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Financial Development, Real Estate Development and Economic Development

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Introduction

I would like to begin by thanking the organizers of what I believe is the largest real estate conference ever assembled for giving me the honor to address this esteemed group which includes academics like myself, policymakers and officials from the government, and individuals from the world of business who are involved one way or another with the development of real property. In other words, the thinkers, the doers, and those who set the rules and provide a partnership with the business community to hopefully develop their communities as efficiently as possible. This partnership between the public and private sectors, and how their roles change as an economy and its financial markets develop, is the principal focus of this talk.

To those of you who are in the business of doing, rather than just thinking, I hope to provide a framework that can help you evaluate the relationship between public policy and private markets in the development of China's urban areas. Specifically, I will be speaking about how the development of an economy's financial markets can change the relationship between the public sector and the private developers.

To my academic colleagues, I hope this talk provides some inspiration for doing research on a topic that clearly warrants serious thought. Specifically, I would like to see research on how the pattern of real estate and urban development contributes to economic development more generally. I would also like to emphasize that since real estate academics work at the cusp of both urban economics and financial economics they should be exploring issues that exploit the synergies that exist between these two subfields of economics. I would say that, except for some notable exceptions, this marriage between finance and urban economics has not been particularly fruitful. Indeed, other than a few papers that have examined the implications of option pricing theory on urban development, we've seen real estate finance and urban economics develop along separate parallel lines. This is unfortunate, because many of the most important issues that real estate academics should be thinking about requires the kind of insights that will flow most naturally from what I will call financial/urban economists. I think this is particularly true when we think of real estate issues from the perspective of a developing economy like China.

Now part of the distance between urban economics and finance is philosophical. Financial economists are inherently free market conservatives. We tend to develop and analyze models where markets work well and view stories of market breakdowns with a great deal of skepticism. Urban economists, in contrast, study cities whose very existence imply externalities that at least suggest the possibility of market failures and a role for policy intervention, (e.g., urban planning) and are thus much more willing to think about a partnership between the private sector and the public/government sector.

This philosophical divide between finance and urban economics should be given special attention within China during its transition to an economy where markets play an increasingly important role. The importance of these issues are likely to be especially important in a country like China which is also going through a transition from an economy which is primarily agrarian to one where the engine of economic growth is almost surely going to come from its urban areas.

How will Chinese Cities Develop?

The possible migration of perhaps hundreds of millions of people into China's cities raises a number of questions, as well as challenges and opportunities:

Will the major Chinese cities grow ever larger, or can we expect to see dozens of new cities, like Shenzhen, sprout up in China?

What will be the pattern of development within these cities?

Will we see monocentric traditional cities like New York or Chicago characterized by densely populated central areas, or will they be more like newer cities like LA, which have multiple and much smaller downtown areas?

While these are important questions, they are not questions that I can easily answer.

A potentially more interesting question, which I have been thinking about lately, is whether we will see cities develop with specialized economies, like the high tech corridors in Silicon Valley in California or Bangalore in India, or alternatively, will they have more diversified economies like you see in U.S. cities like Los Angeles and perhaps here in Beijing. There are clear advantages as well as disadvantages of having focused, or undiversified economic regions, both of which can be illustrated by the current situation in Silicon Valley.

Consider, for example, the following article from the Wall Street Journal, February 18, 2000

Garage.com's IPO registration statement on Feb. 11 listed the usual boilerplate litany of risks ... adding this warning. "Suitable office space in Silicon Valley ... is in short supply and extremely expensive ... We cannot assure you that we will be able to locate suitable office space on cost effective or favorable terms." Why not seek cheaper space elsewhere? A spokesman for Garage.com said the confluence of capital, a talented work force and deal-making infrastructure such as bankers and lawyers make it important to be based in the Valley.

This article really sums up the advantages and disadvantages of having a highly focused regional economy. Because of the synergies that arise because of the confluence of talent in a region, we are likely to produce greater innovation in a focused region. However, this lack of diversification has its costs. When the external economic shocks create industry booms, such as the recent internet boom, there will be a shortage of real estate as well as the personnel required for expansion, thereby putting somewhat of a ceiling on the rate of growth. This is a major problem for the high tech firms in Silicon Valley as well as in places like Austin, Texas and probably Bangalore, India. However, a high tech firm would not be facing this problem in cities with much more diversified economies.

It should also be noted that one also doesn’t want to be in a focused economic region when the principal industry suffers a downturn. An example of this is the Houston, Texas economy in the 1980s, which was heavily concentrated in the oil and gas industries. The oil and gas industries suffered a major downturn in the late 1980s, basically wiping out the Houston real estate industry as well as most of the Texas banks.

The relation between the tightness of the real estate market and the tightness of the job market is illustrated in a couple of Wall Street Journal articles from April 2000. Again, the examples are from the Silicon Valley.

WSJ 4/11/00

"Rosen Sharma, co-founder of Ensim Corp. says space in Silicon Valley has been so tight his recruiters conduct interviews while walking around the block."

"diCarta Inc. CEO – could move to south Silicon Valley where rents are cheaper. But recruiting challenge would increase to where diCarta "probably wouldn't be able to get the company off the ground."

The second article illustrates one of the principle advantages of having a focused regional economy. Skilled workers prefer working in a more focused region because they are more likely to build human capital in such a region and in addition, they are more likely to reap the benefits of their human capital. They are better positioned to build human capital in a focused environment since they are likely to know more individuals working on the kind of problems that they work on, and as a result, learn through their interactions. This advantage of regional focus has been discussed extensively in the urban economics literature. What has attracted less attention in the urban economics literature is the fact that individuals are more likely to be rewarded for their efforts to build human capital in a more liquid labor market. A very talented programmer in Bangalore, who works hard to build human capital, will be able to move to a higher paying job if his current employer doesn't fully appreciate his efforts. However, that same programmer will have much fewer options in a more diversified economy like Calcutta, and thus runs a much greater risk of being exploited by his or her employer. It is clear that this lack of competition for his services hurts the programmer. Moreover, his diminished incentive to build human capital reduces the competitiveness of his employer.

Before concluding this discussion of labor markets and urban focus we must make a clear distinction between individuals with specialized skills and individuals with more generic skills, such as teachers, barbers and others providing services. The individuals with more generic skills do not necessarily benefit from the kind of synergies that exist for those individuals with specific skills and are thus likely to prefer the lower risks associated with living in a more diversified economy. This suggests that in general, there will be no simple market solution to this question of the optimal level of urban diversification. Indeed, there is no clear concept of an optimal level of diversification that all individuals can agree upon. Different individuals will prefer different levels of urban diversification depending on their skills, making it very difficult to completely eliminate politics from issues relating to urban design.

The role of government in urban design

This takes us to our main question. Will the invisible hand of the free market lead to the efficient development of China's cities? Or is the heavy hand of a central government still needed?

Should the central government play a role in directing industries to specific locations?

The specific questions here include issues relating to industrial subsidies:

Should we direct our subsidies in ways that lead to more specialized cities or is it better to have more diversified cities?

From my very limited knowledge of China I understand that the policy until relatively recently was to have fairly diversified local economies. More recently, however, we are seeing some evidence of a strategy that will generate more focus, perhaps to take advantage of the agglomeration benefits that I mentioned earlier. Specifically, there is some effort to direct investment in software and other high tech industries to Shenzhen, with the hope of creating a Silicon Valley in southern China. Similarly, Shanghai has been designated as the financial and commercial center of China.

The question we must ask is whether central planning is really needed to achieve the benefits of focus?

Alternatively, should we be concerned about free markets creating dangerously unbalanced local economies?

In conclusion, before considering the role of government, we must carefully consider the conditions under which market forces generate the optimal mix of specialized and diversified cities without the benefit of central planning?

How should property rights be protected?

There are also important questions pertaining to property rights that need to be resolved. What should be the rights of the owners of real property? Is there such a thing as too much property rights and alternatively is there such thing as too little property rights?

I think we are all aware of the dangers associated with too little property rights. There is something known as squatters rights in the British law which has caused major problems in countries like India. If I own land in India I need to develop it quickly, otherwise there are potential problems with squatters who will be difficult to evict. This is likely to lead to inefficient development. In particular, landowners will be forced to develop their land too quickly, thereby losing the option value that I have discussed in my earlier work.

Problems also arise when property rights are too strong, which I think has historically been the case in Japan. In Japan there is a tendency for inefficient development because of what economists call the hold-out problem. Suppose, for example, there is a prime location in Tokyo, which for historical reasons contains very low-density single-family housing. There might be large economic gains associated with redeveloping the area with much higher density flats, however, if property rights are very strong, any one of the owners of the single-family houses can block the development.

Issues relating to social cohesiveness

There are also important issues relating to what I will call the social fabric of a community, which affect not only the livability of the city but also the city's potential to foster economic growth. In a traditional small town, people go into town to shop, go to the post office, get a haircut, etc. In the process of doing this, they run into people they know, and socialize and exchange ideas. Now the question is whether these nice towns and neighborhoods that facilitate this kind of communication will arise naturally in a free market or whether there is some need for urban planning. I think the answer is that individuals will congregate too little in a free market, since individuals, when choosing, for example, where to shop, ignore the fact that other individuals benefit from serendipitously running into them at the store.

I sometimes refer to this as the Wal-Mart problem since Wal-Mart has been accused of destroying the social fabric of small towns in the U.S. Wal-Mart lures customers who would have otherwise shopped in the central shopping areas of a small town by offering somewhat lower prices. Since individuals ignore the external benefits they create by shopping downtown, they can be lured to Wal-Mart even when it would be socially optimal for them to shop downtown. The result is that the individuals in the town are worse off as a result of Wal-Mart's entry. They might be able to buy slightly cheaper toothpaste, but the cost is a substantially more sterile social environment.

In summary, I don't think a free market will *necessarily* generate what I will call efficient or optimal urban development. The free market solution can potentially lead to either too much or too little development, depending on the nature of property rights. It can also lead to cities that may be either too diversified or too focused, depending on the industrial synergies and the mix between generic and specialized workers, and finally, it can potentially lead to socially sterile living environments.

What does any of this have to do with finance?

At this point, one might be thinking that this is somewhat interesting but has nothing to do with the development of financial markets, which plays such an important role in the title of this talk. However, financial development can potentially play a major role in efficient urban development.

What I would like to argue is that a very well functioning financial market can sometimes substitute for well functioning public policy. I should stress, however, that this requires an extremely well functioning capital market, capable of raising very large sums of money. In other words, ideal markets that may exist in theory, but not yet in practice.

The examples that I would like to describe are the Mall of the Americas in Minneapolis, Minnesota, which is just a bigger form of the kind of shopping malls that you see throughout the world, and a town called Celebration, which is a planned community outside of Orlando, Florida, which was developed by the Disney Corporation. In both cases we have very major commercial developments that were built in a short time period by a single entity that was able to account for externalities when the communities were designed. Unfortunately, I don't have a good third example, which would be some sort of giant industrial park that is designed to facilitate the kind of synergies between firms that I discussed at the outset. The type of example I am thinking about would be very similar to Richard Li's Cyberport in Hong Kong. However, Cyberport, which is sort of an industrial park for software and internet start ups, was launched with considerable government support and is much smaller in scale than either of the other two examples.

In planned communities and shopping malls, the developers can subsidize retail spaces that generate positive externalities. For example, suppose a bookstore attracts customers, who like to browse, and who think the ambiance of a bookstore is conducive for meeting people, but who do not necessarily buy a lot of books. Suppose, however, that before or after browsing in the bookstore, these individuals are likely to go to the restaurant next door for lunch. In this case, one would like to charge the bookstore lower rent, because it creates externalities, and charge the restaurant higher rent because it benefits from these externalities. Shopping malls and planned communities can, and in fact, do cross-subsidize tenants in exactly this way. However, in downtown areas, where different individuals own the individual buildings, this sort of cross-subsidization generally doesn't arise.

Again, what does this have to do with finance?

Major developments that allow this kind of cross-subsidization require multi-billion dollar investments. Raising capital of this magnitude requires certain institutional infrastructure that does not currently exist in countries like China. Specifically, we need an investor protection/governance structure that provides investors with some assurance that their capital will be wisely invested and will not be expropriated by insiders.

To better understand the role of financial markets in urban development, consider a community with a need for, say eight different establishments that, like the bookstore and the restaurant in the earlier example, (or alternatively eight different manufacturing firms) generate different levels of benefits to each other. Within the context of this example we want to compare two different regimes: The first is what we will call an independent regime, where the establishments are individually owned by small independent entrepreneurs who purchase or rent their operating space on a competitive market and pay the same per unit rental costs. In the second, alternative regime, individual entrepreneurs may still own the establishments, but a large corporation that is not constrained to charge equal rents to the individual establishments owns all of the real estate. This second regime is characterized by large shopping malls and industrial parks.

Because of spillover costs, the amount of space devoted to each establishment will be different in these two regimes. Specifically, the collective (or large corporate) regime will allocate more space to the establishments that create the greater externalities (or synergies), and by doing so will create greater total value, relative to the independent (or entrepreneurial) regime where the individual establishments pay the same rental rates.

In reality, the efficiency gains that are created from the ability to cross-subsidize the various establishments come at some cost. Large corporations require significant amounts of external capital, and this in turn creates potential governance problems. Specifically, we need to be concerned about how we keep the managers, who may own just a small fraction of the shares, from making decisions that benefit them personally at the expense of either outside shareholders or outside lenders. In an economy with poorly functioning financial markets, and a poorly functioning legal system, this is likely to be a major problem that would more than offset the advantages associated with coordinating the decisions of the different establishments. However, in an economy with a financial and legal system that solves these governance problems, these costs are likely to be much less important, and the large corporate regime may provide the preferred structure.

The above arguments suggest that there may be a relationship between the development of an economy's financial markets and its legal institutions, and the industrial organization of its real estate, and the importance of urban planning. We can expect to see very large and relatively efficient real estate developments in economies with well-developed financial markets and efficient legal systems. In these economies, large corporations can raise sufficient capital for large developments that are designed to appropriately subsidize the businesses that create the synergies. In other words, the invisible hand of the market can, in theory, provide for the optimal urban design.

This is an ideal, however, that has not even been achieved yet in the United States so, in reality, a partnership between the public sector and the private sector probably is necessary. Moreover, since the scale of development that is feasible without government support is likely to be on a much smaller scale in economies with less efficient financial markets and legal systems, a strong partnership between the government sector and the private developers is much more important in economies with less developed financial markets.

Are governance problems any less severe in the public sector?

I don't want to give the impression that the public sector provides a more efficient solution to the externality problem in an economy with undeveloped financial markets. Indeed, the type of governance problems that make it difficult to raise capital in financial markets may be even more problematic when government officials are directing the allocation of resources. However, the government solution may be feasible, when the private market solution is not since the government is not constrained to make money. Of course, if problems relating to incentives and corruption in the government are severe, it is probably better to simply ignore the externality problems and let the market determine the urban design.

I would like to conclude with a few recommendations

However, before concluding I would like to emphasize that I am not an expert on China, and that my recommendations will have to be carefully molded to fit the political and cultural realities in China.

In the coming years China is likely to be under increasing pressure to reduce the size of its public sector. The real estate sector should be privatized much more cautiously than other sectors and policymakers must be cognizant of the coordination problems that can be solved by a good partnership between the public and private sectors. It is important to recognize that the role that can be taken by the private sector is determined in part by the maturity of the economy's financial markets.

It should be noted that although the development of China's financial markets should be a very high priority, it will be a number of years before the Chinese markets have the breadth and the efficiency to finance very large scale real estate projects without government assistance. What this means, is that the partnership between the real estate developers and the government officials can only be phased out very slowly.

This in turn implies that in addition to the development of her financial markets, China must continue to move forward on creating a legal environment that allows for an efficient relationship between government and private development and provides real estate owners with an appropriate level of property rights.