

INSTITUTIONAL INFLUENCES ON REAL ESTATE APPRAISAL IN CHINA

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Abstract

The establishment of property markets is a critical feature of the future management of China's land resources. The creation of secondary markets requires a reliable price mechanism based on market values. The main hypothesis of this paper is that failure to take full and detailed account of the institutional structure of real estate and property markets in China severely diminishes the validity of most conventional approaches to financial appraisal. The paper outlines the institutional evolution of: -

- Market structures;
- Property rights;
- Methods of valuation.

It illustrates the difficulty of undertaking real estate appraisal in China and identifies the shortcomings of such appraisals in meeting the expectations of 'western' market appraisals.

Introduction

At the inception of the Communist regime in China, the 1947 *Outline Land Law of China* and 1950 *Land Reform Law of the Peoples' Republic of China* ordered the confiscation of privately owned rural land and mandated its distribution among tenant farmers. By 1982, all land in China was nationalized and the concept of land price or value became nonexistent. If 'work units' or individuals wished to acquire land for urban development or other uses, they had to apply to the Bureau of State Land Administration. If the land was owned by the state, the 'buyer' owed nothing for the use of the land and incurred no annual rental fees after the allocation. If a rural commune controlled the land being allocated, collectively, the 'buyer' paid only the cost of expropriation.

Since the 1980s, China has been taking steps to shift the management of its productive resources away from a planned economy to a 'social market economy', pursuing economic reform with political stability. However, economic reform requires major cultural change both in the perception of individuals and in the design and implementation of the institutional change necessary to support a market system. Achieving this without sacrificing the political stability essential in a successful market economy requires several things (political vision, determination and skill; investment in education etc.) but particularly, time.

The national government appears to have a clear vision of the market mechanism that it wishes to create. It has most of the power and (technically) all of the resources at its command. The operational level – the work unit – has very little decision-making power and is effectively licensed to use the resources allocated to it. Individuals at this level will behave (in accordance with human nature) in what they perceive to be their own best interest. They are familiar with this top-down approach and perceive no benefit in seeking decision-making responsibility. This structure is almost the inverse of the typical capitalist market structure in which owners and users of resources dominate the operational level, behaving according to their own best interest.

The operational level is the driving force behind market-based institutional structures. In China, however, the power of the organizational level is the dominant feature of real estate markets and property management. The national administration extends the organizational level down to the operational level. Provincial governments also have delegated powers that have a major influence on the operational level and possess considerable power to interpret national policy to suit provincial needs. Consequently, there can be considerable variation in the implementation of national policy from one province to the next. For international investors, provincial variation is limited to the coastal provinces; nevertheless, the difference of policy between, for example, Shanghai and Guangdong can be significant.

Investors should not be surprised to find that the outward appearance of a market system in China conceals the fact that most markets are not what westerners would expect to find.

Market Institutions

The market mechanism is founded on a bottom-up institutional structure. The transactions that represent economic activity occur at the operational level within monitoring and control mechanisms operated at the organizational level, ultimately supported by the rule of law or the threat of legislation. In contrast, the allocation and distribution of resources in a planned economy is determined at the constitutional level, administered through the organizational level and executed at the operational level. At the operational level of production, individuals or work units execute decisions rather than make them. Decision-making responsibility is reserved for bodies with organizational authority.

Introducing a market system in China requires a transformation of established arrangements. The responsibility for exchanging resources to achieve operational targets has been 'thrust' upon the operational level. Individuals at this level must be educated to recognize why they must change their perception of their own best interest and to play their new role in achieving the vision of the nation's leaders. The organizational level may see little need to change established practice and erode its own power; and is a strong position to resist change. The variation in the interpretation of the new 'rules of the game' between national and provincial organizations can have a major impact on the way the eventual outcome. This problem highlights the critical importance of education at this stage in the development of market institutions.

Economists consider the 'firm' to be the operational decision-making unit representing producers and suppliers in the market mechanism. China uses an apparently similar concept of 'work units'. However, work units are not part of economic decision-making, they are part of a bureaucratic system of administration. They do not own the resources allocated to them, neither do they have significant management responsibility. Operational decisions are made at the organizational level. For example, decisions regarding the acquisition or disposal of property may rest with the Bureau of State Land Administration. This means that decisions are not only one level removed from the operational level, decision-makers can exercise something akin to monopoly power.

Property rights

Another feature of the market mechanism is that it can only deal with ‘property’. Goods and services pass from owner to recipient. In most cases, the identity of property is relatively self-evident. In the case of real estate, this is not so. Land is not transferred, only the rights to use it – they are the property in question. If property rights are vague or ambiguous, purchasers have to spend time and money in attempting to clarify the extent and value of their property, thereby incurring transaction costs.

In a market economy, the use of land is dominated by operational institutions whilst planning and development control is dominated by organizational institutions. Private property rights are allocated according to the institutions of the market. Insofar as this creates an inequitable distribution of wealth, other institutions such as property taxation can be employed to effect a redistribution of resources. Further institutions ranging from the common law rules of nuisance and negligence to planning and environmental control legislation, safeguard the interests of other stakeholders in land. This mix and balance of institutions that encourages freedom to act and innovate to maximize the private benefits to be derived from land, is tempered by other institutions designed to achieve social objectives.

In China, the current property rights of state ownership and rural collective ownership of land were established in the 1982 Constitution. Article 10 said that all urban land was owned by the state (on behalf of the people). In rural areas land is collectively owned. The concepts of ownership and land use rights are separate in China. A land user can obtain land use rights but not absolute ownership. The maximum duration of government-granted leases is 70 years and land use rights revert to the state upon the expiration of the agreement. In the early years of public land ownership, the state allocated land directly to the user free of charge. This right was non-transferable regardless of any subsequent change in circumstances. The rules of rent and value, and market and competition mechanisms were ignored; land valuation was non-existent.

As part of economic modernization, China introduced an ‘open door’ policy in the early 1980s, encouraging the development of a socialist market economy in the major coastal cities and special economic zones (SEZs). Because land is a major factor in modernization and industrialization, the system of land use rights was transformed from a centrally planned allocation system to a market-oriented one. The result was the enactment of the *1986 Land Administration Law*, which granted leaseholds for value. 1986 also saw the creation of the Bureau of State Land Administration to oversee the administration of state land in both urban and rural areas. Local branches emerged in time.

Transferring land use rights for value through a premium payment was initiated in the Shenzhen Special Economic Zone (SEZ) in 1987 following amendments to the 1986 Land Administration Law. Amendments to the constitution in 1988, permitted land use rights to be exchanged in accordance with subsequent legal rules. In 1990 new regulations were introduced (by State Council Decree 55) for the granting and transferring of land-use rights over state-owned land in urban areas. The legislation also created a national registration

system in which the government issues certificates for these rights. With this system in place, land use rights can be transferred, inherited, leased, and mortgaged.

The 1990 regulations enable any domestic or foreign organization, work unit, or individual, to obtain land use rights for which they must pay land use fees, which the state as landowner collects. The amount depends on the size of the site; its location; the duration of the agreement, and the nature of the permitted use. The fee can be a lump sum premium payable on obtaining the lease, or a periodic, rental payment. These reforms gave further impetus to the development of a property market of sorts. Transfers can be effected by private treaty, tender, or public auction. Determining the amount of the premium requires an appraisal. Land uses rights normally have a term of between 40 and 70 years, as fixed by the state. Subject to these limits, SEZs and major coastal cities may adjust the lease periods to suit their needs.

The 1986 land reform encouraged wider interest in real estate. Real estate appraisal began to attract attention. Universities offered courses in real estate and property appraisal, while three central government departments (the Ministry of Construction, the Bureau of State Land Administration (now part of the Ministry of Land and Natural Resources), and the Bureau of State Administration for Industry and Commerce) developed regulations for licensing appraisers and the registration of private appraisal firms.

However, definitions of ‘appraisal’ differ between the three government departments: the Ministry of Construction is most concerned with the appraisal of buildings; the Ministry of Land and Natural Resources is most concerned with the appraisal of land and the Bureau of State Administration for Industry and Commerce is concerned with appraisal in general, including land and buildings and also plant and machinery. These three state agencies each confer national appraisal qualifications, namely, Real Estate Appraisers, Real Estate Valuers and Certified Public Appraisers. Each agency has its own requirements for the appraisal of firms and this is a source of some confusion and inter-agency rivalry.

The first licensing examinations took place in 1994 (Real Estate Valuers) followed in 1995 and 6 by the Real Estate Appraisers and Certified Public Appraisers, respectively. Generally, candidates for the licensing examination are required to: -

- Possess at least two years experience in appraisal;
- Attend college-level courses in real estate; and
- Pass four prescribed real estate examination papers (namely, regulations and policies, investment and management, appraisal theories and practice, and appraisal case studies and analyses).

Since 1995, firms performing appraisals were required to register with the Bureau of State Administration for Industry and Commerce.

Appraisal methods used in China

When appraisal became important in the 1990s, the stock of property suitable for marketing was very limited. Appraisal methods were strongly cost-based, dominated by the cost of land reclamation; site preparation and construction. Site preparation in China refers to the so-called concept of “three utility connections and one formation”. The three utility connections

are water, electricity, and road, and one formation is site formation. The average cost to turn a parcel of raw land into developable site is approximately 150,000 to 200,000 Chinese yuan (approx. \$15-20,000) per acre.

However, the massive increase in supply during the 1990s in certain areas meant that cost-based methods failed to reflect market demand. In these areas market-based methods, particularly the comparative method, have become the norm. Real estate appraisal has a relatively short history in China and Chinese appraisers have adopted methods from overseas, especially from Hong Kong, the United Kingdom, Taiwan, and Japan. The valuation methods that are currently being applied are: -

- The residual method;
- The comparative method;
- The investment method;
- Cost-based methods.

Residual Method

Contrary to ‘conventional’ practice in Mainland China, the residual method distinguishes between the cost of the construction and the value of the site. The concept of site value had long been disregarded in China because land was allocated to users at no cost, and the available property data were based on costs of construction. The fallacy that land and building values were inseparable had been upheld for many years.

The residual method, imported from Hong Kong, is used to determine the residual value of a leasehold site. In Hong Kong, the residual value of a parcel of land is determined by deducting from the gross development the cost of development (including building cost, professional fees, and finance cost) and the developer’s profit. The resulting figure, discounted to take account of the development period, is the residual value, or the price of the land.

Appraisers in Mainland China have modified the residual method so that: -

$$\text{Land price} = \text{Gross development value} - \text{building cost} - \text{professional fee} - \text{cost of finance} - \text{profit} - \text{taxation}$$

becomes: -

$$\text{Land price} = \frac{\text{Gross development value} - \text{building cost} \times (1 + i\% + r\% + p\% + i\%r\% + i\%p\%) - \text{taxation}}{1 + r\% + p\%}$$

Where *i.* = the professional fee; *r* = the cost of finance; *p* = profit.

Because the determination of gross development value relies on reliable comparable sales data from a well-established real estate market, the residual method is only applicable within economically advanced coastal cities and SEZs. In interior cities, the value of real property is very low. After the building cost is deducted from the gross development value, the residual site value is so low that it cannot reflect the actual value of the site.

Comparative method

Major cities, such as Shanghai and Beijing, are in the process of developing basic standard land prices or benchmark prices for different types and classes of urban land – a concept borrowed from Taiwan and Japan.

This comparative method uses comparable sales data to determine the basic standard land price, which represents the average land price for a certain type and class of land within a certain city district during a specific time period. The land is identified as commercial, industrial, and residential. Each is classified according to: -

- degree of prosperity;
- external and internal transportation facilities;
- existing infrastructure and community facilities;
- environmental condition;
- population density.

Once a standard land price has been established for each of the various types and classes of land, it is used as benchmark by the government, to determine land use fees, and by appraisers, to determine sales price in a lateral transfer of land use rights in the open market. Standard land prices also play an important role in land use policy by forming the basis for land assessment and property taxation. The standard land price must be revised periodically, according to changes in the real estate market. Further, because the basic standard land price represents the average price for a certain type and class of land only and no two pieces of land parcel are exactly alike, adjustments are necessary.

Investment method

This method is similar to that used by appraisers in other countries. The essence of this method (called the ‘land rent capitalization method’) is to divide the annual land rent of a land parcel by a selected capitalization rate. The selection of a capitalization rate is the subject of debate. There is still confusion over the investment method, both theoretically and practically. It is not favoured by appraisers in China for two reasons: few appraisers have received their education in the economic or finance disciplines. Secondly, there is no reliable investment market data. Stock and bond markets are very immature and strongly influenced by government and quasi-government policy decisions. Given the lack of reliable indicative yields, the choice of capitalization rate is hazardous. Nevertheless, it is used as a check on other methods.

Cost-based method

This method is simple and administratively convenient. It is used to value urban or potentially urban land where neither the comparative nor the residual method can be applied. Simple and administratively convenient, this method is based on the understanding that urban land value consists of cost of expropriation and associated interest, cost of site preparation and associated interest, and total land rent for the lease period.

Expropriation and compensation

The 1986 Land Administration Law addresses this area. In theory, land compensation is calculated according to income derived from land divided by the investment rate of return.

The interest rates set by local banks are generally adopted as the lowest investment rates of return. However, the law sets the following guidelines for the compensation of expropriated cultivated land for urban purposes: -

1. For the cultivated land the compensation is about three to six times the annual output value averaged over the preceding three years.
2. For resettlement of displaced farm settlers, the compensation for each settler is about two to three times the average annual output value averaged over the preceding three years.
3. Compensation for numbers 1 and 2 combined should not be more than 20 times the average annual output value of the land for the preceding three years.
4. The local government concerned determines compensation for vegetation and fixtures.

Land use tax is usually treated as the rent in the cost method. The current land use tax regulations are as follows: -

- Big cities: 0.5 – 10 Chinese yuan per square meter per year.
- Medium cities: 0.4 – 8 Chinese yuan per square meter per year.
- Small cities: 0.1 – 6 Chinese yuan per square meter per year.
- Country towns: 0.2 – 4 Chinese yuan per square meter per year.

The cost method is deficient in that it usually undervalues a developable site by failing to reflect its potential. Adding together three values is a mechanical and arbitrary exercise. Moreover, including the total land rent for the lease period is a controversial practice.

Clearly, real estate appraisal is still new in China, and some of the methods used are not yet refined enough to reflect a property's true value. But Chinese appraisers have been eager to learn current appraisal methodology from overseas organizations that send delegates to deliver lectures and offer workshops and seminars there.

References

- Chen Guang Yan. "The Property Evaluation in Shenzhen Special Economic Zone," *Symposium on Valuation and Real Estate Management, International Federation of Surveyors* (May 1991): 67-74.
- Li Ling Hin. "The Official Land Value Appraisal System Under the Land Use Rights Reforms in China," *The Appraisal Journal* (January 1995): 102-110.
- Li Ling Hin and Anthony Walker. "Benchmark Pricing Behavior of Land in China's Reforms," *Journal of Property Research* (September 1996): 183-196.
- Ratcliffe J., Yig-pui Tsui and Nai-tung Poon. *An Examination of Land and Property Appraisal Techniques Suitable for Application in the People's Republic of China*. Hong Kong: Department of Building and Real Estate, Hong Kong Polytechnic, 1993.
- Ratcliffe J., Yig-pui Tsui and Hong-yu Liu. *Land Management in the People's Republic of China*. Hong Kong: Department of Building and Surveying, Hong Kong Polytechnic, 1990.
- Walker A.. *Land Property and Construction in the People's Republic of China*. Hong Kong: Hong Kong University Press, 1991.

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