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Minimum wages, wages and employment in various sectors in Honduras

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ABSTRACT

This paper contributes to our understanding of the impact of minimum wages on labor markets of developing countries, where there are often multiple minimum wages and compliance is weak. We examine how changes in more than 22 minimum wages over 1990–2004 affect employment, unemployment and average wages of workers in different sectors, defined by coverage under the legislation. The evidence suggests that minimum wages are effectively enforced only in medium and large-scale firms, where a 1% increase in the minimum wage leads to an increase of 0.29% in the average wage and a relatively large reduction in employment of −0.46%. We find that public sector wages emulate minimum wage trends but the higher cost of labor does not reduce employment there. There are no discernable effects of minimum wages on the wages of workers in small-firms or the self-employed; yet, higher minimum wages may create more unemployment. We conclude that (even under our upper bound estimate of the effect on the wages of workers) the total earnings of workers in the large-firm covered sector fall with higher minimum wages in Honduras, which warrants a policy dialogue on the structure and level of minimum wages.

1. Introduction

This paper contributes to our understanding of the effect of minimum wage legislation on the earnings of different types of workers in developing countries, where there is typically more than one minimum wage (MW), compliance is weak and the share of workers in the uncovered (informal) sector is high relative to more developed countries (Eyraud and Saget, 2005).[1] As we discuss below, micro evidence on the impact of MW legislation in developing countries is rapidly coming to light. However, given the variance across countries in the levels and structures of MWs and their enforcement, much more evidence is needed to form a consensus on the impact of MWs on workers in the sectors covered by this legislation v. those in uncovered sectors. The goal of our paper is to contribute to this growing literature by producing evidence for Honduras, a poor country where multiple MWs are set at relatively high levels by industry and firm size. We measure the wage, employment and unemployment effects of this complex MW structure on workers, defined by the sector in which they work.

We examine the impact on employees in the private sector, where MWs apply, and on the large group of workers – civil servants and the self-employed – for whom MWs do not apply directly, but whose wages and employment might be affected indirectly through the mobility of workers across sectors in response to changes in the MW or because MWs act as a guide in wage setting. Our estimation technique carefully takes into account the multiple MWs set frequently in Honduras and controls for the endogeneity of MW policy to economic conditions. We find that over 1990–2004 MWs are effectively enforced only in medium and large-scale firms, where a 1% increase in the MW leads to an increase of 0.29% in the average wage and a relatively large reduction in employment of −0.46%. There are no discernable effects of MWs on the wages of employees in small-firms, where minimum wage legislation applies, or on the hourly earnings of the self-employed. Public sector wages emulate MW trends but the higher cost of labor does not lead to a reduction in employment there. We find that higher MWs may create more unemployment and may transfer some employment from large private sector firms to small firms, where there is no compliance with MWs.

2. Minimum wages — theoretical considerations and empirical findings

Although the goal of minimum wage policy is to redistribute labor income to low paid workers, its final impact is difficult to predict

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[1] The uncovered sector refers to the jobs that are not covered by minimum wage legislation. Much of this sector is comprised of workers that are not covered by any form of protective labor legislation, which is a definition of the informal sector.

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theoretically as it depends on a number of factors, including how high MWs are set, which workers are covered, how competitive the labor markets are, the elasticities of demand for and supply of labor and the extent to which MWs are enforced.[2]

The competitive model predicts that workers whose marginal product falls below the new decreed minimum will be priced out of the market. Obviously, how high the MW is set relative to the marginal product or market wage is important in determining how large of an impact it will have on employment. However, the elasticity of demand (shaped by factors such as the substitutability of unskilled for skilled labor) is also important; if it exceeds one, an increase in the wage will reduce rather than increase the share of earnings going to low-wage workers.

The models of the labor market based on some form of imperfect competition predict workers will earn a wage below their marginal product and an increase in the MW can, up to a point, increase wages without reducing employment. Factors that can give rise to imperfect competition in the labor market include incomplete information, imperfectly mobile workers and monopsonistic power on the part of the employer.[3]

If MW legislation does not cover 100% of the workforce, then the question arises as to its indirect impact on the uncovered sector.[4] The classical two-sector competitive model predicts that workers whose marginal product falls below the new decreed minimum will be priced out of the covered sector market and will look for work in the uncovered sector, lowering wages and raising employment there (see e.g., Gramlich, 1976; Mincer, 1976). The extent to which employment rises and wages fall in the uncovered sector is a function of the size of the labor supply shift and the elasticities of supply and demand there. It is also possible that wages will not be driven down in the uncovered sector if unemployment rises sufficiently.

Growth in the ranks of the unemployed as a result of the MW increase is of course a function of factors other than the size of the disemployment effect. Institutions such as the generosity of social safety nets (provided by either the government or family networks) can increase the duration of unemployment. However, in a developing country such as Honduras, where the government does not provide unemployment benefits, one would not expect to see low wage earners openly unemployed.

In addition to unemployment, other market mechanisms and general equilibrium effects can lead to the outcome of higher wages in both the covered and uncovered sectors. For example, Saint-Paul (1994) shows that in response to higher wages in the urban area (triggered by higher MWs), capital will flow to the rural areas and increase the demand for labor there.

In sum, it is theoretically difficult to predict the redistributive/earnings effects of the MW on different groups of workers. Given this ambiguity, we turn to the burgeoning empirical literature that uses data from Latin American countries to test for the employment and wage effects of MWs. We should not expect to find similar effects of the MW among less developed countries, or between them and the more developed countries, given the heterogeneity in the structure and coverage of MWs in the less developed countries (see e.g., Eyraud and Saget, 2005). Clearly the impact of the policy will differ if there is one v. multiple MWs, if the structure of MWs is set by occupation v. industry v. region, if its coverage is universal v. for a small segment of the labor market, or if MWs are set only at the low end of the wage distribution (as in the US) v. throughout the wage distribution (as in Costa Rica). Nevertheless, few studies make full use of the elements of the MW structure. Moreover, there is large variance in compliance with MWs in developing countries. The indirect (general equilibrium) effects of these policies on the relatively large uncovered/non-compliant sector are far more difficult to measure given that they are driven by supply and demand shifts and hence make greater demands on data requirements. Nevertheless, we briefly review the major findings in the most recent literature regarding the questions asked in this paper.

With respect to the overall impact of MWs on the labor market, a recent review of the literature for Latin American conducted by the World Bank (2006) concludes that a 1% increase in MWs: a) raises average wages from 0.1–0.6%, affecting wages throughout the distribution (based on studies of Colombia, Mexico and Brazil); b) reduces employment by 0.2%; and c) increases unemployment among the most vulnerable (young, women, least educated). These conclusions are surprisingly consistent with the findings for the US given the variance in the structure of MWs. It should be noted that they are drawn from studies using heterogeneous methods, which do not address the issue of endogeneity and where there is no evidence that more than one MW was used in the analysis even though there are multiple MWs in many of these countries.

We begin by looking more closely at the individual country studies for evidence on wage and employment effects in the covered sector. First we note that few studies explicitly examine the covered v. uncovered sectors separately and hence many results are for all salaried workers. Second, to the best of our knowledge only one study (Montenegro and Pagés, 2004) apart from ours (Gindling and Terrell, 2005, 2007) analyzes the effect of more than one MW. In many cases, especially in kernel density estimates of the wage distributions, it is not clear which of the many possible MWs is being used or whether the authors use an unweighted average (see e.g., Maloney and Núñez, 2004; Kristensen and Cunningham, 2006).

The Latin American minimum wage literature is heavily weighted by studies of Brazil, where only one MW has been set since 1984 and at relatively low levels. Neumark et al. (2006) note that in the 1992–2001 period, when inflation was relatively low, only 8.4% of all workers (including uncovered) in the metropolitan areas of Brazil earned less than the MW, while only 7.0% earned the MW. The evidence garnered from numerous studies points to very small disemployment effects among workers who have a signed labor card, considered to be formal/covered sector workers. For example, using the data from the *Monthly Employment Survey* (PME) for the 1980s and 1990s, Lemos (2006) finds statistically insignificant effects and Fogel et al. (2001) find elasticities of employment with respect to the MW, ranging from −0.001 to −0.024.

Montenegro and Pagés (2004), using data from Santiago, Chile over 1960–1998 and two levels of the MWs (for adult v. youth), conclude that a 1% increase in MWs reduces the probability of employment of male workers by 0.017 percentage points but it raises the employment rates of women by 0.046 percentage points. However, the effect on all unskilled workers is not significant. (These results do not distinguish between covered and uncovered sector workers.)

In Colombia, where there are two MWs (one for apprentices) set relatively high in the wage distribution, existing studies (which use only one wage) have found large disemployment effects. Bell (1997) finds a significant employment elasticity of −0.34 in the manufacturing sector, which was higher among unskilled than skilled workers. Using panel data on men working full time in salaried employment, Maloney and Núñez (2004) estimate a smaller average employment elasticity of −0.15. Arango and Pachón (2004) also find significant negative MW effects on the likelihood of being employed in urban Colombia, which were stronger for women, the young and the less educated.

In Costa Rica, Gindling and Terrell (2005) use data on exogenous changes in 350 MWs set throughout the wage distribution during

[2] See Kennan (1995) and Brown (1999) for an extensive discussion of the theoretical models of minimum wage policy and the empirical literature up through the mid-1990s and Neumark and Wascher (2007) for a review of the empirical work for both the developed and developing countries since the mid-1990's.

[3] See Manning (2003) for a review of this theory and the empirical literature supporting it.

[4] Of course, non-compliance with the minimum wage legislation in some sectors can effectively create a non-covered sector as well.