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Her innovative and diverse research projects have been supported by international research institutions including the World Bank, the Asian Development Bank, the International Growth Center at London School of Economics, and various departments of the Chinese government including the National Science Foundation of China, the Ministry of Housing and Urban-Rural Development, and the National Statistics Bureau of China.

Dr. Zheng received her Ph.D. in urban economics and real estate economics from Tsinghua University, and she pursued post-doctoral research in urban economics at the Graduate School of Design at Harvard University. She is a research fellow at both the Peking University–Lincoln Institute Center for Urban Development and Land Policy and the Center for Industrial Development and Environmental Governance at Tsinghua University.

Dr. Zheng is also the vice secretary-general of the Global Chinese Real Estate Congress. She has won awards such as the Homer Hoyt Post-Doctoral Honoree (2010) and the Best Paper Award from the American Real Estate Society (2005). She is also on the editorial boards of Journal of Housing Economics and International Real Estate Review. Contact: zhengsiqi@tsinghua.edu.cn

Siqi Zheng

LAND LINES: *How did you become associated with the Lincoln Institute of Land Policy and its programs in China?*

SIQI ZHENG: I first learned about the Lincoln Institute when I did my post-doctoral research at Harvard University in 2005–2006. I joined the Peking University–Lincoln Institute Center for Urban Development and Land Policy (PLC) as a research fellow soon after it was established in 2007. From that time I became fully involved in PLC's research activities, such as conducting research projects, reviewing research proposals, and participating in conferences. I was awarded an international research fellowship by the Lincoln Institute in 2008–2009, with my colleagues Yuming Fu and Hongyu Liu, to study urban housing opportunities in various Chinese cities. I now lead the housing team at PLC in conducting policy-relevant research in the areas of housing market analysis and low-income housing policies.

LAND LINES: *Why is the study of the urban economics and the housing market so important to China's future?*

SIQI ZHENG: China is experiencing rapid urbanization at a rate of about 50 percent in 2011, but it is expected to reach 70 percent over the next 10 to 20 years. Up to 1.5 million new migrants already move to Chinese cities per year. Such rapid urban growth offers potentially large economic benefits, as cities offer much better opportunities to trade, to learn, and to specialize in an occupation that offers an individual the greatest opportunity to achieve life goals.

However, rapid urbanization also imposes potentially large social costs, such as pollution and congestion, and urban quality of life suffers from a fundamental tragedy of the commons problem. Urban economics research addresses these issues and tries to figure out a way to maximize agglomeration economies and at the same time minimize congestion diseconomies. This is crucial for China's future, because urbanization is the engine for China's growth.

The housing sector is a key determinant of both the quantitative and qualitative dimensions of urban growth. Along the quantitative dimension, everyone in the city needs some place to live. Housing supply has important influences on a city's overall size and its living cost, and thus the labor cost. Along the qualitative dimension, intensive social interactions happen in vibrant urban communities and neighborhoods. The spillover effect arising from such activities reduces the cost of learning and contributes to human capital improvement.

Low-income housing is a major policy issue in China. Income inequality is rising and housing prices are very high in major Chinese cities, so low-income households face severe affordability problems. For years the Chinese government had overlooked the supply of affordable housing, but it has recently begun to understand that well-designed policies for low-income housing are crucial for achieving more inclusive urban growth opportunities for all residents.

LAND LINES: *How do you approach the study of urban economics and China's housing market?*

SIQI ZHENG: I am doing cross-city and within-city studies on the intersection of urban and environmental economics. With increasing labor mobility across cities, China is moving toward a system of open cities. Under the compensating differentials framework, I use city-level real estate prices to recover households' willingness-to-pay for urban amenities, such as better air quality, more green space, and educational opportunities. My basic finding is that Chinese urban households do value quality of life. As China's urbanites grow richer over time, their desire to live in clean, low-risk cities is rising.

Within a city, I examine the jobs-housing spatial interactions—where people live, where they work, and how they choose their commuting mode. I use

household survey data and real estate transaction data to model these behaviors, since individual choices determine the basic pattern of urban form. Those individual behaviors (“snowballs”) also have important implications for the interrelationships among land use, transportation, and the urban environment, because car ownership is rising and the increase in vehicle miles traveled has become a major contributor to pollution in Chinese cities.

I also focus on housing market dynamics and low-income housing policies. Our Tsinghua team constructed the first quality-controlled hedonic price index based on transaction data in 40 Chinese cities. My coauthors and I estimate the income elasticity of housing demand and the price elasticity of housing supply, and examine the determinants of such elasticities. Using microdata, I investigate how land and housing supply and public investments affect price and quantity dynamics in the urban housing market. I pay close attention to the housing choices of low-income households and rural migrants. Based on my behavior-based empirical study using microdata, I explore the kinds of urban and housing policies that can improve the position of these disadvantaged groups in both housing and labor markets.

LAND LINES: *What challenges do you think China will face in this field in the coming decade?*

SIQI ZHENG: The major challenge is how to achieve a successful transition toward sustainability. China’s rapid economic growth in recent years was largely export-based and benefited from low labor, land, and regulatory costs. The environmental disasters and social unrest that have occurred in many places in China indicate that the current approach is not sustainable for the long term.

Policy makers should reshape urban policies in a variety of ways. Remaining institutional barriers on labor mobility should be removed. Negative externalities of urban production and consumption activities (such as pollution and congestion) should be priced correctly so that individuals’ behaviors are consistent with the socially optimal solution. Income inequality and spatial inequality issues should be addressed. More investment in

human capital is needed. Housing plays a pivot role because it is the largest asset a household owns, and it also affects accessibility to urban opportunities and the quality of social interactions.

LAND LINES: *What are some potential policy implications of this research on the housing market?*

SIQI ZHENG: Most of my work is empirical analysis with microdata, so I can focus on the incentives and choices made by individuals, firms, and governments. I also look at how these choices determine urban form, local quality of life, the labor market, and housing market outcomes. In this way I can provide key parameters for policy makers to support their policy design. For instance, I identify the cities with different housing supply and demand conditions, and suggest that officials should offer different low-income housing policy choices. Cities with an abundant housing stock can use demand-side instruments such as housing vouchers, but those without enough housing should use supply-side instruments such as building more public housing.

LAND LINES: *Is China’s experience with housing market development useful to share with other developing countries?*

SIQI ZHENG: Yes, because many countries also face difficult situations in their housing sectors. Some of the common challenges are how to house the vast numbers of rural migrants in cities; how to provide more affordable housing for increasing numbers of low-income people; where and by what means to provide such housing; and, as cities expand spatially, what are the appropriate urban planning policies and infrastructure investment strategies that can achieve efficient and inclusive urban growth? Through the research conferences and publications produced by the Peking University–Lincoln Institute Center, China’s experiences are already providing lessons for other developing countries.

LAND LINES: *Can you describe some examples of housing supply in the informal housing sector?*

SIQI ZHENG: Nations such as Brazil, India, and China have many poor migrants living in squatter and informal areas. Local governments have little incentive to provide

public services to such areas because the improvements, including clean water and sewerage facilities, will simply stimulate more urban migration.

Chengzhongcun (urban village) is a typical type of informal housing in large Chinese cities. It represents a match between migrants’ demand for low-cost housing and the supply of housing available in the villages being encroached upon by urban expansion. High crime rates, inadequate infrastructure and services, and poor living conditions are just some of the problems in urban villages that threaten public security and management. My research on *Chengzhongcun* shows that local governments at first liked this kind of low-cost informal housing because it can lower labor costs and thus contribute to higher GDP growth in their cities. However, the low quality of social interaction and the shortage of basic public services do not provide a sustainable way of life for the poor rural migrants.

As the industrial sector moves toward a more skill-intensive economy, local governments should consider how to improve the quality of human capital rather than focus on the quantity of cheap labor. This may provide the incentive to upgrade informal housing and transform it to formal housing, or provide public housing to those migrants so they can access more urban opportunities and improve their skills. This transitional process is now occurring in China, and will soon happen in other developing countries that can benefit from China’s experience.

Another example is the role of housing supply in urban growth. Many studies already show that housing supply can support or constrain urban growth because the size and price of housing stock influence labor supply and living costs. In developing countries land and housing supply are influenced by government regulations and behaviors to a greater extent than in developed countries. The design of housing supply policies needs to accommodate future urban growth for all sectors of society.

I have written many working papers on these topics and contributed to the 2011 Lincoln Institute book, *China’s Housing Reform and Outcomes*, edited by Joyce Yanyun Man, director of the Peking–Lincoln Center at Peking University. 