Structural Models of Urban Regeneration in Emerging Markets– Turkey Case

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Abstract

Purpose – As a national movement, urban regeneration is the future of Turkish residential real estate market. In this paper, the models that let housing sector to make sustainable investments to urban regeneration are examined. In this regard, the purpose of this paper is to investigate the structural models of urban regeneration projects take place in emerging markets from the perspective of Turkish examples. It estimates various business and financial models according to varying dynamics of Turkey's recent urban regeneration projects. The paper demonstrates decision making approaches to utilize models that will fit better under changing circumstances.

Design/methodology/approach – The paper reviews the differences of urban regeneration projects in developed and emerging markets. It explores the driving forces behind urban regeneration, legal infrastructure, and practices in Turkey specifically. It draws upon recent urban regeneration examples in Turkey. The paper analyses the existing models and proposes methods to choose the proper models that match with the varying dynamics.

Findings – Urban regeneration needs are different for developed and emerging markets and even for each emerging markets. There is no one-fits-all model in urban regeneration projects. Various dynamics play roles in adoption of proper business and financing model in regeneration projects. Decision making process for the model that fits the project usually lacks systematic analysis. However, urban regeneration needs in emerging markets display similar characteristic as they stem from the same dynamics. Hence urban regeneration practices and models can be adapted to the projects of other emerging markets. In planning stage of urban regeneration projects while methods, resources and financing tools are being planned and allocated, a checklist and/or a flowchart consist of some critical questions addressing the proper business models can be used as decision making tools/approaches.

Research limitations/implications – This paper is essentially exploratory and raises a number of questions for further investigation. There is scope to extend the research to examine other business development models and propose advanced decision making approaches addressing complicated factors.

Originality/value – This is the first paper to examine business models in urban regeneration projects and accordingly propose decision making approaches for adopting the suitable model to follow.

Keywords: Financial model, business model, decision making, urban regeneration, emerging markets

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1. Introduction

Urban regeneration is defined as the renovation of a devastated region inside the city, which has become unhealthy and worthless physically and environmentally and which faces social and economic exclusion, within the scope of a social and economic program in order to recover such region, ascribing new functions to the region, regeneration of the buildings which may be affected by natural disasters to buildings for other purposes of use and renovation of its urban infrastructure (Kocamemi, 2006).

Urban regeneration has generally five main objectives (Roberts and Sykes, 2000). The first main objective is to establish a causal relationship between the city's physical characteristics and the social problems encountered in the region. The second main objective is defined as ensuring a change leading into healthy and livable residential areas in terms of the residence-health relationship. The third objective includes social development and economic progress as one of the factors affecting the urban regeneration process. The fourth objective is "controlled urban growth", on which experience has been gained in the past and which affects today's urban regeneration. The fifth objective is "changing urban policy", and a change must be ensured accordingly in the growth of cities and in the responsibilities and powers related to their management.

Urban regeneration causes a change in the qualities of certain sections of the city, resulting in a structural change in such sections (Tekeli, 2003). One needs to examine this process taking into consideration of the special conditions of each country. This is because there are various reasons which make urban regeneration mandatory. Even though these reasons are similar in some respects, still they vary from country to country. The requirements driving and delivering urban regeneration may vary particularly for developed and emerging markets (Özden, 2008). And therefore as it is not possible to use the same business and financing model for each project for urban regeneration, identifying the model to be used for urban regeneration is the most critical stage in terms of achieving and sustaining regeneration projects.

According to the statements made by the Ministry of Environment and Urbanization in Turkey [1,2], there is a housing stock of around 18 millions currently, 14 millions of which are considered to be under earthquake risk. With the urban regeneration move, 6.7 millions of houses are targeted to be renewed in the next 20 years. In other words, approximately 334,000 houses will be demolished and reconstructed every year, which will require a resource of 465 billion USD in total in 20 years. Thus, this demonstrates that it is inevitable to cooperate with the private sector and that it is necessary to support the private sector and citizens through various incentives, practices, business and financing methods.

The purpose of the study, which is the subject of this article, is to establish a decision-making method in order to select the most suitable business and financing models to be used in the implementation of urban regeneration projects in emerging markets. Within the scope of the study, the background of urban regeneration and the urban regeneration projects applied in Turkey have been examined and models of business and financing methods have been developed, resulting in the development of an approach which will be the decision-making method for the appropriate business

model to be applied for urban regeneration projects to be conducted in emerging markets upon the review of the opportunities and risks associated with these models.

2. Urban regeneration in developed and emerging markets

In fact, urban regeneration projects and the factors necessitating them generally vary from country to country, city to city and region to region, and there are also fundamental differences among them in emerging and developed countries.

Below is a list of the factors requiring urban regeneration and the reasons for urban regeneration projects in developed countries such as Western European countries and the US:

- globalization and thus the requirement to be a global city;
- urbanization and metropolization dynamics;
- decentralization of industrial areas (deindustrialization); (Loures, 2015)
- decline of the specific city functions & reconversion of industrial areas, adaptation of particularly old and non-functional industrial and logistics areas (port, train station, storage areas, etc.) to the modern city with different functions (e.g. London's Dockland Project [3]); (Moldoveanu and Franc, 2014; Özden, 2008)
- changing structure of industry, and technology, media, ICTs sectors becoming the main focus of business life (e.g. 22@Barcelona Project [10;12]) (Gullino, 2009)
- change in the regions whose function needs to be modified as a result of the changing economic and technological conditions in the city; (Özden, 2008)
- creating new attraction centers inside the city through creating new commercial areas (e.g. Paddington Project and Potsdamer Platz);
- areas excluded from the remaining city center developments, enrichment & city revitalization, making the city a center of attraction, revival of the regions whose social and economic value are intended to be enhanced inside the city mostly through art, sports and cultural events (e.g. Queen Elizabeth Olympic Park Project [7;9]); (Moldoveanu and Franc, 2014; Kana, 2012; Davis and Thornley, 2010)
- revival of the local economy, social integration, sustainable community development (e.g. Elephant & Castle Project, Bellenden Street Renovation Project [4;6], etc.) (Couch and Dennemann, 2000)

The reasons which require urban regeneration in emerging markets are mainly based on disorderly urbanization that are caused by the developing economy, rapid population growth and increasing immigration. This causes "urbanized" cities which have not met the requirements of being a city yet. Below is a list of the factors requiring urban regeneration and the reasons for urban regeneration projects in developing countries/emerging markets:

- rapid population growth, economic development and disorderly urbanization; (Özden, 2008)
- immigration and development of squatter areas and shanty settlements caused by immigration; (e.g. Favela de Rocinha, Rio, Brazil) (Hassan, 2012; Güzey, 2009; Dündar, 2001)
- the requirement to transform the squatter areas into quality living spaces; (e.g. ElDarb el-Ahmar Project in Cairo) (Hassan, 2012)
- deficiencies in the urban infrastructure and social infrastructure; (Alpopi and Manole, 2013)
- the need to increase the quality of living; (Alpopi and Manole, 2013; Zhai and Ng, 2013)
- the requirement for new modern city developments as a result of political, sociocultural and socioeconomic changes (e.g. St. Petersburg SBP Renovation Project); (Grazuleviciute-Vileniske and Urbonas, 2014)
- the need for physical improvement because of non-durable, unreliable and aging building stocks; (Güzey, 2009)
- risks of natural disaster (flood, land slide, earthquake, etc.);
- crime & security;
- unemployment and the need to create employment opportunities; (Dündar, 2001)
- provision of public services (health, education, recreational facilities and social amenities, etc.); (Güzey, 2009)
- regeneration of historical areas and refurbishment of historic buildings (e.g. St Petersburg Konyushennaya and North Kolomna Novaya Gollandia Projects). (Said *et al.*, 2013)

Urban regeneration projects may focus on addressing only one of the aforementioned reasons in emerging markets, whereas more than one reason may be addressed depending on the complexity of the problems caused by urbanization. (Hassan, 2012)

3. Urban regeneration in Turkey, which is an emerging market

Urban regeneration has become an agenda item in Turkey because of the need to eliminate shanty towns caused by the urbanization and population growth, unlike the case in the developed countries and similarly to the other emerging markets. The ongoing regeneration process aims to ensure renovation of the aging cultural assets and historical buildings, and to make safe the buildings which are highly vulnerable to unplanned settlements and earthquake risk.

With the immigration from the rural to the urban and the urbanization rate increasing in parallel to this, unplanned and squatter settlements and shanty towns started to appear in the cities of Turkey starting from 50s. This has not only caused the development of buildings which are vulnerable to earthquake, but also resulted in unplanned and inadequate infrastructure and transportation facilities. As a result, even though various legal and legislative actions have been taken until recently focusing on zoning, zoning amnesty and shanty settlements in order to solve the problems, these

precautions have failed to achieve the desired outcome. (Tekeli, 2012; Ataöv and Osmay, 2007)

The first legal study which directly addresses urban regeneration in Turkey was the "Law on Northern Ankara Entrance Urban Regeneration Project", which was drafted in 2004. The project aimed to eliminate the shanty towns in the region, enhance the region's physical development and improve the view of the surrounding landscape (Öngören and Çolak, 2013).

The amendment was made in 2005 to Article 73 of the Municipality Law as a result of the studies performed after the Huge 99' Marmara Earthquake with the aim of allowing collective projects for urban regeneration across the country. And the "Law on Renewal and Protection of Aging Historical and Cultural Immovable Properties and Their Use by Sustenance", which has been enacted in 2005, aimed to reconstruct and restore the city's aging areas which are about to lose their special characteristics and to protect the city's historical and cultural heritage (Öngören and Çolak, 2013).

Following the Van Earthquake in 2011, the "Law No. 6306 on Transformation of Areas under Disaster Risk" has been enacted in 2012, resulting in a holistic approach for the preparation of Turkey's risk regions and buildings against disaster risk. This law aimed to prevent loss of life and property caused by natural disasters including mainly earthquake, ensure a healthy and planned settlement order respecting property rights, provide more social benefits with less cost, and to use the resources in a planned and efficient manner (Öngören and Çolak, 2013). Thus, even though this law was enacted focusing on disaster risk, it has brought along a national urban regeneration movement.

4. Examples of urban regeneration in Turkey, business and financing models

This section addresses models created on the basis of urban regeneration projects which have recently been carried out or which are still ongoing in Turkey, as well as the analyses related to such models. While the methods used in Turkey are examined, business and financing models have been taken into consideration rather than urban planning principles and approaches, and specific planning principles required for a healthy urban regeneration have also not been considered.

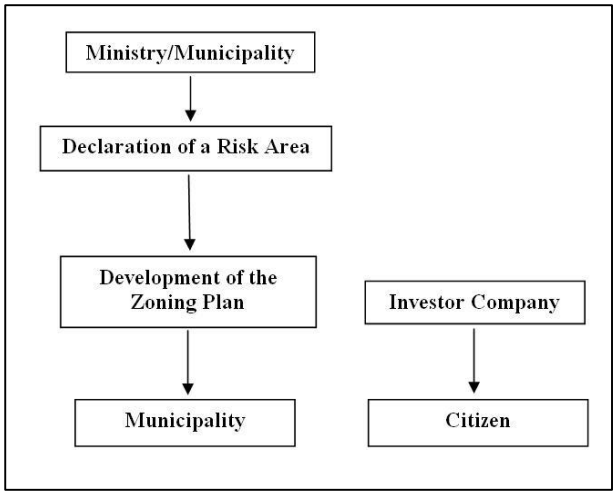
Flat-for-Land Basis Model

One of the traditional urban regeneration models used in Turkey because of lack of capital is flat-for-land basis, and a schematic analysis of this model is provided below.

Within the scope of this model, the ministry or the municipality or the relevant administration carries out a plan development process generally right after the Ministry announces that the region is under risk pursuant to the "Law No. 6306 on Transformation of Areas under Disaster Risk". However, it is not always necessary for the ministry to declare the relevant area as a risk area. The municipality may perform revisions on the basis of various grounds. Because of the increasing floor area ratios as a result of planning efforts, Investor/Contractor companies agree with right-holders on flat-for-land basis in free market conditions as the value of the lands located in the developing/developed regions of the city increases. Urban regeneration projects caused

by an increase in zoning density such as those conducted in Bağdat Street region in Istanbul (identification of risky buildings and agreements for flat-for-land basis constructions) are an example to this model.

Figure 1: *Flat-for-Land Basis Model*



The opportunities and risks/challenges posed by this model are provided in the table below.

Table 1: *Opportunities and Risks/Challenges of Flat-for-Land Basis Model*

Opportunities	Risks and Challenges
• Allows agreeing on approved plans and thus result in shorter completion times • Works may be carried out through a simple agreement for flat-for-land based constructions to be concluded between the investor and property owners	• The model may be used only in areas with increased value or density • Applications are limited to lots, or may be made only on the basis of small-sized blocks • Investor companies find it difficult to reach an agreement with each of thousands of right-holders individually, which results in longer completion times • Lawsuits are filed as a result of unfair practices, which cause interruption in the agreement process • Agreements cannot be completed in large-scale areas involving thousands of right-holders, which cause longer completion times or failure to complete the projects at all

One of the examples of flat-for-land based construction projects is Fikirtepe urban regeneration project [13; 15]. Fikirtepe urban regeneration projects is defined as the urban regeneration project to be carried on an area of around 134 hectares in Eğitim, Dumlupınar and Merdivenköy neighborhoods in the District of Kadıköy following the adoption of the environmental development plan with a scale of 1 / 100,000, which has

been prepared in relation to the earthquake-based urban regeneration, by Istanbul Metropolitan Municipality on 23 November 2010.

The application zoning plans with a scale of 1/1,000 approved at the end of 2011 have paved the way for urban regeneration in the region which involves unplanned squatter areas despite its central location, and urban regeneration has been encouraged in the region with the new zoning plan even though it was not declared as urban regeneration area. Since the new zoning plan allows an additional floor area ratio of 100% for individual city blocks, many construction companies preferred to conclude agreements for flat-for-land based construction with the local residents and began to collect lots of land in order to create city blocks.

In May 2013, the Ministry of Environment and Urbanization stopped all the works in Fikirtepe to declare it as a "risk area" with the Decision of the Council of Ministers under the Law No. 6306, and the authority to develop plans has been transferred to the Ministry of Environment and Urbanization, have first been ratified on 2 August 2013.

The Ministry of Environment and Urbanization has transferred its authorization powers to Istanbul Metropolitan Municipality at the end of 2013, and accordingly 1/1000 Scaled Zoning Plan and its Amendment for Fikirtepe and its Surrounding Areas have been certified.

Even though the plans were subjected to legal proceedings by non-governmental organizations on the grounds of high-density and lack of infrastructure, licensing procedures and demolitions have already started in the region. As a result of the objections filed against the former zoning plans, constructions were not started although excavation works had been performed. However, the process has been accelerated once again at the beginning of 2014 with the new plan and the incentive provided by the Ministry of Environment and Urbanization. In February 2014, 3 projects which were the first to be licensed in the region went on sale, and the first constructions began in March 2014.

In the region where problems continued to exist, including mainly failure to reach agreements with the right-holders, the initial expropriation procedures have started as of October 2014. This decision is expected to resolve the problems experienced with the right-holders, who own small-scale lands and who demand more than their share and thus obstruct the process of reaching an agreement.

The last situation in Fikirtepe is as follows as of November 2014:

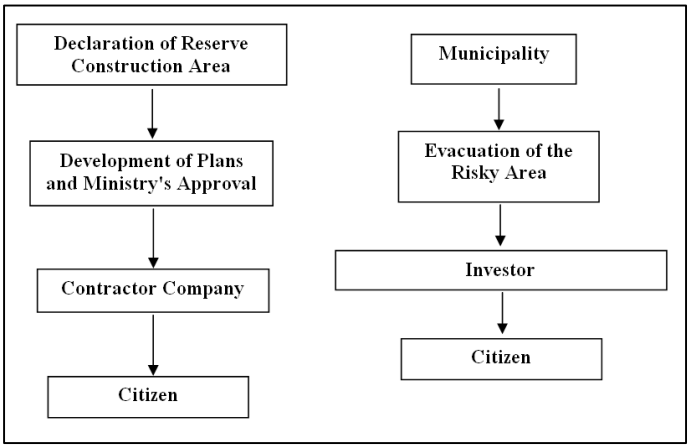
- 100% agreement has been reached on 12 out of 52 blocks.
- Construction permit has been issued for 4 blocks.
- Agreement has been reached on 2/3 of 32 blocks.
- The rate of agreements reached has exceeded 90% on 21 areas.
- Notices of expropriation have been sent to 14 blocks.
- Reconciliation meetings have been made in relation to 8 blocks.
- Urgent expropriation documents were submitted to the court in relation to 1 block, and valuation process has been initiated for urgent expropriation for 3 blocks.

The urban regeneration process, which has lasted longer than 3 years in the region, aims to achieve such goal through flat-for-land basis models. The challenges encountered with Fikirtepe project can be listed as late announcement of the urban regeneration project, failure by the district municipality to play an effective role in the process, unjust treatment to citizens during the reconciliation process, the problems that have come into the public domain, failure to address the regeneration in a holistic manner, and failure to ensure a unity among tens of projects carried out in the region.

Build-Transfer-Sell Model

Another urban regeneration model used in Turkey is called build-transfer-sell model, and a schematic analysis of this model is provided below.

Figure 2: *Build-Transfer-Sell Model.*



In the "Build-Transfer-Sell" model, after the declaration of Reserve Area and development of relevant plans and Ministry's approval process, the Administration, Metropolitan Municipality or the District Municipality works with (usually a small-scale) contractor companies on some certain areas to be regenerated and/or works directly with other administrative institutions (TOKİ, Emlak Konut, Kiptaş, İlbank etc.) to develop residential projects for citizens on some other areas. The right-holders in risk areas agree on a flat-for-land basis for ready apartments constructed in such reserve areas, and financing is derived through the development of a new project in the evacuated risk area. The urban regeneration projects which were declared to be included in risk areas and reserve construction areas and which are conducted by the Administration (e.g. those in Bağcılar and Bayrampaşa region) are an example to this kind.

The opportunities and risks/challenges posed by this model are provided in the table below.

Table 2: *Opportunities and Risks/Challenges of Build-Transfer-Sell Model*

Opportunities	Risks and Challenges
• Administration's assurance • The convenience of agreeing on the basis of already constructed residences • No need for rent allowance as the right-holders can settle in residences whose construction has been completed in reserve areas • Allows the evacuation of the risk areas completely and replanning/changing the function of these areas	• The model may be used only in areas with increased value or density • The Administration takes on the Developer position and carries out many construction and project development activities itself both on the risk area and the reserve area • It is not always possible to supply reserve areas near the risk areas and to relocate the people located in the risk areas in the city center to the reserve areas on the outskirts of the city • This model may not be applicable for city centers • The model may not be sustainable as there is a continuous need for reserve areas in this model • Financing the residences which will be constructed in the reserve areas before the evacuation of the risk areas

Other examples of build-transfer-sell model are the urban regeneration projects in Esenler region [16, 17]. In the leadership of Esenler Municipality and with the support of Istanbul Metropolitan Municipality, urban renewal efforts are planned in five neighborhoods in Esenler district of Istanbul (Oruç Reis, Turgut Reis, Çifte Havuzlar, Havaalanı and Tuna neighborhoods), particularly in areas where shanty settlements are common. The first demolitions started in October 2012 in the region, and the initial residence deliveries took place in February 2013. Construction works are still ongoing in the region.

Urban regeneration efforts in Oruç Reis neighborhood are conducted on an area of 72,080 m². The region has a population of around 8,000 people and the number of right-holders is 600. There are 389 buildings and 1990 independent sections in the region. The area located within the boundaries of Oruç Reis neighborhood has been identified by the Law No. 6306 on Transformation of Areas under Disaster Risk. The project aims to prevent the development of shanty towns and to create livable urban areas in terms of social infrastructure and building quality. The construction works are still ongoing in the area, and the construction of 262 houses has been completed in the reserve housing area which has been allocated for the project.

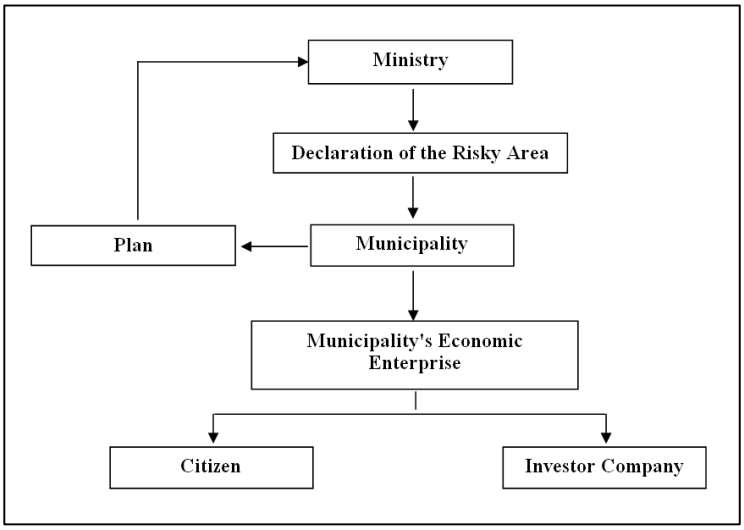
The urban renewal project in Çifte Havuzlar Neighborhood is conducted on an area of 85,300 m², and the region has a population of around 3,200 people. The project area has been identified by the Law No. 6306 on Transformation of Areas under Disaster Risk. The project aims to reconstruct the area in a planned manner, and to ensure a healthy settlement structure which meets high social infrastructure standards and which is earthquake-resistant. 1,500 houses are planned to be constructed within the project area.

Urban renewal efforts continue in other neighborhoods of the district under the leadership of Esenler Municipality. When the Municipality avails land for the projects, (often small-scale) contractor companies are offered suitable project areas, and coordination is targeted to be ensured among the urban renewal works across the district.

Public-Private Partnership Model

Another urban regeneration model is mainly based on public-private partnership, and a schematic analysis of this model is provided below.

Figure 3: *Public-Private Partnership Model*



In the "Public-Private Partnership Model", the power to design and implement urban regeneration projects is transferred to the Municipality following declaration of risky areas by the Ministry. Then, the Municipality establishes an economic enterprise which will carry out the urban regeneration activities. The Municipality's economic enterprise offers consultancy services to developer companies, and concurrently conducts negotiations with right-holders and manages the process. Following the development of plans by the Municipality, implementations are started upon the Ministry's approval.

One of the examples of this model is the urban regeneration project in Belediye Evleri Neighborhood in Adana Çukurova (2,800 buildings, a population of 22,000 and an area of 108 hectares). This region has been declared as risky area, and planning works have started within the scope of urban regeneration project in the leadership of the Municipality. This model does not involve a Municipality's Economic Enterprise. In this model, the Municipality works with a private counseling company and leads the process. Though not clear yet, the intention is to ensure that right-holders do not deal with developers.

The opportunities and risks/challenges posed by this model are provided in the table below.

Table 3: *Opportunities and Risks/Challenges of Public-Private Partnership Model*

Opportunities	Risks and Challenges
• An environment of balance and trust thanks to the balancing role of the public sector • Convenience of reaching an agreement with right-holders and the opportunity to implement the project on larger-scale areas (with more right-holders) thanks to the presence of the public sector • Development of urban regeneration master plans concurrently with agreements • The involvement of the public sector in agreements allows the development of plans in consideration all stakeholders' expectations and the public benefit	• Challenges that may be faced during the negotiation process • Bureaucratic problems • Density • Scarcity of social infrastructure, green and outdoor areas • Political and value-related speculations • Timing issues as projects are conducted on large-scale areas • Difficulty to make social planning • Problems faced in relation to property owners and right-holders • Problems related to physical construction and topography

Another example of public-private partnership models is Gaziosmanpaşa urban regeneration project. The Municipality of Gaziosmanpaşa District in Istanbul conducts urban regeneration projects in 14 neighborhoods (Bağlarbaşı, Barbaros Hayrettin Paşa, Fevzi Çakmak, Karadeniz, Karayolları, Karlıtepe, Kazım Karabekir, Merkez, Mevlana, Pazariçi, Sarıgöl, Yenimahalle, Yenidoğan and Yıldıztabya Neighborhoods), which mainly include aging industrial areas where the housing stocks are old and risky and where the infrastructure and social infrastructure facilities are inadequate. These regeneration projects aim to make the housing stock earthquake-resilient and to overcome social problems such as high rate of unemployment and high crime rates.

The regeneration efforts within the boundaries of Gaziosmanpaşa District, which cover Pazariçi, Sarıgöl, Bağlarbaşı, Yenimahalle, Yıldız Tabya, Kazım Karabekir, Fevzi Çakmak, Barbaros Hayrettin Paşa, Karadeniz, Karayolları and Mevlana Neighborhoods, are carried out by Gaziosmanpaşa Municipality under the Law No. 6306 on Transformation of Areas under Disaster Risk. The Ministry decided on 24 December 2012 that the 11 regions included within the borders of the district be declared as Risk Areas. The total of 11 declared regeneration areas in Gaziosmanpaşa occupies an area of 392 hectares, which correspond to 36% of all regeneration areas in Istanbul, and thus carries the title of the largest urban regeneration area. This area includes around 8,000 buildings, 12,000 units and a population of 66,000 people. The District Municipality works in cooperation with TOKİ (Housing Development Administration of Turkey) for urban renewal projects in slums and shanty town improvement areas (~19,429 m²). Besides, major private real estate developers also develop urban regeneration projects in various regions of Gaziosmanpaşa (~1,750,000 m²).

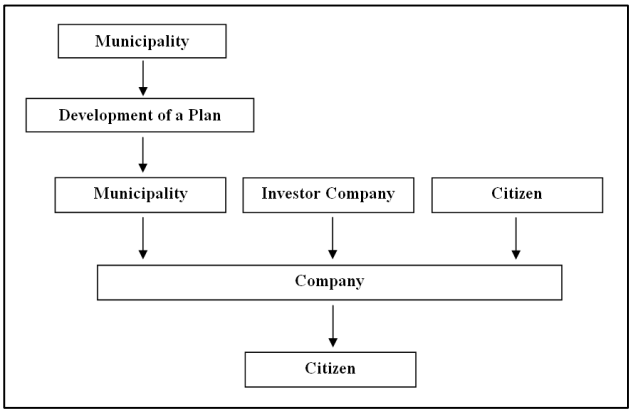
The implementation powers were transferred from the Ministry to Gaziosmanpaşa Municipality pursuant to Article 2 of the Law No. 6306 on Transformation of Areas under Disaster Risk. A protocol has been signed between the District Municipality and GOPAŞ Company on 4 April 2013. GOPAŞ is a company in which the municipality holds shares, established for conducting urban regeneration projects, and provides assistance for reaching agreements between land owners and developers (on the number and size of apartments to be given, etc.) GOPAŞ provides a platform which will allow developers to ensure efficient and effective functioning of the transformation process. Developers

do not have to hold face-to-face meetings and negotiations with each right-holder thanks to GOPAŞ. In addition, GOPAŞ provides information and support to right-holders about the process, creating an environment of trust.

Company Model

Another urban regeneration model is company model, and a schematic analysis of this model is provided below.

Figure 4: *Company Model*



In this model, a company is established by the Municipality, Investor/Entrepreneur company and land owners following the development of plans by the Municipality. Then, the process is managed by the company established. Within the scope of the project, zoning rights are reduced instead of exercising expropriation, and the value created is shared among land owners in proportion to their shares in lands. Urban regeneration projects conducted by GEÇAK, Zafertepe etc., which have the nature of a partnership founded by the municipality, developer and land owners in the form of a company/cooperative (e.g. Dikmen Valley Project), are an example to this model (Aras and Alkan, 2007; Uslu and Yetim, 2006). The opportunities and risks/challenges posed by this model are provided in the table below.

Table 4: *Opportunities and Risks/Challenges of Company Model*

Opportunities	Risks and Challenges
• An environment of trust and reconciliation • Added value • Development of participatory projects	• The Company assumes the "Developer" role • Difficulty to implement the project on larger-scale areas (with more right-holders) • Disputes delaying and disrupting the process • Failure by the public sector to play a balancing role in management • Disruption of the process caused by the high number of participants • Land owners' direct involvement in the process

Another example of the Company Model is Portakal Çiçeği Valley project. Portakal Çiçeği Valley covers an area of 11 hectares within the boundaries of Çankaya and Ayrancı residential districts, falling between Cinnah and Hoşdere Streets.

In the beginning of 90s, Ankara Metropolitan Municipality started to work for resolving the slum-area problem in the region, and aimed at implementing a model which derives its own resources rather than exercising expropriation, increases the ecological value of the valley and ensures participation by right-holders. In the leadership of the Municipality and in partnership with land owners and private entrepreneurs who will develop and conduct the project, PORTAŞ "Portakal Çiçeği Vadisi Proje Geliştirme, İşletme ve Ticaret Anonim Şirketi" was established in June 1991 with the decision of Ankara Metropolitan Municipal Council. Agreement has been reached on the shareholding structure of the company to be established, in which the Municipality would hold 49% of the shares, right-holders would hold 21% of the shares in proportion to their shareholding, and the developer would hold 30% of the shares (Göksu, 2002).

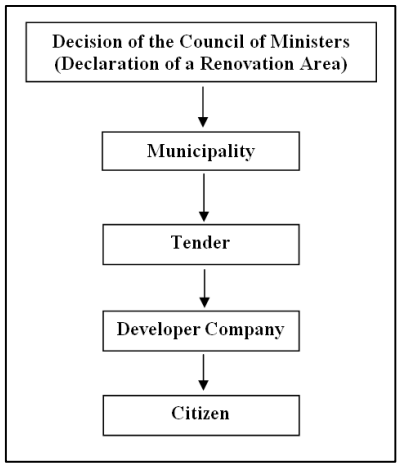
The project conducted is based on a reconciliation method produced by the public and private sectors, land owners and residents of slums, and consolidation of the zoning rights. Accordingly, the zoning right was reduced by ¾, and 70% of the valley has been planned as green area [18]. The project not only provided green areas, but also added value to the valley despite the reduction in the zoning rights. The most important aspect of the project was that it created an environment of reconciliation, ensured public benefit with the leadership of the municipality, added value and ensured that this value was shared instead of vesting new zoning rights. The value added to the valley was shared among the shareholders in proportion to their shareholding ratios using a scoring method, and individuals were given option right starting from the holder of the smallest number of shares. The Municipality got no share out of the value created on the valley other than the project investments, and thus it was ensured that the green area to be developed on the valley mostly included recreative functions available for use by the city (Göksu, 2002).

Tender Model

Another urban regeneration model is based on a tender process, and may be analysed as follows.

In this model, the Municipality issues a tender for renovation area following the Decision of the Council of Ministers on Declaration of a Renovation Area. The Developer Company that is awarded the tender makes use of the part remaining after right-holders' shares are given. Urban regeneration projects conducted through agreement by the local municipality with the developer as a result of a tender issued under the "Law No. 5366 on Renewal and Protection of Aging Historical and Cultural Immovable Properties and their Use by Sustenance" (e.g. Fener Balat Renovation Project) are an example to this model.

Figure 5: *Tender Model.*



The opportunities and risks/challenges posed by this model are provided in the table below.

Table 5: *Opportunities and Risks/Challenges of Tender Model.*

Opportunities	Risks and Challenges
• Administration's assurance • This model is applicable for city centers • Allows renovation and protection of aging historical and cultural structures	• The model may be used only in areas with increased value or density • The model is not appropriate for use in large-scale areas • Investor companies find it difficult to reach agreement with right-holders, which results in longer completion times • Unjust treatment to citizens • Lawsuits are filed as a result of unfair practices • Negative perception among the public

Tarlabaşı project is another example of the tender model. The location of Tarlabaşı within the city, the increasing importance of Pera throughout the history and its historical heritage are what constitutes the basis of the regeneration.

The enactment of the "Law on Renewal and Protection of Aging Historical and Cultural Immovable Properties and their Use by Sustenance" laid the legal foundation for the regeneration of Tarlabaşı. The area covering nine city blocks in Tarlabaşı (around 20,000 m²) was declared as "Renovation Area" on 20 February 2006 with the Decision of the Council of Ministers pursuant to the relevant articles of the Law No. 5366. Beyoğlu Municipality ratified and adopted this decision on 10 November 2006.

The project covers the renewal of 278 buildings, 210 of which are proprietary examples of civil architecture, on a total of 9 blocks, as well as the streets between these buildings and the entire infrastructure. Beyoğlu Ministry issued a tender on 16 March 2007 for the first stage of Tarlabaşı Renewal Project, and the contract was awarded to GAP İnşaat owned by Çalık Holding. Within the scope of the agreement signed, it is

undertaken that 26,179 m² out of the area of 62,804 m² will be given to the neighborhood's residents and that the apartment owners who owned small-sized apartments will be provided with loans by the builder.

5. Results and discussion

Each regeneration project must be addressed and developed taking into consideration the structure, physical and social characteristics of the urban regeneration area, the existing economic condition, the city's texture and the community's relationship with the city. Developed countries/markets and developing countries/emerging markets vary to a great extent mainly in terms of the reasons requiring urban regeneration, the way urban regeneration is approached and the models which may be used for urban regeneration.

Urban regeneration requirements may be different from each other in all emerging markets. However, economic growth, immigration and the associated growing population in cities, as well as the changing demographical structure and urbanization are all common characteristics of emerging markets. Therefore, urban measures become necessary as a result of the uncontrolled growth of cities together with increasing immigration. Urban regeneration becomes necessary in emerging markets mainly because of uncontrolled and random urbanization and its consequences.

One cannot speak of a single model to be used for all urban regeneration projects. Various dynamics are taken into consideration while selecting the most appropriate business and financing model. Most of the time, a systematic analysis may not be performed before deciding on the model to be used for projects that have various dynamics.

As the examples provided in the study are all from Turkey, the business development methods analyzed in this article and the models described herein may seem to be specific for Turkey. However, since emerging markets are similar in terms of their economic growth and urbanization patterns and the requirements of urban regeneration are based on similar grounds, the models described in this article may also be adapted to the other emerging markets and urban regeneration projects even though urban regeneration practices in Turkey are governed by laws.

Decision-making phases may be guided through asking a set of questions in the planning phase before the implementation of urban regeneration projects while defining and allocating the methods, procedures, financial and funding sources to be used, and the most feasible model may be identified in this manner. Naturally, the model to be identified will vary depending on the location, physical characteristics, building density, social and environmental characteristics of the urban regeneration area, the provisions of the laws and legislation, and on the actor to perform the urban regeneration process (Yu and Kwon, 2011). The appropriate model may be selected through answering the questions to be prepared taking into consideration the opportunities, challenges and risks of each business model for urban regeneration, which has been analyzed and developed.

The questions to be asked in this regard may be as follows:

Table 6: Decision making checklist

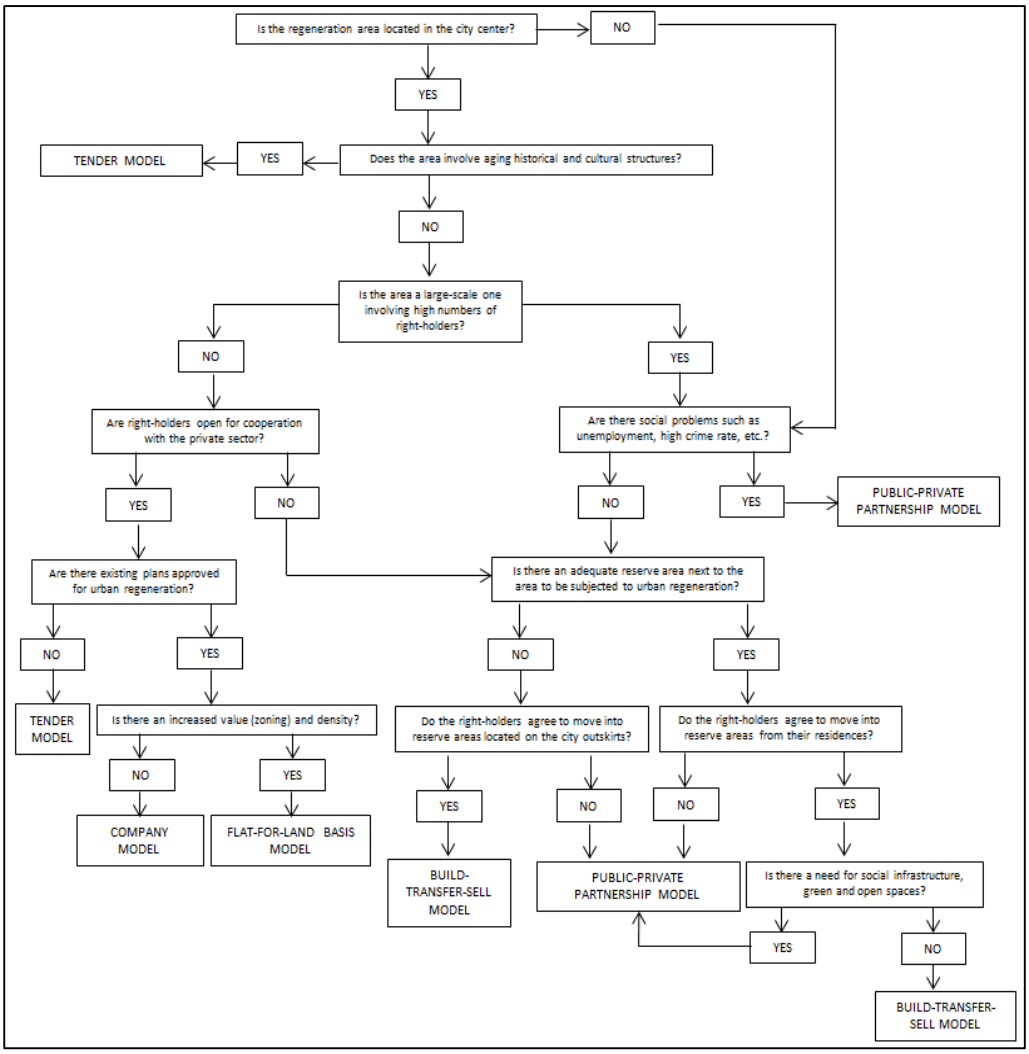
Questions	Answers	
Flat-for-Land Basis Model	**Yes**	**No**
Are there existing plans approved for urban regeneration?	x	
Is there an increased value (zoning) or density?	x	
Is the area a large-scale one involving high numbers of right-holders? (i.e. does the area have more than 100 independent units or right-holders?)		x
Is the public sector involved in the process of agreement with right-holders?		x
Are right-holders open for cooperation with the private sector?	x	
Build-Transfer-Sell Model		
Has a reserve area been declared?	x	
Is there an adequate reserve area next to the area to be subjected to urban transformation?	x	
Do the right-holders agree to move into reserve areas located on the city outskirts?	x	
Do the right-holders agree to move into "reserve areas" from their current residences?	x	
Is there an increased value (zoning) or density?	x	
Is the transformation area located in the city center?		x
Public-Private Partnership Model		
Is the public sector involved in the process of agreement with right-holders?	x	
Are urban regeneration master plans being developed?	x	
Is the area a large-scale one involving high numbers of right-holders?	x	
Is there an increased value (zoning) or density?	x	
Are there social problems such as unemployment, high crime rate, etc.?	x	
Is there a need for social infrastructure, green and open spaces?	x	
Company Model		
Are there existing plans approved for urban regeneration?	x	
Is the area a large-scale one involving high numbers of right-holders?		x
Has there been any reduction in zoning rights?	x	
Is there a need for social infrastructure, green and open spaces?	x	
Are right-holders open for cooperation with the private sector?	x	
Tender Model		
Are there existing plans approved for urban regeneration?		x
Is there an increased value (zoning) or density?	x	
Is the regeneration area located in the city center?	x	
Does the regeneration area involve aging historical and cultural structures?	x	
Is the area a large-scale one involving high numbers of right-holders?		x
Are right-holders open for cooperation with the private sector?	x	

If the aforementioned questions are asked at the beginning of the planning and project development phases of urban regeneration projects and the most suitable model is selected in advance and adopted as the business model, then it may be possible to plan the things that will be paid attention, risks, opportunities, financing methods, resources, etc., and the business model may be developed in consideration of the same. Thus, the model that best matches to the answers given to the "close-ended" questions included in

the checklist table above may be selected as the business model, and the regeneration project may be conducted using this model.

As an alternative decision-making method, the questions that will determine the model to be selected may be asked in the manner shown in the flowchart below, and participants may proceed as necessary depending on whether their answer is "yes" or "no", and the model reached at the end is implemented.

Figure 6: *Decision making flowchart*



The questions in the checklist and flowchart above may be refined in accordance with the location and region of the urban regeneration area, environmental, social, legal and economic conditions, the scope and stakeholders of the project and the actor to initiate the urban regeneration works. The model to be applied specifically for each urban regeneration project may be selected with this approach described. Ideally, if all stakeholders (the public and private sectors, citizen) reach the same model, the urban regeneration is expected to be started and be sustained.

6. Conclusion

In fact, urban regeneration projects and the factors necessitating them vary from country to country, city to city and region to region, whereas there are also fundamental differences among them in emerging markets and developed countries.

Whereas the drivers of urban regeneration are mainly the purposes of metropolization and adaptation of the city to the globalization in developed countries, these factors are often disorderly urbanization that are caused by the developing economy, rapid population growth and increasing immigration in emerging markets.

Urban regeneration has become an agenda item in Turkey, which is an emerging market, in 50s because of the need to eliminate increasing shanty settlements caused by the urbanization and population growth. The ongoing regeneration process aims to ensure renovation of the aging cultural assets and historical buildings, and to make safe the buildings which are highly vulnerable to unplanned settlements and earthquake risk.

This article examines examples and models of urban regeneration projects which have been carried out recently or which are still ongoing in Turkey, and analyzes the business models developed using them. An approach has been developed, which will be the decision-making method for selecting the appropriate business model to be applied for urban regeneration projects to be conducted in emerging markets.

The models which may be used in urban regeneration vary depending on the area that needs to be regenerated, the location and characteristics of the buildings, building density of the regeneration area, the existence of infrastructure and social infrastructure areas, the urgency of the regeneration requirement, the social structure, financing methods, stakeholders, the actor to initiate the urban regeneration project and so on. As it is not possible to use the same model for each project for urban regeneration, identifying the model to be used for urban regeneration is the most critical stage in terms of achieving and sustaining regeneration projects. In Turkey, urban regeneration projects are shaped mainly by financing models because of the lack of capital. The most common model in Turkey is flat-for-land basis, and other traditional models used include revenue-sharing, pre-sale method, build and sale, etc.

According to the statements made by the Ministry of Environment and Urbanization in Turkey, there is a housing stock of around 18 million currently, 14 millions of which are considered to be under earthquake risk. With the urban regeneration move, 6.7 millions of houses are targeted to be renewed in the next 20 years. In other words, approximately 334,000 houses will be demolished and reconstructed every year, which will require a resource of 465 billion USD in total in 20 years. Thus, this demonstrates that it is inevitable to cooperate with the private sector and that it is necessary to support the private sector and citizens through various incentives, practices and financing methods.

The public sector's control and leading position are vital for ensuring that the urban regeneration efforts, which are based on the laws, are made feasible and sustainable. In addition, the financing provided by investors and the private sector together with the support of the public sector is critical for the implementation of urban regeneration projects. Instead of using the traditional methods and financial methods used so far

within the scope of urban regeneration efforts, alternative methods and financing models need to be developed with the innovative perspective and approach of all stakeholders of the urban regeneration efforts (the public sector, investor, financing institution, citizens).

Feasibility of large-scale regeneration projects is dependent on whether such projects can be financed. It is easier, to a certain extent, for contractors to finance regeneration projects on small-scale areas using their own facilities. Therefore, it is critical to address the financing issue in a more detailed manner for major regeneration projects and to provide public support (i.e. providing actual financing support and technical and legal framework for the financing of the project). (Öngören *et. al.*, 2015)

In emerging markets such as Turkey, various alternative financial instruments and incentives are needed for the acceleration of the urban regeneration process. Alternatives must be made available such as pension funds, Individual Retirement System (IRS) and instruments which have recently been introduced in Turkey by the Capital Market Board (real estate certificates, sukuk, infrastructure REITs, real estate investment funds, alternative funds, project funds, etc.), as well as incentives such as increases in zoning rights and transfer of zoning rights and some other incentives (construction loans, interest incentives, rent allowances, exemption from taxes, duties and charges) (Öngören *et. al.*, 2015). In addition, projects for renewal of existing houses must also be actively encouraged during the urban regeneration process. Constructing "Green and Sustainable" buildings within the scope of urban regeneration offers significant opportunities (Çamlıbel, 2011; Alhanlıoğlu and Çamlıbel, 2012; Çamlıbel *et al.*, 2014).

It is necessary to address the regeneration areas with a planning technique and approach designed specifically for urban regeneration and to have a planning and property legislation which includes the definitions of social infrastructure, outdoor and green and open spaces beyond their standard definitions of use as well as the definition of private, public, semi-public areas and which allows integration of streets with green and open space and additionally a construction legislation allowing architecture of density in city centers accordingly and an additional strong transportation infrastructure.

As much as urban regeneration projects are concerned, mostly the private sector is expected to build all areas including social infrastructure areas; however these extra social infrastructure costs added to land and construction costs may prevent the feasibility of projects. In addition to alternative financing models, assumption by the public sector of the infrastructure and social infrastructure investments in a manner to support the flat for land ratio particularly in dense areas through the use of public financing is of vital importance in order to allow the implementation of urban regeneration projects.

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