16 Developer obligations in relation to land value capture in Taiwan

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1. A cursory glance at land value capture

Capture of land value that accrues not from an individual's own effort is a fundamental policy stated in the Constitution of Republic of China, Taiwan (Hu, 2006). Article 143 of the Constitution reads that:

> All land within the territory of the Republic of China shall belong to the whole body of citizens. . . . If the value of a piece of land has increased, not through the exertion of labor or the employment of capital, the State shall levy thereon an increment tax, the proceeds of which shall be enjoyed by the people in common.

A Land value increment tax (*tu di zeng zhi shui*) levied upon transaction of land was therefore introduced in 1954 and continues into the present time.

The rate structure of this tax has always been progressive. The present rates are from 20%–40%. The tax rates were respectively 40%, 50% and 60% during most of the 1990s. The highest rate even reached 100% between the 1950s and 1960s. Despite the high tax rate, the suppressed assessment has kept the effective tax rate down. In the second half of the 2000s, the effective rate was only around 4%–6%. (Hua, 2013). Despite of the under-assessment, land value increment tax accounts for between 20% and 40% of total tax revenue over the course of years 2003 and 2013 for the six major cities (Taipei, New Taipei, Kaohsiung, Taichung, Tainan and Taoyuan) in Taiwan.[1] It is fair to conclude that this tax has supplied a significant tax revenue to local governments, but performs unsatisfactorily as a value capture instrument (Lin & Cheng, 2016).

In addition, a Statue for Collection of Community Development Fee by Construction Project (*gong cheng shou yi fei zheng shou tiao li*) was enacted in 1944 (Chang, 1993: 42). This fee can be levied on lands and improvements that gain direct benefits from specified public infrastructures,

1 Ministry of Finance website: www.mof.gov.tw/Eng/Home

including roads, bridges, ditches, harbors, piers, reservoirs, embankments, channel dredging, etc. The amount of fees charged cannot exceed 80% of the total infrastructure costs that largely include construction, land acquisition and mortgage loans. This fee aims to recoup the spillover benefits of certain public infrastructures, and involves no changes of land use. However, this fee stopped its collection during the 1980s, largely because of the political pressure and the lack of consensus on the beneficiaries.

Land use zoning was introduced to Taiwan in the 1980s. Land was divided into urban areas and non-urbanized areas (areas outside of urban areas). Land in the urban areas was zoned in accordance with the urban plans that depict the ideal future development of a city. In contrast, there was a lack of plans in the non-urbanized areas to guide the future land use. As a result, the existing use of land during the 1970s and 1980s was recognized as the legally permissible use (Lin & Ding, 2015). For example, if an area of land in that time period was in farm use, it would be zoned as farmland. This dual system of land-use zoning effectively affects how the land value is captured.

2. Developer obligations in urban areas

In urban areas, Article 27–1 of Urban Planning Law reads that:

> When an interested party formulates or modifies a detailed plan . . . or the original formulating agency modifies an urban plan. . ., the competent authority may request the said interested party to provide or donate from within the area for which the plan modification is made land for public facilities, constructible land, floor areas or a certain amount of money.

In compliance with Article 27–1 of this Act, the Ministry of the Interior has since the mid-1990s published at least seven ordinances (National Development Council, 2014: 37) to specifically handle the expected increase in land value and additional need for public facilities that result from the changes in land uses (see Table 16.1).

Table 16.1 shows that the ordinances were enacted to deal with rezoning of land from or into a certain zone, or between specific zones. The types of land-use zones involved also reflect the popular kinds of land rezoning at various time points in history. In each ordinance, the required contribution from landowners in exchange for rezoning is specified. For example, Ordinance of Rezoning of Industrial Land has set the requirements shown in Table 16.2.

The expert committee of urban planning (*dou shi ji hua wei yuan hui*) consists of 14–22 members. More than half of the committee members need to be appointed from outside of the local governments. External members must include professionals in urban planning, urban design, landscape, architecture or transportation (Code of Organization of Expert Committee of Urban Planning). The required contribution is in principle offered in the

Table 16.1 Ordinances dealing with land use changes in urban areas

Names of Ordinances	*Contents*	*The Year Ordinance Was First Passed*
Ordinance of Rezoning of Land Adjacent to Industrial Zone	Rezoning of land parcels that are adjacent to industrial zone into industrial land	June 1994
Ordinance of Rezoning of Industrial Land	For industrial zone to be rezoned into other zones	September 1994
Ordinance of Rezoning of State-owned Enterprise Land	Rezoning of state-owned enterprise land into other land uses	February 1996
Ordinance of Rezoning into Light Industry, Logistics and Retailing Land	For other zones to be rezoned into light industry, logistics and retailing zone	July 1996
Ordinance of Rezoning into Media Industry Land	For other zones to be rezoned into media industry zone	December 1996 (repealed in 2017)
Ordinance of Rezoning of Agricultural Land	For agricultural zone to be rezoned into other zones	February 1997
Ordinance of Rezoning of Agricultural or Conservation Land into Health Care Industry Land	For either agricultural or conservation zone to be rezoned into health care industry zone	August 1997

Table 16.2 Required contribution in ordinance of rezoning of industrial land

Rezoning to Residential Land	*Rezoning to Commercial Land*	*Rezoning to Other Land Uses*
The contributed area for public facilities and building sites combined cannot be less than 37% of the total rezoned area	The contributed area for public facilities and building sites combined cannot be less than 40.5% of the total rezoned area	Subject to the decision of expert committee of urban planning at local governments
In all cases, the contributed area for public facilities cannot be less than 30% of the total rezoned area.		

form of land. However, subject to the prior consent of the expert committee, the contribution of building sites can be instead substituted by monetary payment. A formula for the amount of value-equivalent payment (*dai jin*) is set in the ordinance as:

Amount of value-equivalent payment = Appraised value of total area of building sites (after rezone) × area of contributed building sites (after rezone) / total area of building sites (after rezone)

At least three real estate appraisal firms will be commissioned by the local government to value the rezoned area. The highest valuation result among the

appraisal firms will be selected to be the appraised value of total area of building sites (after rezone). Moreover, a minimum amount of value-equivalent payment is stipulated as 1.4 times the government-assessed value (*gong gao xian zhi*) of the contributed building sites after rezoning (this government-assessed value serves the calculation of the land value increment tax levied upon transaction of land, and in practice is significantly lower than the market value).

Another example of rezoning of land uses is the Ordinance of Rezoning of Agricultural Land. This Ordinance states that sites of public facilities need to be offered not only to serve the rezoned area, but also neighboring areas. If the developer is not able to offer the public facilities inside the rezoned area, substitute sites should be provided outside. Otherwise, subject to the prior consent of the expert committee of urban planning, value-equivalent payment is an alternative. The determination of the amount of value-equivalent payment is the same as in the Ordinance of Rezoning of Industrial Land (see earlier equation). Moreover, the area of sites for public facilities and substitute sites combined cannot be less than 30% of the rezoned area if the new use is industrial, and the figure cannot be less than 40% if new uses are other than industrial.

By and large, the requirements for developer obligations among various ordinances are similar and only differ in some details. In principle, provision of sites of public facilities is required and a minimum standard (in percentage) is often specified. Value-equivalent monetary payment is often allowed, and its amount is prescribed. Finally, the local expert committee of urban planning oversees the process and enjoys a high degree of discretion in decisions.

3. Developer obligations in non-urbanized areas

Uses of land and its changes outside of the urban areas are regulated by the Regulation of Land Uses in Non-Urbanized Areas. This Regulation is authorized by Regional Plan Act. Article 15–1 of this Act reads: "For the purpose of development and utilization, according to the regional plan, an applicant may submit a development plan enclosed with related documents to the municipal or county (city) government." Furthermore, Article 15–3 reads: "the applicant shall . . . and pay the development impact fees to the municipal or county (city) government for the purpose of improving or increasing public facilities; the foresaid development impact fees may be substituted by buildable land within the development area." In compliance with Article 15–3, an Ordinance of Levy of Development Impact Fee in Non-Urbanized Areas was enacted in August 2001. Article 2 of this ordinance states that "The need for levying development impact fee (*kai fa ying xiang fei*) arises when land development involves changes in the nature of land use and that consequently affects the service level of public facilities and other public interest in the neighbouring areas."

The appended Table 1 of this ordinance specifies the occasions when development impact fees should be applied, and the public facilities that are demanded associated with land development (see Table 16.3).

Table 16.3 Development impact fees in various scenarios of land development

Development Scenarios	*Required Provision of Public Facilities*	*Optional Provision of Public Facilities*
Residential use	Connecting roads, schools	Local parks, fire brigade
Industrial use	Connecting roads	Local parks, fire brigade
Commercial use	Connecting roads	Local parks, fire brigade
Recreational use	Connecting roads	Parking lots, fire brigade
Other uses	Connecting roads	Parking lots

Only connecting roads are the mandatory public facilities for all kinds of development, and schools are additionally required for residential developments only. The local governments are given discretion to decide if other public facilities are needed, such as local parks, fire brigades or parking lots. Article 4 of the same ordinance allows the impact fee to be paid by value-equivalent building sites in lieu of monetary payment. The appended Table 2 of this ordinance further formulates the calculation of the development impact fees for connecting roads, schools, local parks, fire brigade and parking lots.

For example, the formula for calculating the development impact fee for connecting roads is shown here (assuming the width of road is 3.5 m):

$$C = NLM \times (3.5 \times 1000) \times (CU + CL)$$

where
C: estimated development impact fee.
NLM: need of additional length (km) of road resulting from the new development.
CU: construction cost of roads per m^2. This figure is subject to the decision of local governments.
CL: land cost of roads per m^2. This figure is subject to the decision of local governments which will take into account both 1.4 times the government-assessed land value and the valuation of real estate appraisers.

Also, the formula for calculating the development impact fee for elementary and junior high schools is shown here:

$$SIF = POP \times Ss \times CL$$

where
SIF: estimated development impact fee.
POP: estimated additional number of students resulting from the new residential development.
Ss: the standard size (m^2) required per student.
CL: land cost of the school per m^2. This figure is subject to the decision of local governments, taking account of both 1.4 times the government-assessed land value and the valuation of real estate appraisers.

Formulations for calculating development impact fees for providing local parks, fire brigades and parking lots are similar to previous equations. The input variables for equations are clearly specified in the ordinances. However, the figures for some variables are at the discretion of local governments to suit the local situations.

Besides the development impact fee, there is a feedback fee (*hui kui jin*). Article 12 of the Agricultural Development Act states that "The change of land use as stated in the first paragraph of Article 10 shall be subject to the payment of a feedback fund based on its business nature of the land in use." In compliance with the Article 12, an Ordinance of Appropriation and Allocation of Feedback Fee Fund for Farmland Conversion was enacted in August of Year 2000. This ordinance specifies the amount of monetary feedback. The land value under the new use is based on the government-assessed value when the rezoning is permitted. In the case of conversion of farmland into land for transportation and logistics-related industry such as driving schools or bus stops, 40% of the estimated land value under the new use is levied as feedback fee. In the case of conversion of farmland into private roads, the levy rate is 20%. In the case of conversion of farmland into historic buildings, the levy rate is 1%. In the case of conversion of farmland into sites for agricultural industry such as agricultural facilities of production, storage, marketing and leisure, the levy rate is 3%. For other farmland conversion not specified in the preceding, the levy rate is 50%. In addition, if the farmland under conversion is classified as prime farmland (*te ding nong ye qu*), or located in areas of farmland consolidation or areas where a significant amount of agricultural resources has been invested, the rate of feedback fee could be raised by another 20%.

Similar to this ordinance is the Ordinance of Appropriation of Feedback Fee Fund for Slope Land. This Ordinance was enacted in November 2000 in compliance with Act 48–1 of the Forestry Act, which states that:

> To encourage long-term reforestation by private individuals and/or organizations, the Government shall establish a reforestation fund. The sources of funding shall be as follows: 1. Allocations from water-rights fees; 2. A reciprocation fund provided by those who undertake development of slope land; 3. Penalty fines for violation of this Act.

The value of slope land after development is based on the government-assessed value under the new uses. The amount of feedback fee depends on the type of development, the levy rate ranges between 6% and 12%. For example, in the cases of mining and golf courts, the fee is 12% of the estimated value of the slope land after development. In contrast, in the case of a driving school, the levy rate is 6%. A discount for the feedback fee is allowed if measures are taken to mitigate the environmental impacts.

Ordinances governing developer obligations in urban areas all originate from Article 27–1 of the Urban Planning Act. In contrast, ordinances

governing developer obligations in non-urbanized areas not only originate from the Regional Plan Act, but also from other acts (for example, Agricultural Development Act and Forestry Act) that particularly stipulate the development of agricultural and forestry land. It is also noted that ordinances in non-urbanized areas are not only concerned with land value capture, but also highlight the significance of farmland preservation and environmental protection (Suzuki et al., 2015).

4. Concluding remarks

Specific legislation meant to govern land value capture only started to be enacted during the mid-1990s. Review of the legislation and its enforcement has highlighted a number of features that warrant some attention.

First, Taiwan seems apparently to employ a non-negotiable developer obligations system. Details of developer obligations are almost always prescribed in written ordinances. However, when examined closely, ordinances often specify only the minimum requirements, which leaves room for negotiation. Besides, expert committees are granted a high degree of discretion. In addition, developers are sometimes allowed to choose between monetary payment and contribution of building land, but only if the relevant authorities or expert committee agrees. It is expected that a monetary payment is preferred over land contribution for developers when the land value is on the rise. It is unfortunate that no information is available about the actual negotiation room of developers.

Second, when monetary payment is accepted as a substitute for building land, this amount is often based on a certain percentage of the government-assessed land value (made for the land value increment tax), together with the valuation of real estate appraisers. The government-assessed land value is not tailored made for the purpose of determining developer obligations. In consequence, the assessed land value (even if 40% of the land value is added on) may not be based on real market values. Introduction of the appraisers' valuation indicates the government's intention to reflect the true increase of land value. Given the long-term nature of government-assessed land value, it is best seen as a safety valve to prevent a too-low value estimation.

Finally, the differences in land-use control among urban and non-urbanized areas seem to go together with differences in the rationales behind developer obligations. Determination of developer obligations in urban areas tend to be based on the expected value of land in the new and more valuable use. Obligations of this kind are more in line with the direct rationale that landowners do not deserve the entire increase of land value. In contrast, the development impact fee in non-urbanized areas aligns more with the indirect rationale that landowners are liable to internalization of the negative impacts of the new development. In addition to these two rationales, the more recent introduction of a feedback fee on farmland and

slope land seems to have added a new sort of indirect rationale. This fee is earmarked to conserve a better natural environment.

The long discrepancy between urban and non-urbanized areas in land-use control finally led to the enactment of the Spatial Planning Act in 2016. Under the new act, all land in the country is under the same zoning system. Land is divided into four zones: environmental conservation zone, marine resource zone, agricultural development zone and urban development zone. Under the four zones, there are presently 22 sub-zones that specify the permissible land uses. Applications for changes in the permissible land uses will require payment of two different fees: an environmental conservation fee (*guo tu bao yu fei*) and an impact fee (*ying xiang fei*), charged by the central and local governments, respectively. The former is meant for the purpose of environmental conservation, and the latter for improvement of public facilities. How developer obligations will evolve under the new legal regime in practice remains to be seen.

References

Chang, Jing-Sen (1993) *Urban Planning in Taiwan: 1895–1988*, Chang Yung-Fa Foundation for National Policy Research, Taipei: Ye-Jiang Publisher. (in Chinese)

Hu, Chuen-Lei (2006) A Study on Land Policy and Regulation Under the ROC Constitution, *Economic Research*, 6:33–72. (in Chinese)

Hua, Jing-Qun (2013) Issues and Strategies of Property Tax Reform. *Modern Public Finance*, 36: 8–24. (in Chinese)

Lin, Tzu-Chin and Ding, Hsiu-Yin (2015) Farmland Reform, Property Right Reconfiguration and Land Market, *Taiwan: A Radical Quarterly in Social Studies*, 100: 217–228. (in Chinese)

Lin, Tzu-Chin and Cheng, Yun-Ting (2016) The Missing Public Interest in Land: Auctions of Public Land in Taipei City. *Issues & Studies: A Social Science Quarterly on China, Taiwan, and East Asian Affairs*, December 52(4): 1640003-1-1640003-20.

National Development Council (2014) *Evaluation of Obligation and Feedback System of Land Development in Taiwan*. (in Chinese)

Suzuki, H., Murakami, J., Hong, Y-H, and Tamoayose, B. (2015) *Financing Transit-Oriented Development with Land Values: Adapting Land Value Capture in Development Countries*, World Bank Group.

Cited acts

Agricultural Development Act 2016

Code of Organization of Expert Committee of Urban Planning 2004

Forestry Act 2016

Ordinance of Appropriation and Allocation of Feedback Fee Fund for Farmland Conversion 2016

Ordinance of Appropriation of Feedback Fee Fund for Slope Land 2017

Ordinance of Rezoning into Light Industry, Logistics and Retailing Land 2006

Ordinance of Rezoning into Media Industry Land 2017 repealed

Ordinance of Rezoning of Agricultural Land 2018

Ordinance of Rezoning of Agricultural or Conservation Land into Health Care Industry Land 2004
Ordinance of Rezoning of Industrial Land 2011
Ordinance of Rezoning of Land Adjacent to Industrial Zone 2018
Ordinance of Rezoning of State-owned Enterprise Land 2018
Regional Plan Act 2000
Regulation of Land Uses in Non-Urbanized Areas 2018
Spatial Planning Act 2016
Statue for Collection of Community Development Fee by Construction Project 2000
Ordinance of Levy of Development Impact Fee in Non-Urbanized Areas 2015
Urban Planning Law 2015