Station area developments in Tokyo and what the Randstad can learn from it

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This chapter aims to provide an overview of how station areas are being developed in Tokyo and the actors involved. To understand the context in which these actors operate first the organisation of the railway sector in Japan is described. In the subsequent two paragraphs a brief overview is given of how the planning of railway improvements is carried out in Tokyo, and how the planning system in Japan works. Next, a description of the key actors involved in developing station areas is given. Subsequently, more attention is paid to the role of private railway operators in Tokyo, as they play a crucial role in the development of station areas due to the fact that they own the stations and large parts of the lands surrounding them. The chapter ends by highlighting the typical features of the development of station areas in Tokyo.
4.1 The railway sector in Japan

In figure 4-1 an overview is given of the key actors involved in the development, management and maintenance of railway networks in Tokyo/Japan. Basically, the core of the system is formed by the Ministry of Land, Infrastructure, Transport & Tourism (MLIT) and private railway operators\(^{17}\). The Japan Railway Construction Transportation Technology Agency (JRTT) and the Transportation Policy Council fulfil the secondary roles in the system. The former is occasionally involved in constructing private railway lines, while the latter is only involved in the planning stage of railway improvements. The role of each actor is further elaborated upon below.

**Ministry of Land, Infrastructure, Transport & Tourism (MLIT)**

This ministry is responsible for granting licenses to railway companies. The duration of these licenses is unspecified. This means that once a license is granted to a railway company the company may operate a railway indefinitely, provided that it does not create serious management issues such as safety threats (Shoji, 2005). Consequently, Japanese railway companies are not subject to competitive tendering or to competition regarding the exploitation of passenger railway services. The only competition that exists between railway operators is that of overlapping and parallel networks (van de Velde & Röntgen, 2009). Overlapping is caused by railway operators making use of other networks belonging to neighbouring operators by offering through-services between their networks. In this way a transfer is no longer necessary. The presence of parallel networks is caused by the high number of railway lines that serve the Greater Tokyo

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\(^{17}\) Most of the railway lines in Tokyo are owned and operated by private railway companies (see chapter 3).
Area. Consequently, passengers can often choose between multiple railway operators when travelling to a certain destination. There are no specific contracts between the ministry and the railway operators regarding for example a level of performance that needs to be achieved.

Railway operators do not receive subsidies from the ministry for their railway operations, as the national government policy dictates that railways need to be selfsupporting in Japan (Shoji, 2001). This means that railway operators should be able to pay for their own operating and infrastructure costs. Regarding the latter, this implies that railway operators themselves are responsible for financing the construction and improvement of railway infrastructure. The same is true for the procurement of new rolling stock; fares must provide sufficient revenue to cover all these expenses. Through the Japan Railway Construction Transportation Technology Agency (see further below) the ministry does, however, in conjunction with local governments (i.e. prefectures and cities), provide subsidies to private railway operators for: 1) shortening travel times (e.g. for the construction of connecting lines linking the networks of two different private railway operators), 2) improving transfers (e.g. for changing railway tracks or platforms, or for the renovating of station building or concourses), 3) promoting barrier-free stations (e.g. for the construction of elevators and escalators at stations), and 4) eliminating level railway crossings (e.g. by building overpasses or underpasses). Subsidies for new subway lines, monorails, automatic guided systems, and new town lines are only available to the public and semi-public railways.

Furthermore, the ministry is responsible for regulating railway fares. All fares must be preapproved by the minister after the fare level is assessed at transportation councils, whose members are appointed by the ministry. In general, fares should cover all railway expenses including profits. Consequently, railway operators are not allowed to increase their fares unless they can demonstrate that they are operating at a loss. Railway companies enjoy thus a rather limited freedom in setting their own fare levels. On the other hand, railway companies are given a free hand in deciding the level and type of services they want to offer. Last but not least, the ministry is responsible for the formulation of general railway policies.

What can be concluded from the above is that the ministry plays a rather limited role in the provision of transport services in Japan, and only sporadically provides subsidies to the private railway sector where it is really needed.

**Private railway operators**

In Japan private railway operators provide railway services on rail infrastructure which they alone own. Furthermore, they are also responsible for the management, maintenance and development of their own railway network. There is, in other words, no separation between infrastructure and transport (see figure 4-1).

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18 National and local government (prefecture and municipality) usually each provide a share of approximately 40-45% of the costs. The remainder is paid by the private railway operator.
As railway operators do not receive operational subsidies fare box revenues have to cover all their costs. Although private railway operators usually generate considerable revenues from other non-rail activities, it is forbidden by accounting regulations (i.e. the Railway Accounting Ordinance) to use these revenues to subsidize their railway operations. This means for instance that a railway company is not allowed to charge low fares at the expense of its non-rail activities. Even bus operations, which are part of the transportation sector, are considered separate to the railway sector (Mizutani, 1994). In other words, non-rail activities and rail activities have to be profitable in their own right. As paragraph 4.5 demonstrates, private railway operators have proven to be rather successful in generating synergies between these two activities.

The absence of direct subsidization and the suppression of fare increases have generally made private railways rather reluctant to carry out excessive\(^{19}\) infrastructure investments (Moriya, 2004; Shoji, 2005; van de Velde & Röntgen, 2009; Wakuda, 1997).

**Japan Railway Construction Transportation Technology Agency (JRTT)**\(^{20}\)

JRTT is an independent administrative agency and was established in 2003 through the integration of the Japan Railway Construction Public Corporation (JRCC) and the Corporation for Advanced Transport and Technology (CATT). JRTT is in involved in the construction of new and the improvement of existing urban railway lines. Among the new lines constructed are subways, new town railways and airport access railways. After completion these lines are transferred to the railway companies, which are usually public or semi-public operators. Occasionally, JRTT is also involved in the improvement of existing private railway lines. For example, the quadrupling of the Odakyu Odawara line (see chapter 6) was constructed by JRTT and was transferred to Odakyu Corporation after completion.

JRTT plays an intermediary role in financing railway projects of railway companies. It receives loans from the national and local governments, and funds from the private sector (i.e. a developer) which it uses to construct new railway lines or to extend or quadruple existing ones. After completion these lines are transferred to railway companies for which they pay a transfer charge to JRTT. This charge is, among other sources of revenue, used to repay the loans provided by the national and local governments. In addition, JRTT is also involved in constructing projects to shorten travel time and to improve transfers. An example of the first type of project is the construction of short-cut lines. Examples of the latter include the addition of platforms, the widening of access passages, and the renovation of station buildings.

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\(^{19}\) Construction costs are large due to the high costs of land acquisition, the need for elevated tracks to avoid level crossings, and the need for reinforced construction as Japan is an earthquake-prone country.

\(^{20}\) This information is derived from the brochure For the future transportation network (JRTT, 2008).
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To construct these projects JRTT receives national and local government subsidies in addition to loans from the private sector. After completion these facilities are leased to railway companies for which they pay a facility usage charge. This charge is used to repay the loans provided by the private sector.

Last but not least, JRTT is also responsible for the sale of the land formerly owned by Japan National Railways. In the case of Tokyo and Osaka these concern prime real estate holdings located in central places within the city.

Transportation Policy Council

The transportation policy council is an advisory body within the Ministry of Land, Infrastructure, Transport & Tourism, and mainly consists of academics. The Council is responsible for drafting master plans for the three large metropolitan areas of Japan (Tokyo, Osaka and Nagoya). These master plans contain the future railway investments and improvements for the next 15 years. The latest plan for Tokyo was formulated in the year 2000 and contains the future railway developments/improvements up to the year 2015.

4.2 Planning of railway networks

The Transportation Policy Council is responsible for preparing the master plan for Tokyo's urban railway network. The first master plan was approved in 1925. Since then another eight plans have followed, including the latest plan formulated in the year 2000. This new master plan covers 658 kilometres of railway sections and includes the construction of new lines, the quadrupling of lines and the extension of existing lines. Furthermore, it contains the railway sections from the previous plan that were not completed. The master plan had to meet the following objectives (Morichi et al., 2001):

1. To reduce peak period congestion ratios from 183% to 150% in specified sections of main routes, and below 180% on individual routes.
2. To establish reciprocal through services with not only the city centre, but also between sub centres within the metropolitan area.
3. To build a dispersed network structure (i.e. a network capable of serving large parts of the metropolitan area) in response to the reorganization of bay areas and urban redevelopment around key stations.
4. To strengthen the access to airports and Shinkansen stations.
5. To offer more convenient transfers with other lines (i.e. barrier-free).
6. To utilize existing stock by extending existing routes and developing short-cuts, and to promote the use of former freight lines.

Figure 4-2 shows the railway improvements recommended by the Transportation Policy Council. The red lines are the routes that should be completed by the year 2015 and cover 288 kilometres of railway sections. As of 2006, when the plan was
halfway, 148 kilometres of these lines were finished while 93 kilometres were under construction (Transport Policy Council, 2006). The orange lines are the routes that should be under construction by the year 2015 and cover 167 kilometres of railway sections. As of 2006, 15 kilometres of these lines were under construction, while for the remaining 152 kilometres construction had not yet started (Ibid, 2006). The green broken lines concern the routes that must be developed or studied in the future, meaning after 2015. They cover 203 kilometres of railway sections. As mentioned above, the railway improvements concern the construction of new lines as well as the modification of existing lines (i.e. extension or quadrupling).

Although the ministry approved the master plan, it is not automatically guaranteed that the proposed railway developments will be carried out. The plan contains recommendations and it is ultimately up to private railway operators, that is, if the proposed railway improvements concern private railway lines, to implement the investments suggested. As government grants for private railway improvements are rather limited, most of the funding has to come from private railway operators themselves. Therefore, it is not a surprise that most private railway operators are reluctant to construct new railway lines or improve existing ones, as there is a little chance to gain profitable returns. This is somewhat different in the case of the construction of short-cut lines, as here usually two thirds of the costs are covered by government subsidies.

Figure 4-2 Urban railway network master plan for the Tokyo metropolitan area

Source: adapted from Morichi et al., 2001
4.3 Planning in Japan\textsuperscript{21}

In order to understand the context in which station areas are being planned it is necessary to briefly outline how the planning system in Tokyo/Japan works. Planning in Japan is carried out on three levels: the national, regional and local level. At the national level 'Comprehensive National Development Plans' are prepared. Since 1962 five such plans have been established. In 2005 it was decided to revise the national (and regional) planning system. As a result the 'Comprehensive National Development Plan' was replaced in 2007 by the so-called 'National Land Sustainability Plan'. This plan consists of two parts: a national plan and a wide-area regional plan. The national plan stipulates the basic policies, objectives and measures considered necessary from a nationwide perspective. The wide-area regional plan does the same but covers a smaller area usually comprising two or more prefectures (MLIT, 2006). The 'National Capital Regional Basic Plan' is an example of such a wide-area regional plan and has been formulated for Tokyo and seven surrounding prefectures. The Ministry of Land, Infrastructure, Transport and Tourism is responsible for formulating both the national and regional plans. In contrast to many other countries Japan does not have a regional government. On a local level planning is carried out by two governing bodies: the prefectures and the municipalities within each prefecture. Prefectures serve the wider areas while the municipalities provide the local services. The prefecture of Tokyo, called the Tokyo Metropolitan Government (TMG), occupies a special position as its central and most populated part is divided into 23 self-governing municipalities, referred to as the 23 Wards. Regarding city planning the Wards are responsible for 'local affairs' such as the construction of local roads, the maintenance of local parks and small-scale urban developments. The prefectural governments are responsible for large-scale projects and for the planning of urban facilities such as roads, airports, parks and sewerage facilities. City plans such as district plans, urban development projects (land readjustment and urban redevelopment projects), land use zoning plans and plans for urban facilities are made on the local level. Either the TMG or the wards carry out such plans depending on the size and importance of a project (see figure 4-3).

\textsuperscript{21} A large part of this section is derived from Chorus (2008).
Twelve land use districts make up the basic zoning in Japan and provide a land use pattern for each type of urban area. Generally these districts can be categorized into residential, commercial and industrial land uses. The residential district is by far the most extensively zoned; seven out of the twelve land use districts relate to this category. Although the name might suggest differently ‘residential districts’ are not only committed to residential usage. On the contrary, even in the most strictly zoned areas, the ‘Exclusive low-storey Residential districts’, a non-residential land use is allowed. For example, it is permitted to dedicate part of a house to small-scale functions like a shop or a store. The most loosely zoned districts are the ‘Commercial Districts’. Here virtually every kind of function combination is possible, and directions related to the usage of buildings and lands are minimal. Usually the ‘Commercial District’ zones can be found along major roads, around stations and in the traditional shopping and business districts.

In addition, the areas that are most loosely zoned are also the areas where the controls on building activities are the weakest. ‘Commercial Districts’ do not only facilitate the largest variety in land uses, they also allow for the highest densities and tallest buildings to be realized. This is most clearly demonstrated by volume controls such as the Building Coverage Ratio (BCR) and the Floor Area Ratio (FAR)\textsuperscript{22}. The BCR determines to what extent a site can be built upon, while the FAR regulates the scale of a building with respect to its surroundings. The maximum values of both volume controls vary depending on the district use. The highest values are to be found in the ‘Commercial Districts’ since these are the areas where land prices are the highest and intensive land use is most often requested. By placing fewer restrictions on volume controls, resulting in high FAR and BCR ratios, such a demand can be met. In a ‘Commercial District’ the BCR is 80% while the FAR can go up to as much as 1300% (see table 4-1). This means that 80% of a building lot can be used for the construction of a building that is allowed to have a floor space equalling thirteen times the size of the lot. Therefore, traditionally the highest densities and the most high-rise buildings

\textsuperscript{22} FAR stands for the ratio between the gross floor area and the area of the plot of land. BCR stands for the ratio between the built area and the area of the plot of land.
are to be found in the ‘Commercial Districts’. Most strictly regulated are the Exclusive Residential Zones, resulting in low values regarding the FAR and the BCR. For example, in some areas zoned as ‘Exclusive Low-rise Residential Districts’ only a BCR of 30% and a FAR of 50% is permitted. In these areas aspects such as sunlight, ventilation and lighting play an important role in the quality of the living environment. Therefore, it is not preferable to have a high density here, which is why FAR-values are among the lowest in these zones.

Table 4-1  Allowable total floor area ratios and building coverage ratios

<table>
<thead>
<tr>
<th>Land Use District</th>
<th>FAR Values</th>
<th>BCR Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1 and 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusive Low-rise</td>
<td>50, 60, 80, 100, 150, 200%</td>
<td>30, 40, 50, 60%</td>
</tr>
<tr>
<td>Residential Districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 1 and 2</td>
<td>100, 150, 200, 300, 400, 500%</td>
<td>30, 40, 50, 60%</td>
</tr>
<tr>
<td>Exclusive Mid-rise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Districts</td>
<td>100, 150, 200, 300, 400, 500%</td>
<td>50, 60, 80%</td>
</tr>
<tr>
<td>Category 1 and 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Districts</td>
<td>100, 150, 200, 300, 400, 500%</td>
<td>50, 60, 80%</td>
</tr>
<tr>
<td>Quasi Residential Districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbourhood Commercial Districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300%</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>Quasi Industrial Districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusive Industrial Districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: <em>The Building Center of Japan, 2004.</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The FAR Controls were introduced in 1963 to replace the former Building Height Controls, and after being tested in some parts of Tokyo (the station area of Shinjuku was one of these areas) they were eventually completely adopted in 1970 (Tokyo Metropolitan Government, 1994). Previously, the total floor area of buildings was regulated by controls such as the building height. In ‘Residential Districts’ the height of a building was not allowed to exceed 20 metres while in other districts the maximum height was set at 31 metres. With the adoption of the FAR controls these height controls were abolished except for the ‘Category 1 and 2 Exclusive Low-Storey Residential Districts’, where a height control of 10 to 12 metres still exists.

Although specified by law the designated floor area ratios are not fixed. Several systems exist that allow for a relaxation of existing FAR-values. In general, exemptions to existing floor areas are given when a developer includes the preservation of historical sites, the creation of public facilities or the guarantee of a certain percentage of open space in a development. Depending upon the proportion of land a developer contributes to the aforementioned aspects, an additional floor area ratio is given to the development in the form of an FAR-bonus. (see chapter 7).

The FAR is a powerful tool that the TMG can use to stimulate the development of particular areas, such as station areas. For example, the further growth of sub-centres and regional centres has been encouraged by assigning them higher floor area ratios than their surrounding areas. The central business district, that is the area around Tokyo Station, traditionally has the highest FAR values. This is because the land prices here are among the highest, followed by the sub-centres around the Yamanote loop (see figure 4-4). The regional centres also have higher values compared to their suburban surroundings; however, they have considerably lower values than their counterparts in the city centre as their development potential is weaker.

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23 Recently also in some other districts an absolute height limit has been introduced in order to restrict high-rise buildings to a limited number of areas in Tokyo.
4.4 Key actors involved in the development of station areas

Typically, two actors are involved in the development of station areas in Tokyo. They are the local governments (in particular the prefecture) and the private railway operators\(^\text{24}\). The MLIT fulfils a secondary role in the development of station areas by providing the legal framework for land use planning. As such it is capable of defining the parameters of the decisions made by the local governments and the private railway operators. The role of the two key actors is explained in more detail below.

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\(^{24}\) Private real estate developers are on an ad hoc basis involved in station area developments. When they are involved, they usually team up with a private railway company.
Tokyo Metropolitan Government (TMG)

In regards to the development of station areas, the role of the TMG mainly concerns conditioning and facilitating land use developments. It has several ‘weapons’ at its disposal to do this. Basically these weapons can be divided into two categories: planning instruments and financial instruments. Both instruments are used in conjunction with each other. Relevant planning instruments for encouraging developments around station areas are the volume controls. As was mentioned in paragraph 4.3, for each land use zoning category minimum and maximum Floor Area Ratio and Building Coverage Ratio levels are specified. Depending on the size of the project the maximum value of these volume controls is either decided by the TMG, wards or larger municipalities. The volume controls, and in particular the FAR, are relevant as they can be used to create scarcity of developable land. In general station areas in Tokyo are given higher FAR-values than their urban surroundings. This means that around station areas higher building volumes, and thus potentially more profits, can be realized. Moreover, most stations and their adjacent areas are zoned as ‘Commercial District’ where there are few rules regarding the usage of land. By deliberately targeting higher density development at station areas the TMG seeks to encourage private sector investments. In addition, several systems exist that allow for a relaxation of the existing FAR-values (for a more detailed description of these instruments see chapter 7).

Furthermore, the TMG seeks to encourage the development of different functional programmes around stations. For example, the main stations around the circular Yamanote line in Tokyo have each been assigned with different functional profiles. Accordingly, the TMG seeks to promote this profile by giving companies that match a certain functional profile a temporary real estate tax exemption in case they want to locate around the station concerned. Thus, besides deliberately targeting higher density development, functional differentiation is also consciously promoted by the TMG.

Private railway operators

In general, the planning of a station area development project is not done by local governments, but by each private railway company individually or in cooperation with other private developers. Local governments do not draft urban plans, but rather confine themselves to providing the conditions to which a development should comply. Instead, such plans are made by the private railway actors themselves. In other words, private railway operators enjoy a rather prominent position in planning a development.

Private railway operators usually own considerable amounts of land along their railway tracks. They can utilize this land for constructing houses, universities, offices, shops, amusement parks and so on. The locations of these functions are consciously planned. For example, amusement parks are usually planned at the end of a railway line as this not only generates more fare revenues (i.e. ticket prices are based on the distance
travelled), but also off peak and bi-directional traffic flows (i.e. people travelling after rush-hour and away from the city centre). Another example is universities. Private railway operators are keen on having universities along their railway lines as it stimulates off-peak travel. Usually, universities are planned away from city centres to generate bi-directional traffic flows. Some railway operators go very far in attracting universities by sometimes giving the land away for free25.

4.5 Private railway operators and their role in developing station areas

The most important/characteristic actor in developing station areas in Tokyo is the private railway operator. Therefore in this paragraph more attention is paid to their role. Private railway operators in Tokyo/Japan have greatly diversified their businesses during the last decades. Besides being active in the transportation segment such as the operation of trains, busses, taxis and in some cases cargo, private railway companies have become increasingly engaged in other non-transportation activities such as retail, real estate, leisure and services (e.g. cinemas, resorts, golf courts and internet), hotels and other services (e.g. car rental, cable television and travel agencies). Most major private railway companies allot a part of their business activities to subsidiary companies. For example, Tokyu Corporation, a major railway company operating in the southwest of Tokyo, consists of 156 subsidiary companies and 22 equity-method affiliated companies (Tokyu Corporation, 2010). Thus, many major private railway companies form large business conglomerates of which, in many cases, they are the group flagship. The group members are linked by cross-shareholding and other financial ties, interlocking directorates, long-term business relationships and other social and historical links (Shoji, 2001, p.16)

There are basically three reasons for private railway operators to engage in such side-businesses. The first and foremost reason is that such activities generate stable ridership (Shoji, 2001). This became especially important after 1906 when the Railway Nationalization Act went into effect. Under this law private railway operators were no longer allowed to use or build new lines that could interfere with government lines. This was, for example, the reason why private railway operators were not allowed to cross the Yamanote loop line and as such had to establish their terminals along this line (see chapter 3). As a result private railway operators were compelled to serve sparsely populated areas. The limited customer base, together with the fact that private railway operators needed to be self-supportive, basically forced companies to generate a steady ridership through business diversification. Another reason for private railway companies to engage in side-businesses was to pursue additional revenue sources for expanding their profit margins (Mizutani, 1994). Although the regulated fare system ensured railway companies with minimum profits, it offered limited room for business growth. As such business diversification could be seen as a rational and understandable

25 Tokyu Corporation gave away 30 hectares of land to Keio University in order to get it to establish its campus around Hiyoshi station. It believed that a reputable university like Keio would act as a catalyst for the development of the surrounding area enabling Tokyu Corporation to recoup its investment.
choice. Moreover, under the corporate tax system it was rather attractive for private railway companies to generate profits in track-side real estate, as only realized net profits were taxable while unrealized profits were not. Private railways have skilfully used this to expand their internal reserves by utilizing land value increases as unrealized profits (Moriya, 2004). A third and final reason could be the fact that railway companies were granted indefinite licenses by the ministry, which enabled them to develop long-term integral development strategies for their railway territories (see chapter 6).

Private railway operators have a long history of diversification. In many cases, private railways became from the outset involved in non-rail activities. In general, railway companies started by diversifying into housing, amusement parks and other attractions, street lightning and supply of electricity. These residential and leisure facilities helped the railway companies to build up their passenger base in the vicinity of their railway lines. Stations were developed to meet the needs of the passengers. In a later stage, private railway companies started to expand their businesses to the people living along their railway lines. Department stores, office buildings, retail facilities, and other consumer-related businesses were developed in and around the station. By the 1920's the first railway companies to use this strategy had proven to be successful and others soon followed (Shoji, 2001). Government regulations did not forbid private railway operators to engage in such activities, while for example the former Japan National Railways was prevented by law to diversify its businesses (Saito, 1997). This explains, as will be illustrated later, why Japan Railways East (JR East) is lagging behind in terms of business diversification when compared to other private railway operators.

Business diversification should be seen as the main factor responsible for the profitable operation of private railways in Japan. According to Saito (1997) other supportive factors include efficient management, overcrowding during rush-hours, and favourable market conditions (i.e. densely populated cities with concentrated urban cores). It is important to note that this success is not only restricted to the major private railway operators serving the three largest metropolitan areas, many private railway operators serving the less populated areas in Japan have become successful as well (Shoji and Killeen, 2001).

**Generating synergies**

The three core business areas of the major private railway companies are transportation, retail and real estate. Although accounting regulations prescribe that cross-subsidization between these activities is not allowed, there are strong interdependencies. Private railway operators have managed to achieve sustainable business growth through successfully exploiting these interdependencies. An important reason for this success is that private railway operators have been developing their transport, retail and real estate activities in such a way that they have reinforced each other’s profitability. In other words they have generated synergy. How this synergy is created is explained in figure 4-5.

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26 Private railway operators have also developed resorts, hotels and departments throughout various parts of Japan, often located far away from their railway lines.
Basically, three mutual relationships exist through which synergy can be created. First, a mutual relationship between transportation and real estate can be identified. Improvements to the transportation network (e.g. building connecting lines, introducing rapid train services, or increasing train frequencies) can make certain areas more attractive for development, which is reflected by higher property prices and rents. Property developments around station areas increase the number of residents and people working in these areas, and thus the number of passengers using the stations/railway network. Second, a mutual relationship between transportation and retail exists. Improvements to a railway network may encourage more people to use the train for shopping, leading to a higher number of potential customers and revenues. The development of retail facilities may also generate off-peak travel, thereby making railway operations more efficient. The third and final relationship concerns the one between real estate and retail. The development of retail facilities can contribute to making a station area more attractive, which is reflected by higher property prices and rents. Property development on the other hand can contribute to increasing the potential customer base for the shops and can lead to more revenues.

Financial performance of private railway operators
In this section an overview is given of the financial performances of two private railway operators. The first operator is Tokyu Corporation which was one of the pioneers in business diversification in Tokyo. The second operator is Japan Railway East (JR East) which is a relative newcomer in terms of business diversification; it was not until its privatization in 1987 that it was allowed to engage in non-rail activities.

Tokyu Corporation
In figure 4-6a an overview is given of the revenue composition of Tokyo Corporation. It is clearly demonstrated that retail activities generate by far the most revenues. In fiscal year 2009 retail accounted for 43% of the total revenues generated, followed by transportation (15%) and real estate (12%). The remaining part of the revenues
was earned in other business divisions. This clearly demonstrates the importance of the non-transportation activities in the daily operation of Tokyu Corporation. Other private railway operators show similar revenue earnings for their retail and real estate segments, although the transportation segment sometimes plays a more important role. For example, in the case of Odakyu Electric Railway Corporation, a major private railway company providing services in the southwest of Tokyo, the revenues earned by its transportation segment accounted for 30% of its total operating revenues (Odakyu Electric Railway Corporation, 2009).

Figure 4-6a  Operating revenues during fiscal year 2003-2009 (billion Euros)

Notes: A fiscal year in Japan starts on April 1st and ends on March 31st. In 2003 the construction segment ceased to exist as a separate business unit and became part of the 'other' business segment. The huge difference between the retail revenues in 2004 and 2005 is caused by a composition change of the retail segment. Source: compiled from annual reports 2003-2009 of Tokyu Corporation.

The transportation segment was the most profitable business segment of Tokyu Corporation in fiscal year 2009, accounting for 42%, closely followed by the real estate segment (see figure 4-6b). This contrasts with other private railway companies where usually by far most profits are generated by the transportation business segment. The share of retail in the total operating profit is relatively small considering its large share in the total operating revenues. As a consequence its return is rather low, especially when compared to its other core business segments.
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East Japan Railway Company (JR East)

JR East is the largest railway company operating on the private stage in Japan. Its services cover, unlike most other private railway operators, not only the Tokyo metropolitan railway network, but also the intercity and regional network. JR East is thus, unlike Tokyu Corporation, not only an urban railway operator, but also a regional railway operator. As such it has much higher passenger numbers and consequently much higher revenues than other private railway operators. Besides being the largest private railway company it is also the youngest. In 1987 Japan National Railways (JNR) was privatized and divided into six regional passenger companies and one national freight company. JR East was one of these regional passenger companies. Due to its status as a relative newcomer it is lagging behind regarding its business diversification. Prior to its privatization, governmental laws did not allow JR East to engage in any activities other than transportation. Moreover, as part of its privatization in 1987, it was decided that surplus land such as disused freight yards and marshalling yards belonging to the former JNR should be sold in order to redeem some of its huge debt. As a consequence JR East could not, unlike other private railway operators in Tokyo, rely on substantial landholdings. Therefore, JR East is, more than other private railway companies, forced to focus on maximizing its station buildings. In the ten years following its privatization JR East received a reduction of 50 percent in property taxes. This has greatly helped JR East to increase its profits from non-transportation businesses.

As of 2007 128 hectares of former JNR land needed to be disposed of in Tokyo. Although there is thus a considerable amount of land available for development JR East cannot use this land as this land is owned by the Japan Railway Construction Transportation Technology Agency (JRTT) whose task is to sell off this land. As such, JR East virtually hardly owns land.
As figure 4-7a illustrates, most of JR East’s revenues are earned by its transportation department. In the fiscal year 2009 the transportation share accounted to 67% of its total revenues, followed by retail (16%) and real estate (9%). By fiscal year 2018 the share of non-transportation revenues should account for 40% (JR East, 2008).

![Operating revenues during fiscal year 2003-2009 (billion Euros)](source: Compiled from annual reports 2003-2009 of JR East.)

A similar picture arises when analyzing JR East profits. The transportation business segment is by far the most profitable business segment, accounting for 67% in fiscal year 2009 (see figure 4-7b). Despite its limited amount of land holdings, JR East manages to generate a relatively large share of its profits from real estate activities. These profits mainly stem from the leasing of space to retailers and other tenants in shopping centres within its railway stations.
4.6 Conclusion

This chapter has provided an insight into how station areas are being developed in Tokyo and the key actors involved. When reflecting upon the roles the key actors play in developing station areas it can be concluded that the role of the Tokyo Metropolitan Government is rather limited. Its main role is to facilitate and condition land use developments around station areas, for which it uses its planning and financial instruments. As such it has a relatively limited but influential role in the planning and development of station areas. In general the actual planning of station areas in Tokyo/Japan is not done by local governments. Instead it is done by private railway operators themselves, who have to follow the main profiles set by the TMG for these areas.

The above shows that private railway operators play a rather prominent role in both the planning and development of station areas in Tokyo. Not only are they, albeit in conjunction with other private actors, responsible for drafting urban plans, they are also actively involved in initiating retail and real estate activities in or adjacent to their station premises. These activities have enabled private railway companies to generate stable ridership, while at the same time pursue additional revenue sources. Moreover, the fact that railway operators are not subject to competitive tendering has encouraged private railway operators to develop long-term integral strategies for their railway territories.