when selecting tenants, because doing so would merely allow profit-maximizing landlords to free-ride. High rents generated substantial income for landlords while also filtering tenants: only those with sufficiently large profit margins could afford to stay. Ironically, the artistic enterprises that once gave Tianzifang its soul were the least able to bear such costs. For example, Chen Yifei's studio was forced to relocate due to unaffordable rent and was even taken to court for unpaid dues-a scenario that became increasingly common and symbolic of broader contradictions.

Beyond rising rents, another key trend was the shortening of lease durations. Long-term five-year leases were replaced with one-year contracts, largely because this period coincided with a strong upward trend in Shanghai's real estate market. With property prices rising rapidly, landlords expected continued appreciation and thus preferred the flexibility of short-term agreements to frequently adjust rental prices. However, short leases created significant uncertainty for tenants and reduced their incentive to invest in and upgrade their shop environments.

To analyze the effects of rent escalation on the industrial transformation of Tianzifang, this paper constructs a general equilibrium model with two sectors: one for homogeneous goods and one for heterogeneous goods. The homogeneous goods sector represents non-creative industries, which typically sell mass-produced, low-differentiation products. The heterogeneous goods sector represents creative industries, which are characterized by cultural and artistic uniqueness and operate in a monopolistic competition framework.

3.1.1. Model Setup

To focus on the impact of the rent spiral mechanism on industrial structure, this paper draws upon the consumer preference framework proposed by Venables [10]. In this setup, consumers derive utility from both homogeneous goods and differentiated (heterogeneous) goods. The utility function is specified as follows:

$$\Omega(X,Y) = Y + U(X) \tag{1}$$

Here, $\Omega(X,Y)$ is a quasi-linear utility function, where Y denotes the consumption of homogeneous goods, whose price is normalized to 1, and Xrepresents the consumption index of differentiated (heterogeneous) goods. It is assumed that $U(\cdot)$ is a constant elasticity of substitution (CES) utility function, which takes the following specific form:

$$U(X) = \frac{\sigma}{\sigma-1}\left(X^{\frac{\sigma-1}{\sigma}} - 1\right) \tag{2}$$

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The consumption index of differentiated goods is specified in the form of a CES function:

$$X = (\int_0^n x(\omega)^{\frac{\sigma-1}{\sigma}} d\omega)^{\frac{\sigma}{\sigma-1}} \tag{3}$$

Here, x(ω)denotes the consumption of a differentiated good of variety ω， and nndexes the types of differentiated products. To simplify the model, it is assumed that the elasticity of substitution is the same between homogeneous and heterogeneous goods, as well as across different varieties of heterogeneous goods, denoted by $\sigma > 1$.Then, the aggregate (or ideal) price index in the market is given by:

$$P = (\int_0^n p(\omega)^{1-\sigma} d\omega)^{\frac{1}{1-\sigma}} \tag{4}$$

Here, p(ω)denotes the unit price of the differentiated good ω.The representative consumer chooses among different products to maximize their utility, subject to the following quasi-linear budget constraint:

$$Y + PX = I\ , I = wL + rN \tag{5}$$

Representative firms in both sectors employ Cobb–Douglas technology, using labor and land as input factors. The production function for homogeneous goods firms is given by:

$$Y = L_Y^{\alpha} N_Y^{1-\alpha} \tag{6}$$

The production function for differentiated goods firms is given by:

$$q = L_Y^{\alpha} N_Y^{1-\alpha} \tag{7}$$

Let $Y\ and\ q$denote the outputs of homogeneous and differentiated product firms, respectively, and let $\alpha > 1$ .represent the share of labor input. Given that existing studies and field investigations have shown that creative industry firms often incur additional costs to renovate their premises in order to create environments more conducive to artistic inspiration and creativity, this paper assumes that each firm in the differentiated product sector must make an additional fixed investment of δunits of land. The fixed cost per firm in this sector is denoted by $r\delta$,while firms in the homogeneous product sector do not bear such fixed costs.

3.1.2. Model Solution

From the consumer utility maximization problem, the demand for each differentiated product variety can be derived as $x(\omega) = p(\omega)^{-\sigma}$. Aggregating the consumption of differentiated products using a CES utility function yields the simplified total consumption as $X = P^{-\sigma}$, Under a symmetric equilibrium, we obtain:

$$x = p^{-\sigma} \tag{8}$$

$$X = n^{\frac{1}{\sigma-1}} x \tag{9}$$

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$$P = n^{\frac{1}{\sigma-1}}p \tag{10}$$

Similarly, the optimal consumption of the homogeneous good can be derived as:

$$Y = I - PX = I - P^{-\sigma} \tag{11}$$

Under the Cobb–Douglas production technology adopted by firms in the homogeneous goods sector, the cost-minimizing unit cost is given by $C_Y = w^{\alpha}r^{1-\alpha}$. Based on the zero-profit condition, the equilibrium price satisfies:

$$r = w^{-\frac{\alpha}{1-\alpha}} \tag{12}$$

The differentiated product sector operates under monopolistic competition with constant elasticity of substitution. Under profit maximization, the optimal pricing rule corresponds to a markup over marginal cost $\frac{\sigma}{\sigma-1}$, given by:

$$p = \frac{\sigma}{\sigma-1}w^{\alpha}r^{1-\alpha} \tag{13}$$

Firms in a monopolistically competitive market must cover fixed costs in order to enter. Based on the zero-profit condition $\frac{1}{\sigma}px = r\delta$, the equilibrium can be solved as:

$$p = (\sigma r\delta)^{\frac{1}{1-\sigma}} \tag{14}$$

Substituting the equilibrium price of differentiated products into the aggregate price index yields:

$$P = (n\sigma r\delta)^{\frac{1}{1-\sigma}} \tag{15}$$

Combining with the total consumption of differentiated products $X = P^{-\sigma}$, the expression for the number of varieties n can be derived as:

$$n = \frac{X^{\frac{\sigma-1}{\sigma}}}{\sigma r\delta} \tag{16}$$

This expression indicates a negative relationship between land rent and the number of firms nin the differentiated product sector.

3.1.3. Theoretical Analysis

Based on the results of the general equilibrium model, this study divides the industrial evolution process within Tianzifang into three phases for analysis. The first phase represents the initial equilibrium, where land rent is denoted as r_1, and the number of firms (i.e., varieties) in the differentiated product sector is:

$$n_1 = \frac{X^{\frac{\sigma-1}{\sigma}}}{\sigma r_1\delta} \tag{17}$$

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As Tianzifang rose to fame, various cultural and creative studios were drawn to the area. A large number of creative industry firms entered the park, leading to increased demand for land. As a result, land rent rose to $r_2 > r_1$, At this stage, the number of firms in the differentiated product sector is:

$$n_2 = \frac{X^{\frac{\sigma-1}{\sigma}}}{\sigma r_2 \delta} \tag{18}$$

According to real-world observations, land rent in Tianzifang exhibits a certain degree of rigidity—rents tend to rise quickly but are difficult to reduce. Some property owners would rather leave their properties vacant than lower the rent. Therefore, in the third phase, if the land rent remains fixed at $r_3 = r_2$, then even as some firms exit and the demand for land in the factor market declines, the presence of rent rigidity leads to the insufficiently timely adjustment of land rent causes the third phase to remain at a low level of diversity.

$$n_3 = \frac{X^{\frac{\sigma-1}{\sigma}}}{\sigma r_3 \delta} = \frac{X^{\frac{\sigma-1}{\sigma}}}{\sigma r_2 \delta} = n_2 \tag{19}$$

3.1.4. Numerical Simulation and Visualization

Building upon the above analysis of differentiated product varieties, this study further examines the market share dynamics between the differentiated and homogeneous goods sectors. Market share is defined in terms of the proportion of consumer expenditure. The market share of differentiated goods is:

$$S_X = \frac{P \cdot X}{I} \tag{20}$$

The market share of homogeneous goods is:

$$S_Y = \frac{Y}{I} = 1 - S_X \tag{21}$$

Under simplified parameter settings, the results of the numerical simulation are shown in Figure 2. Consumption of differentiated products is primarily influenced by the budget constraint and the aggregate price index of the differentiated goods sector. Rising land rent directly affects both the production costs and fixed costs of firms producing differentiated products, leading to a reduction in the number of varieties and an increase in prices. Consequently, the share of differentiated products in total consumer expenditure declines. This phenomenon aligns with real-world observations in Tianzifang, where differentiated goods firms have exited, and the market share of homogeneous goods has expanded while product diversity remains low.

When originality can no longer compete with imitation, and selling creativity becomes less profitable than selling wholesale goods, more and more shop owners turn to vending generic products sourced from low-end commodity markets. Tianzifang remains bustling, but the quality of offerings becomes increasingly uneven. Once its core competitive advantage has vanished, it takes only a slight nudge-changing market conditions-for Tianzifang to fall from its pedestal.

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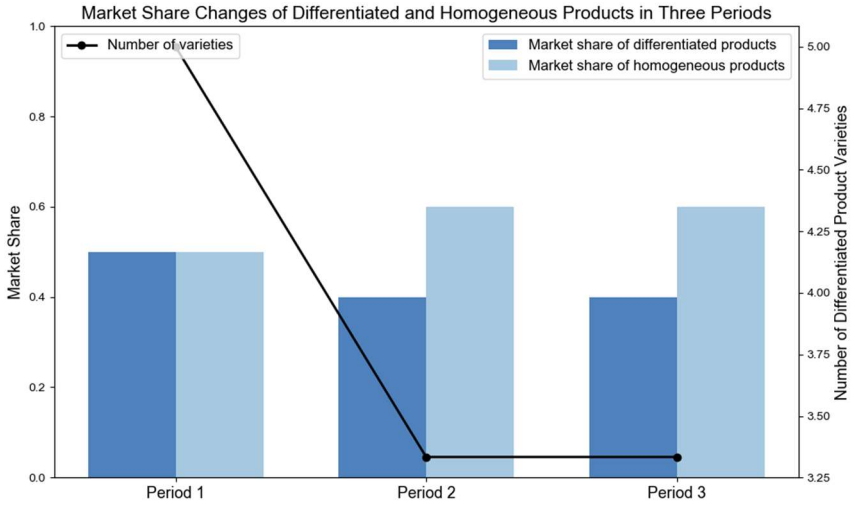

Figure 2 Numerical Simulation and Visualization

Note: This figure provides a visual representation based on the general equilibrium analysis in this study. To simplify the computation, the following parameter settings are applied: the elasticity of substitution between differentiated products is set to σ = 4; the fixed land cost for entry of differentiated firms is $\delta = 4$; both labor endowment (L) and land endowment (N) are normalized to 1. The three phases correspond to: "Phase I: Initial Equilibrium," "Phase II: Rising Land Rent," and "Phase III: Rigid Land Rent."

3.2. External Competition: Shrinking Heterogeneity

In industries without absolute entry barriers, first movers are often pursued by later entrants. Amid the nationwide wave of old-town redevelopment, a growing number of competitors with similar business models-such as Kuanzhai Alley in Chengdu and Ciqikou in Chongqing's Shapingba District-have entered the market. Of course, each city's historic district possesses unique characteristics shaped by its own cultural heritage, and thus cannot be regarded as entirely identical to Tianzifang. Nonetheless, the emergence of these competitors has undoubtedly eroded Tianzifang's early market power in capturing residual demand within its niche segment. As competition in this market intensifies, individual firms' profits are inevitably compressed. Another critical factor is the rapidly rising rent, which continues to erode merchant profitability across the district. In such a market shakeout, those that survive are often low-barrier, low-quality, and high-price vendors selling generic commodities. The decline of cultural creativity, which once formed the core competitive advantage of Tianzifang, has thus undermined its very foundation. As the product differentiation between Tianzifang and other internet-famous commercial areas continues to diminish, its overall business performance is likely to deteriorate further.

This study adopts the model of vertical differentiation from industrial organization theory to analyze the relationship between product differentiation and firm profitability.

We begin by considering two firms producing products of different qualities, denoted by $s_1$and s_2， with identical unit costs c, Without loss of generality, let $\Delta s = s_2 - s_1 > 0$,meaning that Firm 2 offers a higher-quality product than Firm 1. Here, product quality captures the vertical differentiation between the two firms' offerings, where consumers universally perceive Firm 2's product as superior. This reflects the early days of Tianzifang, when its artistic and cultural appeal attracted young people and foreign tourists.

Each consumer's demand is normalized to 1, and the heterogeneity in preferences for the two products is captured by a consumer-specific index θ ,which is assumed to be uniformly distributed over the interval $[\underline{\theta}, \overline{\theta}], \overline{\theta} = \underline{\theta} + 1$. A consumer's utility derived from a product is evaluated based on quality as follows:

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$$u(\theta, s) = \theta s \tag{22}$$

Given the prices of the two products, p_1, p_2, the marginal consumer—that is, the consumer who is indifferent between purchasing product 1 and product 2—has a heterogeneity index $\tilde{\theta}$ that satisfies the condition:

$$\tilde{\theta} s_2 - p_2 = \tilde{\theta} s_1 - p_1 \tag{23}$$

Here:

$$\tilde{\theta} = \frac{p_2 - p_1}{\Delta s}, \tilde{\theta} \in \left[\underline{\theta}, \overline{\theta}\right] \tag{24}$$

The demand faced by the two firms D_1, D_2 is given by:

$$D_1(p_1, p_2) = Prob\left(\theta \leq \tilde{\theta}\right) = \tilde{\theta} - \underline{\theta} = \frac{p_2 - p_1}{\Delta s} - \underline{\theta} \tag{25}$$

$$D_2(p_1, p_2) = Prob\left(\theta \geq \tilde{\theta}\right) = \overline{\theta} - \tilde{\theta} = \overline{\theta} - \frac{p_2 - p_1}{\Delta s} \tag{26}$$

The profit functions of the two firms are:

$$\pi_1 = (p_1 - c)\left(\frac{p_2 - p_1}{\Delta s} - \underline{\theta}\right) \tag{27}$$

$$\pi_2 = (p_2 - c)\left(\overline{\theta} - \frac{p_2 - p_1}{\Delta s}\right) \tag{28}$$

The first-order conditions for profit maximization are derived as:

$$\frac{\partial \pi_1}{\partial p_1} = \frac{p_2 - 2p_1 + c}{\Delta s} - \underline{\theta} = 0 \tag{29}$$

$$\frac{\partial \pi_2}{\partial p_2} = \overline{\theta} - \frac{p_1 - 2p_2 + c}{\Delta s} = 0 \tag{30}$$

By solving the reaction functions of both firms simultaneously:

$$\frac{p_2 - 2p_1 + c}{\Delta s} - \underline{\theta} = 0 \tag{31}$$

$$\overline{\theta} - \frac{p_1 - 2p_2 + c}{\Delta s} = 0 \tag{32}$$

If $\overline{\theta} \geq 2\underline{\theta}$, and $c + \frac{\overline{\theta} - 2\underline{\theta}}{3}\Delta s \leq \underline{\theta} s_1$. The assumption $\overline{\theta} \geq 2\underline{\theta}$ is made to ensure that $p_1^* > c$,meaning that the equilibrium price of the lower-quality firm's product exceeds its average cost. The economic implication is that consumer preference heterogeneity in the market is sufficiently large-there are enough consumers willing to buy Firm 1's product, so its price stays above cost and the firm avoids losses. $c + \frac{\overline{\theta} - 2\underline{\theta}}{3}\Delta s \leq \underline{\theta} s_1$, or expressed equivalently as $p_1^* \leq \underline{\theta} s_1$. This

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condition means that even the consumer with the lowest valuation for quality gains utility that exceeds the product's price. If the opposite were true, such consumers would not purchase the product, as the utility they derive would be lower than the cost, leading to zero demand from that segment.

Then, the market equilibrium prices are:

$$p_2^* = c + \frac{2\overline{\theta}-\underline{\theta}}{3}\Delta s \tag{33}$$

$$p_1^* = c + \frac{\overline{\theta}-2\underline{\theta}}{3}\Delta s \tag{34}$$

Therefore, by comparing the two expressions, we find that $p_2^*>p_1^*$, which means the equilibrium price of Firm 2's product is higher than that of Firm 1.

Furthermore, solving yields the profits of the two firms as:

$$\pi_2(s_1, s_2) = \frac{\left(2\overline{\theta}-\underline{\theta}\right)^2 \Delta s}{9} \tag{35}$$

$$\pi_1(s_1, s_2) = \frac{\left(\overline{\theta}-2\underline{\theta}\right)^2 \Delta s}{9} \tag{36}$$

By comparing the profits of the two firms, we find that π_2>π_1, Furthermore, based on the profit expressions for both firms, it can be inferred that as the product differentiation Δs increases, the profits of both firms rise-that is, a greater quality gap makes the high-quality product more competitive while also allowing the low-quality product to carve out its own niche, resulting in mutual gains. However, once Δs approaches zero and the two products become fully homogeneous, then p_1=p_2=cis the only Nash equilibrium. In this case, both firms set their prices equal to marginal cost and can only earn zero economic profit.

Based on the above model, this paper argues that Tianzifang comprises two markets: one for homogeneous goods and one for differentiated goods. In the monopolistic competition of heterogeneous products, Tianzifang-initially a high-quality producer with cultural heritage and first-mover advantage-was able to set higher prices and earn greater profits. However, as its endogenously rising rents gradually drove out the creative industries, it selectively retained low-barrier, low-quality, high-price merchants. The heterogeneity of its products compared to other internet-famous commercial districts gradually diminished.

A survey shows that compared to 2013, the number of creative industry firms in Tianzifang had significantly declined by 2018-from 51 down to just 18. In contrast, the number of businesses unrelated to creativity, such as small commodity shops and catering services, increased year by year and came to occupy half of all tenant types in Tianzifang. High-end, original designs in art, jewelry, and clothing were replaced by low-creativity merchants selling silk scarves, Korean accessories, and imported handbags. At the same time, there were as many as seven branches of the "Shanghai Lady Snow Cream" shop, which became the most iconic "local product" [3]. When competitors from different cities and districts all source their products from the Yiwu small commodity wholesale market and repackage them as local specialty goods, they fall into low-quality, homogeneous competition. As a result, merchants unable to earn positive profits will exit the market. In addition, while the model assumes that the unit costs of the two types of firms are equal, in reality the operating costs across different cities and districts vary. Among these, Tianzifang's high rents significantly raise the average cost and place local merchants at a

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competitive disadvantage. Once Tianzifang is labeled as a distribution center for Yiwu small commodities, its former identity-high-end, artistic, and literary-is irreversibly lost. The more young people once loved it, the more eager they are now to distance themselves from it, for fear it may damage their image as trendy, individualistic, and stylish. In today's era of highly polarized social media discourse, once reputation is lost, it is difficult to rebuild, sending Tianzifang into a downward spiral.

3.3. New Challenges in the Post-Pandemic Era

Although the impact of the pandemic was severe, the post-pandemic recovery deserves even more attention. The pandemic brought widespread shocks to businesses across the country and heightened consumers' awareness of risk prevention. As a result, future consumption behavior may become more cautious. The relationship between browsing and purchasing may reverse—from shopping being the main goal of visiting, to visiting primarily for viewing, with reduced or no purchases. Thus, Tianzifang faces not only a significantly lower foot traffic level compared to the pre-pandemic period, but also a series of challenges such as low conversion rates and low per capita spending among visitors.

In the post-pandemic period, tourism authorities across China have adopted various strategies to compete for visitors. A recurring cycle has emerged: "a street with a story – brand inflow – surge in foot traffic – rent hike." Cases such as "Zibo Barbecue" and "Tianshui Spicy Noodles" have exemplified media-generated viral trends that quickly capture public attention. However, public interest tends to shift rapidly to new trends, and social media platforms also redirect traffic accordingly. Most of these new-generation internet-famous attractions initially rise to popularity through large-scale marketing and media exposure, but lack uniqueness and differentiation. Without core competitiveness, it is difficult to continuously attract consumers; they may enjoy a short burst of popularity and profits, but soon fade as attention moves on. Given the limited public attention span, how much of it can still be expected to fall on Tianzifang, a relic of a bygone era?

4. Where to Go From Here?

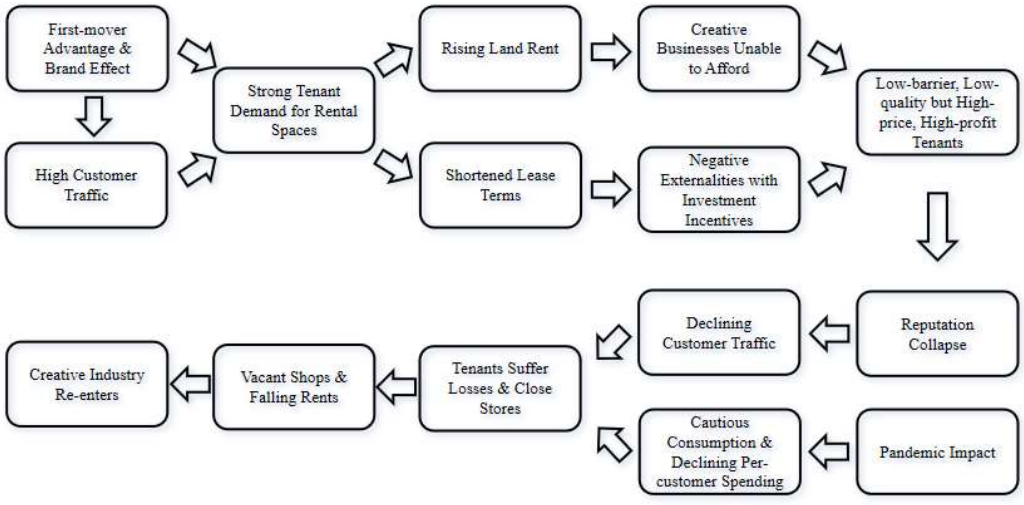

Figure 3. Further Evolution of the "Land Rent Spiral"

From a long-term perspective, the key to revitalizing Tianzifang lies in rebuilding its core competitiveness-that is, identifying a differentiated position among the numerous internet-famous districts across China and offering more unique and distinctive products. Given its

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cultural heritage, the local government's positioning of Tianzifang as a cultural and creative industry park is a rational decision based on its resource endowments. However, challenges remain in the implementation process. Tianzifang's narrow alley-style commercial spaces are inherently more attractive to small- and medium-sized creative studios, but high rent remains the primary barrier to their entry. Due to fragmented property ownership, the local government faces prohibitively high bargaining costs in negotiating with individual landlords, making unified planning and direct intervention difficult. As a result, the market is expected to continue playing a decisive role in this quasi-ungoverned space. Under market forces, the evolution of Tianzifang is likely to follow a "land rent spiral," as illustrated in Figure 3.

The collapse of Tianzifang's public reputation, compounded by the dual impact of the pandemic, has left its merchants trapped in a cycle of low foot traffic, low customer spending, and bleak revenues. Poor business performance means that many tenants can no longer afford high rents, leading to forced exits due to financial losses. As tenant turnover rises, the perceived scarcity and desirability of Tianzifang's commercial spaces decline. If landlords continue to demand high rents, there will not be enough merchants willing to move in, and some storefronts will remain vacant. In response, landlords must eventually lower rents in order to lease out their spaces. Thus, under the influence of market forces, rent levels will ultimately adjust toward an equilibrium where supply meets demand-only at that point can the market clear. Otherwise, maintaining high prices without matching transaction volumes will simply result in persistent vacancies and stagnation.

Figure 4. Transfer Notice for a Tianzifang Storefront

When market rents fall to a level acceptable for creative industry firms, Tianzifang's cultural and environmental advantages may once again emerge as an asset. Otherwise, excessively high rents will continue to select only high-margin merchants selling low-quality, high-priced goods. This paper argues that a more ideal solution would involve some form of effective coordination among the numerous individual landlords-such as delegating partial property rights to local authorities-thereby making the implementation of an industrial planning scheme feasible. However, in reality, collective action is difficult to organize due to the free-rider problem. Therefore, such a governance mechanism is likely to face severe implementation challenges. In conclusion, once a historic opportunity is missed, it may prove difficult to recover. Even if rents eventually return to a level acceptable for cultural and creative businesses, it remains uncertain whether original creative merchants will return. The task of reshaping Tianzifang as a genuine cultural and creative industry park is long and arduous, and its future remains highly uncertain.

5. Conclusion

In sum, this paper has shown that Tianzifang's decline stems from two intimately related economic mechanisms. First, our two-sector general equilibrium framework demonstrates that,

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under conditions of rigid land rents, upward pressures on rental rates lock product variety at a persistently low level. As rents rise, only firms with sufficiently large profit margins can survive; less profitable, highly differentiated creative enterprises are systematically driven out, preventing the district from sustaining a rich diversity of offerings. Second, drawing on the vertical differentiation model, we have established that diminishing quality differentials among remaining firms-products converging toward homogeneity-inevitably erode the markup over marginal cost and compress economic profits. When differentiation vanishes, both high- and low-quality producers are forced to set prices equal to marginal cost, yielding zero economic profit and disincentivizing further creative investment.

Together, these two strands of analysis explain the trajectory from Tianzifang's initial artistic vibrancy to its current state of commercial homogeneity and tenant turnover. Rising rents not only filter out the creative studios that once defined Tianzifang's unique character, but also induce entrants to supply generic, low-differentiation goods, accelerating profit erosion. In this way, a self-reinforcing "rent spiral" traps the district in a low-diversity, zero-profit equilibrium. Recognizing these dynamics is crucial for policymakers and local stakeholders: without mechanisms to stabilize rents or to coordinate landlord behavior so as to preserve variety, Tianzifang-and districts like it-will struggle to reclaim their competitive edge as cultural-creative hubs. Future interventions should therefore focus on re-establishing affordable space for genuine creative producers and restoring product differentiation, thereby setting the stage for renewed vitality in historic commercial districts.

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