

# 主論文の要約

(Abstract of Dissertation)

論文題目 : Spatial Plan and Economic Development in Indonesian Small Cities:  
Comparative Study of Jepara's Flexible Plan and Tegal's Rigid Plan

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論文内容の要約 :

Following decentralization in 1998, Indonesia stipulated new spatial planning regulation (Law 26/2007), which mandates district governments to compile the new spatial plan. The 26/2007 Law states that district spatial plan must integrate national and province's interests. Then, the unregulated areas are handed over to district governments to be regulated.

A number of studies on Indonesia's spatial management examine big cities and their surrounding areas, as conducted by Buchori and Sugiri (2016), Hudalah (2017), Pravitasari et al. (2018), Rukmana (2015), Sadewo, Syabri, and Pradono (2018), and Setiyowati et al. (2018). Such a situation makes small cities somewhat neglected in spatial-matter studies, as argued by Bell and Jayne (2009).

This study fills the research gap on small cities' spatial management studies. Tegal and Jepara are picked to represent small cities. Tegal has a rigid spatial plan, while Jepara's plan is flexible. A rigid spatial plan grants one or closely related activities in a designated zone as in the USA (Buitelaar, 2007). Meanwhile, a flexible spatial plan permits multiple functions to take places, such as in England (Buitelaar, 2007) and Japan (Akashi & Ochi, 2007).

This research analyzes spatial plans in Indonesian small cities, looking backward when the plan was in the making process and forward after the plan was in the implementation and revision process. The research tries to answer the following questions. First, why some cities opted for flexible spatial plans while many others chose rigid plans. Second, how rigid and flexible spatial plans affect incoming investments. Third, why adverse effects arise in Jepara that applies flexible zoning and why Jepara's government was unprepared to prevent such adverse outcomes. Fourth, how the spatial plan revision process proceeds.

In answering the first question, this research finds that the social factor mattered the most in affecting a spatial plan type choice. There are three reasons behind a decision to opt for a spatial plan type: institutional, economic, and social factors (Tasan-Kok, 2008), in which the economic factors are the mostly-found reason. The economic reasons were less significant since, when the plan was in the making process around the early 2010s, the economy was still concentrated in big cities (Indonesia Statistics Central Board, 2021) and small cities did not receive many new investments. Hence, competition among small cities to attract firms had not yet started, making districts'

top managers did not pay much attention to the issue. Meanwhile, the institutional factors could not elucidate why Tegal and Jepara opted for different plan types since both districts belonged to the same governmental system and referred to identical regulations in making their spatial plans.

After spatial plans are imposed, the next thing to do is to analyze how they affect incoming investments. Flexible zoning, according to Healey (2004), Mills (1991), and OECD (2017a), will attract more investments compared to rigid zoning. Such an occurrence takes place in Milan (Healey, 2004). However, Milan is a metropolitan with many pulling factors for investors. Then, how about small cities' situation, with fewer pulling factors? Will flexible zoning entice more investment to come there?

Another research was conducted by James et al. (2016) in Invercargill, a small city in New Zealand. They found that the city was revitalized after implementing governance reform, cooperation with other cities, and flexible zoning. Then, how about small cities that compete with each other and against bigger cities instead of cooperating? Is loose zoning the sole factor that matters in alluring firms to come? Then, to what extent does flexible zoning attract investments in small cities?

The reasons behind the firms' location choice can be classified into neoclassical, institutional, and behavioral factors (Hayter, 1997). The neoclassical factors are elements that directly affect firms' financial condition. The institutional factors deal with institutional matters (whether the institution itself like the permit provisioning process or regulations as the outputs of institutions). Finally, the behavioral factors are an influence of personal liking in deciding the firms' location. Out of those factors, according to Moriarty (1983, in Hayter, 1997), the neoclassical factors (mainly labors' availability and wages, land price, and infrastructures) are considered the most influential. In contrast, zoning regulation was deemed important only by 55% of respondents.

Firms conducted two steps survey before deciding plants' location. In the preliminary survey, firms considered the aforementioned neoclassical factors and infrastructure availability. Then, the follow-up survey was conducted to examine the institutional factors, such as the government's openness to investment, zoning regulation, and brokers' behavior.

The data reveals that Jepara attracted more investments and included as big-five districts in Central Java Province in terms of accumulated investments in 2013-2019 (Central Java Province One Stop Service, 2019), although Jepara is not crossed by the national road and railway network. Nevertheless, both Jepara and Tegal offered relatively low wages compared to bigger cities, abundantly available workers, and cheap land prices. The low wages advantage was gained after 2014, following a sharp increase in JMA districts' minimum wage. The incoming investments in both districts mainly came from JMA.

In addressing the second research question, this research's findings demonstrate that in small cities context, the districts that have loose zoning will likely attract more investments than the districts applying rigid zoning, thus conform the findings stated by Healey (2004), Mills (1991), and OECD (2017a) above. Nevertheless, there are several conditions: the laborers' availability, wages, and land prices should be competitive enough so that the districts are included as one of the potential locations in the firms' preliminary survey. Those conditions were the firms' first considerations in

deciding the factories' locations, and zoning was not included as the primary concerns. Still, the spatial plan played a significant role, as inferred in Tegal and Jepara's case. Although Jepara possessed inadequate transportation infrastructure, the regency was more successful in attracting firms. Investors preferred a flexible spatial plan since they have more options to choose the plants' location.

Nevertheless, in broader city constellations, the theory is inapplicable. Firms would still choose bigger cities (although they have rigid spatial plans) than small cities (even though they offer loose zoning), provided both types of cities have similar neoclassical factors. This situation was due to bigger cities' advantages that small cities will never be able to defeat: already-mature agglomeration economies and international-level infrastructures such as seaports and airports.

Responding to the third question, in Jepara that received many new investments, the incoming firms bring favorable and unfavorable effects. On the one hand, the firms make the economy grow and provide jobs. On the other hand, adverse effects transpire, such as uncontrolled growth, land conversion, and difficulties in finding persons willing to work in agricultural and traditional industry sectors. People are more interested in working for factories since the factories give better salaries.

The negative impacts occurred because Jepara's flexible spatial plan J was not made based on the technical requirements in formulating such a plan, making the regulation does not provide any preventive measures to contain the harmful effects. Such a situation occurred since, when the plan was in the making process, the economy was still concentrated in big cities. Thus, the policy actors did not expect that there would be many incoming investments.

Replying to the fourth question, in the spatial plan revision process that started around 2019, the economic factors became the most influential factors; thus, it follows the findings of most studies on spatial plan making. The circumstances alteration when JMA districts set a steep increase on their minimum wage regulations in 2014, which made labor-intensive firms unsettled and flee to look for other regions that offer lower production costs (Deny, 2015; Pamungkas, 2018; Sari, 2013; Siregar, 2019), influenced the revision process. The policy actors paid much more attention, and they demanded to provide more spaces for investors.

This research offers several theoretical contributions on spatial management topics, especially in the small cities context. First, in small cities' spatial plan-making process, the economic factor is not always decisive. Such a situation happens when investors do not consider small cities attractive for investment locations due to industrial agglomeration in big cities. Later, when investors deem small cities attractive, the economic factor becomes influential. The state of affairs shows that there is a time gap between big cities and small cities regarding the time when the economic matter comes to be significant in spatial plan making.

Second, the theory stating a flexible zoning plan will entice more investments than a rigid zoning plan (Healey, 2004; Mills, 1991; OECD, 2017a) only applies in the small-city context and is inapplicable in the bigger-city constellation. The partial applicability occurs because small cities are mostly in a disadvantageous position against bigger cities.

Third, spatial-related theories derived from big cities' experiences are not always applicable in the small cities' context. Small cities have different characteristics and

face distinct issues compared to big cities. Hence, a researcher studying small cities should be careful in using such kinds of theories in order to not fall into bigger cities' bias.

Fourth, the relationship between small cities and big cities does matter in spatial plan making, implementation, and revision process. Small cities are more dependent on bigger cities, but not the other way around.

In a broader context, this dissertation's findings show how policy actors learned and adapted to the rational functions of the spatial plan. Theoretically, the policy actors should choose a flexible zoning plan because such a plan is more attractive to investors than a rigid plan. However, the spatial plan was not always rationally understood and interpreted by policy actors. That was why some districts opted for a rigid plan in the plan-making process in the early 2010s and in the plan revision process around 2019.