



http://dx.doi.org/10.1016/j.worlddev.2014.06.015

## Escalation of Real Wages in Bangladesh: Is it the Beginning of Structural Transformation?

XIAOBO ZHANG<sup>a,b</sup>, SHAHIDUR RASHID<sup>b</sup>, KAIKAUS AHMAD<sup>c</sup> and AKHTER AHMED<sup>d,\*</sup>

<sup>a</sup> Peking University, China <sup>b</sup> International Food Policy Research Institute, Washington, USA <sup>c</sup> Ministry of Power, Energy and Mineral Resources, Dhaka, Bangladesh <sup>d</sup> International Food Policy Research Institute, Dhaka, Bangladesh

Summary. — Using data from multiple sources, we show that the real wages in Bangladesh, particularly in rural areas and for female workers, have accelerated in recent years. Real wage escalation is likely the result of a combination of more job opportunities in the nonfarm sector, especially in the manufacturing sector, and a greater inflow of remittances, primarily from unskilled male workers overseas. Since physical labor is the most important asset for the poor, the escalation in real wages has boosted the poor's earnings, helping them improve their livelihood and escape poverty. © 2014 Elsevier Ltd. All rights reserved.

Key words — Bangladesh, rising wages, Lewis turning point, industrialization

### 1. INTRODUCTION

With about 1,200 people per square kilometer, Bangladesh is one the most densely populated countries on the planet. The reality of intense population pressure is reflected in commonly portrayed images in the popular media, such as crowded buses and trains with passengers on top, endless lines of human-powered rickshaws, and deaths in thousands from both natural and man-made disasters. With increasing landlessness, and a heavy reliance on labor markets, understanding the dynamics of wage formation in this setting is critically important for identifying the process of economic transformation and poverty reduction. However, both theories and empirics of wage determination in Bangladesh, and elsewhere in developing countries, have intrigued economists for decades.<sup>1</sup> The neo-classical theories, where labor demand and wages are determined by the marginal physical product, cannot explain stable wages amid seemingly unlimited supply of workers and massive involuntary unemployment in developing countries like Bangladesh. The reason is simple: if market clearing conditions hold, unemployed workers should bid down wages until full employment is reached. One set of theories that provide a more coherent explanation of stable wages amid abundant labor supply has been the nutrition-based efficiency wage theory, originally proposed by Leibenstein (1957) and Mazumdar (1959). The premise of this theory is that since productivity depends on consumption, it is in the interest of the employers to pay a wage that ensures minimum calorie requirement of the workers so that they can work effectively.

However, neither neo-classical nor efficiency wage theories seems to be consistent with an emerging trend in Bangladesh—a sharp increase in real wage rate in recent years. This trend is quite contrary to the findings of earlier empirical studies on agricultural wage formation in the country. Using historical data from the 1950s to 1960s, Bose (1968) demonstrated that real agricultural wages in Bangladesh (then East Pakistan) had been declining since the end of colonial rule in the late 1940s. Subsequent studies—notably Khan (1977 and 1984), Boyce (1989), Ravallion (1990), and Boyce and Ravallion (1991)-echoed similar concerns about the downward trend in real agricultural wages. Extending Boyce and Ravallion's (1991) data set (1949-81) to 1999-2000, Rashid (2002) argued that the trend in the relative price of labor and food documented in the earlier studies had changed in the 1990s. In particular, rice was no longer the key determinant of the agricultural wages, as predicted by the subsistence wage hypothesis.<sup>2</sup> However, none of the earlier studies reported a sharply rising trend with analysis of the underlying factors within a coherent theoretical framework. This paper attempts to bridge this knowledge gap. Unlike previous studies, it (a) uses data from multiple sources, (b) analyzes the sources of income growth and their relationship with rising wages, (c) triangulates the results in light of the theories of economic transformation, and (d) highlights implications for poverty reduction.

The results suggest that the real wage rates, especially in rural areas, have accelerated since the early 2000s. Triangulating these results with other evidence, we demonstrate that rising wages in Bangladesh is consistent with Arthur Lewis's (1954) dual economy model with unlimited labor supply. The evidence suggests that Bangladesh is at the stage of development commonly termed as the Lewis Turning Point, where workers begin to gain greater bargaining power in negotiating wages. Key drivers behind this trend have increased nonfarm job opportunities, especially for women in the growing manufacturing sector. As labor costs have risen in other developing countries, such as China and India, Bangladesh has emerged as a new destination for labor-intensive industries (IHS Global Insight 2010; Sincavage, Haub, & Sharma 2010; Zhang, Yang, & Wang 2011). In the mid-1980s, the garment sector employed only 120 thousand people and exported about US\$31 million worth of merchandise. By the mid-1990s, the sector employed 1.3 million people, mostly women, and

<sup>\*</sup> Excellent research assistance from Hak Lim Lee, Solomon Lemma, and Saika Belal and helpful comments from Valerie Mueller are gratefully acknowledged. Final revision accepted: June 10, 2014.

exports reached US \$2.2 billion. It grew further in the 2000s and exports soared to more than US \$19 billion, equivalent to nearly 80% of the country's exports, and provided direct employment to about 4.0 million people in 2012 (Rashid, Tefera, Lemma, & Yunus, 2014). The booming manufacturing sector has attracted millions of surplus workers, in particular women, from rural areas (Kabeer & Mahmud, 2004). Initially, as laborers moved out of the agricultural sector, the impact on rural wages was minimal due to the presence of surplus labor. However, over time, as the supply of seemingly unlimited labor was exhausted, the terms of trade in the labor market started to shift in favor of workers, leading to a tightening labor market and an increase in agricultural wages.

Since physical labor is the primary asset for the poor, a change in the labor market can translate into improvement in the poor's livelihood and lead to a reduction in poverty. This appears to be the case in Bangladesh over the past decade when the country has made remarkable progress in reducing poverty. The poverty rate dropped from 49% in 2000 to 32% in 2010, falling by 1.7 percentage points per year (World Bank, 2013). To put these numbers in perspective, about 1.6 million people have escaped poverty every year since 2000. In comparison, the rate of decline in poverty was much more modest during 1995–2000, from 51% to 49%, equivalent to only 0.4 percentage points per year.

The rest of the paper is organized as follows. Section 2 presents a conceptual framework explaining the rise in wages as predicted by the Lewis's (1954) model. This is followed by a discussion on the analysis of two data sources to show that rural real wages accelerated in the second half of the decade spanning 2000–10. Section 4 presents analysis of both household surveys and other official statistics to identify the factors behind an observed rise in real wages. The paper concludes with a summary of findings and their implications.

### 2. CONCEPTUAL FRAMEWORK

Economic development is a process of transferring workers from low-productivity sectors, such as agricultural production to more productive sectors, such as manufacturing. In the early stage of the structural transformation, the out migration of rural workers from the agricultural sector to the manufacturing or nonfarm sector has little effect on the wages of both sectors due to excess unemployment and underemployment in rural areas. A defining feature of this early stage of development is that urban wages far exceed rural wages. Additionally, at this stage, wages remain low and stable in both sectors. Over time, as the economy grows there comes a point at which the excess labor in rural areas becomes fully absorbed by the emerging nonfarm sector, initiating a rise in wages. This was the key insight advanced by Lewis (1954), and such a point was coined as the "Lewis turning point".<sup>3</sup>

However, the empirical evidence on the existence of a Lewis turning point in South Asia is mixed. It has been widely shown that the East Asian economies experienced a noticeable Lewis turning point (Fei & Ranis, 1975; Fields, 2004; Zhang *et al.*, 2011). However, studies on South Asia have failed to uncover such a trend as of 1970s (Rosenzweig, 1980). In case of Bangladesh, the earlier studies presented results—that is, a declining trend in real wages at least up to early 1980s—that were quite contrary to the prediction of Lewis model. This is either because the Lewis model of economic development with unlimited labor did not hold in these countries; or because these countries did not reach the turning point at the time when the studies were conducted. As economic transformation



Figure 1. Conceptual model of Lewis turning point. Source: Adapted from Basu (1997). Note: The thick gray line represents the urban wage curve; the thick black line indicates the rural wage curve.

occurs over a long horizon of time, studies are unlikely to discern the turning point if the sample period is not long enough to encompass the transformation.

Figure 1 provides an illustration of the Lewis turning point in a dual economy set up where L is the total size of the labor force in the economy and  $O_R$  and  $O_U$  are origins of the rural and urban sectors, respectively.<sup>4</sup> The marginal product of labor in the urban sector is  $AB (A_1B_1, A_2B_2, \text{ and so on})$ , whereas the marginal product of labor in the rural sector is CD. One key feature of the rural marginal product of labor, *CD*, is that there is a long flat line when the amount of rural labor is greater than  $O_R L_2$ . Initially, let us assume that the marginal productivity of labor in the urban sector is  $A_1B_1$ . At this point, the urban wage is w and the rural wage is m, with corresponding labor allocation of  $O_U L_1$  in the urban sector and  $O_R L_1$  in the rural sector. With capital accumulation and technological development, the marginal product of labor curve AB shifts rightward and the share of the labor force in urban sector increases. For example, when the curve shifts to  $A_2B_2$ , employment in the urban sector increases from  $O_U L_1$  to  $O_U L_2$ ; and the rural share declines by a similar magnitude. The rural wage at this point (the first Lewis turning point) starts to increase because the rural marginal product of labor curve, CD, has passed the horizontal stage. From then on, the rural wage continues to increase; urban wages remain constant until AB reaches the point  $L_T$  or the second Lewis turning point, where rural and urban wages converge and both begin to rise simultaneously.

This model predicts that the escalation of rural wages precedes the increase in urban wages which takes place after the economy reaches the Lewis turning point,  $L_T$ . The analysis in this paper attempts to determine whether such a point can be detected in recent data from Bangladesh, where scholars have expressed concern that the economy is not growing fast enough to absorb the surplus labor (Islam, 2007).

### 3. EVIDENCE ON RISING REAL WAGES

This section presents an analysis of data from two sources to document the pattern of rising real wages in Bangladesh.

#### (a) Evidence based on monthly wage data

The first data source is monthly wage data from *Monthly Statistical Bulletins*, published by the Bangladesh Bureau of Statistics (BBS), which reports both rural and urban wages. The BBS collects information on daily wages for unskilled

Download English Version:

# https://daneshyari.com/en/article/7394692

Download Persian Version:

https://daneshyari.com/article/7394692

Daneshyari.com