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# Dynamics of social health insurance development: Examining the determinants of Chinese basic health insurance coverage with panel data

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ABSTRACT

Social health insurance (SHI) is gaining popularity in many developing countries, but there are few systematic empirical studies on the dynamics of SHI development. This study investigates the determinants of coverage of the Basic Healthcare Insurance for Urban Employees (BHI) in China. Using a panel database ranging from 1999 to 2007, the study finds that: (1) economic development plays a valuable role in BHI development; (2) strong financial capacity and administrative capacity in the government contributes to BHI progress; (3) higher trade union density is closely related to more rapid BHI expansion; and (4) taxation agencies are better at collecting SHI premiums. These findings provide evidence-based lessons for new and ongoing SHI programs. In addition, this article aims to make a more general contribution to the study of social policy development by expanding the scope of current theories on social policy development.



## Introduction

Since the 1880s, 27 countries have achieved universal health care coverage through social health insurance (SHI) (Carrin & James, 2005). Now SHI is rapidly spreading among developing countries. South Africa, Zimbabwe, Cambodia, Laos and Malaysia are considering the introduction of or a shift to SHI, while Thailand, Colombia, the Philippines, Ghana and Kenya are at different stages of SHI development (Hsiao & Shaw, 2007; Obermann, Jowett, Alcantara, Banzon, & Bodart, 2006). International organizations (e.g., the World Health Organization and the World Bank) are actively promoting SHI in developing countries.

In order to mobilize funds and pool risks, SHI plans collect contributions from various units, such as individuals, households and enterprises, and then pool health risks among the group. It is believed that SHI can raise stable funding for the health care system, which will help resolve the under-funding problem among health care providers in low- and middle-income countries. Despite the popularity of SHI, several questions remain unanswered or have untested answers. For instance, one key issue of SHI development is the extension of coverage (Schremmer, Coheur, Jacquier, & Schmitt-Diabaté, 2009). A brief historical review finds that the time to achieve universal coverage has varied across time and countries: Germany, 127 years; Austria, 79 years; Belgium, 118 years; Luxemburg, 72 years; Israel, 84 years; Costa Rico, 20 years; Japan, 36 years; and South Korea, 26 years (Carrin and James, 2005; Kwon, 2009; Barnighausen & Sauerborn, 2002).

What factors foster or fetter SHI coverage? Systematic analysis of variations in SHI coverage is still rare. By investigating factors that determine the development of SHI in developing countries, we can achieve a twofold benefit: first, evidence-based findings will inspire ongoing SHI projects in developing countries; second, we can situate SHI development theoretically and expand the explanatory scope of social policy development theories.

This article traces the development of Basic Healthcare Insurance (BHI) for Urban Employees in China and examines the determinants of coverage. Initiated in 1999, BHI covered 180.2 million people in 2007. However, its development has not been smooth across regions or over time. As the largest developing country in the world, China shares many similarities with other middle- and low-income countries. Therefore, as SHI gains increasing attention worldwide, the study of China's BHI case will offer lessons to ongoing SHI projects in developing countries.

In pursuing this agenda, the article is organized as follows. First, background information is provided on the evolution of the Chinese health protection system, along with a brief introduction to the political economy of developing BHI in contemporary China. Second, two lines of literature are reviewed concerning SHI development: one is a theoretical analysis of social program development, and the other is a specific analysis of factors influencing SHI development. The third part discusses methodology and introduces data, measurements and the statistical model. Last, the article concludes with research findings and a discussion.

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## The evolution of health insurance programs and the political economy of extending BHI coverage

Under China's planned economy, most urban residents were covered by health insurance programs (Ramesh & Wu, 2009; Bloom & Gu, 1997). The labor insurance scheme (LIS) covered workers, while the government insurance scheme (GIS) covered civil servants and other state employees. Employees' dependents enjoyed a half-fee medical service. However, as economic reform moved forward, a large number of publicly-owned enterprises began incurring losses, and some even went bankrupt (Grogan, 1995; Du, 2009). Consequently, LIS and GIS could not be sustained because they were embedded in the planned economy. This resulted in more than half of urban residents losing coverage from any health care program (Liu, 2002; Meng et al., 2004).

To tackle this problem, the Chinese government piloted a new scheme to replace the old system. In December 1998, after years of pilot testing, BHI for Urban Employees was launched nationwide (Liu, Zhao, Cai, Yamada, & Yamada, 2002). It was designed to cover the urban working population, especially those working in the formal sectors. After nine years of development, BHI covered only 53% of urban employees in 2007. The progress of BHI across different provinces has varied greatly, despite similar starting points and policy design (Fig. 1). A natural question arises; what determines the pace of BHI expansion?

Expanding coverage of BHI is not merely a problem of policy implementation, it is also a problem related to China's rapidly changing political economy. To understand the difficulty of extending BHI coverage, it is first necessary to understand that it requires the participation of several stakeholders, including, but not limited to, the state, employers and employees. China's changing political economy has made this seemingly easy task more complicated. For the state, ongoing reform has fragmented authority both vertically and horizontally. Whereas decentralization has given local governments more autonomy, it has also shouldered them with more responsibility for local affairs (Blumenthal & Hsiao, 2005). For employers, complications arise because state-owned enterprises (SOEs) account for a declining share of gross domestic product (GDP), while private businesses and foreign firms are booming. Private sector employers are more profit oriented and less constrained by the state, which gives rise to disobedience of laws that do not coincide with their interests. In fact, disputes over social insurance payments are responsible for 30% of total labor dispute cases (Department of Population and Employment Statistics of the National Bureau of Statistics of China and Department of Planning and Finance of the Ministry of Labor and Social Security of China, various years). For employees, difficulties arise because more and more people are being employed in the private sector. They are exposed to more market risks, while their chances of obtaining social protection are undermined. To understand this perplexing situation, we turn to existing knowledge for insights.

## Theoretical and empirical studies on social policy development

Two lines of thinking have developed over the issue of SHI development. The first concerns social policy development in general, a mainstream theme in the field of welfare state research. The other is more directly related to SHI. Many scholars and policy analysts have explored the empirical factors influencing SHI development. Although both lines of study have yielded important insights, they are separate lines of study that still need to be linked. This section will review theories of social policy development and the related empirical studies.

### *The logic of industrialism*

Proposed by Wilensky and Libeaux (1958), this model argues that social policy is the consequence of modernity. Social and economic forces have shaped the origination and development of social programs. The mechanism can be summarized as follows. Economic development first increases state revenues and individual incomes, thereby improving the public and private affordability of social programs. With economic growth, labor from rural and low-value-added agriculture moves to high-value-added industries. Because more and more people are employed in concentrated urban industries, social policy development gains economic support and geographic convenience. At the same time, social contingencies, such as old age, sickness and unemployment, brought about by industrialization and urbanization also make social protection necessary (Skocpol & Amenta, 1986).

This argument corresponds with studies of SHI. Hsiao and Shaw (2007) developed a rule of thumb to judge whether a state is in a good position to achieve universal coverage through SHI; whether its GDP per capita reaches US$6000 per year. Many scholars have

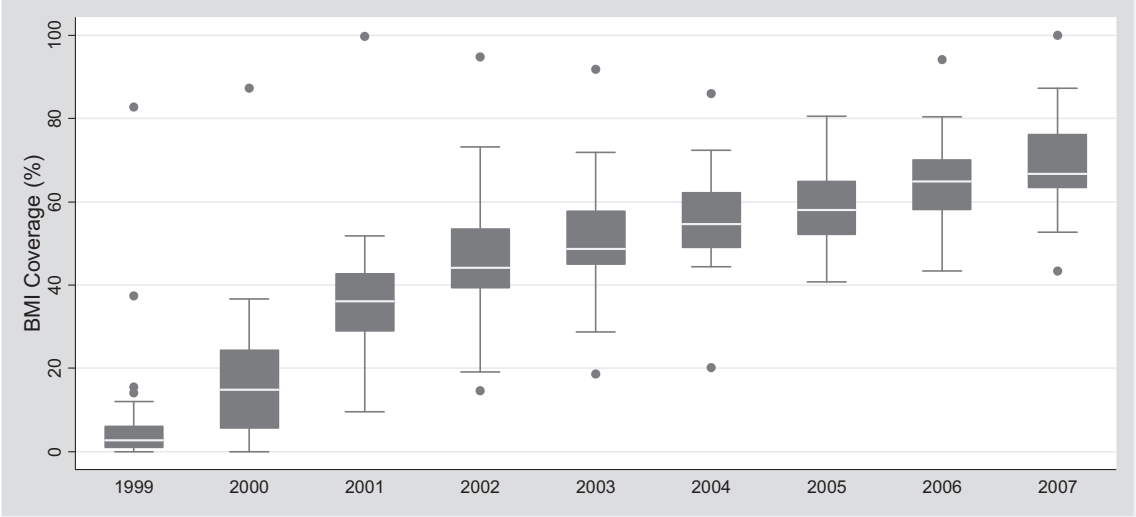


**Fig. 1.** BHI coverage from 1999 to 2007. Source: BHI panel database.