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Energy & Utilities Practice

Industrial Park Governance

The Vital Cog for Success

Content

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Executive Summary

Governments often resort to the creation of industrial parks to catalyse the economy of a region or of the whole country. They invest tax-payer money into infrastructure projects with a view to attract investors into the park. If the park is thriving, these investors will in turn pay land rentals or dividends through their joint ventures with the park's governing entity. They will also bring jobs to the region or the country, corporate tax income to the state or federal government and will enhance the park's visibility with their own stature.

Economies of scale and synergies are driving the creation of large industrial parks. However, governments often struggle to establish an effective and empowered governing entity to administer and develop these parks. This article stresses the benefits of a governing entity, discusses the key questions faced by most governing entities, as well as governance models observed around the world and their characteristics. Finally, it establishes what criteria should be used to choose the best model and applies them to select it.

Benefits of a Governing Entity for an Industrial Park

Balancing the park's development strategy from the country's point of view and the interest of potential investors is paramount to the success of a park. Failure to do so will result in the government wasting tens or hundreds of millions of tax-payer money in infrastructure. The Suzhou Industrial Park (SIP) initially failed in the 1990s until the right balance was reached and a major share structure reshuffling occurred at SIP. This decision power balance is at the heart of any park's governance model.

Prominent industrial parks, such as Jurong Island in Singapore, the Port of Rotterdam Authority in the Netherlands and the Shanghai Chemical Industry Park in China, all have governing entities in place to support various administrative and development functions. Having a governing entity ensures seamless coordination among multiple parties. Large industrial complexes that deal with multiple stakeholders, such as government and various agencies, investors and NGOs, will benefit from a single point of contact.

A governing entity also ensures the formulation of integrated development plans. A large industrial complex needs an entity to plan and execute plans such as for land preparation, infrastructure, facilities, utilities and peripherals. This entity can serve as a developer or master planner in the coordination of these various activities. The third benefit of having a governing entity is to source and manage funds in order to finance the development of infrastructure and facilities in and around the park.

Finally, the governing entity will drive processes for requesting or raising funds to finance infrastructure and facility projects, and ensure the right connections to funding pools are in place (e.g., a statutory body can request funds from the government, but a corporation can raise funds by issuing equity to its shareholders and investors). Having a sound governing entity can also bring strong marketing capability and focused promotional strategies to attract investors.

Key Questions Faced by Governing Entities

There are key questions that drive the selection of a governing entity for an industrial park. Choosing the right framework is a crucial step, as it dictates timelines, the scope of functions, authority levels and budgets in the initial phase of the park's development.

The overarching question is what the governance options are for the industrial park. The first question faced by a governing entity relates to its scope of function. An industrial park mainly exists to administer, develop and finally create sustainable economic benefits from an industrial area, and its governance structure will define how these two functions are executed.

Secondly, there is a need for clarity around which projects should be funded by which entity (e.g., the federal or state government, investors, or the development corporation such as the case may be). This is essential to establish, especially at the onset of the industrial complex, as the development of the infrastructure and facilities of the park is one of the primary factors in attracting investors into the park.

It may not be absolutely necessary to finalize and link the project to the funding entity. It is sufficient to agree on the principles for the project and funding may be adapted, within the principles, to suit the evolving and aligned needs of the park development.

The level of authority given to the governing entity and the land over which it has jurisdiction are also important to define. This will determine, for instance, the budgeting process, approval levels for spending, and execution of projects. Access to funds is also connected to the dimension of management board representation, which will shape the administration and development of the park.

Finally, the question of revenue allocation needs to be addressed. The sustainability of the park raises questions such as "Who will own the land surrounding the industrial complex?"; "Who will collect the rent in the area of the industrial complex?"; and "How will investment into development activities be recovered?".

Governance Framework Options

Arthur D. Little conducted a benchmarking study of successful industrial parks around the world. They included:

- Jurong Town Corporation (JTC) in Singapore
- Port of Rotterdam Authority (PRA) in the Netherlands
- Shanghai Chemical Industry Park (SCIPAC and SCIPDC) in China
- Iskandar Regional Development Authority (IRDA) in Malaysia
- Bintulu Development Authority (BDA) in Malaysia

Although there could be variations around the same theme, there are essentially three governance models: (See Figure 1.)

Option 1 – Statutory Body:

A statutory body is formed by a legislative act, and is given certain powers as defined by this act. It has the mandate to both develop and administer the park. JTC in Singapore was established in 1968, and is the main developer and manager of industrial estates in Singapore. The efficiency of the government of Singapore has contributed to the success of JTC through centralization of economic development activities (i.e., multiple projects were done in conjunction with the Economic Development Board of Singapore).

Option 2 – Corporation:

A corporation is a profit-driven entity created to develop and administer an industrial complex. The Port of Rotterdam Authority (PRA), formerly a department of the Municipality of Rotterdam, was corporatized in 2004 so it could finance the port activities and better respond to client demands. Positive state and government involvement and readiness of infrastructure from the onset have also contributed to its success to date.

Option 3 – Combination of Statutory Body and Corporation:

In the third model, a statutory body and a corporation are set up, respectively, for administration and development of the complex (e.g., SCIP). In this model, the statutory body protects the government's interests and administers the park. The corporation holds the land and develops the complex; land is rented to investors, generating sustainable income.

Figure 1: Governance framework options around the world

Governance Framework Options		
Option 1	Statutory Body	■ Established through an act of parliament ■ Responsible for both development and administration
Option 2	Corporation	■ Established through a companies act ■ Responsible for both development and administration
Option 3	Statutory Body plus Corporation	■ Statutory body is responsible for administration ■ Corporation is responsible for development

Source: Arthur D. Little

Characteristics of the Three Governance Models

Before one selects a governance model for the administration and development of an industrial park, it is important to understand the characteristics of the three governance framework options observed around the world. For simplicity, these have been defined along the dimensions derived from the key questions outlined earlier:

- Scope of Function
- Source of Funding
- Authorities
- Constitution of the Board of Management
- Revenue Allocation

Scope of Function:

A statutory body may have various jurisdictions to administer and develop the industrial complex under its purview. It can create investor-friendly by-laws and act as a central coordinator to facilitate investors' interaction with various government agencies; it can influence the government to provide schemes, such as tax holidays, in order to attract potential investors. On the development side, a statutory body may receive capital grants from the government to purchase land, and to develop and maintain a common infrastructure.

Alternatively, a corporation can develop a master plan and get it approved by the required government entities. It then acts as a facilitator to enable investors to interact with government agencies, and is responsible for marketing the complex to other potential investors in the park. On the development side, the corporation can develop common infrastructures such as roads, drainage, lighting and form, or participate in joint ventures to develop utilities.

A combined model segregates functions by having the statutory body oversee the park's administration, while the corporation oversees its development.

Source of Funding:

A statutory body usually receives an annual budget from the ministry under which it is established (e.g., JTC and IRDA), and may receive capital grants from the government for the purchase or construction of assets (e.g., JTC). If the body owns the land and collects rent from investors in the park, the body remains sustainable and plows its income back into development and administrative activities. It can also have separate development and operational funding pools under its management (e.g., IRDA).

A corporation is usually set up through an initial capital investment from the state or federal governments. Driven by commercial principles, it is expected to fund itself through revenues generated from its operations. In addition, a corporation can receive public loans.

A combined statutory body and corporation usually receive an annual budget from the ministry under which the statutory body is established for the administration of the park. The corporation can be funded initially by government entities or government-linked companies (e.g., SCIP), and equity stakes are given in line with the funds received. The corporation is then expected to be a sustainable entity that funds its development through income received from operations (mainly land rental or revenue from JVs).

Authorities:

Based on our study, we found that a statutory body can draft and enforce its own by-laws to make the complex investor friendly (e.g., BDA has developed various by-laws for the Bintulu development), own the land and collect rent from its investors (e.g., JTC), develop the complex with external oversight and control, or even distribute loans, borrow money, make investments and employ staff.

A corporation, instead, follows existing laws as defined by the country companies' act, and does not have the authority to create by-laws.

But a combination of both will have the authority typically granted to a statutory body, and yet function like a corporation. As such, the statutory body can draft and enforce its own by-laws to make the complex investor-friendly, and act as a one-stop shop for all investors in their interaction with the government; it can also set administrative procedures for establishing companies within the park, and decide which industries should be given preference and manage policies (e.g., SCIP). Meanwhile, the corporation has economic ownership of the land and authority to collect rent from its investors.

Constitution of the Board of Management:

Each entity has its own unique characteristics and composition. In JTC, the chairman, deputy chairman and other members are appointed by the Ministry of Trade & Industry, with concurrence from the government and representation from other ministries as well as legal and accounting firms.

But for a corporation such as PRA, the management and supervisory boards are typically apolitical. PRA is managed by an executive board, which is overseen by a supervisory board composed of members from the public and private sectors. These members represent railways and shipping and utility companies, which have a vested interest in developing infrastructure and utilities for the park. The executive board then meets with the supervisory board at the annual general meeting, where investors in the park are represented through a federation.

In a combination of both statutory body and corporation, such as SCIP, the leadership group is composed of representatives of the Shanghai government and the district government. The administration committee is essentially an arm of the Shanghai Municipal Government, and the development corporation is governed by a board with six shareholders. But each shareholder is, in fact, a subsidiary of either the Municipality of Shanghai or SINOPEC.

Revenue Allocation:

For a statutory body, revenue is almost uniquely derived from land and building rental income. This is the case for JTC, which collects rent on land that belongs to the Land Office of Singapore in exchange for developing it.

Instead, a corporation such as PRA may have multiple revenue streams such as port dues and quay fees, as well as rent and ground leases.

A combined model, on the other hand, allocates revenues differently between the two entities. For example, in the SCIP Development Corporation, one source of revenue is through leasing land user rights to investors, while the other is revenue from JV companies (e.g., utilities), which can be reinvested into the park.

In summary, funding and revenue streams flowing to the governing entity, land rights and authority over the land under

Figure 2: Key characteristics of each governance model option

	Statutory Body	Development Corporation	Statutory Body plus Corporation
Framework	■ Set up under Federal or State with a mandate for development and administration ■ Can collect rental from State land	■ Equity split determined through negotiations between Federal and State based on capital and land investment ■ Can collect rental from State land	■ Statutory Body for administration, acts as a cost center ■ Corporation for development, acts as a profit center through State land rental
Scope of Function	■ Can influence the government to incentivize investors and coordinate with agencies ■ Develops or outsources infrastructure and utilities	■ Facilitates investor interactions with government agencies ■ Owns and develops the Master Plan ■ Can form JVs to develop utilities	■ Statutory Body gives development direction to the Corporation ■ Statutory Body interfaces with the government and its agencies ■ State alienates land to the Corporation
Funding	■ Receives annual budget ■ Can receive grants from government ■ Has access to development funds	■ Driven by commercial principles ■ Needs revenue streams to sustain itself ■ Can receive public loans	■ Driven by commercial principles; needs revenue streams to sustain itself; can receive public loans
Authority	■ Can own the land ■ Can draft and enforce its own by-laws	■ Has authority over its own budget ■ Can enter into JVs	■ Statutory Body acts as One Stop Shop ■ Corporation has budgetary authority
Board of Management	■ Federal and State representation ■ Investors through a committee	■ Apolitical board representing relevant industries ■ Investors through a federation	■ Body has Federal and State representation ■ Corporation with GLC[1] representation
Revenue	■ Derives revenue from land rental or acts as cost center	■ Pays dividend to shareholders and/or re-invests into development	■ Body has no revenue; Corporation pays dividends and/ or re-invests

Source: Arthur D. Little
1 Government-Linked Companies

its purview and constitution of the board of management are all central to the governance of an industrial park. Each of the benchmarks analysed follows one of the three governance models and each of the three governance model options carries its own characteristics (see Figure 2).

The next section discusses the criteria that we have used in order to weigh the pros and cons of the three governance model options and recommends what is the best model to govern an industrial park.

Selection of the Best Governance Model

Based on our analysis, we identified nine evaluation criteria that help bring clarity amongst the various characteristics of the three models.

a) Investor Friendliness

Investor friendliness relates to the ability to act as a facilitator to potential and current investors as a one-stop shop (e.g., issue operating licenses and submit proposals on investor-friendly schemes to government agencies). A statutory body rates higher than a corporation on this dimension, thanks to connections made easier with other government entities. But a combined entity still rates higher overall as it also brings the marketing capabilities of a corporation.

b) Government and Public Alignment

Government and public alignment relates to how federal and state governments have input into the entity's direction and functions, and how the park's governing entity can protect the interest of the public and align with the country's strategy. A statutory body rates higher than a corporation on this dimension, however the combined option rates higher overall. It is less likely to fall prey to political interests than a statutory body, even when the government has shares in the corporation itself.

c) Capital Independence

Capital independence captures how the entity can secure sufficient capital outlay for development activities. There is a need to balance capital independence on one hand, and government and public alignment on the other. At the outset, a statutory body will be completely reliant on government funding for both development and administration of the park, while for a corporation most of the initial fund raising occurs through debt financing with relatively low government capital injection. The statutory body rates lowest on this dimension.

d) Political Robustness

Political robustness measures how independent the governing entity is from political influence. Politicians might have more influence over a statutory body than a corporation, in terms of elections and composition of a board of management. Also, for a statutory body, politics are key to securing a budget from the government for the administration and development of a park, making it tributary to political ups and downs. As such, the corporation is the best governance option in this regard.

e) Efficacy

Efficacy has to do with the expected agility of the governing entity in the daily operations of the park. Overall, a corporation driven by a commercial mindset will be more efficient than a statutory body which remains a government agency, but a combination of the two will still prove superior as the statutory body will help the governing entity deal with the various other agencies in a way that the corporation cannot.

f) Transparency

Transparency indicates the degree to which the financial statements, internal processes and controls can be audited and scrutinized externally. Whereas a corporation is bound by the country companies' act and its operations are largely transparent, a statutory body is bound by its legislative assembly's rule and subject to the audit of an auditor general or a parliamentary public account committee. Yet a corporation is easier to control and enforce audits on than a statutory body.

g) Financial Sustainability

Financial sustainability relates to how much government funding is required, and whether the governing entity can generate enough revenue to sustain itself in the future. While a statutory body is not incentivized to be financially sustainable, it is also not susceptible to bankruptcy and can always be shored up by additional government funding as long as political will is there. Sustainability is important to investors on the park as they do not want to see the services they expect to be discontinued. On this dimension, the statutory body remains the better option.

h) Risk Management

Risk management measures the ability of the governing entity to manage risk and issues that might impact the industrial park, and how they are mitigated. The ability to influence and to compel government and private entities need to be balanced with the agility in responding to market. A corporation will manage risk in a way that a statutory body will not, but a combination of the two will again prove superior as the statutory body will give the governing entity the power of influence over other government agencies.

Figure 3: Criteria used in selecting a governance model

Illustration

Evaluation Criteria	Weighting	Option 1	Option 2	Option 3
a Investor Friendliness	High	◕	◑	●
b Government / Public Alignment	High	◑	◔	●
c Capital Independence	Low	◔	◕	◕
d Political Robustness	High	◔	●	◕
e Efficacy	High	◑	◕	●
f Transparency	Low	◑	●	◕
g Financial Sustainability	High	◕	◔	◑
h Risk Management	High	◔	◑	●
i Ease of Implementation	Low	◑	●	◕
Cumulative Score		29	37	51

Source: Arthur D. Little

i) Ease of Implementation

Ease of implementation needs to be taken into account, in terms of time and cost to establish the governing entities. A statutory body might take a longer time to set up than a corporation due to legislative requirements. Instead a corporation can be established within a relatively short timeframe and can also attract talent freely. With the additional complexity of interaction between the statutory body and the corporation, this is perhaps the main drawback of the combined option which is otherwise superior to either of the other options in many respects.

The final step in our approach to deciding which is the best governance option is to weigh these criteria against the three governance models themselves (see Figure 3).

The combined option comes on top as it brings the 'best of both worlds'. It leverages the power of a corporation driven by a commercial outlook with the power of a statutory body which can facilitate interaction with other government agencies for the benefit of the park investors.

Figure 4: Pros & cons of the 3 governance options

	Pros	Cons
Option 1 – Statutory Body	■ Can have the authority to approve some operating licenses ■ Good access to Federal funding ■ Better able to coordinate with Federal and State agencies ■ Not prone to bankruptcy ■ Can ensure optimum balance between investor incentives and government revenue	■ Political will is key to securing budget for the park's development ■ Higher investment by the Federal Government ■ Out-of-budget items may be difficult to fund ■ Some processes may face bureaucratic hurdles ■ Difficulty in recruiting specific competencies and assessing financial performance
Option 2 – Corporation	■ Interacts with investors as a commercial body which is suitable to them ■ Since most development occurs through debt financing, capital requirement from government is low ■ Since board representation and management are largely apolitical, it is politically robust ■ Can be implemented within a short time span	■ Has little leverage on the functioning of any government entity ■ Even with political will to develop the complex, it is driven cautiously by commercial principles ■ Funding will be tougher as getting loans is more difficult and equity infusion needs approval from both Federal and State ■ Risk of bankruptcy exists
Option 3 – Combined Option	■ Federal support for the Body ■ Private investors reduce the capital burden from the government ■ Robust model as development corporation is apolitical ■ Body centralizes administration functions and can issue operating licenses ■ Corporation runs as commercial entity	■ Potential complexity in interfacing with investors ■ Potential risk due to bureaucratic voids in the set-up ■ Body still has political linkages ■ Complexity in the interactions between Body and Corporation, particularly in planning ■ Longer time-line for implementation

In this combined model, while the statutory body can strengthen the administration of the park by bringing government funds and access to land, the corporation can ensure the development of the park is driven by commercial principles. But it may take more time to set up initially and be slightly more complex to run than either of the other two options. It is important to realize that each option has its pros and cons (see Figure 4).

In the end, the selection of the governance model needs to address the primary objective of the park. If the park needs to remain close to a country's strategic objectives and time is not the primary concern, then the government may want to set up a statutory body to administer it. This will facilitate interaction with federal and state agencies and if these are run efficiently, as is certainly the case with the Jurong Town Corporation, this option is a viable one.

But if the government's primary objective is to showcase the country's attractiveness to potential investors, it may want to set up a corporation which can run the park more efficiently and is better able to attract talent, as is the case with the Port of Rotterdam Authority. Alternatively, this second option could be leveraged during the park's initial stages of development in order to get it off the ground quickly while a statutory body is set up to administer it at later stages.

Conclusion

Our study of the governance model of successful industrial parks around the world shows that there are essentially three framework options: the governing entity can be a statutory body, a corporation or a combination of the two. These governance models all display different characteristics when it comes to the entity's scope of function, authority and powers, funding and revenue allocation, as well as constitution of the board of management.

These issues are fundamental to the success of an industrial park and 'getting it right' translates into a win-win situation for both government and investors on the park. Investors will flourish and governments will get jobs, tax revenue and growth for the local or regional economy. But the central question is, if a government can select from these three governance models, which one should it choose.

We have established the criteria that should be weighed to select the best governance model. They address all of the ingredients which both governments and investors will look for before deciding to invest in a park. These criteria have been used in order to propose the governance framework for a very prominent industrial park in South East Asia. Deciding on the governance model is a critical step, in as much as it sets the scene for the future of a park and will dictate its administration and development.

Notes

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Arthur D. Little

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