

The Critical Role of Street Vendor Organizations in Relocating Street Vendors Into Public Markets: The Case of Hsinchu City, Taiwan

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Abstract

This article analyzes how the Hsinchu municipal government in Taiwan was able in one instance to successfully relocate street vendors into a thriving public market, the Zhu Lian market, but failed in another instance to replicate this success with the Guan Dong market. These two cases both involved in situ relocation of street vendors with similar economic situations. Fieldwork and key informant interviews with vendors and government officials were carried out in Hsinchu City, Taiwan, in 2012.

The research finds that street vendor organizations play a crucial role during the relocation process. In game theory terms, the organization can shape the multiplayer dynamic game of relocating a large number of vendors to overcome the prisoner's dilemma and play a cooperative game for mutual benefits. The article also discusses the potential pitfalls of relying on strong vendor organizations in managing street vendors in the city. Increasing the authority and autonomy of organizational leaders can enable them to bypass lower-ranking officers and negotiate directly with high-ranking officers and politicians, fostering a political patronage system in the city.

Introduction

Street vending is a global urban phenomenon in both the east and the west (Ball, 2002; Bhowmik, 2005; Cross, 2000; Roever, 2006). Conflict and negotiation between street vendors and city governments take place in every major city around the world, and numerous laws and municipal

ordinances are regularly devised to regulate street vendors (Brown, 2006; Cross and Morales, 2007; Kim, 2012). The most common ways city governments regulate street vendors include (1) limiting the number of vendors through licenses or permits, (2) designating public spaces such as street-vending zones, and (3) relocating vendors into public market buildings (Garnett, 1995; 2009). Of these strategies, the effort to move vendors off the street and into market halls and buildings involves more significant public investment and is more complex in its attempt to formalize spaces for vendors. Often, implementation has been problematic because the spatial locations and arrangements are not economically feasible for vendors' livelihoods (Morales and Kettles, 2009). How to spatially manage street vending is a vexing conundrum for many cities around the world.

This article offers the case study of the Taiwanese city of Hsinchu to analyze the reasons why the municipal government in one instance was able to successfully relocate street vendors into a new thriving public market building, the Zhu Lian (ZL) market, but in another instance was unable to replicate this success with the Guan Dong (GD) market project.

In both cases, Hsinchu City worked through the institution of the street vendor organization. The role of vendor organizations is not well studied in the vending policy literature when hypothesizing the problems of previous attempts to manage street vendors through the formalization of public markets. This study focuses on them in order to find what role they may have played in the successful ZL public market case. Then, the comparative GD public market case, in which the city government tried to replicate its success with the ZL market, provides further insights about both the necessary and sufficient conditions that are needed.

Review of the Literature

Street vendors usually develop a sense of entitlement to the space in the city they use to vend, especially if they have been allowed to use the space regularly for a long time. Whether through tacit condoning or an impracticality to evict, the status quo that is built with neighbors and customers helps to socially construct this entitlement. As a result, vendors usually have built social networks and figured out a way to make business profitable (Kim, 2015).

Meanwhile, street vending is viewed as a sign of poverty and underdevelopment by developmental states eager to grow the nation's economy and world standing. Vending's demise is considered a desirable sign of progress toward a more prosperous and developed urban environment. Although municipal governments sometimes may enjoy some success in progressing toward such an environment, street vendors are resilient because of the necessity for livelihood. The police may be able to stamp out street vendors in certain parts of the city, but the street vendors may simply move their business to other parts of the city where enforcement is less aggressive and proactive. Or vendors may wait until enforcement wanes and then return to their old places. Therefore, municipal governments have used another strategy—relocating street vendors to designated vending districts or public markets. Implementing such projects usually involves a long and difficult process of negotiating with vendors. In cities where the occasional off-street public markets have been built, many of those markets suffer high desertion rates and fail altogether. The following list describes the reasons for their failure.

1. **Ill-conceived location.** The new off-street market ideally should be highly visible to customers and be easily accessible. Appropriate locations are usually difficult to find because of high urban land values and the preexisting densely built environment. Lyons and Msoka (2010: 1091) noted that, “The relocation to customer-poor sites makes it difficult for many—and impossible for some—to rebuild their businesses.” Cross (1998) also pointed to unprofitable locations as one crucial factor that led to the rejection of enclosed public markets in Mexico City.
2. **Bureaucratic regulations.** After moving into an enclosed public market, street vendors generally have to face more regulatory compliance obligations with the formal market—obligations that they did not have to deal with when they were on the street (Cross, 1998; Donovan, 2008; Kettles, 2004). In addition, the city government’s rigid method of allocating market booths (such as long-term leases and standardized booth sizes and designs) may not fit well with the needs of street vendors (Morales, 2010).
3. **Lack of customer drawing power.** Vendors may also find it difficult to keep their customer base in new locations (Bromley, 2000; Donovan, 2008; Lyons and Msoka, 2010). Because business relocation is disruptive to business, relocating in situ or in close proximity is important. Furthermore, part of the advantage of shopping in the street often was the convenience to customers en route. The new public market’s design, however, may increase shopping time and costs without offering enough substitutionary advantages. Bromley (2000: 19) noted, “When customers fail to follow, the vendors have little choice but to return to the streets.”

The issues cited in the preceding list put primary agency in the government: successfully relocating and nurturing vibrant public markets depends on the actions of the state. The literature about the social networks of street vendor associations or organizations, however, suggests that such organizations could play a vital role in the relocation process. For one, they could help negotiate vendors’ interests with complex bureaucracies. In addition to having negotiating power, they may have detailed knowledge about the practical needs of street vendors’ livelihoods, which is key to devising any successful street vendor relocation program. If vendor associations do exist, they could also play a key role because their social support network, norms, and regulations might be the ones more relevant to vendors and might also complement, compete with, or challenge the efforts of the state (Cross, 1998; Peña, 2000). Beyond representation, however, it is less clear what role the street vendor organization may play in implementing a relocation program.

This article focuses on further analyzing the role of street vendor organizations in public programs to relocate vendors into market buildings. It aims to tease out lessons by comparing one successful and one failed street vendor relocation case in Hsinchu City, Taiwan. Rather than primarily focusing on the actions of the government, we seek the point of view of the street vendors themselves as well as the government. The goal of this research is to understand what factors make a street vendor relocation process successful, both in terms of empowering street vendors to improve their situation and in terms of the government’s objective to relocate vendors off the street.

Case Selection and Methods

Hsinchu City, with a population of 0.45 million, is known for its high-technology industries; its residents’ median incomes are the highest in Taiwan. Street vendors in Hsinchu City operate under

three kinds of legal statuses: (1) government-registered (GR) street vendors, (2) government-condoned street vendors, and (3) undocumented (UN) street vendors. At the time of this study, roughly 2,500 street vendors were operating in Hsinchu City before the relocation projects discussed in this article began (Taiwan, 2003).

We chose the ZL and GD as comparison cases because they were similar in some important ways. The two public markets are located in the same administrative district in Hsinchu City and are close to each other—the Euclidean distance between these two markets is less than 4.4 miles. The opening of the markets occurred only 7 years apart, with the ZL market opening in 1999 and the GD market in 2006. Both markets are located in middle- to upper middle-class neighborhoods, and most market vendors in both markets have secondary education.

Both cases involve groups of vendors that had existed in the city for more than 40 years. Their long history of existence implies that they enjoyed a stable market demand for their goods and services. They also make interesting comparison cases because ZL is the larger group involving 500 street vendors while GD involved 100 vendors. ZL's larger size would imply a more challenging collective action problem (Olson, 1965; Ostrom, 1990), which makes its success even more interesting to investigate.

Although the ZL public market is located closer to the old Central Business District in Hsinchu City, which would place it in a more valuable location, it also faces stronger competition from other downtown shopowners and street vendors. On the other hand, even though the population density of the eastern part of the city is lower, the GD public market faces less competition because no other public market or Special Street Vending Area (SSVA) operates in the eastern parts of the city.

So, in sum, many of the common obstacles to vendor relocation problems are held constant between these two cases. They both involved relocations in situ, dealt with the same bureaucracies, and used the same public market designs. Thus, rather than focusing on state actions, we focus on the role of the vendor organizations and ask the following research questions.

Research Question 1. How did the vendor organization negotiate and manage the relocation process in the ZL case and how did its actions contribute to the vendors' decisions to move and to stay in the new public market?

Research Question 2. Why did the lessons learned from the ZL market fail to generate a successful market project in GD? What happened differently? What factors led to the failure of the GD street vendor relocation process?

The case study method was chosen as the appropriate method to answer these questions about complex organizational behavior and relationships and to search for new variables to explain success and failure. These case studies were built through fieldwork undertaken in Taiwan in the summer of 2012. The research included semistructured interviews conducted in the Chinese language. The 34 total interviewees included 6 ZL market customers, 4 ZL market vendors, 5 ZL vendor association leaders, 3 GD market customers, 2 GD street vendors who left the market, 2 GD market vendors who stayed, 3 GD vendor association leaders, and 9 Hsinchu City government officials. The study also involved participant observations at the markets and their surrounding streets and a review of government documents and secondary data. The interviews were triangulated with each other and with secondary data in order to allow for some falsifiability.

The Relocation Process of the Zhu Lian Street Vendors

Street vendors first started conducting their business on the streets around ZL Temple, a faith center with historical and religious significance in Hsinchu City, Taiwan, in the late 1800s. By the late 1970s, it was estimated that more than 500 street vendors earned their living in the ZL street market every day (Tai, 2005).

The Hsinchu Street Vendors' Union

The Hsinchu Street Vendors' Union (HSVU) was first formed in 1958 by around 20 street-cart vendors in the downtown area. The main mission of HSVU was to protect the rights of its street vendor members by building a communication bridge between street vendors and the city government. By the late 1970s, the number of HSVU members had grown to around 400 street vendors, and it was the oldest and biggest of its kind in the city.

By the late 1990s, more than 1,000 vendors throughout the city were HSVU members. Approximately 300 of these vendors operated in what is now the ZL public market area, and the rest conducted their businesses in other SSVAs. To manage such a large group of people was challenging. To address this management problem, HSVU divided the vendors into roughly 40 subgroups, each consisting of 20 members, around 5 delegates, and 1 elected opinion leader. Together, these opinion leaders played a significant role in helping to manage HSVU's daily affairs. They not only exerted strong influence on their subgroup members' attitudes and behaviors toward major business issues, but they also offered advice and mediated disputes on the street. Any important HSVU decision could not be made without first reaching a consensus among these elected opinion leaders.

The opinion leaders elected a 12-member board of directors. The board was composed of an executive chairman, a vice executive chairman, a treasurer, and several directors. The board elected its executive chairman, who served as the head of HSVU and its members.

The Construction and Management of the ZL Market Building

As Hsinchu City became more modernized and car oriented in the early 1980s, the city government's policy toward vendors started to change (Mian and Chua, 1986; Tian, 2012). In 1986, City Mayor Rèn (1940–2010) planned a new four-story indoor market building to accommodate 500 booths and underground parking, less than a block away from where the ZL vendors were operating.

More challenging than construction, however, was how to cajole the street vendors into the market building and create a sustainable public market. Even after the ZL market building construction was finally completed, most street vendors were reluctant to move into the multistory market building. They claimed that contact with urban pedestrians would be very limited and their existing customer base would not follow them to the new location. As discussed previously in the literature review, fear of losing business is a common concern that deters vendors from moving into public market buildings as are the cumbersome application processes and the rigidity of market vending regulations.

Before the ZL case, public market buildings in Hsinchu City were built and then directly managed by the city government. This government management model, however, did not serve the purpose of running a successful public market very well.

To avoid repeating the same mistake, the city government conceived that a new management model was needed. In 1998, after reporting to City Mayor Tsai, the then Market Sector Chief Cheng, responsible for managing all street vendors in the city, decided to adopt a public-private partnership approach to managing the ZL marketing building. The city government would commission the operation of the ZL public market to a concessionaire. Upon expiration of the operation period, the right to operate would revert back to the city government. Sector Chief Cheng conceived that the concession contract could help solve the bureaucratic problems in traditional public service delivery and fix failures of the government-managed public markets. It was assumed that, to earn more profit, the concessionaire would have stronger incentives in attracting more customers and reducing the market vacancy rate than a civil servant would.

The Concession Negotiation Process

In May 1997, after no tender had been submitted for two consecutive tendering periods, Section Chief Cheng personally reached out to the HSVU leaders and asked them to tender for the concession contract. Under tremendous pressure from Mayor Tsai, in the meetings Cheng threatened that if no tender was offered by the end of the summer, city government might use any means necessary (that is, forceful eviction and demolition) to relocate the street vendors into the market building and then operate the market without HSVU.

Having long been recognized by the city government as the “legitimate managing entity” of the four biggest SSVAs in the city for more than 30 years, some HSVU leaders said they felt a “moral obligation” to cooperate with Cheng. In addition, the HSVU leaders had the incentive to maintain their dominant position among other street vendor organizations. An HSVU leader recounted, “During that time, we had several internal meetings. Not everyone was confident about moving into the market building,” but, in the end, the late HSVU Chairman Huang agreed to sign a concession contract memorandum with the city government. For the concession right of the ZL market building, the HSVU leaders agreed to pay an annual fee of around 200,000 U.S. dollars (USD) for 9 consecutive years to the city government. In return, the city government promised to offer assistance in helping the HSVU leaders to operate a successful public market.

Due to the logistical and technical difficulties of relocating hundreds of street vendors into the market building, which needed to be redesigned and remodeled to fit the new demands of a modern public market, both sides agreed the concession contract would not enter into force until May 1999.

Redesigning the Market Building

After signing the contract, the HSVU leaders decided to modify the existing circulation system of the ZL market. Under the concession contract—with the exception of two new proposed escalator ramps for customers—all other improvements had to be paid by the vendor organization. They decided to make the following improvements: (1) build a new car-parking ramp that would enable

vendors to more easily unload their wares, (2) upgrade two dilapidated cargo elevators, and (3) set up public seating and indoor landscaping to help foster a sense of community and invite customers to stay at the market.

The HSVU leaders also decided to install a new central air-conditioning system in the ZL market. They wanted to reverse the stereotype in the public's mind that public markets were muggy and smelly. In addition, they hired 10 full-time market cleaners to scrub the floors and clean the windows and contracted with a pest-control company to apply pesticide every 2 months. Next, HSVU leaders organized the market space into three different vending zones: (1) a wet-goods zone (for example, meat, seafood, and fresh produce), (2) a dry-goods zone (for example, handcrafts, textiles, and trinkets), and (3) a prepared-foods dining area.

The Opening of the Market

Upon signing the concession memorandum with the city government, HSVU had already started recruiting street vendors to move into the market. To reach economies of scale and to share the renovation costs, HSVU leaders calculated they needed to rent out a minimum of 250 booths with each booth's tenant(s) paying around 2,000 USD to share the cost of renovations. Although approximately 700 street vendors were conducting business outside the market building daily, at first, few vendors showed interest in moving into the market.

As the market remodeling work progressed, however, more and more street vendors, especially HSVU members, began to convert and move in. Those vendors tended to trust their leaders more than they trusted city government officials. Instinctively entrepreneurial, the street vendors became willing to take the risk. "During that time, everyone was skeptical and unsure about it, but I decided to take a gamble and moved in the market with my friends. In the worst scenario, we could always retreat to and re-occupy the street again," said one street vendor.

In April 1999, the remodeling of the market was complete and approximately 250 street vendors moved in. HSVU's office opened in the ZL market. The street vendors who did not move into the market migrated to other places in the city or rented stalls on private vacant lots abutting the street. In June 1999, the ZL market began its trial operation. After that, the city government sent in the bulldozers and police to evict the remaining few vendors on the street, demolishing the temporary structures and widening the road. Today, the ZL market building remains fully occupied and is viewed as the most successful public market in Hsinchu City.

Major Findings About the Zhu Lian Public Market Relocation Process

Our case study analysis allows us to locate several reasons for the success of the ZL public market project.

Special Relationship Between HSVU and the City Government

One of the most crucial factors that contributed to the ZL public market's success was that its relocation process was implemented by a street vendor organization, the HSVU. The major reason the city government was able to ask HSVU to help relocate the ZL street vendors in the first place was that they had shared a special relationship with each other for more than 30 years. The HSVU leaders maintained social order among the vendors for the city government, and the city government maintained the commercial interests of the HSVU leaders.

In the past, in public market projects, booths were rented individually to street vendors at a symbolic price to "bribe" vendors to stay in the market. In the case of the ZL public market, however, the government adopted a very different approach. Instead of subsidizing street vendors on an individual basis, the city government subsidized the street vendor organization (that is, HSVU) through a relatively low concession fee, treating the organization as a concessionaire that could manage the renting of the booths. The low concession fee helped to assure a profit margin for the HSVU leaders with which to recruit street vendors.

The city government was willing to offer such a novel deal because of the credibility that the HSVU had gained over the years as an effective organization. At the same time, HSVU leaders were willing to assume the task of relocating ZL street vendors because (1) the low concession helped to assure a profit potential, (2) the city government supported their dominant position among vendor organizations, and (3) HSVU leaders also wielded some political influence because they were the biggest and oldest street vendor organization in the city. They could ask for governmental assistance if something went wrong. The successful ZL market relocation process was therefore first carried out on this foundation.

Market Tenant Selection Strategy

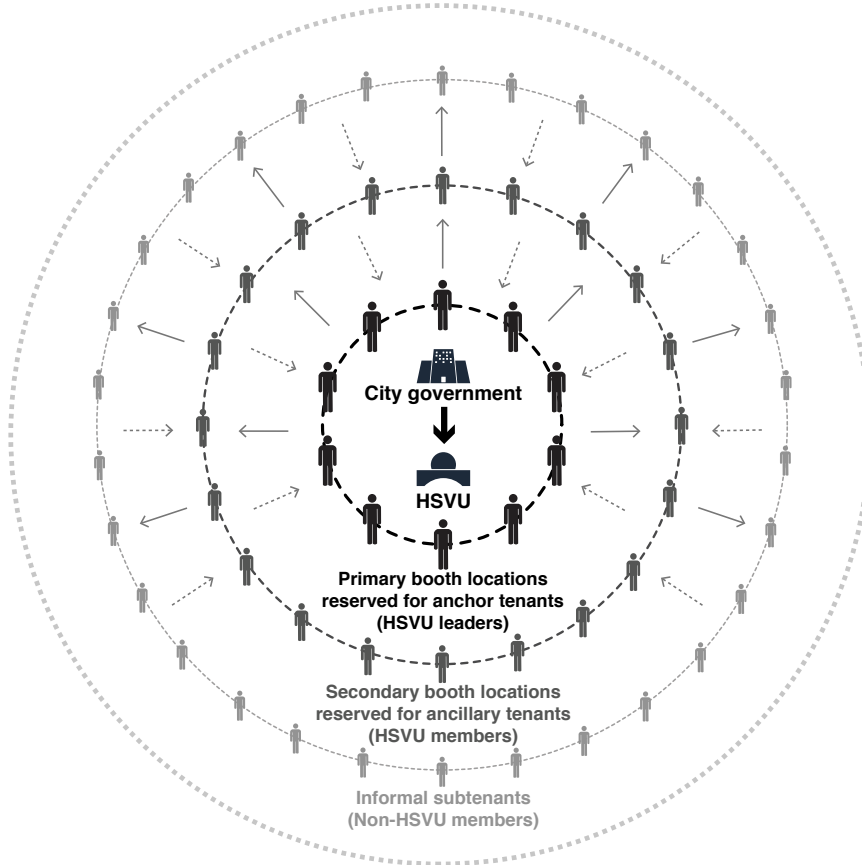
Another important aspect of the ZL street market relocation process was that it had gone through a very careful planning process of the public market project both physically and organizationally. Although it comes from a very different context, the literature about the strategies of American shopping malls is a useful analogy (Brown, 1992; Forgey et al., 1995; Gerbich, 1998; Sweet, 1959; William, 1994).

The street vendors are not a homogeneous group but vary in their relative power and resources (see exhibit 1). When enlisting street vendors for the ZL public market, HSVU leaders mainly focused on recruiting their own members who were willing to share the improvement costs of the market (around 2,000 USD per tenant). Non-HSVU-member vendors who were willing to prepay the improvement cost voluntarily were given secondary consideration. Street vendors who were unwilling or unable to contribute to the improvement cost could not join the market. In this way, the tenant-selection policy excluded any uncommitted or low-margin street vendors from moving into the public market at the very beginning.

The result was a group of the most resourced and entrepreneurial street vendors. Therefore, they were more likely to be able to afford the capital investment necessary to secure new stalls in the new market building. In contrast, the street vendors who were unwilling or could not afford to share the upfront investment cost tended to either be stationary vendors who were still doubtful about the future prospects of the public market, or they were the mobile vendors who moved from

Exhibit 1

The Distribution of Power and Space in the ZL Public Market



HSVU = Hsinchu Street Vendors' Union. ZL = Zhu Lian.

place to place vending their goods. The latter kind of street vendors commonly did not vend continually in the ZL street market. Unable to claim their own urban territory, these vendors' survival strategy was to scavenge the inferior locations left in the ZL street market. Therefore, they were less likely to be able to accumulate a loyal customer base and invest the capital needed to secure new stalls in the market building.

Because the market concession contract did not regulate how many booths one vendor could rent, the HSVU leaders divided the market tenants into three categories: (1) the anchor tenants, (2) the ancillary tenants, and (3) the informal subtenants. Before signing a concession contract with the city government, HSVU first attempted to secure long-term lease commitments from prospective anchor tenants (that is, the street vendors who were willing to rent three or more market booths in the ZL public market at one time and share the corresponding amount of market improvement cost). In return for their entrepreneurship, these anchor tenants had their pick of prime locations in the ZL public market.

Anchor tenants were usually the patriarchs of street-vending families who had participated in the original open-air ZL public market (that is, families who had managed several market booths on the street for a long time and whose syndicates had also cultivated a loyal customer base). Securing the commitment of anchor tenants was an important step in laying the foundation for the future growth of the ZL public market. The seniority and name recognition of anchor tenants attracted customers and also other ancillary tenants to come into the market.

At the founding of the ZL public market, seven anchor tenants accounted for around 10 percent of the market's booths, roughly three booths for each. By moving their own operations into the market early in the relocation process, HSVU leaders were able to market the ZL public market's development plan persuasively to prospective market vendors who might otherwise have felt uncertain about moving their business to a new, indoor public market.

Because street vendors rely on each other's presence to draw foot traffic, after ZL street vendors were assured that certain anchor tenants' customers would visit the public market, they became more willing to set up stores in the ZL public market. As more floating street vendors observed their friends and colleagues relocating, gradually they perceived the ZL public market as a potential business opportunity and decided to relocate as well.

After anchor tenants or ancillary market tenants committed to paying the rent and sharing market renovation costs, HSVU allowed them to sublease their booths to anyone at any price for however long they saw fit. This policy inadvertently created an informal market for ZL public market booths, which allowed market booths to be bought, sold, and exchanged between different subtenants. In addition, HSVU leader/anchor tenants became the largest landlords in this market.

Because of this flexible sublease policy, some anchor tenants thought of renting market booths and conducting their vending business in those booths as two different business decisions. By acquiring (or investing in) more market booths than they needed to conduct their vending businesses, some entrepreneurial anchor tenants anticipated the possibility of future sublease income streams from their spare market booths. The public market project capitalized the street vendor.

The anchor tenants did not move into the market because they were eager to cooperate with the city government; they joined the system only because of clear economic benefits and certainty that their dominant positions would continue to be guaranteed. The HSVU leasing policy offered them tangible financial benefits from the capital appreciation of market booths and potential sublease income.

Scale, Merchandise Mix, and Variety

The large number (250) of vendors in the ZL public market was another asset to the market's success. The vendors offered customers a wide variety of competitively priced products that prompted them to return for both specialized and basic items. One HSVU leader said, "As a rule of thumb, I personally think a successful public market must have more than 150 booths, so the products are diverse enough to draw people back."

The merchandise variety was further enabled by HSVU's ability to allow market vendors to sublease their rights to sell in the market to anyone else on a daily basis—even at a higher daily rent than the market vendors had to pay to HSVU. This practice helped generate new types of

businesses and bring in new business owners to the market. This daily-lease strategy turned out to work particularly well for the fashion retailers. By subleasing their booths to other aspiring street entrepreneurs, particularly those in the specialty apparel, designer clothing, or chic accessory segment, 2 or 3 days a week, existing market vendors were able to add trendy new formats to their booths' overall product portfolio. In fact, more than one-half of the "fashion vendors" in ZL public markets were subtenants.

These daily-lease subtenants were critical to the revitalization of the ZL public market in several ways. First, sometimes a subtenant's business might fare even better than their "landlord's" business. In these cases, these budding entrepreneurial subtenants, who were optimistic that their exclusive merchandise and/or superior service would continue to thrive, might decide to "purchase" the booth from their landlord and officially become a ZL market tenant. Second, when a certain type of product or service was already oversupplied, the mechanism could automatically adjust itself by discouraging market subtenants to lease space. The third benefit of this daily-lease policy was that the sublease tenant helped assure that all booths were operational, especially in situations in which the first tenant might need to be away for personal reasons. Vacant stalls are very conspicuous and hurt the market's image. This daily-lease policy allowed subtenants to plug in to idle booths and maintain the sense of a bustling market.

Management Structure

Both opinion leaders and anchor tenants acted as the main contact people for the ZL public market, and they were available whenever the market was open. They worked together with the HSVU board, overseeing the daily market operations, such as collecting market booth rentals and membership fees, enforcing market rules and regulations, and handling complaints and disputes. HSVU leaders hired a full-time clerk, several guards, and cleaners to cover the daily operations of the ZL public market.

Because HSVU leaders were all street or market vendors themselves, they understood market vendors' specific needs. Therefore, market vendors were more likely to support their leaders' decisions, which in turn made it easier for HSVU leaders to implement new ideas and address new challenges. The management structure also allowed for quicker and easier input, which helped build market vendors' trust of their opinion leaders, instill a sense of ownership in the market, increase communication, and create openness to the market's governance structure.

In Situ Relocation

At the beginning of the ZL public market's planning process, the city government decided to build a new market building on a public space that was part of the original ZL street market. Thanks to its close proximity to the old street market site, the new ZL market was able to retain the social, commercial, and cultural networks of the old street market. As the literature review has shown, by locating the new market building on the site of the old street market, the city government helped sustain the new ZL public market not only by maintaining the support of a loyal customer base, which the old street market had developed for more than 50 years, but also by minimizing the impact on customers' shopping and travel patterns. In addition, as we shall see in the next case, in situ relocation is a necessary but insufficient factor in sustained relocation and market operation.

The Relocation Process of the Guan Dong Open-Air Market

The GD open-air market first appeared in the eastern part of Hsinchu City in the late 1940s. Management of the GD public market vendors differed from that of the ZL street market vendors; whereas a vendor organization managed the ZL street market vendors, the city government managed the GD public market vendors. Roughly speaking, two types of vendors operated in the GD public market. One type was the GR vendor, and the other was the UN vendor. The city government assigned a civil servant to oversee the day-to-day business of the market, such as resolving disputes and collecting stall rents.

By the 1990s, as the population of Hsinchu City grew larger, the crowded and unhygienic conditions of the GD public market generated concerns that it might be detrimental to the city's image. In 2000, after successfully moving the ZL street market vendors indoors, the city government decided to build another new enclosed market building to accommodate the original GD open-air public market vendors. Armed with the knowledge and experiences from relocating the ZL street market vendors, the city government felt confident it could recreate "another successful ZL public market relocation experience," as one civil servant recalled.

The government deployed the following best practices learned from the ZL public market.

- **Relocation in situ.** By setting up the new public market at the original site, the new market building could inherit an established customer base. The GD market vendors could avoid the unprofitable lag time of rebuilding their customer base all over again. So, according to the literature, one of the largest reasons for failure had been avoided: vendors were not relocated to distant locations but were kept in situ.
- **Fostering a vendor organization.** The city government believed that a self-managed public market would give vendors a stronger sense of ownership and incentive for the market's success. The Guan Dong Public Market Vendor Association (GDVA) was established as a for-profit legal entity at the general meeting and the vendors ratified the GD market bylaws. The first GDVA board of directors was elected in 2003. It was assumed that the GDVA would strive to further the common interests of its members, such as maintaining a clean shopping environment, attracting more customers, and increasing foot traffic. These assumptions later turned out to be wrong.
- **User participatory design.** The city government thought that a public market planned and designed with the involvement of its vendors would be more responsive and appropriate to vendors' practical needs, thereby leading to more successful businesses. The GDVA was, therefore, fully consulted during the entire design and development process.
- **The market building.** The new market building was completed in 2006. The mixed-use five-story building, which included two levels of underground parking, was built at the cost of 165 million new Taiwan dollars (3.5 million USD). The ground and second floors were designated as the new market, with 112 market booths, while the remaining floors were designated as a community activity center. The new market had a modern cargo elevator, two passenger elevators, an inclined moving walkway system, a central air-conditioning system, and a loading dock. In short, physically, the new GD market building was a scaled-down version of the ZL public market.

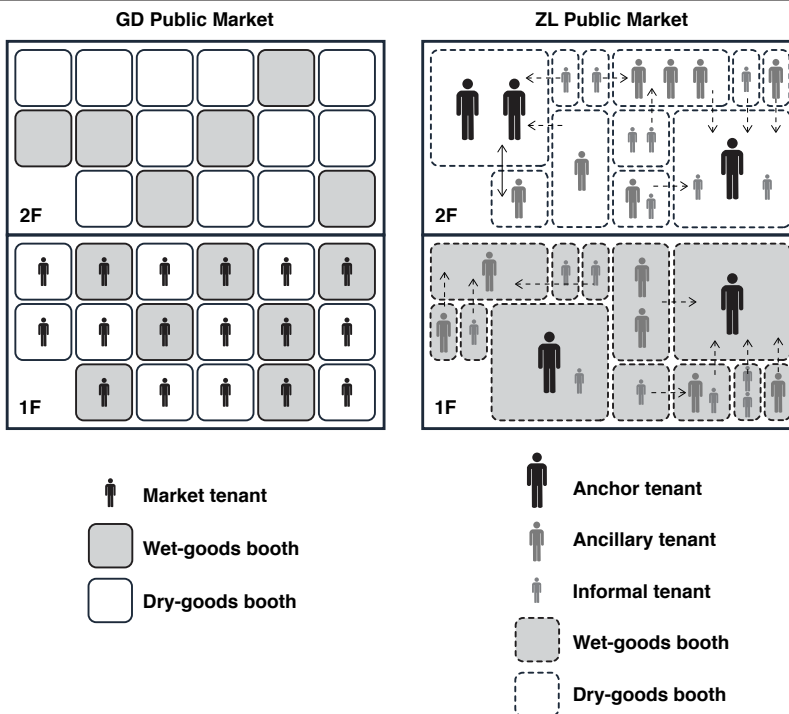
In the fall of 2006, the new GD public market opened. It did not generate the same amount of foot traffic as the original open-air market. The city government and the GDVA failed to recruit enough market tenants to fill the empty market stalls in the beginning—the total market booths were only 60 percent full. On the second floor, particularly, only 8 market vendors had moved in and the rest of the market booths (41) were standing unoccupied. As a result, the cash flow from the market booths rental did not match the investment scale of the market building either. Even though significant efforts had been made by the city government to encourage street vendors to move into the new market, a critical mass of vendors did not move in.

Major Findings About the Guan Dong Public Market Relocation Process

Even though the lessons of relocating the ZL street market vendors had been applied by the city government, the result of the GD public market relocation process had been mediocre. Uncovering the reasons why the GD market was not successful despite mimicking the “best practice” ZL case is important for honing in on the reasons why the first case worked and learning more about the critical role of vendor organizations. As we explain in the subsequent sections, spatial regulations and enforcement importantly shape the economic viability of a property rights system within the market (see exhibit 2).

Exhibit 2

Comparison of the Property Right System in the GD and ZL Public Markets



1F = first floor. 2F = second floor. GD = Guan Dong. ZL = Zhu Lian.

Management Structure and Membership

Even though the city desired to work with a vendor organization and tried to foster one into existence, the main reason the GDVA failed was the problematic way that it was constituted. The government adopted a two-phased GDVA member recruitment strategy, which later turned out to be very detrimental to the market's development. The city government invited the GR vendors to join the GDVA first and recruited the other UN vendors to join the GDVA later. All the GDVA leaders were GR vendors. The result of this recruiting bias was that the UN vendors and their interests were not well represented when the GDVA leaders were holding general meetings and ratifying the GD market bylaws, which were crucial in forging the market's spatial and economic structure.

The city government gave first priority to recruiting the GR vendors because they had established a loyal customer base. The hope was that, after the GR vendors' committed to moving into the market, their seniority and name recognition would help generate the anchor power to influence their customers and also the UN vendors to follow them into the market, as had happened at the ZL market.

To encourage the GDVA members to promote the success of the new GD market, the GD market bylaws required that the GDVA membership status could be granted only to the people who had fully committed to moving into the market. Because the city government used a two-phased tenant recruitment process, predictably the first recruited market tenants (that is, the GR vendors) were able to grab all the market booths on the first floor, and then left all the empty market booths on the second floor to the GDVA members who might (or might not) move into the market later.

Furthermore, under this system, only the GDVA members could change the GDVA bylaws. Therefore, the UN vendors could not change the system unless they joined the GDVA first. Because all the market booths on the first floor had already been grabbed up by the GR vendors, however, if the UN vendors really wanted to change the way market booths were assigned, the only way they could achieve this aim would have been to first rent the market booths on the second floor of the market. None of the UN vendors decided to join the GDVA, and most of the UN vendors remained on the sidewalk where foot traffic is higher than it would have been on the second floor of the GD market.

Allocation of Market Spaces and Zoning

While approving the GD market bylaws, the GDVA founding fathers also decided to abolish the GD market zoning code, so the GDVA members could freely choose the floor where they wanted to conduct their businesses. Right after the GDVA abolished the market zoning code, the GDVA leaders asked the city government to change the market floor plan layout, because all the GR vendors wanted to stay on the first floor and refused to go to the second floor.

In particular, the GDVA chairman himself was a butcher and wet-goods vendor who was originally supposed to go to the second floor of the market. Instead of following the market zoning code, however, the GDVA chairman led all wet-goods GR vendors to abolish the code and sought help from the city council members to ask the city government to change the original design of the market.

A problem emerged with trying to squeeze more market booths on the first floor: each market tenant's vending area became smaller and more crowded, and the market aisles also became narrower. Every vendor had less space to exhibit his or her goods to customers, thereby hurting the diversity of merchandise mixes the vendors could offer. Worse, being squeezed together with the wet-goods vendors, the dry-goods vendors could not enjoy the positive customer spillover effect from each other. During our field survey, we found that only the wet-goods vendors were still conducting their business on the first floor. All dry-goods market vendors had left the market. Even though the city government had installed inclined moving walkway systems to move customers to the second floor as the ZL market had done, the customer base was not willing to go upstairs without high-demand vendors and full occupancy.

From a game theory point of view, the wet-goods GR vendors shared a common interest in decreasing the overall vacancy rate of the GD public market: lower vacancy rates and a more diverse merchandise mix would draw more customer foot traffic. But the wet-goods GR vendors also had individual interests in staying on the first floor, where the customer foot traffic would be highest.

When, in the initial plan, the number of market booths on the first floor exceeded the number of dry-goods GR vendors who were first assigned there, a few wet-goods GR vendors were assigned to those empty spots. But as more wet-goods GR vendors moved to the first floor, the drawing power of the second floor grew weaker. Then, each wet-goods GR vendor would find that, as long as an empty booth was still available on the first floor, to maximize personal interest, he or she should move there to the point until no empty spot was available and to ignore the effects of his or her personal movement on the market.

The net result of this game was that the customer drawing power of the second floor became almost zero, very few UN vendors wanted to move in, and the vacancy rate of the public market has remained high. The market zoning code, the government price support, and the existence of a vendor association that is supposed to act in the interest of the group might have kept wet-goods GR vendors from acting contrary to the common interests of all other prospective market tenants. Even though such intervention mechanism did exist in the GD market, it did not work properly.

Law and Rigid Bureaucracy

In the ZL market case, the street vendor organization—HSVU—had more autonomy in spatially managing its market. In the GD market case, however, the city attempted to foster a street vendor organization, civil servants were still involved, and the city still officially managed the GD market. Public management entailed more restrictive regulations. The major reason the city government could not provide strong incentives for the wet-goods GR vendors to stay on the second floor was that the law did not allow the city government to do so. The law required the city government to treat every market tenant equally—that is, to treat all market tenants literally in the same way. The Public Market Management Law (PMML) requires that all market booths “managed by the city government” should be rent controlled; a lottery should be used to ensure all market booth locations are equitably assigned; every household should acquire no more than one market booth; the tenant should own and operate his or her booth; and the tenant should not transfer (or sublease) the booth to another person, except for his or her family members.

Therefore, the major incentive strategy for convincing the strongest vendors to relocate to an upper floor in the ZL market case was unavailable in this case. Even though the city government knew that enticing the wet-goods GR vendors to stay on the second floor was necessary for the financial stability of the GD market, the city government, handicapped by the PMML, was not able to offer any benefits to compensate the risks and uncertainty the wet-goods GR vendors might face. Also, because of the PMML, the wet-goods GR vendors were not able to capitalize on their first-mover advantage. They could not select prime locations for themselves, their rent per square foot was not discounted compared with the late-movers' rent, they received no cash inducement from the city government, and they could not invest in spare market booths to anticipate the possibility of a future sublease income stream.

Furthermore, because civil servants had to obey the system of rules and follow procedural routines to carry out their duties, the management of the GD public market could sometimes become very inflexible. From time to time, the rigid bureaucratic process made the civil servants unable to respond to the sudden shifts in the environment, and it even restricted the civil servants from solving the problem efficiently and effectively.

Discussion

The city government used similar relocation strategies in both markets: (1) in situ relocation, (2) user participatory design, (3) two-story markets, (4) modern building facilities, and (5) working through a street vendor organization.

The two major differences between these two cases are (1) scale—the ZL market has 250 booths, whereas the GD market has only 112 booths, and (2) institutional capacity—a vendor organization managed the ZL market, whereas the municipality managed the GD market.

This section discusses why, even though the ZL market strategies were applied to the GL market, the success of the GD market has remained elusive. It also examines what can be learned from these two cases that will contribute to a better understanding of the crucial role that street vendor organizations play in the street vendor relocation process.

The Crucial Role of a Robust Street Vendor Organization

A public market can be thought of as a collectively owned resource system, and the market booth is thought of as the unit that each market vendor appropriates from the system. Because the market is jointly provided, maintained, and used by the market vendors, positive externalities can be realized through cooperation, such as higher customer foot traffic and better shopping environments. Enjoying the higher individual net benefits from joint cooperation requires an institution that can effectively regulate the costs and benefits of each of the members. If the institution either does not adequately disperse the benefit/cost ratios or tolerates free riders, however, the common goods will devolve into a suboptimal and dysfunctional arrangement and eventually collapse (Ostrom, 1990).

Many potential risks and uncertainties exist, however, for the first-mover street vendors into a collectively managed resource of a new public market. Even though a cooperative strategy of moving into the market together maximizes the benefits for all vendors, a prisoner's dilemma may arise

in which every street vendor's dominant strategy is to be a late mover. In the GD case, the leaders of the group went even further to alter the rules for their personal benefit. Credible commitments and strong enforcement of transparent governance rules are two of the main ways to overcome the prisoner's dilemma. This article shows that solving this synergistic problem involves the creation of an institutional arrangement so the sets of working rules regulating each street vendor's behavior can be clearly defined, effectively enforced, and mutually monitored.

Scale and Inclusivity

The market generally needs to reach a certain scale so it can offer the necessary diverse merchandise mix to retain or expand its customer base. As the size of the market becomes bigger, so does the difficulty of arranging synchronized collective actions among street vendors. What is more, in the case of the ZL market, the diverse merchandise mix is not created only by the HSVU members (that is, the anchor tenants and the ancillary tenants)—the breadth and depth of the products of the ZL market is, in fact, created also by cooperating with many non-HSVU vendors (that is, the informal subtenants). Working with these “outsiders” makes the coordination work of the ZL market even more complex and intricate.

HSVU leaders, however, were able to perceive the potential values that those outsiders could add to the ZL market and devised a complex property-right system to realize them. An institutional approach that conceives a set of rules determining what actions are required, forbidden, or permitted is therefore essential in solving the tricky problem of coordinating collective actions between the insiders and the outsiders during the ZL market relocation process.

Collective Action and Enforcing the Rules of the Game

Through market zoning and settling the anchor tenants on the second floor, HSVU was able to convince market tenants to trade off the short-term personal interest (that is, grabbing the booths on the first floor) for the higher future economic return (that is, enjoying the higher property value of their market booths). By creating strong customer drawing power on both the first and second floors of the market, HSVU was able to ameliorate its members' anxiety and help them gain a more accurate understanding of what to expect from the market. The HSVU leaders followed these new plans by taking second floor booths, while also being compensated by the ability to buy more booths. Therefore, the vendor members can expect all other vendors to follow the zoning scheme accordingly and adopt adherence to the new order.

In the ZL public market, the regular meetings of the opinion leaders of the street vendors serve as a forum for face-to-face discussion of collective problems and potential joint strategies; therefore, all decisions of the street vendor relocation process are made collectively with every player knowing what the other players will be doing. Even though the forum per se may not change street vendors' dominant strategy of maximizing one's self-interest, the forum helps communicate the rules of the game.

Furthermore, because the information about compliance rates is available from the regular face-to-face meetings with street vendor leaders, street vendors can acquire the information needed to formulate their future strategic decisions. When they know that more affected street vendors agree

to comply with the market zoning code, they are more likely to make the same commitment and act accordingly. If no market vendor is found breaking the market zoning code, it is then reasonable for each market vendor to keep complying with the rule.

The Implications of Having Strong Street Vendor Organizations

ZL public market's success can be attributed to its unique booth-leasing strategies and location assignment rules. These rules followed the original socioeconomic structure of the old market—prime locations were reserved for senior street vendors with the strongest customer-drawing power; marketable property rights for booths were developed so the booths could be subleased or resold, hedging the investments of all vendors; and daily booth rentals were retained for floating street vendors to test new markets.

By recognizing and incorporating the existing activities of street vendor organizations, the government is able to make policies that are more resonant with the local conditions and that are more likely to succeed. In return, after the street vendor organization gets the government's *de facto* recognition, it can make and enforce the rules itself. The power dynamics between the government and the governed has morphed with greater autonomy and governing power.

Political Capital

In some circumstances, the change in power dynamic is so great that the street vendor organization gains even more bargaining power than the government. For instance, when the city government first announced the ZL public market concession bid in 1997, HSVU leaders thought the price of the concession fee was unacceptably high; therefore, they refused to bid. Not until the city government voluntarily lowered the concession fee twice (to 20,000 USD per year) and announced the bid for the third time were HSVU leaders willing to bid on the concession contract. The reason HSVU had the audacity to force the city government to lower the concession fee was that, during that time, no other entity had the ability to relocate the ZL street vendors into the ZL public market. Lacking competition, HSVU had the ability to set its own price.

In other circumstances, when the members of the street vendor organization reach a certain number, the organization leaders wielded political influence over the government civil servants. Again, in the case of HSVU, which had around 1,200 members by the end of 2011 when combining the vendors' friends and relatives, they comprise a politically significant voting bloc that is strongly motivated to protect HSVU members' rights and promote their interests. In other words, at this size, HSVU is no longer merely a group of street vendors on the sidewalks. It has become an advocacy group that carries strong political clout in the street vendor policy decisionmaking process.

Capitalizing on the Street Vendor Organizations' Control of Public Space

A strong street vendor organization provides vendor leaders with an instrument to facilitate engagement in higher value-added "commercial property development" activities rather than just laborious, cost-based street vending. For example, in the first case study of the ZL public market,

some HSVU leaders (that is, anchor tenants) are in the unique positions of “landlord” and therefore are able to receive extra market booth sublease income that is, in fact, more financially rewarding than earnings from running their own vending businesses. In some cases, HSVU leaders can afford to live solely on this alternative source of income.

Furthermore, HSVU leaders not affiliated with the ZL public market spend time and energy seeking underused urban public spaces that have the economic potential to become SSVAs. Such spaces include plazas, parks, sidewalks, and empty market halls in the downtown area, which, according to the urban zoning code, can be converted into SSVAs at night, on the weekends, and in other situations.

After these HSVU leaders gain the use right to such an urban space, they will divide it into lots and establish a system for respecting each stakeholder’s property rights. Next, they determine booth layout and assignment plans, rental/sublease schemes, and other programmatic and formal elements for the space. The city government generally is acquiescent of the property-right system that HSVU leaders devise. Like the ZL public market development process, conflicts of interest are typical, but city government officials generally prefer not to know (or pretend not to know). After HSVU leaders manage to change an underused urban public space into a successful SSVA, such as a night market, or a holiday open-air market, the real market value of the land will typically increase to several times what it was when HSVU leaders first leased the land from the city government.

In the ZL public market’s case, because the concession fee the HSVU leaders paid to the city government was so low during the first 9-year concession period, their profits were very high. Some other street vendor leaders who did not belong to HSVU, or who were pessimistic about the prospects of the ZL public market at the beginning, later became jealous of the huge profits the HSVU leaders possessed and aspired to share a piece of the pie. Some of these street vendor leaders managed to garner enough political and social support to unite as a second big street vendor union, called Night Market Vendor Union (NMVU), to compete with HSVU.

Formalizing the Informal

Although large street vendor organizations are able to gain more political influence and, with that, additional legal protection and formality (such as a stable business environment free from police harassment and a lower risk of capital confiscation), this condition also inevitably attracts more regulatory attention. Therefore, for a large street vendor organization, the goals of gaining more legal protection and evading authoritative supervision are sometimes incompatible with each other. To avoid any external monitoring, a street vendor organization has to stay small and invisible, which will restrict it from garnering strong political influence.

An organization’s size not only makes it more noticeable to regulatory officials, but it also makes it an easy target for the outside entities (such as other street vendor organizations and community groups) that may use existing regulatory norms to weaken the larger organization’s competitive advantage. As long as a street vendor organization keeps growing and gaining more political influence, it may have to begin to formalize in some measure.

An example of this formalization happened during the first 9-year concession period of the ZL public market. Even though the HSVU's dominant position gave its leaders the ability to bargain down the concession fee with the city government, the high-profit margin on the concession contract attracted the attention of Taiwan's Internal Revenue Service (TIRS), a central government agency. By conducting a rental survey to assess the "rental property market" in the ZL public market, TIRS agents were able to assess HSVU's income and tax liability and then required HSVU to pay its fair share of the tax. In short, once the magnitude of a robust street vendor organization (that is, an informal social institution) has reached certain economies of scale, it may make more sense for it to become formal to protect its capital investment and resources.

Collusion

Because the allocation of urban public spaces (such as the ZL public market and the special street vending zones) to street vendor organizations is generally sanctioned by the state, street vendor leaders will find it necessary to create collusive relationships with the agents of the state to maintain their organizations' dominant positions in the city.

By way of illustration, even being the biggest street vendor organization in the city, HSVU still needs to win the bidding war to defend (or expand) its urban territories. If every entity bids on a level playing field, however, HSVU's chances of outbidding others cannot be guaranteed every time. Because the stakes are high, the two biggest street vendor organizations in Hsinchu City (that is, HSVU and NMVU) both sponsor their own "clients" in the city hall. By doing so, both organizations' leaders are able to check on each other to ensure they are not being taken advantage of.

In one rare instance, however, when the financial risk of developing an underused urban public space was so large and the potential return on investment was so immense, both the HSVU and NMVU leaders decided to share the pie together. They worked together to ensure that the bidding result unfolded as originally planned. Their aim was to acquire the usufruct right of a very big lot in the downtown area and then subdivide the benefits among themselves. In this scenario, the HSVU and NMVU leaders were able to undercut the administrative authority of the city government and reconfigure the political and economic structure of Hsinchu City. The urban territory battle takes place not only on the sidewalk but also inside city hall.

Conclusion

This article points out the critical functions a street vendor organization can play during the street vendor relocation process. We explored this issue by comparing two street vendor relocation cases in the same district in Hsinchu City, Taiwan. In the first case, ZL public market, was successfully relocated by a robust street vendor organization; in the second case, the GD public market relocation failed when the city government tried to foster a street vendor organization, but the process devolved into a dysfunctional state.

At first blush, we might think the problem of relocating street vendors into an enclosed public market is a one-person static game—each affected street vendor decides for himself or herself whether to move into the market, filling one empty market booth at one time, one by one, until all

booths in the market are filled. This article points out, however, that the street vendor relocation process is, in fact, a multiplayer dynamic game. A robust street vendor organization plays a crucial role in solving the street-vending relocation puzzle, by providing a governance institution that can better convince its members to conform to the public market plan. In addition, we found that, although spaces were not distributed evenly, they were distributed to the stronger businesses while still allowing for inclusivity of newer entrepreneurs.

The robustness of a street vendor organization affects street vendors' incentives in such a way that they may be more willing to commit themselves to acting together and contributing to the success of the street-vending relocation process. It is a social network that bonds street vendors together and bridges diverse interests, with its own social norms and etiquette. It wields great influence on street vendors' decisions about whether to move into the new enclosed public market and, therefore, can make or break the relocation process.

We also conclude, however, by discussing the strong political influence street vendor organization leaders may possess. Even though the city government may attempt to control and regulate street vendors with the help of the street vendor organization leaders, this approach is a double-edged sword. The recognition from the city government enables street vendor leaders to strengthen their organization's position, expand their territory, and attract more street vendor members; with that, street vendor leaders are able to accumulate more political influence.

After gaining sufficient political clout, street vendor leaders will wield substantial influence over not only their own members but also the same city government that sanctions them in the first place. As a consequence, they can use their political connections to bypass lower-ranking officers and negotiate directly with high-ranking officers and politicians, effectively fostering a patron-client relationship that undermines the sovereignty of the city.

The future of street vendor relocation policies therefore should be designed in such a way that the city government sets the principal rules and the vendor organization implements and monitors these rules. This organization-oriented approach may represent an alternative way to solve the relocation problems; however, the system of checks and balances should also be carefully designed. Even though the city government may need to rely on street vendor leaders' help to facilitate the relocation process, these leaders' power also needs to have checks for the public interest.

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References

- Ball, Jennifer. 2002. *Street Vending: A Survey of Ideas and Lessons for Planners*. Planning Advisory Service Report Number 509. Washington, DC: American Planning Association.
- Bhowmik, Sharit K. 2005. "Street Vendors in Asia: A Review," *Economic and Political Weekly*, May 28–June 4.
- Bromley, Ray. 2000. "Street Vending and Public Policy: A Global Review," *The International Journal of Sociology and Social Policy* 20 (1/2): 1–28.
- Brown, Alison, ed. 2006. *Contested Space: Street Trading, Public Space, and Livelihoods in Developing Cities*. Bradford, United Kingdom: Intermediate Technology Publications.
- Brown, Stephen. 1992. "Tenant Mix, Tenant Placement and Shopper Behavior in a Planned Shopping Center," *The Service Industries Journal* 12 (3): 384–403.
- Cross, John C. 2000. "Street Vendors, Modernity and Postmodernity: Conflict and Compromise in the Global Economy," *The International Journal of Sociology and Social Policy* 20 (1/2): 29–51.
- . 1998. *Informal Politics: Street Vendors and the State in Mexico City*. Redwood City, CA: Stanford University Press.
- Cross, John, and Alonso Morales, eds. 2007. *Street Entrepreneurs: People, Place and Politics in Local and Global Perspective*. New York: Routledge.
- Donovan, Michael G. 2008. "Informal Cities and the Contestation of Public Space: The Case of Bogotá's Street Vendors, 1988–2003," *Urban Studies* 45 (1): 29–51.
- Forgey, Fred A., Paul R. Goebel, and Benny Nixon. 1995. "Addressing Tenant Site Selection To Maintain Shopping Center Success," *Economic Development Review* 13 (2): 56–59.
- Garnett, Nicole Stelle. 2009. "Private Norms and Public Spaces," *William & Mary Bill of Rights Journal* 18 (1): 183–198.
- . 1995. "Managing the Urban Commons," *University of Pennsylvania Law Review* 160 (7): 1995–2026.
- Gerbich, Marcus. 1998. "Shopping Center Rentals: An Empirical Analysis of the Retail Tenant Mix," *Journal of Real Estate Research* 15 (3): 283–295.

- Kettles, Gregg W. 2004. "Regulating Vending in the Sidewalk Commons," *Temple Law Review* 77 (1): 1–46.
- Kim, Annette M. 2012. "The Mixed-Use Sidewalk: Vending and Property Rights in Public Space," *Journal of the American Planning Association* 78 (3): 225–238.
- Kim, Annette Miae. 2015. *Sidewalk City: Re-Mapping Public Space in Ho Chi Minh City*. Chicago: University of Chicago Press.
- Lyons, Michal, and Colman Titus Msoka. 2010. "The World Bank and the Street: (How) Do 'Doing Business' Reforms Affect Tanzania's Micro-traders?" *Urban Studies* 47 (5): 1079–1097.
- Mian, Fong Shia, and Shu Guan Chua. 1986. "The Research of Solving Urban Street Vendor Issues in Taiwan," *Taiwan Commercial Quarterly* 37 (3): 174–204.
- Morales, Alfonso. 2010. "Planning and the Self-Organization of Marketplaces," *Journal of Planning Education and Research* 30 (2): 182–197.
- Morales, Alfonso, and Gregg W. Kettles. 2009. "Zoning for Public Markets and Street Vendors," *Zoning Practice* 24 (2): 2–7.
- Olson, Mancur. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Working paper. Cambridge, MA: Department of Economics of Harvard University.
- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.
- Peña, Sergio. 2000. "Regulating Informal Markets: Informal Commerce in Mexico City," *International Journal of Sociology and Social Policy* 20 (9/10): 37–67.
- Roever, Sally. 2006. *Street Trade in Latin America: Demographic Trends, Legal Issues, and Vending Organizations in Six Cities*. New Delhi, India: Routledge.
- Sweet, Morris L. 1959. "Tenant-Selection Policies of Regional Shopping Centers," *Journal of Marketing* 23 (4): 399–404.
- Tai, Po-Fan. 2005. "Who Are Vendors? The Historical Formation of Vendors in Taiwan," *Taiwan: A Radical Quarterly in Social Studies* 17: 121–148.
- Taiwan Directorate-General of Budget, Accounting and Statistics. 2003. *Quinquennial Taiwan Street Vendor Survey*. Taipei, Taiwan: Republic of China (Taiwan).
- Tian, Shian Po. 2012. *Evaluating the Possibility of Managing Public Market Through Public Private Partnership*. Taipei, Taiwan: Taipei City Government.
