

THE MINIMUM WAGE: CURSE OR CURE?

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ABSTRACT

For most countries the choice is how to set the minimum wage rather than whether or not to have one. The paper addresses the issue of an efficient minimum wage policy. Setting the minimum wage is a delicate balancing act: on the one side the wage needs to be high enough to secure some socially accepted standard of living. On the other, it should not be too high in order not to price low-productivity workers out of employment. Evidence demonstrates that such a balance can be struck. If the minimum wage is set at a moderate level then it does not cause significant employment losses, while keeping low-paid workers out of poverty. But the minimum wage should not be thought of as an effective tool to reduce poverty as it is not well targeted at the poor. Instead it should be viewed as a tool to ensure a more fair distribution of wages. There is no universal rule as to the “right” level of the minimum wage, as it depend on a number of country-specific factors, such as labor market conditions and variation in worker productivity across regions, industries, occupations, etc. This paper argues that the rational minimum wage policy should be based on the analysis of the wage distribution. The minimum wage should be set so as not to cut “too” deeply into the wage distribution of affected workers, such as the youth, the low-skilled, and workers in the lagging regions. The paper recommends *nine principles of a prudent minimum wage policy* to help policymakers address the trade-off between wage protection and employment.

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Introduction

The minimum wage is the subject of substantial theoretical as well as political controversy. Proponents vigorously promote minimum wage as a means of improving incomes of low-wage workers and their families. Opponents portray the minimum wage as device which turns against the very people it is supposed to help by pricing them out of employment and thus eventually reducing rather than enhancing worker welfare.

In reality, “[...] the intensity of the political debate surrounding the minimum wage—on both sides of the issue—is out of proportion to its real importance in the economy. [...] Opponents tend to exaggerate its adverse employment effects, while proponents tend to exaggerate its effects on poverty” (Card and Krueger, 1994, p.395).

Empirical evidence indicates that the minimum wage set at a moderate level usually does not have a substantial disemployment effect but at the same time it has only limited and often transitory impact on earnings of low-wage workers. It tends to reduce earnings inequality but it hardly reduces poverty. Overall, the impact of minimum wages tends to be small and confined to a relatively narrow group of workers. Thus, the answer to the question posed in the title of this note is “neither a curse, nor a cure”.

Although most of the evidence comes from the developed (OECD) countries, whenever possible we complemented it with the available evidence from the developing countries. Still, one should bear in mind that differences in compliance and the size of the informal sector make the impact of minimum wages potentially different in the developed and developing countries

In the rest of this note we examine theoretical predictions as to minimum wage effects, review the empirical evidence, present policy implications and finally recommend principles of a prudent minimum wage policy.

Why The Minimum Wage?

The intended objectives of establishing minimum wages are to prevent the exploitation of workers by employers, to promote a fair wage structure, to provide a minimum acceptable standard of living for low-paid workers and, eventually, to alleviate poverty, especially among working families (ILO, 1992).

How Minimum Wages Are Set?

There are two basic mechanisms for setting the minimum wage. First, a statutory minimum wage is set by government, possibly involving consultations with trade unions and employers. Second, minimum wages are determined through collective (tripartite or bipartite) negotiations. Collective agreements can set national or sectoral (industry, occupational) minimum wages. In some countries, sectoral collective agreements are extended to employers who were not party to the original agreements. Many countries vary the minimum wage level, mainly by age but in some cases also by job tenure, region, industry and occupation (Table 1)

Table 1 Minimum wage differentiation¹

Minimum wage varies by:	Country ¹
Age	Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, USA
Job tenure	Austria, Belgium, Greece, Ireland, Italy, Norway, Sweden
Region	Austria, Finland, Germany, Ireland
Industry	Austria, Denmark, Finland, Ireland, Italy, Norway, Portugal, Sweden, Switzerland
Occupation	Finland, Greece, Ireland, Sweden

1. OECD countries only.

Source: (Dolado et al. 1996)

In setting minimum wages governments or the bargaining parties need to reconcile two opposite kinds considerations. On the one hand, there are social consideration of workers needs, standards of living and earnings inequality, which lead to the pressure – coming usually from labor unions – to increase the minimum wage. On the other hand, there are economic considerations of productivity, competitiveness, and job creation, which result in the pressure – usually originating from employers’ organizations – to keep the minimum wage at a low level.

It is worth noticing that the ILO (1970) Minimum Wage Fixing Convention explicitly recommends to balances these two kinds of considerations (Article 3), and to account for both the needs of employees and employers (Article 4). In practice, how high the minimum wage is set (relative to productivity) depends much on the prevailing social norms with regard to inequality and fairness, on the perception of what constitutes a “decent wage” as well as on relative bargaining strengths of workers and employers. Countries where the labor movement is strong and societies are committed to the goal of equality tend to have higher minimum wages (relative to productivity) than countries where the labor movement is weaker and where there is more acceptance for economic inequalities.

However, what constitutes a socially acceptable minimum is a dynamic concept, which *inter alia* is modified by economic conditions. For example, high and persistent

¹ The table is provided for illustrative purposes and no attempt was made to update the information shown.

European unemployment has led to the recognition of the need for greater wage flexibility, which in turn has contributed to minimum wages declining relative to average wages in most European OECD countries (OECD 1998).

How Important Is The Minimum Wage And What Determines Its Impact?

The most straightforward indicator of the importance of minimum wages is the ratio of the minimum wage to the average (mean) wage. The higher the ratio the better is the relative position of minimum wage workers, but also the larger the “bite” of the minimum wage, that is its potentially harmful employment effects.

The minimum wage/average wage ratio is used both to describe the minimum wage system and to guide policy decisions. A decline in this ratio, unless intentional and agreed among social partners, often spurs upward minimum wage adjustments so as to maintain the minimum wage at a fixed level relative to the mean wage.

However the *mean* wage, although commonly used, is not the most appropriate reference point for the minimum wage. The reason is that the mean is strongly influenced by changes at the upper end of the wage distribution, for example by the growth of salaries of highly skilled professional workers. As such the mean wage does not reflect labor market conditions faced by low-productivity workers. The *median* wage (which is the wage such that one-half of all workers earn less than it and one-half earn more) is a more relevant benchmark to assess the “bite” of the minimum wage.

For example, in Colombia the minimum wage accounts for 40 percent of the mean wage, but for as much as 68 percent of the median wage (Maloney and Nunez, 2002). The latter measure shows that earnings of minimum wage workers are pretty close to those of the median worker, and thus points to a potentially significant effect of the minimum wage. In contrast, the former measure suggests that there is a considerable gap between earnings of the minimum wage worker and an abstract “average worker”.

Moreover, if wage dispersion is increasing (which has become a widespread phenomenon associated with the skill biased technological change) it may well be the case that the minimum wage decreases as a proportion of the mean wage but increases as a proportion of the median wage. In such a case, using the former ratio to justify the increase in the minimum wage may lead to a wrong policy decision.

The importance of the minimum wage (customarily measured by the minimum wage/mean wage ratio) varies substantially across countries. On the one extreme, in Honduras the minimum wage accounts for somewhat over 60 percent of the mean wage. On the other extreme, in some of the FSU countries the minimum wage is less than 10 percent of the mean wage. These two extremes notwithstanding, most countries fall into the 20 to 50 percent range. Based on this, the minimum wage can be roughly categorized as follows (Table 2).²

² This categorization is purely illustrative as there is a number of country specific factors which determine the importance of the minimum wage.

Table 2 Categorization of minimum wage levels

Minimum wage level	Percentage of the average wage
Low	less than 20
Modest	20 – 29
Medium high	30 – 39
High	40 – 49
Very high	50 or more

The importance of the minimum wage depends not only on its relation to the average wage, but also on the **shape of the wage distribution**. The impact of the minimum wage is the stronger the longer and heavier is the lower end of the distribution *before* imposing the minimum wage. In other words, if wage inequality and the incidence of low-pay are high, the minimum wage has a larger effect than if wage inequality and the fraction of low-paid workers are low. For example, in Sweden the minimum wage/average wage ratio is relatively high, but the wage distribution is so compressed that nobody actually receives the minimum (Dolado et al. 1996).

Thus, given the level of the minimum wage, it is the shape of the earnings distribution that determines the **percentage of workers who are affected by the minimum wage**. The percentage of workers affected is a critical parameter that influences the impact of the minimum wage. The larger the fraction of workers at or near the minimum wage, the stronger will be the effect of the increase in the minimum.

Two other important factors that determine the impact of the minimum wage are **enforcement of the minimum wage laws**, and the **size of the informal sector**. In many countries there are segments of the economy where the minimum wage laws are not enforced. This is particularly the case in small firms with no union presence. The size of the segment depends on the government's overall contract enforcement capacity and on the capacity of labor inspectorate and labor courts. Obviously, the larger the segment of the economy where the minimum wage is not enforced, the smaller is its overall impact. For example, the problem of non enforcement of wage contracts has been particularly severe in many countries of the former Soviet Union, which is a likely factor behind the erosion of the importance of minimum wages in those countries.

A closely related problem is the size of the informal sector, where by definition workers are not covered by labor regulations, including the minimum wage law. A large informal sector and thus a large number of uncovered workers obviously limits the importance of the minimum wage. For example, in Honduras the minimum wage/average wage ratio is very high but since many workers earn less than the minimum wage the actual "bite" of the minimum wage is much less than it appears. However, the statutory minimum wage can influence the informal sector wage setting via the "lighthouse" effect, whereby the minimum wage is used by informal sector employers as a guidepost in their wage setting decisions. Such an effect was found for example in Colombia (Maloney and Nunez, 2001).

It should be noted that excessively high minimum wages can exacerbate the non-compliance problem and can encourage the informal sector growth. This implies that a policy of setting minimum wages at a moderate level may be more effective in protecting the incomes of low-wage workers than a policy which sets minimum wages so high as to discourage compliance.

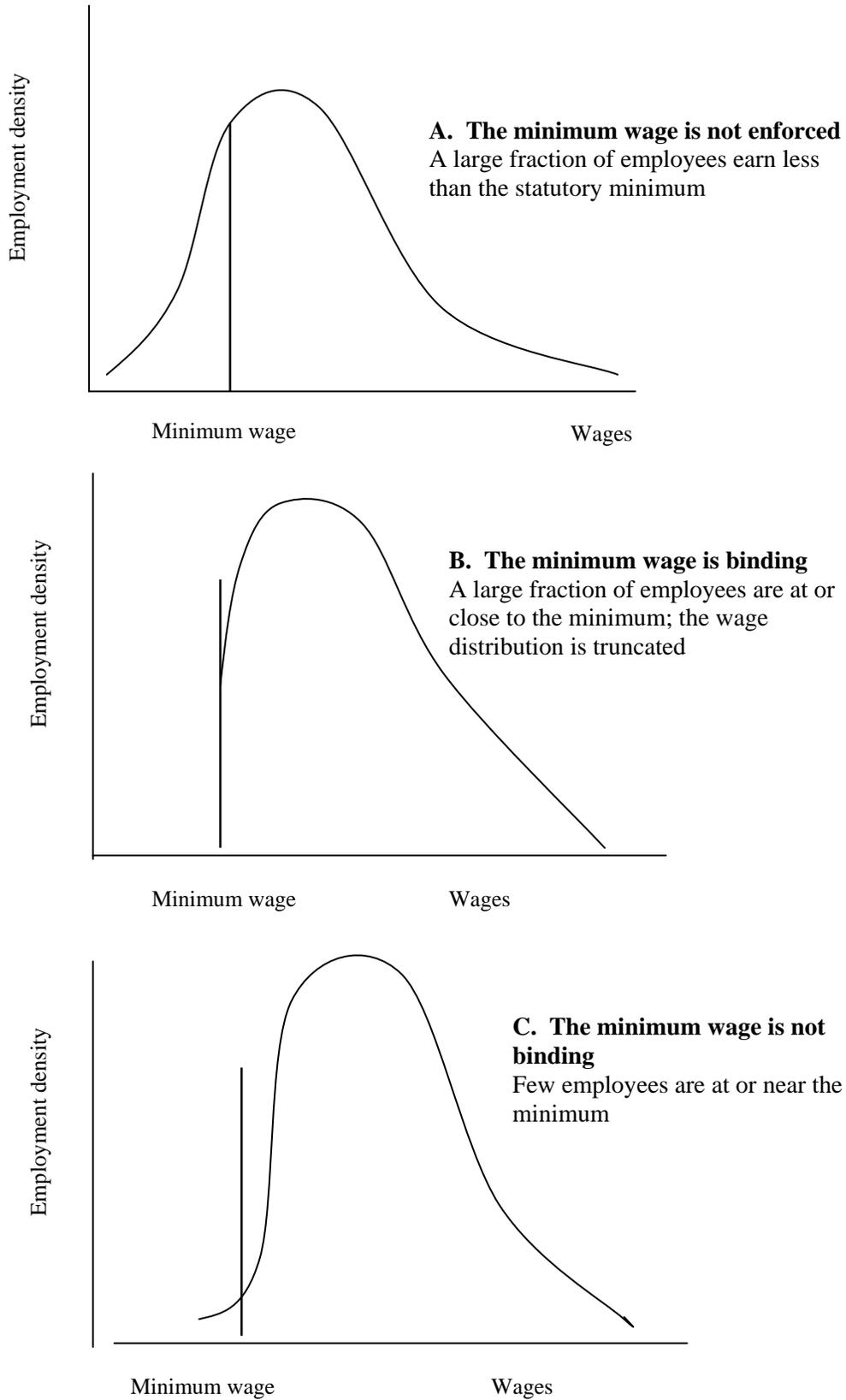
The importance of the minimum wage can be assessed by visually examining the location of the minimum wage in the wage distribution. Figure 1 shows that this simple method allows one to determine if the minimum wage is effectively enforced and whether or not it is binding. The minimum wage has an impact only in the case depicted in Panel B. There is a visible spike at the minimum wage, meaning that it truncates the wage distribution. In the absence of the minimum wage some workers who are currently at the minimum wage would earn less than the minimum. At the same time, the spike indicates that workers whose productivity is less than the minimum wage (who could have been employed absent the minimum wage) are barred from employment.

If one intends to use the above visual assessment to inform policy decisions, then it is desirable to depict the wage distribution by regions and worker groups (categorized by key dimensions that are related to productivity such as age, skill level, education). For example, the regional analysis of the wage distribution in Poland showed that the national minimum wage is binding in the less economically developed regions of the country whereas it is not binding in the more developed regions (Rutkowski, 2001).

The analysis of the importance of the minimum wage by worker group allows one to determine the **profile of workers likely to be affected by the minimum wage**. For example, the minimum wage as a rule cuts much further into the wage distribution of young workers than into that of older workers. This means that young workers will be affected more by the increase in the minimum wage than older workers. If the analysis reveals that the impact of the minimum wage is likely to vary significantly across some key dimensions (e.g. age), then the differentiation of the minimum wage along these key dimensions may be warranted.

The welfare impact of increasing the minimum wage critically depends on the **elasticity of demand for low-skilled workers**. If the demand is highly sensitive to changes in wages, that is if a given increase in the wage rate gives rise to a disproportionate fall in employment, then the net welfare impact of the increase in the minimum wage is negative. If in contrast, the demand is relatively insensitive to wage changes, then the net impact of the higher minimum may be positive. The exact elasticity of labor demand for the affected workers is as a rule an unknown parameter, which precludes its use for policy analysis. However, one can use proxies, such as estimates of the elasticity in other countries or for earlier periods. If these are absent, one may use qualitative rules, such as that the elasticity of demand for unskilled workers tends to be larger than that for skilled workers. At a more fundamental level, it is important to apply the concept of the elasticity of labor demand when examining potential effects of increasing the minimum wage.

FIGURE 1. THE MINIMUM WAGE AND THE WAGE DISTRIBUTION



A final factor that influences the importance of the minimum wage is the **connection between low-paid employment and poverty**. The two relevant questions are “Do the low-paid workers tend to be poor?” and “Do the poor families tend to have low-wage workers?”. If the answer to both questions is positive, then the minimum wage can have a strong impact on poverty (the impact can be positive or negative, depending on the size of the disemployment effect).

For instance, in Poland only one in four low-wage worker was found to be poor. This means that earnings gains resulting from an increase in the minimum wage would largely accrue to non-poor families. Furthermore, low-wage workers accounted for only 6 percent of all poor persons of working age (Rutkowski, 2001). These figures clearly indicate that even if all workers affected by the increase in the minimum wage kept their jobs, the poverty impact of the increase would still be very limited. The Polish example is quite typical; OECD data indicate that the relatively weak link between low-pay and poverty is a rule rather than exception (OECD, 1998). The main reason for this is that poverty tends to be predominantly associated with non-employment (including unemployment), rather than with low wages.

What Does The Economic Theory Say About The Minimum Wage?

There is no unambiguous answer to the question posed in the title of this section for it depends on the structure of the labor market. This structure can be represented the competitive model of the labor market, or the monopsonistic model. The models yield contrary predictions as to employment effects of minimum wage. According to the competitive model, if a minimum wage is set above the market-clearing level, employment reduction and an increase in unemployment will follow. In contrast, according to the monopsony model, if the minimum wage is set within a certain range – above the monopsony wage but below the marginal revenue product of labor – it can increase employment.

Competitive model of the labor market

The critical assumption of the competitive model is that firms do not need to raise wages in order to hire more workers. A textbook example of a competitive labor market is a market for low-skilled labor consisting of small firms whose hiring decisions do not affect the market wage for low skilled labor.

Under the competitive labor market model, the increase in the minimum wage is bound to bring about employment decline. If the wage rate is pushed above its equilibrium level, then job losses follow so as to restore the equality between the wage rate and the marginal revenue product of labor. Workers whose productivity is below the minimum wage are priced out of work. As a result, the minimum wage set above the equilibrium level causes unemployment among the affected workers.

These negative effects of the minimum wage policy are further exacerbated if one accounts for the effects on the sector that is not covered by the minimum wage regulation (informal sector). Workers released from the covered sector in search for work move to the informal sector and drive down the informal sector wages (Ehrenberg and Smith, 2003). Under such a scenario wage gains of workers who remained in the formal sector are achieved at the expense of wage losses of the growing ranks workers in the informal

sector. The two sector model is particularly relevant for developing countries where the informal (uncovered) sector tends to be relatively large.

Monopsony model of the labor market

The key assumption of the monopsony model is that firms have to increase wages in order to hire more workers. This implies that hiring an additional worker costs the monopsonist more than this worker's wage (which is higher than wages of already employed workers), as it must proportionately increase wages of all its workers. As a consequence, the profit maximizing monopsonist hires less workers and at a lower wage rate than would a competitive firm. Given that the monopsonist pays workers less than the value of their marginal product, it is willing to employ more workers but cannot do so without raising the wage rate. The reason it does not raise the wage rate is that this would lower its profits. In this context, a minimum wage set above the monopsonist's wage increases employment as it forces the monopsonist to pay higher wages, which attract more workers. Thus under monopsony, a minimum wage can increase employment by making work pay and thus inducing more labor supply.

A textbook example of monopsony is a one-company town, i.e. one large firm dominating the labor market. Under such circumstances workers have little bargaining power as they cannot easily find employment with other employers. However, a monopsonistic labor market can arise whenever employers need to raise wages to hire more workers. This can for example occur owing to limited geographical mobility of workers.

As mentioned, a monopsonistic firm needs to increase wages to hire more workers, and as a result has unfilled vacancies. Such conditions are more likely to occur in a tight, low unemployment labor market, when firms compete for workers to fill available posts. They seem less likely to arise in a slack, high unemployment labor market, when firms face a line of applicants and workers compete for scarce jobs. This latter case is closer to the competitive labor market, where firms can increase employment without increasing wages. If so, then the employment effect of the minimum wage is likely to depend on labor market conditions. It can be positive in buoyant labor markets, and will be negative in depressed labor markets. This has a straightforward policy implication, which is discussed in the last section of this note.

It should be stressed that the predictions of the competitive and monopsonistic models as to the employment effect of the minimum wage diverge only within a certain wage range. Both models predict that if the minimum wage is set above some threshold then employment losses will follow. In other words, it is beyond doubt that the minimum wage set at too high a level will cause employment reductions and an increase in unemployment.

Since the monopsony model introduces some ambiguity as to the employment effect of the minimum wage, the question becomes primarily empirical. The following section reviews the evidence.

What Is The Empirical Evidence?

This section provides an brief overview of minimum wage effects in three central areas: employment, earnings distribution, and poverty.

Employment effects

There seems to be an agreement that the overall employment effects of minimum wages – positive or negative – tend to be small.³ However, this small overall effect is significantly larger among vulnerable worker groups. In particular, most studies found that higher minimum wages reduce employment among young workers. There is also a consensus, that a 10 percent increase in the level of minimum wage would reduce teenage employment by a range of 1 to 4 percent (OECD, 1998). As to prime age workers, it seems that in OECD countries minimum wages have no impact on employment outcomes (OECD, 1998).

These mild employment effects are conditional on minimum wages being set at a modest level relative to the average wage. If, in contrast, the minimum wage is set so high, that it cuts deep into the wage distribution, then substantial employment reduction is likely to follow. The imposition of US minimum wage norms on Puerto Rico is a textbook example that if the minimum wage is raised too high, the consequences can be deleterious. When the minimum in Puerto Rico was raised to about 70% of the average manufacturing wage, the island experienced massive job losses and a substantial rise in unemployment as a result. (Castillo-Freeman and Freeman, 1992).

An important question is whether countries with higher minimum wages have a worse employment record. The most comprehensive study which addressed that question is that by Neumark and Wascher (1999). The study's main finding is that countries with higher minimum wage levels have lower youth employment rates. However, the presence of a youth sub-minimum reduces the negative consequences of the minimum wage for youths.

Impact on the earnings distribution

One objective of establishing the minimum wage is to prevent excessive earnings inequalities. Indeed in most cases minimum wages do lead to a compression of the earnings distribution OECD (1998). Countries with higher minima relative to median earnings have both lower earnings dispersion and lower incidence of low pay. In addition, minimum wages tend to narrow the earnings differentials across demographic groups. For example, they reduce the gender and age earnings differentials.

Along with the reduction in wage inequality, an increase in the minimum wage boosts the earnings of low-wage workers. Obviously, workers at or near the (old) minimum wage gain the most, but due to the ripple effect wages of workers earning above the minimum wage tend to increase, too. Roughly, the effects of minimum wage increases tend to be concentrated in the bottom quartile of the wage distribution and have little effect above the 25th percentile (Card and Krueger, 1995). However, the benefit of higher earnings following the minimum wage increase tend to be short lived, as firms tend to offset the increase in labor cost by adjusting hours of work and the employment level, or by taking advantage of inflation, which erodes the real value of wages.

³ These “small effects” refer to elasticity, i.e. a percentage change in employment resulting from a 10 percent change in the minimum wage. The absolute employment effect obviously depends on the elasticity and the magnitude of the change in the minimum wage. It is also important to bear in mind, that employment elasticity is likely to increase with the level of the minimum wage.

Minimum wages and poverty

The effect of minimum wages on poverty rates is limited since in virtually all countries most of adults who live in poverty do not work (OECD, 1998).⁴ For instance, in most OECD countries less than 10% of the poor are low-wage workers.

However, the effect is stronger on the “working poor”, that is poor families where at least one individual is working. This is not surprising, as among those poor who do work, the low-wage workers are preponderant (in the OECD around 80 percent of the “working poor” are low-wage workers). Thus, increases in the minimum wage have a greater potential to alleviate poverty in countries where there is a large number of working poor (OECD, 1998).

The evidence indicates that some families gain and other lose in the wake of the minimum wage increase. An increase in the minimum wage can help some poor families to escape poverty, it can also push some non-poor families into poverty. The latter effect arises because some of the workers in non-poor families lose their jobs in the wake of the minimum increase. The proportion between the number of winners and the number of losers depends on country specific conditions.

On the whole, the impact of minimum wages on poverty is negligible, because a majority of adults who live in poverty do not work, and many low-wage workers are in relatively affluent families. Accordingly, the minimum wage is not a well targeted and an effective anti-poverty program, although it can reduce poverty among the “working poor”.

What Are The Lessons Learned And Policy Implications?

Most countries, including the developing countries, have signed the ILO Convention 131 and are thus committed to fixing a minimum wage. In this context the relevant question is not whether to have a minimum wage, but how to fix it so as to maximize benefits or to minimize the costs (summarized in Table 3).

Table 3 Costs and Benefits of the Minimum Wage

Costs	Benefits
A possible disemployment effect, i.e. higher chances of losing a job and lower chances of escaping unemployment for low-skilled and inexperienced workers	Higher earnings of low-paid workers
	Less earnings inequality and a lower incidence of low-pay
Income losses in poor families stricken by unemployment as a result of a minimum wage hike	Income gains in poor families which have low-wage workers
	Positive supply-side effect which “makes work pay”, rather than discourages labor-market participation (in contrast to some other transfer programs)

Evidence demonstrates that if the minimum wage is set at a moderate level then it is not likely to entail substantial employment losses, while it ensures some minimum

⁴ This refers to OECD countries, to which the available evidence is limited.

earnings standard for low-skilled workers with little bargaining power. It can help the working poor, however it will hardly reduce poverty at large.

What is a moderate, “safe” level of the minimum wage? There is no universal answer to this question, as minimum wage effects depend on a host of country-specific factors, such as labor market conditions and variation in worker productivity across regions, industries, occupations, etc. As a rule of thumb, in developing countries the national minimum wage should probably be less than 40 percent of the average wage and be lower – roughly not more than one-third of the average wage – if unemployment is high and concentrated among young and low-skilled workers.

However, a prudent minimum wage policy does not consist in picking up the “right” level of the minimum wage. It rather consists in following a set of principles, which are summarized below.

Nine Principles Of A Prudent Minimum Wage Policy

1. Set the minimum wage so as to provide a minimum acceptable standard of living for low-paid workers but simultaneously ensure that its “bite” is limited, that is it does not cut too deeply into the wage distribution.
2. Allow for labor market conditions. Do not increase the minimum wage when unemployment is high or rising and is concentrated among low-skilled workers.
3. Implement a youth sub-minimum wage, especially if youth unemployment is high. Roughly, the youth sub-minimum should account for about 75 percent of the adult minimum wage. Further differentiation may be considered, e.g. a lower minimum wage for teenagers and higher for young adults.
4. Consider regional differentiation in the minimum wage if labor market conditions and productivity vary substantially across regions. In economically depressed regions with high unemployment the regional minimum wage should be lower than in regions with more buoyant labor markets.
5. Do not extend sectoral collective agreements regarding minimum wages to non-participating employers, and provide an “opt out” option for employers (especially small ones) for whom it is too costly to comply with sectoral agreements. Such employers should be bound only by the national minimum wage.
6. Carry out periodical minimum wage adjustments to allow for the price or wage growth. At the same time, take into account changes in labor market conditions (see point 2). To balance these two considerations, do not get locked into a rigid formula for regular adjustments of the minimum wage. For example, the balance can be struck by linking minimum wages to average wage increase, but subject to the inactivity rate remaining below a specified level (as it is the case in the Netherlands).
7. Collect data on the wage distribution either by means of an employer- or household-based survey.
8. Analyze the wage distribution before increasing the minimum wage, focusing on factors that will determine the impact. The two most important are:

- a. The ratio of the *new* minimum wage to the average (preferably median) wage for vulnerable worker groups (e.g. youth, low-skilled workers) and across regions.
 - b. The proportion of workers to be affected by the increase, i.e. the proportion of workers whose wages are between the current and the new level of the minimum wage (by worker group and region);
9. Set the minimum wage at a lower level and enforce it effectively. This is a more efficient and equitable approach than setting the minimum wage at a higher level but with weak or selective enforcement.

Ultimately, setting the minimum wage is a balancing act, when benefits accruing to those who enjoy a wage hike need to be weighted against potential losses suffered by those who lost their job or cannot find one.

Further Readings

Readers who want to learn more about minimum wage policies and their impact should first consult the sources listed below.

Card, David and Alan B. Krueger (1995), *Myth and Measurement. The New Economics of the Minimum Wage*, Princeton, NY: Princeton University Press.

A comprehensive but accessible review of research on minimum wage policies and their impact on employment, wage distribution and poverty. Focus is on alternative (monopsonistic) models of the labor market and the minimum wage. Empirical evidence refers mainly to the U.S.

Dolado Juan, Francis Kramarz, Stephen Machin, Alan Manning, David Margolis and Coen Teulings (1996), "The economic impact of minimum wages in Europe", *Economic Policy*, October, pp. 319-370.

A good survey of minimum wage policies and their effects in Europe.

Ehrenberg and Smith (2003), *Modern Labor Economics. Theory and Public Policy*, eighth edition, Addison –Wesley, Boston, MA.

Provides good textbook exposition of the effects of minimum wage policies under a competitive and monopsonistic labor market (Chapter 3: The demand for labor).

OECD (1998), *Employment Outlook*, Paris.

Information on minimum wage setting and trends, and a summary of research on the impact of minimum wage regulations in OECD countries.

References

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