

The fundamentals of minimum wage fixing

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François Eyraud and Catherine Saget

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INTRODUCTION

The minimum wage is a labour market institution used in the majority of countries the world over. Indeed, a total of 116 member States have ratified one or both Conventions of the International Labour Organization (ILO) on minimum wage fixing,¹ and many other countries have established minimum wage fixing procedures even though they have not ratified the relevant Conventions. The minimum wage has had a long and turbulent history. The United Kingdom recently joined the ranks of countries with a minimum wage, having discontinued the old system of Wages Councils in the early 1990s, and Germany is currently debating the benefits of adopting a national minimum wage. The importance of this institution is clear from the number of enquiries that the ILO receives from its constituents. In an effort to respond to these concerns, the International Labour Office has launched a database summarizing the main legal and institutional arrangements on minimum wage fixing in some 100 countries (www.ilo.org/travdatabase).²

This volume analyses and supplements the information provided in the database. It aims to provide constituents of the ILO and other international organizations, as well as authorities and researchers working in this field, with a general overview of the institutions and practices in different countries and to present the main issues surrounding the implementation of the minimum wage, in particular its impact on major social and economic variables such as employment and income. This book thus carries on from the work of Starr (1982), offering guidance to people associated with the administration of these systems and providing them with information on how minimum wages operate in countries other than their own.

At first glance it appears easy to define the minimum wage as the wage floor applying to all wage earners and ensuring that they receive a minimum level of pay protection.³ The reality is much more complicated, as illustrated by the extraordinary variety of legislative texts set forth in the ILO database. The reason for such a complex array of systems can be traced to the very foundation of all

minimum wage systems: minimum wage fixing procedures and criteria. These two aspects will be analysed in the first two chapters.

Chapter 1 examines the various procedures and their seemingly endless permutations, depending on the number of parties involved in the wage fixing process and the characteristics of the work and the employee in question (kind of activity, place of activity, worker's qualifications, and so on). Nevertheless, one fundamental issue allows for a better understanding of this diversity and also provides some coherence: the role of collective bargaining. This is always a factor in the minimum wage fixing process, whether through attempts to compensate for its absence or to curtail, establish or develop it. In many cases the minimum wage is a starting point from which the collective bargaining process then branches out to cover other aspects of working conditions. It is worth mentioning that as the influence of collective bargaining diminishes, mainly as a result of international competitive pressures, so the policy significance of minimum wage legislation may be growing across the world.

As regards the criteria discussed in Chapter 2, although they are limited in number the countries studied combine them in a multitude of ways. Moreover, the emphasis placed on certain criteria varies over time and across countries. This is because each of them is linked to different objectives. In one country the minimum wage may be perceived as a way of ensuring a decent standard of living, in which case the purchasing power criterion will take precedence over other considerations. In another country, meanwhile, the fight against inflation may well be a priority – or might become a priority in the first country at a later date. Here, the inflation rate will be the main criterion retained. Once again, one aspect is common to all these situations: minimum wage determination is a major instrument of economic and social policy because it can be manipulated in order to achieve diverse objectives, from income distribution to economic competitiveness.

It is precisely because the minimum wage is a powerful and flexible instrument of economic and social policy that its use varies across countries, resulting in a host of different arrangements and national models. Nevertheless, this diversity gives rise to both problems and contradictions, which justifies examining the appropriateness of such wide-ranging use.

The effectiveness of the minimum wage as a tool of economic and social policy is analysed and measured more closely in the second half of the book. The impact of the minimum wage on employment is a major political issue. Chapter 3 is therefore devoted entirely to it. Both the validity of econometric models and their results are analysed with regard to a number of significant studies on the subject. They suggest that, under certain conditions, minimum wage increases result in little or no upward movement in unemployment rates.

Although the relationship between the minimum wage and employment has received considerable attention in recent years, the function of the minimum wage was originally social. This aspect is expanded upon in Chapter 4, which

attempts to measure the social impact of the minimum wage. To this end, the following questions are raised: Does the minimum wage reduce the gap between the lowest- and highest-paid workers? How does the level of the minimum wage compare with the worldwide poverty level? What are the direct and indirect effects of the minimum wage on poverty? The answers will make it possible to evaluate minimum wage policy on the basis of its main objective, namely protecting the lowest-paid wage earners. In this respect, it should be noted that if it is crucial to take into account the impact of the minimum wage on employment, it is equally important to consider its impact on the earnings of the lowest-paid workers. This examination of the relationship between the minimum wage and poverty is carried out with reference to two issues that are rarely studied: identifying wage earners who are excluded from the scope of the main legislative texts, and identifying the causes of non-compliance with the relevant legislation.

However, we still do not have at our disposal all the information required to answer these questions comprehensively. This is why the volume concludes by putting forward a few issues that warrant more in-depth study.

Notes

¹ The Minimum Wage-Fixing Machinery Convention, 1928 (No. 26), and the Minimum Wage Fixing Convention, 1970 (No. 131).

² See the presentation of the database in Annex I. Two other databases are available: one on working time and another on maternity protection. A general national legislation database may also be consulted at www.ilo.org/natlex.

³ The 1967 report of the ILO Committee of Experts defined the minimum wage as follows: “[the minimum wage] represents the lowest level of remuneration permitted, in law or fact, whatever the method of remuneration or the qualification of the worker; (...) [it] is the wage which in each country has the force of law and which is enforceable under threat of penal or other appropriate sanctions. Minimum wages fixed by collective agreements made binding by public authorities are included in this definition” (ILO, 1992, para. 31).

MINIMUM WAGE FIXING PROCEDURES

1

Generally, analysis of industrial relations around the world tends to classify countries according to level of development or geographical region. In this study – and in this chapter in particular – it is more often a common history than the level of industrialization that brings countries together. For example, the British system of Wages Councils has left its mark in many Commonwealth countries, Australia being a notable exception to this rule. Likewise, we should not be surprised to find Germany and Namibia grouped together. Where practical application and impact on actual wages are concerned, however, different factors need to be considered. In this regard, the capacity of the actors to organize effective collective bargaining, and the size of the informal economy both play an important role.

At first sight it is difficult to understand the incredible variety and complexity of national minimum wage fixing procedures. Clearly, these systems are the result of the way in which the minimum wage has been implemented and developed over time. Nevertheless, two interdependent factors have played a vital role in the establishment and evolution of these procedures and shed some light on the similarities that exist in this confusing array of systems: these factors are the state of collective bargaining and the use by governments of the minimum wage as a tool for economic policy. When collective bargaining is less well developed, the influence of a statutory minimum wage system will be more pronounced, resulting in a wider scope of application in terms of both sectors and different categories of workers covered. Similarly, intensive use of the minimum wage by a government with a view to realizing various economic policy objectives will lead it, willingly or otherwise, to reduce the role of collective wage bargaining in order to better control its development. On the contrary, a well-established collective bargaining process results in government intervention being excluded or limited to the protection of the lowest-paid wage earners.

As a result, the most important factors to be taken into account when classifying the different systems are the following:

- The actors involved. What is the extent of government intervention and the role of collective bargaining and the social partners? Between a minimum wage set by a public authority and one set solely through bipartite bargaining there is a series of intermediate situations characterized by more or less binding consultations between the State and the social partners.
- The number of minimum wage rates. A single national rate should be distinguished from a multitude of rates set according to sectors and/or occupations. Between a system with one rate that applies nationwide and systems with hundreds of rates there is a wide range of situations, attesting to the different roles played by the minimum wage.

The attraction of this type of classification is that it allows for a description of the different systems, based on a combination of these two factors, moving from the simplest to the most complex system. This will be our starting point. This section concludes with an examination of the fundamental reasoning behind these minimum wage systems which, as already mentioned, is based on the role of collective bargaining in each country.

1.1 Basic types and combinations of minimum wage fixing procedures

Table 1 summarizes the minimum wage fixing procedures in the countries covered by the database. Four categories have been identified, based on the considerations mentioned above: the actors involved and the number of minimum wage rates.

1. One base rate for the whole country or per region, with the State as the key decision-maker.
2. Multiple rates that vary by sector and/or occupation, with the State as the key decision-maker.
3. One base rate for the whole country or per region, determined by collective bargaining.
4. Multiple rates that vary by sector and/or occupation, determined by collective bargaining.

1.1.1 *Single national or regional rate¹ set by the State or a tripartite body*

This is the most commonly used method. Sixty-eight countries included in the database (67 per cent of the total) are covered by a national or regional minimum wage rate.²

Table 1 Minimum wage fixing procedures

National or regional minimum wage rate set by government or tripartite body	Sectoral and/or occupational minimum wage rates set by government or tripartite body	National or regional minimum wage rate set through collective bargaining	Sectoral and/or occupational minimum wage rates set through collective bargaining ¹
Asia			
Australia, China, India, ² Indonesia, Japan, Republic of Korea, Lao People's Democratic Republic, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Thailand, Viet Nam ³	Bangladesh, Cambodia, Fiji, ⁴ India, ⁵ Japan, Malaysia, ⁵ Nepal, Pakistan, ⁵ Philippines, Solomon Islands, Sri Lanka		Fiji, India, Malaysia, Pakistan
Africa			
Algeria, Angola, Burkina Faso, Chad, ⁶ Gabon, Ghana, Guinea-Bissau, Madagascar, Morocco, Mozambique, Nigeria, Sao Tome and Principe, Senegal, Tunisia	Botswana, Lesotho, Mauritius, South Africa		Botswana, Namibia, South Africa
Americas			
Argentina, Bahamas, Bolivia, Brazil, Canada, ⁷ Chile, Colombia, Haiti, Mexico, Panama, Paraguay, Peru, Trinidad and Tobago, United States, Uruguay, Venezuela	Belize, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay		
Arab States			
Lebanon, Syrian Arab Republic			

(Table 1 cont'd)

Table 1 (cont'd)

National or regional minimum wage rate set by government or tripartite body	Sectoral and/or occupational minimum wage rates set by government or tripartite body	National or regional minimum wage rate set through collective bargaining	Sectoral and/or occupational minimum wage rates set through collective bargaining ¹
Europe			
Albania, Bulgaria, Czech Republic, Estonia, France, Hungary, Ireland, Israel, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Turkey, United Kingdom	Cyprus, Czech Republic, ⁸ Malta	Belgium, Greece	Austria, Finland, Germany, Iceland, Italy, Sweden, Switzerland

Notes: ¹ In many countries collective bargaining determines wage rates for certain sectors, setting them at a level higher than the minimum fixed by an authority. These cases are not included in the table as the rates thus set are an addition to the basic statutory minimum. Only examples where collective bargaining is the only means used to establish minimum wage rates are listed, either for sectors where minimum wage rates are not set by an authority (e.g. India), or for countries in which all minimum wage rates are determined by collective bargaining (e.g. Germany). ² Reference is made here to the recommended federal floor, one of the three procedures used in India. ³ Minimum wage rates vary depending on whether a company is foreign or locally owned. ⁴ The Minister of Labour establishes minimum wage rates for workers in sectors without an effective collective bargaining mechanism. ⁵ Minimum wage rates established for sectors or occupations in which there is no effective collective bargaining mechanism. ⁶ The 1996 Labour Code provides that minimum wages should be determined by collective agreement. In actual fact, minimum wages fixed by the Government at that time have not been adjusted since then. ⁷ Two provinces have been provided as an example: Ontario and Manitoba. ⁸ In addition to the national minimum wage, the Government sets minimum tariffs. These apply only if an employer chooses not to conclude a collective agreement.

Source: ILO minimum wage fixing database, 2004.

It is also the most straightforward system, even though it can have many variations. In a small number of countries, like Nigeria and Lao People's Democratic Republic, the legislation provides that wage fixing decisions are the sole responsibility of the government. In practice, this legal constraint does not stand in the way of consultation with the social partners. In most countries the legislation requires that any decision be made following a consultation period. Consultation may be carried out either directly with the social partners or with a permanent committee (bipartite or tripartite). In most cases, consultation takes place within a committee.

In countries belonging to this category a single base wage rate is set for the whole economy or region and a public authority plays a leading role, often making the final decision. In many of these countries a network of sectoral and/or

enterprise-level wage agreements determines the actual wages paid in enterprises. These wages are higher than the minimum set by the public authority. This factor does not fall within the sphere of table 1 because, strictly speaking, the collective wage bargaining does not take place within the minimum wage fixing procedure. Therefore, a State that is strongly interventionist with regard to minimum wage fixing does not prevent the development of collective bargaining if intervention is limited to the fixing of a base minimum wage rate.

This first category has two sub-categories: countries with a single national rate and those with regional rates. There may be a number of reasons for minimum wage rates to be set by region, the most obvious being the administrative and political structure of the country. This method is often used in federal systems where a country's individual states or regions maintain a certain degree of autonomy, as in Indonesia and China, for instance. The United States, where historically minimum wage rates have been set first at state level, belongs to the same sub-category. A second factor is that allowances must be made for differences in living standards between regions. Rates that vary across regions for this reason are often determined at the central level. It should be noted that in addition to being complex, this practice may have negative effects, e.g. being a contributing factor in the depopulation of disadvantaged regions, as people move to already overpopulated areas such as capital cities where minimum wage rates are often higher (ILO, 1997a).

1.1.2 Multiple rates set by public authorities

This is the second most commonly used method. Multiple minimum rates are fixed under the authority of the government or a tripartite committee by sector and occupation. This system exists in 29 countries included in the database (28 per cent of the total) and applies to a large variety of situations. It is used on its own in 16 States including Cambodia, Cyprus, Ecuador, Mauritius and several Latin American countries. In eight countries (Japan, Malta and Mexico, among others), the sectoral minima determined by a public authority are combined with a national or regional minimum wage. Moreover, in some former British colonies, tripartite commissions are established for sectors with no effective collective bargaining process in place. This is a remnant of the former British system of Wages Councils. Therefore, this system is generally combined with minimum wage fixing through collective bargaining for sectors with well-organized trade unions. In these countries (e.g. Botswana, Fiji, Malaysia and South Africa) collective bargaining is an integral part of the minimum wage fixing system. Finally, we should mention India and Pakistan which, in addition to these two systems, also have a national minimum wage rate.

The nature of minimum wage determination starts to change when multiple rates are utilized. Minimum wage fixing by sector, occupation, or even by hierarchical level within each sector causes the scope of application of each minimum wage rate to diminish, thus moving with each successive step closer to

the enterprise itself. These minimum wages are therefore more directly applicable and provide more details concerning the actual wage policy of each enterprise. The minimum wage has thus shifted from simply providing a base wage rate for the most at-risk workers to influencing or even actually determining wage policy at the enterprise level. The system is more an actual wage fixing method than a minimum regulation. Taken to the extreme, such a system becomes a substitute for collective bargaining. A tripartite system of collective bargaining is thus established, with the State as the dominant player.³ The distinction between single rates and multiple rates can therefore be made based on the divergent ways in which the minimum wage is used by the State: either to protect the most vulnerable workers, or to establish actual wage rates in sectors or enterprises.

This leads us to the following problem. How can we clearly distinguish between a system with a single national or regional rate and a system with multiple rates, when there is a multitude of situations between these two extremes? In particular, it is difficult to decide what number of rates places a system within the “multiple rates” category. This question must be addressed on a case-by-case basis, by determining whether the minimum wage is intended to protect only the most vulnerable workers or whether it has replaced collective bargaining, establishing the wages actually paid to many workers.

In the Solomon Islands, where there are two minimum wage rates – one for workers in fishing and agriculture and another for all other workers – the distinction between the two categories is still unclear. We might be tempted to put the country in the “single rate” category because there are only two rates that apply to all workers. This would lead us to conclude that the rates are in fact a safety net designed to protect workers most at risk. However, given the small number of the economically active population, it could also be argued that they in fact determine the rates actually applied in enterprises. The legislation also allows for abatement of the minimum wage rate for enterprises not in a position to pay, a fact that supports the hypothesis that the rates are actually the normal rates applied rather than being the absolute minimum.

In the Czech Republic the Government sets a national minimum wage rate but the country belongs to the multiple rates category because 12 minimum wage rates are also set, depending on workers’ experience. These rates must be respected by all enterprises regardless of sector, and higher rates may be set through collective bargaining. The levels set in this wage scale provide the benchmark for establishing pay hierarchies and wage levels in the majority of sectoral agreements in the country.

Malta is a clear and classic example of a country with multiple rates set by a public authority. The Government fixes simultaneously a national minimum wage and separate minimum wage rates by sector. Bangladesh, for its part, has a system of Wages Councils that involves tripartite bodies making minimum wage rate proposals to the Government. These Councils exist for two main sectors: agriculture and the textile industry. The latter sector sets rates for all main

occupations (electricians, fabric cutters, etc.). In free trade zones a body made up of government and employers' representatives sets specific rates for each type of activity (electronic work, clothing, leatherwork, heavy industry, etc.). Even more than in the previous example, the detail of the rates suggests that these are the salaries actually paid by enterprises. As a result, the minimum wage does more than just provide protection for the lowest-wage earners, for it applies to a wide range of workers with different qualifications and experience, and performing a host of different activities.

Countries with multiple minimum wage rates set by a public authority may also have regional and national variations. Regional rates may be set at the central level, as is the case for foreign-invested enterprises in Viet Nam. The Minister of Labour sets different rates according to the region where companies are established. Rates may also be determined in a more autonomous fashion at the regional level. In Japan, there are tripartite Minimum Wage Councils in each of the country's 47 regions. Individual regions may also fix minimum wage rates for certain industries. In general, these rates tend to be slightly higher than the regional minimum wage rates. (The Japanese system is actually more complex; it is presented in greater detail in section 1.4.2, below.)

It is also important to mention the system applied in India. First of all, the Government sets a series of minimum wage rates for 45 occupations/activities. Local governments then fix minimum rates for additional occupations/activities at the regional level. India currently has some 1,230 occupational and sectoral rates. In line with the system's British heritage, these rates apply only to sectors thought to be poorly organized, while in sectors deemed to have an adequate level of collective bargaining, minimum wage rates are fixed through collective agreements. Finally, in 1996 the Government introduced a base minimum wage rate applicable to all sectors nationwide. Pakistan follows a similar, if slightly simpler, system: wage fixing at the regional level is less important, and the federal minimum wage has been more formally implemented.

The third and fourth minimum wage fixing categories, addressed in the following paragraphs, mark a fundamental shift in the determination method. There is a tendency to consider that a minimum wage inherently involves a guarantee being provided by the State when, in fact, in one group of countries minimum wages are determined through collective bargaining without any intervention by the public authorities.

1.1.3 Single national rate set through collective bargaining

Very few countries have a single national rate set through collective bargaining. Of all the countries studied only two – Belgium and Greece – belong to this category. As in countries where a single national rate is set by the government, there are sectoral and enterprise-level agreements. Indeed, collective bargaining establishing sectoral and enterprise-level wage rates is beyond the legal framework relating to the minimum wage as such.

1.1.4 Multiple rates set through collective bargaining

In countries without a centralized minimum wage fixing system, this role is fulfilled by sectoral agreements. It is the network of collective agreements that makes up the minimum wage fixing system. This model is found in several European countries, including Germany and Italy, and one African country, Namibia.

The question that arises is whether these are still minimum wages. Based on ILO Conventions, the answer is certainly yes. The Conventions provide that it is the role of the competent authorities and social partners to determine which workers require protection and how that protection will be ensured. Likewise, from an economic point of view, the answer is also yes because wages determined by collective agreements set the benchmark for enterprises: the wages may not fall below these levels though they may exceed them – this is called “wage drift”.

The key reason why these rates should be considered as minimum wages is that the scope of application of collective agreements extends to a large majority of workers, as is generally the case in the countries referred to above. However, there will always be a certain number of workers in enterprises that are not subject to collective agreements and who are therefore not covered by the minimum wage. This is the case in particular for sectors made up of many small enterprises (e.g. construction, catering). The only way to increase coverage is for the State to legally extend collective agreements’ scope of application. This places an obligation on non-parties to a collective agreement to apply its provisions. Another problem is that some collective agreements set wages very low because of workers’ lack of effective bargaining power. A national minimum wage rate would probably establish the threshold at a higher level. These problems, together with the fear that the unemployed might be forced to take up extremely low-paid jobs, have provoked some union federations, such as the German Catering Federation, to call for the establishment of a national minimum wage.

1.2 The dynamics and logic behind different minimum wage fixing methods

This typology illustrates that minimum wage fixing ranges from a decision made by the government alone to wage negotiation through bipartite agreements. At the same time, systems also range from the establishment of a single minimum wage rate to the setting of wages that apply to a large part of the actual enterprise-level wage hierarchy. No universal system exists that would, for example, limit the role of the minimum wage to the protection of the most at-risk workers regardless of economic activity while playing a clearly defined role within the national system of minimum social protection.

This is because from the outset minimum wage fixing has been intrinsically linked to the level of development of collective bargaining and the role of the

State. Wages have always been the workers' primary concern. In the absence of a well-organized collective bargaining structure, demands for wage increases have often led to conflicts and strikes. In order to compensate for a lack of collective bargaining through which peaceful solutions could be found, governments have had to intervene directly in numerous cases to resolve wage disputes. In many countries collective bargaining has developed over time to such an extent that it provides the necessary framework for the management of wage disputes. In others, the State remains the dominant figure in wage determination.

New Zealand, whose minimum wage system dates from the late nineteenth century, is generally considered to be the first country to have established a minimum wage mechanism aimed mainly at preventing industrial disputes. In 1957 in Uganda, the colonial authorities published a report recommending an increase in the minimum wage rate that had been frozen for the previous ten years. The justification for this proposal was that the lack of an effective wage setting mechanism was leading to disputes and strikes (Weeks, 1971). It is also significant that the first example of state intervention concerning minimum wages in Europe, at the beginning of the twentieth century, was an attempt to protect domestic workers. Not only was this group fragmented, but the one-to-one relationship between worker and employer, inherent to this type of work, also made it very difficult for its members to have even a minimum level of organization enabling them to defend their rights through collective bargaining. Other categories of workers would have been able to organize themselves and protect their rights in this way. As a result, British Wages Councils were established in sectors where effective trade union organization was lacking. In the other sectors, the social partners fixed wages through collective bargaining. This shows that minimum wage systems are closely linked to the ability of collective bargaining to take charge of wage setting. From the outset, therefore, regulation and state intervention, on the one hand, and collective bargaining, on the other, have been interchangeable in this respect, the context being the determining factor.

This relationship between minimum wage fixing, state intervention and the development of collective bargaining is also found in countries that have recently sought to implement such systems. In Lesotho, the system is under the control of the Government, which sets wage rates for 21 manual occupations. The rates are set in such detail that the process is not just a straightforward minimum wage system but amounts to a regulation of actual wage policy. Trade unions have come out against this rigid system as it does not take into consideration the capacity of businesses or sectors to pay. Moreover, they feel that they are now strong enough to replace the system with proper sectoral collective bargaining. If this trend continues, the minimum wage will have acted as a catalyst in the development of collective bargaining. Once established, collective bargaining will be able to deal with subjects other than wages, such as working time, conditions of work, etc.

The main conclusion to be drawn from this analysis is that, historically, it was very often the minimum wage that triggered the development of collective bargaining.

In this respect, it should be noted that British trade unions were long opposed to the notion of introducing a minimum wage (Metcalf, 1999). As for the German trade union movement, today there is a lively debate between supporters and opponents of establishing a statutory minimum wage. The latter have advanced a very practical argument: wage earners guaranteed a minimum wage will have less reason to join a trade union in order to defend their interests. This argument is at least partly valid when applied to developing countries because in many of them the minimum wage is almost the only negotiated wage. However, it overlooks the point emphasized above: the fact that the minimum wage is a building block in the development of collective bargaining. Nevertheless, it is true that this hypothesis depends on the political will and organizational efforts of the actors concerned.

Experience has shown that when social dialogue is confined solely to minimum wage fixing at the national level, considerable pressure is applied, leading to demands for increases that may appear excessive. This occurs because the national minimum wage fixing process is the only forum available for trade unions to clearly show what they are doing to defend workers. As a result, minimum wage fixing becomes intensely adversarial.

In order to avoid this and to preserve the minimum wage's original role of providing protection for the most at-risk workers, it is important to establish an alternative forum for wage negotiations, ideally at the sectoral or enterprise level. There, wages may be set at a level higher than the minimum wage and taking into account the capacity of enterprises covered by the agreement. The aim is to prevent the minimum wage being the focal point of demands for significant wage hikes by introducing more objectivity and rationality into social dialogue.

Nevertheless, once a statutory minimum wage system has been established, it can be used for more functions than those related to collective bargaining. A statutory system may also be a part of economic policy on employment, inflation or redistribution of income. Minimum wage fixing thus takes on another dimension. This not only explains but can also justify the State's desire to keep the system under its own control, rather than putting it back into the sphere of collective bargaining. This will be expanded upon in Chapter 2.

1.3 From consultation to bargaining: Sharing the decision

As already noted, minimum wages are rarely set through collective bargaining alone. In most countries the government is involved in the decision-making process. However, between the government deciding alone and a joint decision being taken, the degree to which the decision is shared varies enormously. There are five main methods:

- the government decides alone;
- the government consults directly and separately each of the social partners;
- the government must seek the opinion of a specialized committee;
- a tripartite committee sets minimum wage rates; or
- minimum wages are set through collective bargaining, with no state intervention.

Tables 2 and 3, respectively, summarize minimum wage fixing methods in the countries covered by the ILO database and list the relevant committees. It is clear that the most popular system is minimum wage determination by the government following a period of consultation with a bipartite or tripartite committee. The second most commonly used system is that of a tripartite committee fixing minimum wage rates and the government simply confirming the decision. Next is the less restrictive obligation to consult the social partners directly. At this point, it should be noted that the number of countries whose laws do not require some type of consultation is not negligible: there are nine of them, accounting for some 9 per cent of the countries covered by the database. Of course, the reality is far less clear-cut than the legislation. In practice, the first three methods are often very similar. In all of them the government plays the main role in the process but the importance of consultation is still recognized.

1.3.1 Systems where the public authority plays the main role

Even where a country's legislation does not specifically provide for consultation, in practice it is rare for some sort of official or informal consultation to be totally absent. Conversely, it is also important to establish the extent to which an obligation to consult the social partners or a specialized committee actually limits the decision-making power of the public authority.

In this respect it is useful to distinguish between two procedures. Either the government proposes the minimum wage rate and consultations take place based on its proposal (this method may be referred to as "government decision following consultation"), or the minimum wage is determined by a specialized body which recommends a rate to the government for its final decision and implementation ("government decision based on recommendation"). It is of course the government that makes the final decision in both cases, but its influence is not the same. In the former case the government's influence is paramount; in the latter, the influence of the social partners will be stronger. The number of countries following one system or the other is almost equal.

Consultation in the "government decision following consultation" system may be carried out with the social partners directly (as in the Czech Republic and Viet Nam, for example), and it may also take place within a committee designated by law to fulfil this role. Table 3 lists the relevant bodies, for example the National

Tripartite Cooperation Council in Latvia or the National Committee on Collective Agreements in France. In this system the committees' opinions are not binding on the government and, as indicated earlier, the role of the social partners will be limited. Nevertheless, in practice their influence depends on the importance of minimum wage fixing in the country and the power of the social partners. As mentioned above, when the minimum wage is the only term of employment fixed through social dialogue, the social partners will often apply strong pressure as this is the most visible forum in which to stand up for workers' rights.

Table 2 Consultation during the minimum wage fixing and adjustment process¹

Government fixes minimum wage rates			Specialized body sets minimum wage rates	Collective bargaining and other procedures
No obligation to consult social partners	Following direct consultation with the social partners	Following advice and/or recommendation of specialized body		
Asia				
Lao People's Democratic Republic	China, New Zealand, Solomon Islands, Viet Nam	Bangladesh, Cambodia, ² Fiji, India, Indonesia, Japan, Malaysia, Nepal, Pakistan, Papua New Guinea, Thailand	Australia, ³ Bangladesh, ⁴ Republic of Korea, ⁵ Philippines, Sri Lanka	
Africa				
Nigeria, Sao Tome and Principe	Algeria, Chad, Morocco	Angola, Botswana, Burkina Faso, ⁶ Gabon, Guinea-Bissau, ⁷ Lesotho, Madagascar, ⁸ Mauritius, Senegal, South Africa, ⁹ Tunisia ¹⁰	Ghana, Mozambique	Namibia, South Africa
Americas				
Bolivia, Brazil, Canada, ¹¹ Chile, United States, Uruguay ¹²	Bahamas, Cuba	Belize, Canada, ¹¹ Guatemala, Haiti, Honduras, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela	Argentina, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Mexico	

Government fixes minimum wage rates			Specialized body sets minimum wage rates	Collective bargaining and other procedures
No obligation to consult social partners	Following direct consultation with the social partners	Following advice and/or recommendation of specialized body		

Arab States

Lebanon, Syrian Arab Republic

Europe

Luxembourg	Czech Republic, Estonia, Israel, Romania, Russian Federation, Spain	Albania, Bulgaria, Cyprus, France, ¹³ Hungary, Ireland, Latvia, Lithuania, Malta, Netherlands, Portugal, United Kingdom	Poland, Slovakia, Slovenia, Turkey	Austria, Belgium, Finland, Germany, Greece, Iceland, Italy, Sweden, Switzerland
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Notes: ¹ In many countries, in certain sectors collective bargaining sets wage rates that are higher than the minimum rates set by an authority. These are not included in the table as the rates thus set are an addition to the basic statutory minimum. Only cases where collective bargaining is the only means used to establish minimum wage rates have been noted, either for sectors where minimum wage rates are not set by an authority (e.g. India), or for countries in which all minimum wage rates are set through collective bargaining (e.g. Germany). ² The body in charge also advises the Government on the extension of collective agreements and studies the labour market in general. ³ A commission regulates all industrial relations disputes in the country. ⁴ A board is concerned with all regulations within EPZs. ⁵ The Minimum Wage Council's decision is promulgated by the Minister of Labour. If the Minister disagrees with it, the Council may be asked to revise the proposal. However, if a two-thirds majority of the Council supports the proposal, the Minister is obliged to approve it. ⁶ A commission also conducts studies concerning the general economic situation and elements that serve as a basis for setting the minimum wage. ⁷ General advisory body. ⁸ Advisory body on matters concerning employment, conditions of work, and salaries. ⁹ A commission advises the Government on all matters concerning basic conditions of employment and trends in collective bargaining. ¹⁰ A committee is concerned with all issues related to labour laws, standards, collective bargaining and the social environment. ¹¹ Based on Manitoba and Ontario legislation. Minimum wages are fixed at the provincial level in Canada. ¹² Although minimum wage rates are normally set in Wages Councils, these have not been convened since 1993, and the Government has been setting a national minimum wage rate unilaterally since then. ¹³ A committee analyses collective agreements in general: extensions, collective bargaining, minimum wages, etc.

Source: ILO minimum wage fixing database, 2004.

Table 3 Specialized bodies involved in the wage fixing process

Country	Wage fixing process
Asia	
Australia	Australian Industrial Relations Commission <i>Judicial body with the power to hand down awards and decisions</i> <i>The Safety Net Review Decision determines the federal minimum wage and is made in response to an application for adjustment made by any party to an award affected by the decision</i> <i>All interested parties (usually Government and social partners) may make submissions to the Commission before a decision is made</i>
Bangladesh	Minimum Wages Board (tripartite) <i>Workers in industries</i> Council of Minimum Wages and Prices for Agricultural Labour (never established) <i>Agricultural workers</i> Export Processing Zones Authority (bipartite: Government and employers) <i>Workers in EPZs</i>
Cambodia	Labour Advisory Committee (tripartite)
Fiji	Wages Councils (bipartite)
India	Advisory Boards and Committees (bipartite)
Indonesia	National Wage Council <i>Provides national wage policy advice (tripartite)</i> Provincial Wage Councils <i>Advise provincial governors, who determine provincial minimum wages (tripartite)</i> District/City Wage Councils <i>Advise provincial governors, who determine provincial minimum wages (tripartite)</i>
Japan	Central Minimum Wage Deliberative Council <i>Provides guidelines for the Prefectural Minimum Wages Deliberative Councils (tripartite)</i> Prefectural Minimum Wages Deliberative Councils <i>In practice, decisions taken by the Prefectural Minimum Wages Deliberative Councils determine the minimum wage rates (tripartite)</i>
Republic of Korea	Minimum Wage Council (employers', workers' and independent representatives)

Country	Wage fixing process
Malaysia	Wages Councils (tripartite)
Nepal	Minimum Remuneration Fixation Committee (tripartite) <i>Workers other than agricultural labourers</i> High-Level Monitoring Committee (tripartite) <i>Agricultural labourers</i>
Pakistan	Provincial Minimum Wages Boards (bipartite)
Papua New Guinea	Minimum Wages Board (tripartite) <i>May determine minimum wage rates, but to be enacted these must be approved and registered by the Head of State</i>
Philippines	National Wages and Productivity Commission (tripartite) <i>Reviews regional minimum wage rates to determine whether they are in line with prescribed guidelines</i> Regional Tripartite Wages and Productivity Boards (tripartite) <i>Determine minimum wage rates applicable in regions, provinces or industries subject to the guidelines set by the National Wages and Productivity Commission</i>
Sri Lanka	Wages Boards (tripartite) <i>Workers in certain trades</i> Remuneration Committees (tripartite) <i>Shop and office employees</i>
Thailand	National Wage Committee (tripartite) Tripartite Provincial Committees <i>May recommend that a rate higher than the national minimum wage rate be applied for certain provinces</i>
Africa	
Angola	National Council of Social Dialogue (tripartite)
Botswana	Minimum Wages Advisory Board (tripartite)
Burkina Faso	Labour Advisory Commission (bipartite)
Gabon	National Wages Committee (tripartite)
Ghana	National Tripartite Committee on Salaries and Wages
Guinea-Bissau	Social Dialogue Council (tripartite)
Lesotho	Wages Advisory Board (employers', workers' and independent representatives)

(Table 3 cont'd)

Table 3 (cont'd)

Country	Wage fixing process
Madagascar	National Employment Council (tripartite)
Mauritius	National Remuneration Board (bipartite)
Mozambique	Labour Advisory Commission (tripartite)
Namibia	Minimum wage rates determined by sectoral collective agreement
Senegal	National Employment and Social Security Council
South Africa	Employment Conditions Commission (tripartite) <i>Recommends minimum wage rates for certain sectors</i> <i>Minimum wage rates are determined by collective agreement for sectors where minimum wages are not fixed by the Government</i>
Tunisia	National Committee on Social Dialogue
Americas	
Argentina	National Council for Employment, Productivity and the Adjustable Minimum Living Wage (tripartite)
Belize	Wages Councils (employers', workers' and independent representatives)
Canada	Ontario, Manitoba Minimum Wage Board (tripartite)
Chile	In practice, the Government consults employers' and workers' representatives before making a proposal to Congress
Colombia	Permanent Commission on the Harmonization of Wage and Labour Policies (tripartite)
Costa Rica	National Wages Council (tripartite)
Cuba	Consultations only with workers' representatives
Dominican Republic	National Wages Council (tripartite)
Ecuador	National Wage Council (tripartite) <i>Minimum wages set by the Council are approved by ministerial accord</i>
El Salvador	National Minimum Wages Council (tripartite)
Guatemala	National Minimum Wages Councils (tripartite) National Wages Council
Haiti	Committee for Consultation and Arbitration (tripartite)
Honduras	National Minimum Wage Council (tripartite)
Mexico	National Commission on Minimum Wages (tripartite)
Nicaragua	National Minimum Wages Council (tripartite)

Country	Wage fixing process
Panama	National Minimum Wage Commission (tripartite)
Paraguay	National Minimum Wages Council (tripartite)
Peru	National Council for the Promotion of Work and Employment (tripartite)
Trinidad and Tobago	Minimum Wages Board (tripartite)
Venezuela	Tripartite Commission for the Revision of Minimum Wage
Arab States	
Lebanon	Cost of Living Index Committee
Syrian Arab Republic	Regional Minimum Wage Determination Committees (tripartite)
Europe	
Austria	Minimum wages are fixed in sectoral collective agreements
Belgium	National minimum wage determined in inter-sectoral collective agreement negotiated within the National Labour Council
Bulgaria	National Council for Tripartite Partnership
Cyprus	Labour Advisory Board (tripartite)
France	National Committee on Collective Agreements (tripartite)
Germany	Minimum wages fixed in sectoral collective agreements
Greece	A national minimum wage rate is fixed by collective agreement
Hungary	National Labour Council (tripartite) <i>Minimum wages set by the Government are subject to the agreement of the Council</i>
Ireland	The tripartite National Economic Agreement includes a recommended national minimum wage rate
Israel	Automatic indexation
Latvia	National Tripartite Cooperation Council <i>Council must be consulted concerning Bills, draft Regulations, employment issues and implementation of any ratified ILO Conventions</i>
Lithuania	Permanent Labour Remuneration Committee of the Tripartite Council
Malta	Employment Relations Board (employers', workers' and independent representatives)
Netherlands	Social Economic Council (bipartite) <i>Indexation, although in exceptional circumstances the rate may be frozen, following consultation with the Council</i>

(Table 3 cont'd)

Table 3 (cont'd)

Country	Wage fixing process
Poland	Tripartite Commission <i>Negotiations within the Commission to determine any adjustment, based on the rate proposed by the Government</i>
Portugal	Standing Committee for Social Consultation of the Economic and Social Council (tripartite)
Slovakia	Council of Economic and Social Concertation (tripartite) <i>Determines the coefficient used as the basis for determining the minimum wage rate</i>
Slovenia	Economic and Social Council of Slovenia <i>Determined in tripartite pay policy agreement negotiated within the Council</i>
Switzerland	Minimum wages are fixed in sectoral collective agreements
Turkey	Minimum Wage Fixing Board (tripartite)
United Kingdom	Low Pay Commission <i>Must consult the social partners before making a recommendation</i>

Source: ILO minimum wage fixing database, 2004.

In countries where government decision is based on a recommendation, a specialized wage committee is usually set up. There is the National Wage Committee in Thailand, the National Remuneration Board in Mauritius, the Employment Relations Board in Malta and the Low Pay Commission in the United Kingdom. These entities are made up of employers' and employees' representatives along with members chosen by the government who are either government representatives or independent members. It is also worth noting that wages councils based on the former British system have the same tripartite structure even though their scope of application is limited to individual sectors rather than encompassing the whole economy. As recommendations made by these specialized bodies are generally backed by a technical report and based on an agreement, it would be difficult for the government not to accept the proposal or to reject a unanimous decision. On the other hand, it has no such constraints when there is disagreement within the committee. In Slovakia, for example, if the social partners cannot reach agreement the Government has the authority to make a unilateral decision.

1.3.2 Tripartite systems

In about 15 countries tripartite commissions do more than merely make recommendations; they set the minimum wage rates. In most cases the government

validates the decision but this is merely a formality. The different decision-making procedures are summarized in table 2. In two countries, Ireland and Slovenia, the minimum wage is set through a tripartite agreement.

In this method, for a decision to be reached the authorities generally have to come to an agreement with the employers' and workers' representatives. The presence of government representatives does of course enable them to have an influence on the decision. In Poland, the Tripartite Commission's discussions are based on the minimum wage rate proposed by the Government. Another, more indirect means of influencing the decision is by carefully selecting the date on which the minimum wage is raised. If the legislation does not stipulate how frequently rates should be increased (and this is the case in most of the countries studied, as shown in table 7), the government is free to choose the period that suits it best. However, this option is open only when the government does not encounter strong opposition from the social partners.

The situation is very different when minimum wage setting is in the hands of the social partners.

1.3.3 Collective bargaining

Here the decision is no longer shared between the government and the social partners. From a purely legal point of view, minimum wage setting is left completely to the social partners. As stated previously, two situations need to be clearly identified. In the first, no minimum wage rate actually exists as almost all wages are established through sectoral agreements. Germany, Italy, Namibia and Sweden, among others, follow this formula. In the second, a national multi-sectoral agreement sets a single minimum wage rate for the whole country (e.g. Belgium, Greece). An agreement applicable nationwide is analogous to a statutory system with state intervention.

The fact that public bodies are not legally designated participants in the collective bargaining process does not necessarily mean that they are not involved in wage fixing. First, public bodies intervene when collective agreements are extended. The extension process requires enterprises not parties to the original collective agreement to apply the provisions of the agreement. Second, governments may make recommendations concerning wage increases that, unsurprisingly, have an effect on negotiations.

1.4 Fixing the minimum wage rate in practice

We will conclude this chapter by giving a few examples of how minimum wage rates are fixed in practice so as to illustrate some of the practical problems that may arise independently of actual wage fixing methods and institutions.

When studying this process we need to distinguish between the establishment of the initial minimum wage rate and calculation of periodic adjustments.

1.4.1 Initial rate fixing

In many countries it is difficult to know how the minimum wage was initially set. It was often the outcome of bargaining between trade unions, employers' organizations and the government, based on labour market statistics and current economic conditions. In any event, there are two main methods for setting the initial rate. These may be used independently or in combination.

The first method is based on cost of living and aims to determine a rate that will cover the basic needs of workers.⁴ This appears to be the most clear-cut method but it does give rise to some problems. Aside from the availability of statistics on the cost of living, many questions arise regarding how the method is implemented.

Should one consider that a worker is the sole wage earner for a household? If wages are to cover the needs of the workers and their families, one needs to establish how many children should be taken into the equation. For example, in Mexico a family is deemed to consist of five people. The idea that only one wage earner provides for a family's basic needs is clearly challenged by the ever-increasing number of women in the labour market. Therefore, defining the family for the purposes of minimum wage fixing is thought to be less relevant today. However, the growing number of one-parent families should make this question topical again, given that a substantial percentage of the "working poor" fall into this category.

The price of goods and the standard of living vary from one region to another. Should these regional variations be taken into account, given the internal migration problems this can cause? In 1984, Brazil removed all regional variations from its minimum wage rate in an effort to reduce internal migration from poor to wealthy regions.

The second method is to take wage statistics into consideration, basing the minimum wage rate on the lowest and average wage rates. This method was followed by the Netherlands when implementing a minimum wage rate in 1968. The attractiveness of this method is its simplicity. However, it relies on wage statistics being trustworthy and readily available. It is also based on the premise that actual wages paid, in particular the lowest wages, are a true reflection of workers' basic needs and the needs of their dependants. This is not necessarily the case, in particular in sectors where workers enjoy little protection.

If the pros and cons of both methods are taken into account, it is clear that the best solution is to use a combination of the two, taking the statistics available concerning the needs of workers and wages as the technical basis to be used as a starting point for bargaining. Regardless of the situation, there are never any statistical absolutes in this field. Any definition of "needs" will always be subjective; consequently, the minimum wage is first and foremost a subject for negotiation.

The most recent example available to illustrate how the initial minimum wage rate is fixed is the United Kingdom. Brown (2002) provides detailed

information on how the minimum wage rate was determined. The process began in 1997 when the Labour Government set up the Low Pay Commission to implement a minimum wage system in the country and fix the minimum wage rate. The first national minimum wage rate was set in April 1999; it had taken the Commission two years to reach its objectives. The team in charge comprised nine commissioners: three with a background in trade unions, three from employers' organizations, and three members of the academic community who were specialists in labour issues. Workers' and employers' organizations were consulted during the nomination process but commissioners were fully independent and had no obligation to report to their respective organizations. The Commission was supported by a large technical secretariat consisting of between 10 and 20 people, depending on requirements. The final recommendation was based on in-depth statistical analysis of the labour market and general economic conditions, along with numerous surveys and inquiries. The consultation process was extremely comprehensive. Rather than simply conferring with the traditional social partners, the commissioners also went to workplaces to speak directly to workers and employers in both large and small enterprises. It is interesting to note that Commission members found that their work was facilitated by the fact that it had already been decided that one national minimum wage rate should be implemented, rather than having different regional or sectoral rates. A similar process is followed when recommendations are made concerning periodic adjustments of the minimum wage rate.

1.4.2 Periodic adjustments

The problem faced by most countries today is determining increases in established minimum wage rates. This adjustment procedure depends on the type of consultation process in place.

In countries with a more flexible consultation process increases are often automatic, at least in part. In the Netherlands, adjustments are based on estimated wage increases following public and private wage negotiations held during the year. Certain situations may result in minimum wage rates being frozen but the Government must consult the social partners before taking such a decision. In fact, although the minimum wage rate is indexed to the evolution of wage rates in general, the level of employment and unemployment is also a determining factor. Adjustment is automatic only when a specific balance has been maintained between the number of workers employed and those registered as unemployed. If the balance is upset by a high unemployment rate, the Government may decide not to raise the minimum wage, or that any increase will be less than the average yearly wage increases. In that case the Government must consult the Social Economic Council, a body comprising employers', government and independent representatives, but is under no obligation to follow the Council's advice.

In France, adjustment is triggered by a 2 per cent rise in inflation. Each year in July, the Government may also decide to increase rates on the basis of economic

growth. It must seek the opinion of the National Committee on Collective Agreements, to which it had previously furnished a report on the conditions of the labour market. The Committee's opinion is not binding on the Government. In addition, it is rare for the Committee to reach a unanimous decision because the trade unions and employers are usually unable to agree on the minimum wage rate. In any event, following any increase, the purchasing power of the minimum wage cannot be less than half the total increase in the purchasing power of the average hourly wage.

The procedure is quite different when a specialized body makes a minimum wage rate proposal which is then submitted to the government for approval. The government has the discretion to reject the proposal but this is far more difficult and such action must be justified. We have already examined the system in force in the United Kingdom. We can use the Republic of Korea as a second example: the body responsible for minimum wage rate adjustment is the Minimum Wage Council, made up of an equal number of workers', employers' and independent representatives. The Council is supported by a technical secretariat which obtains and analyses the necessary statistics. Negotiations are based on the Council's technical report and decisions taken by a two-thirds majority vote. The independent members' vote is often crucial because it is rare for the workers' and employers' representatives to agree. The proposed rate is forwarded to the Minister of Labour, who has the authority to accept or reject the proposal but may not modify it.

The final method involves a specialized committee deciding on minimum wage increases autonomously. This is the case in Costa Rica, Japan and Mexico, among others.

In Mexico, the body in charge is the National Commission on Minimum Wages. Its president is chosen by the Head of State and its 18 members comprise an equal number of workers' and employers' representatives. Documentation concerning the state of the economy, cost of living variations, employment and unemployment rates, wage levels and so on is provided by a technical secretariat and constitutes the basis for the Commission's decision on rate increases. The Commission must also submit a report justifying its decision.

In Costa Rica, the National Wages Council determines minimum wage rates for different categories of workers. Its decision is based on the analysis of available data and on consultations with employers' and workers' organizations. Rate adjustment proposals are transmitted to the Minister of Labour, who may request that the Council alter its proposal; however, the Council has the discretion to reject such requests.

Japan is a unique case. Legally, the tripartite regional councils on minimum wages set the minima for each of the country's 47 regions. In practice, however, they follow the directives issued by the tripartite Central Minimum Wage Deliberative Council. In addition to this procedure, the Minister of Labour gathers statistics on the spring round of wage negotiations in respect of wage

levels in small enterprises. Based on this and on any other information available, the Council makes recommendations on the wage rates to be applied in each region. Most commonly, increases are equal to the average wage rises in small enterprises. Additionally, wage surveys on small businesses are carried out at the regional level. The results of the surveys and the Council's directives form the basis of negotiations in the regional councils. If no agreement is reached, decisions are taken by majority vote.

A final factor enters the equation when one considers how these procedures vary over time. Countries such as Mexico have gradually reduced decentralization and the number of categories and rates. A similar shift has occurred in Japan, where in practice the Central Minimum Wage Deliberative Council issues directives, rather than the regions having to act independently. In Portugal, consultation procedures have also changed over time. During some periods the Government has based its wage fixing decisions on the conclusion of a tripartite agreement, and at other times it has preferred to retain control. Clearly this decision is closely related to the political and economic environment. These are precisely the factors that underscore the importance of certain criteria in determining minimum wage increases. This issue is addressed in Chapter 2.

Notes

¹ Excluding separate rates for specific categories of at-risk workers such as youth, disabled workers, etc.

² It should be noted that some countries implement several options at the same time. If added up, the number of countries may therefore exceed that of the database.

³ There are a few exceptions, such as Japan. In section 1.4 we will see that minimum wages in this country are generally an acceptance of the increases already agreed to in the collective bargaining process. Therefore, in practice minimum wages act as a type of extension of the negotiated rates.

⁴ Minimum wage fixing criteria will be examined more closely in Chapter 2.

In most cases legislation lays down the different criteria which should be taken into account by the authority responsible for minimum wage fixing. They fall into two broad categories: the first is of a more social nature and addresses the basic needs of workers while the second, more economic oriented, focuses on the country's economic constraints. This chapter sets out to analyse the most frequently applied criteria and more particularly the objectives underlying the use of each one.

2.1 Legal criteria

Table 4 summarizes the fundamental criteria used in the determination of minimum wage rates as set forth in the legislation of the countries included in the database.¹ Analysis of the legal texts allows us to identify a number of trends.

First, certain criteria are mentioned in the legislation much more frequently than others. The criterion most often cited by far is inflation/cost of living, followed by the general economic condition and wage levels. Further down we find workers' needs, productivity, the employment rate and, at the bottom end of the scale, the capacity of enterprises to pay and social security benefits. A number of conclusions can be drawn from this pattern. First, the needs of workers and their families ranks only fourth, and the capacity of enterprises to pay is at the bottom of the list. Yet it would seem that these two criteria are crucial to minimum wage fixing since they concern the main function of the minimum wage (protecting workers' standard of living) and its effectiveness (the capacity of enterprises to pay). In fact, some criteria are redundant. For example, the needs of workers and their families are taken into account as part of the most frequently cited criterion: inflation/cost of living. This means that in many countries the minimum wage should be set at such a level that inflation does not have a negative effect on workers' purchasing power. The capacity of enterprises to pay is also

taken into consideration when productivity and general economic conditions are being cited.

The ILO database also shows that the same criteria may be used in very different, even contrasting, ways. For example, if a country's legislation links retirement benefits or unemployment payments to minimum wage levels, the authorities must consider the effect that any adjustment of the minimum wage will have on benefit levels. It is important to make sure that any decision made does not upset the social security budget. On the other hand, in China this criterion was used quite differently: the legislation required that minimum wage rates should be higher than unemployment benefits in order to motivate the unemployed to find work. (This provision was repealed and new regulations issued in March 2004.) The same holds true for inflation. In Ireland, the competent authorities must ensure that any increase in minimum wage levels does not have a detrimental effect on inflation. However, as previously noted, in most countries a reference to inflation involves an attempt to avoid the purchasing power of minimum wages from being eroded by price increases.

The criteria stipulated are often guidelines that assist the decision-making process, rather than being strict requirements that must be complied with. As a matter of fact, a legal provision stating that the competent bodies must take the general economic situation into consideration leaves plenty of scope for interpretation. One criterion that is often cited without any specific restrictions or objectives being formulated is "employment" (the Netherlands being one of the rare exceptions; see section 1.4.2). The most extreme example of flexibility is found in countries whose legislation does not set any criteria whatsoever. They represent more than 20 per cent of the countries studied.

On the other hand, in some countries the application of certain criteria is very strictly enforced. As stated earlier, a 2 per cent rise in inflation automatically triggers an adjustment in France, while in Belgium the minimum wage is indexed to the inflation rate. Estonia's legislation stipulates that the minimum wage should reach 41 per cent of the average wage by 2008, and in the Netherlands the minimum wage is indexed to the average increase in negotiated wage rates.

This comparative analysis of the legislation in force shows that countries differ widely in defining relevant criteria and their relation to the minimum wage. In practice this legal framework is even more complicated, for a number of reasons.

First of all, the bodies in charge of setting minimum wage rates may take into account factors that are absent from the legislation, or they may use criteria that are quite different from those set by the legislator. For example, between 1992 and 1995 Uruguay's Government weakened the role of the minimum wage in the hope that this would have a positive effect on the development of enterprise-level collective bargaining, which is obviously not one of the objectives stipulated in minimum wage legislation.

Table 4 Criteria for minimum wage fixing

	Level of wages	Social security benefits	Needs of workers and their families	Inflation and/or cost of living	Employment level	Economic situation and/or development	Productivity	Capacity of enterprises to pay	No criteria set
Asia									
Australia				✓	✓		✓		
Bangladesh				✓		✓			No criteria for setting minimum wages for workers in EPZs
Cambodia	✓	✓	✓	✓	✓	✓	✓		
China	✓	✓		✓	✓	✓	✓		
Fiji									✓
India				✓					
Indonesia	✓		✓	✓	✓	✓		✓	
Japan	✓			✓				✓	
Korea, Republic of			✓	✓			✓		
Lao People's Democratic Republic									✓

Minimum wage fixing criteria

Table 4 (cont'd)

Table 4 (cont'd)

	Level of wages	Social security benefits	Needs of workers and their families	Inflation and/or cost of living	Employment level	Economic situation and/or development	Productivity	Capacity of enterprises to pay	No criteria set
Malaysia						✓			
Nepal						✓		✓	
New Zealand									✓
Pakistan				✓		✓			
Papua New Guinea							✓	✓	
Philippines	✓		✓	✓				✓	
Singapore ¹									
Solomon Islands									✓
Sri Lanka				✓		✓			
Thailand	✓			✓		✓	✓	✓	
Viet Nam			Wage must allow workers to save	✓		✓			
Africa									
Algeria				✓		✓	✓		

	Level of wages	Social security benefits	Needs of workers and their families	Inflation and/or cost of living	Employment level	Economic situation and/or development	Productivity	Capacity of enterprises to pay	No criteria set
Angola	✓	✓			✓	✓	✓	✓	
Botswana	✓	✓	✓	✓	✓	✓	✓		
Burkina Faso			✓			✓			
Chad									✓
Gabon									✓
Ghana									✓
Guinea-Bissau	✓	✓	✓	✓	✓	✓	✓		
Lesotho									✓
Madagascar			✓	✓		✓			
Mauritius	✓			✓		✓	✓		
Morocco				✓					
Mozambique						✓	✓		
Namibia ²	✓	✓	✓	✓		✓		✓	
Nigeria									✓
Sao Tome and Principe									✓

Table 4 (cont'd)

Minimum wage fixing criteria

Table 4 (cont'd)

	Level of wages	Social security benefits	Needs of workers and their families	Inflation and/or cost of living	Employment level	Economic situation and/or development	Productivity	Capacity of enterprises to pay	No criteria set
Senegal				✓		✓			
South Africa	✓			✓	✓	✓		✓	
Tunisia									✓
Americas									
Argentina				✓		✓			
Bahamas									✓
Belize									✓
Bolivia									✓
Brazil		✓	✓	✓					
Canada ³	✓					✓			
Chile									✓
Colombia	✓			✓				✓	
Costa Rica				✓		✓			
Cuba			✓			✓			

	Level of wages	Social security benefits	Needs of workers and their families	Inflation and/or cost of living	Employment level	Economic situation and/or development	Productivity	Capacity of enterprises to pay	No criteria set
Dominican Republic			✓			✓	✓	✓	
Ecuador			✓	✓					
El Salvador			✓	✓		✓			
Guatemala			✓	✓	✓			✓	
Haiti				✓					
Honduras			✓	✓	✓	✓	✓	✓	
Mexico	✓			✓	✓	✓		✓	
Nicaragua			✓			✓			
Panama				✓	✓	✓			
Paraguay	✓		✓	✓			✓		
Peru			✓			✓			
Trinidad and Tobago	✓	✓		✓	✓	✓	✓		
United States									✓
Uruguay									✓ ⁴

Table 4 (cont'd)

Minimum wage fixing criteria

Table 4 (cont'd)

	Level of wages	Social security benefits	Needs of workers and their families	Inflation and/or cost of living	Employment level	Economic situation and/or development	Productivity	Capacity of enterprises to pay	No criteria set
Venezuela				✓		✓			
Arab States									
Lebanon			✓	✓					
Syrian Arab Republic			✓	✓	✓				
Europe									
Albania		✓	✓	✓	✓	✓	✓		
Austria									✓
Belgium				✓					
Bulgaria	✓	✓	✓	✓	✓	✓	✓		
Cyprus	Minimum wage should reach 50% of median wage by 2008								
Czech Republic				✓					

	Level of wages	Social security benefits	Needs of workers and their families	Inflation and/or cost of living	Employment level	Economic situation and/or development	Productivity	Capacity of enterprises to pay	No criteria set
Estonia	Minimum wage should reach 41% of average wage by 2008			✓	✓		✓		
Finland				✓	✓	✓			
France	✓		✓	✓		✓			
Germany									✓
Greece									Minimum wage set by collective agreement
Hungary	✓	✓	✓	✓	✓	✓	✓		
Iceland									✓
Ireland	✓			✓	✓	✓			

Minimum wage fixing criteria

Table 4 (cont'd)

Table 4 (cont'd)

	Level of wages	Social security benefits	Needs of workers and their families	Inflation and/or cost of living	Employment level	Economic situation and/or development	Productivity	Capacity of enterprises to pay	No criteria set
Israel	Minimum wage is 47.5% of average wage			✓					
Italy				✓					
Latvia	Minimum wage should reach 50% of average wage by 2010								
Lithuania	✓		✓	✓	✓	✓	✓	✓	
Luxembourg	✓			✓		✓			
Macedonia, former Yugoslav Republic of	✓								
Malta				✓					
Netherlands	✓	✓			✓				

	Level of wages	Social security benefits	Needs of workers and their families	Inflation and/or cost of living	Employment level	Economic situation and/or development	Productivity	Capacity of enterprises to pay	No criteria set
Poland	✓			✓	✓	✓	✓		
Portugal			✓	✓		✓	✓		
Romania									✓
Russian Federation				✓					
Slovakia	✓	✓		✓					
Slovenia									✓
Spain	✓				✓	✓	✓		
Switzerland									Minimum wage set by collective agreement
Turkey			✓			✓			
United Kingdom						✓			

Notes: ¹ There is no statutory minimum wage in Singapore. ² Criteria established in the collective agreement on minimum wages in the agricultural sector. There is no national minimum wage in Namibia. ³ Criteria established for setting minimum wage rates applicable to the construction industry in the state of Manitoba. Minimum wages are fixed at the provincial level in Canada. ⁴ Minimum wage fixing criteria are established by the Wages Councils. However, since 1993 minimum wage rates have been set by the Government directly rather than by the Councils.

Source: ILO minimum wage fixing database, 2004.

A further difficulty that arises when conducting a comparative analysis of minimum wage fixing mechanisms is that the emphasis each country places on any given criterion can vary over time as the political and/or economic climate changes. In this regard, it should be noted that “general economic situation” is commonly cited as a criterion in wage fixing, but as such it is inherently ambiguous.

How can one explain these complex and variable systems in a way that enables us to gain an insight into their basic functions? In Chapter 1 we used the current and historical status of collective bargaining as the basis for understanding the main trends in minimum wage fixing procedures. In this chapter, analysis of the practices of many countries shows that the key is governments’ use of minimum wages as a tool for macroeconomic and social policy, which means that minimum wages are used to achieve many different outcomes. This ever-changing use can at times make it more difficult to grasp the role of the minimum wage.

Therefore, rather than following the established practice of presenting each criterion one by one, we have grouped them according to their economic or social goals. This approach demonstrates how each one may have a multitude of objectives and reveals the relationships between the different criteria.

2.2 Minimum wages and social policy

The criteria of “needs of workers and their families” and “cost of living” are included in the legislation of over 60 per cent of the countries studied. This suggests that, at least when minimum wage systems were established, legislators pursued social objectives and aimed to ensure and protect the minimum purchasing power of the workers most at risk. In fact, the minimum wage was not designed to be a wage policy instrument; originally it was a tool designed to protect the most vulnerable workers. In Chapter 1 we saw that this was historically the case, and the criteria for setting minimum wage levels confirm this.

2.2.1 *Minimum wages and poverty*

The main aim of the minimum wage is to protect the lowest-paid workers in order to guarantee them a decent standard of living. During a debate on the first draft proposal for a basic minimum wage in 1909, Winston Churchill said, “It is a serious national evil that any class of His Majesty’s subjects should receive less than a living wage (...) the good employer is undercut by the bad, and the bad employer by the worst” (Campbell, 1995). This protection of a decent standard of living represents what is both laudable and ambiguous about the minimum wage. On the plus side, it protects the lowest-paid wage earners. It is however ambiguous because of this very virtue, in that it can be seen as the perfect instrument to combat poverty in general, a role that it cannot take on alone.

From the outset, the principle of the minimum wage has been that it is revenue unconnected with the act of production; it is a sum owed to the worker

and essentially linked to the status of wage earner. The earliest minimum wage fixing methods are clear evidence of this approach. The employer's capacity to pay and the wage earner's productivity are not taken into consideration; minimum wage rates are calculated primarily on the basis of the amount needed by the workers to pay for their own living costs and those of their families. There is no reference to the workers' contribution to an enterprise in terms of production; the only consideration is the requirement that workers be able to provide for their own needs and the needs of their families. When the concept of a minimum wage was initially introduced in industrialized countries, the question of wage earner productivity was not even raised. Wages were so low that workers were not properly paid no matter how much they produced. Of course, in many countries the situation is very different at present.

The notion of needs and hence of protection from poverty varies across time and space. In Chapter 1 we examined, from a practical viewpoint, how basic needs are taken into consideration in minimum wage fixing. Now we will look at these same needs from the angle of poverty reduction. We can identify many diverse notions of basic needs (and therefore of poverty) which do not follow a distinct pattern of evolution because they are present at different periods in a variety of countries. Nevertheless, when examined as a whole, they reveal the following pattern:

- a move from the notion of basic needs to the requirements for a decent standard of living;
- an extension of the notion of a decent standard of living to include different aspects of social protection outside the enterprise such as pensions, family benefits, etc.;
- an even wider extension, where the minimum implies not just covering the needs of the poorest workers and their families, but also enabling them to benefit from growth in general in the same way that other workers do.

This variation in the concept of basic needs makes it more difficult to define poverty and the role that the minimum wage plays with regard to poverty. This issue is examined in the following paragraphs.

Indonesia is a good example of the progression from the concept of basic physical needs to that of requirements for a decent standard of living. Until 1996, the goods considered when calculating basic needs included only the goods required to satisfy a worker's physical requirements. The concept was then extended to include the requirements for a decent standard of living, such as education, health and social security for retirement. In 2003, the Government prescribed that all these factors should be considered when minimum wages are being set or adjusted. This example also illustrates how the concept of needs can vary with time. As regards the goods considered when minimum wage rates are calculated, everything depends on local living standards and each country's

definition of basic standards.

Table 5 illustrates the extension of the notion of a decent standard of living to some aspects of social protection, showing that a large number of countries link certain social security benefits to variations in minimum wage levels. The most common relationship is with retirement benefits and disability payments, while links with employment and maternity benefits are less frequent. In a small number of countries, in particular Algeria, Brazil and the Netherlands, there is a very close relationship between minimum wages and social security benefits.

Such close links mean that the minimum wage fulfils the functions of a “social floor”. For example, in these systems retirement benefits are adjusted with each rise in the minimum wage so that, in theory, the purchasing power of the poorest pensioners is maintained. When the minimum wage plays this basic role it is both fair (the most at-risk pensioners must be assured that the purchasing power of their retirement benefits will not be eroded) and straightforward (a single instrument adjusts an entire section of the social security system); however, the inherent risk is a potential massive increase in social security costs.² As a result, a certain amount of flexibility is lost, thereby possibly jeopardizing the main function of the minimum wage, that is, protecting workers most at risk.

In Algeria, where the minimum pension amounts to 75 per cent of the minimum wage, the Minister of Labour and Social Security estimated that increasing the minimum wage from 8,000 to 10,000 Algerian dinars cost 24 billion dinars per year (US\$310 million), half of which was paid for by the State, and the other half through social security funds.

Many governments hesitate to raise minimum wage levels because of the impact this has on state budgets, even if economic conditions (growth, higher general wage levels) are favourable. In Brazil, for example, one of the reasons for the drop in the value of the minimum wage in real terms in the 1980s and 1990s was its impact on the massive public deficit of that period through the payment of benefits and pensions.

Table 5 Links between minimum wages and social security benefits

	Link identified	No link identified
Asia		
Pensions		China, Lao People's Democratic Republic, Thailand, Viet Nam
Maternity benefits	Lao People's Democratic Republic	China, Thailand, Viet Nam
Unemployment benefits	China	Lao People's Democratic Republic, Thailand, Viet Nam
Disability benefits		China, Lao People's Democratic Republic, Thailand, Viet Nam
Special payments/ other	Thailand, Viet Nam	China, Lao People's Democratic Republic
Countries without any link to social security benefits: Australia, Bangladesh, Cambodia, Fiji, India, Indonesia, Japan, Republic of Korea, Malaysia, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Solomon Islands, Sri Lanka.		
Africa		
Pensions	Algeria, Burkina Faso, Chad, Gabon, Madagascar, Nigeria, Sao Tome and Principe, Senegal, Tunisia	Morocco
Maternity benefits	Algeria	Burkina Faso, Chad, Gabon, Madagascar, Morocco, Nigeria, Sao Tome and Principe, Senegal, Tunisia
Unemployment benefits	Algeria, Tunisia	Burkina Faso, Chad, Gabon, Madagascar, Morocco, Nigeria, Sao Tome and Principe, Senegal
Disability benefits	Algeria, Madagascar	Burkina Faso, Chad, Gabon, Morocco, Nigeria, Sao Tome and Principe, Senegal, Tunisia
Special payments/ other	Algeria, Morocco, Tunisia	Burkina Faso, Chad, Gabon, Madagascar, Nigeria, Sao Tome and Principe, Senegal
Countries without any link to social security benefits: Angola, Botswana, Ghana, Guinea-Bissau, Lesotho, Mauritius, Mozambique, Namibia, South Africa.		
Americas		
Pensions	Brazil, Colombia, Dominican Republic, Ecuador, Mexico, Nicaragua, Paraguay, Uruguay	Argentina, Bolivia, Chile, Costa Rica, Peru

(Table 5 cont'd)

Table 5 (cont'd)

	Link identified	No link identified
Maternity benefits	Bolivia, Mexico	Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Nicaragua, Paraguay, Peru, Uruguay
Unemployment benefits	Brazil, Chile, Uruguay	Argentina, Bolivia, Colombia, Costa Rica, Dominican Republic, Ecuador, Mexico, Nicaragua, Paraguay, Peru
Disability benefits	Brazil, Costa Rica, Dominican Republic, Mexico, Nicaragua, Paraguay, Peru, Uruguay	Argentina, Bolivia, Chile, Colombia, Ecuador
Special payments/ other	Argentina, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Mexico, Paraguay, Peru, Uruguay	Chile, Nicaragua
Countries without any link to social security benefits: Bahamas, Belize, Canada, Cuba, El Salvador, Guatemala, Haiti, Honduras, Panama, Trinidad and Tobago, United States, Venezuela.		
Arab States		
Pensions		Lebanon
Maternity benefits		Lebanon
Unemployment benefits		Lebanon
Disability benefits		Lebanon
Special payments/ other	Lebanon	
Countries without any link to social security benefits: Syrian Arab Republic.		
Europe		
Pensions	France, Netherlands, Romania	Albania, Bulgaria, Greece, Hungary, Luxembourg, Poland, Portugal, Russian Federation, Slovenia, Spain
Maternity benefits	Hungary, Netherlands, Poland, Portugal, Russian Federation	Albania, Bulgaria, France, Greece, Luxembourg, Romania, Slovenia, Spain
Unemployment benefits	Greece, Luxembourg, Netherlands, Portugal, Romania, Russian Federation, Spain	Albania, Bulgaria, France, Hungary, Poland, ¹ Slovenia

	Link identified	No link identified
Disability benefits	Bulgaria, Greece, Netherlands, Portugal, Romania, Russian Federation, Slovenia	Albania, France, Hungary, Luxembourg, Poland
Special payments/ other	Albania, Bulgaria, France, Greece, Luxembourg, Netherlands, Poland, Portugal, Romania, Spain	Hungary, Russian Federation, Slovenia

Countries without any link to social security benefits:

Austria, Belgium, Cyprus, Czech Republic, Estonia, Finland, Germany, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Malta, Slovakia, Sweden, Switzerland, Turkey, United Kingdom.

Note: ¹ There is a general policy to unlink the amount of social benefits from the minimum wage level.

Source: ILO minimum wage fixing database, 2004.

The link between the minimum wage and poverty becomes even weaker in the third and final notion of “basic need”, that is, when the competent bodies link adjustments to economic growth. This was the prevailing theory in France when the “guaranteed” minimum wage was replaced by the minimum “growth” wage in 1970. It was also the objective behind the implementation of a minimum wage in the Netherlands in 1968. Since the poorest workers are still the target of minimum wage legislation, the relationship between the minimum wage and poverty has not been completely severed. However, the minimum wage is no longer a tool used to ensure that workers are paid wages that are above the poverty line; instead, it becomes a means to enhance their well-being. This approach was also adopted in Mauritius after a period of neutralizing general wage increases by keeping minimum wages low as part of a development strategy aimed at spurring economic growth. From 1985 onwards Mauritius has followed a very different policy. Minimum wage adjustments have been taking into account the country’s strong economic growth and a desire to redistribute new-found wealth to the most at-risk workers. At that stage Mauritius’ minimum wage policy was geared towards combating poverty and distributing income more evenly.

The above examples highlight what is both laudable and ambiguous about the link between the minimum wage and poverty. It is interesting to note that this debate resurfaced prior to the adoption of minimum wage legislation in the United Kingdom. The terms of reference of the Low Pay Commission, responsible for setting up the system, carefully avoided any mention of acceptable minimum living conditions, in other words, of making the minimum wage an instrument to fight poverty. Without going into the details of the underlying tax concerns, the basic position was that attempts to combat poverty called for other methods. The minimum wage was only one component in a battery of measures forming a coherent policy in the fight against poverty amongst workers (Brown, 2002). There should be no contradiction between the level of the minimum wage and the system that provides the subsidies enabling the destitute to live, be they

wage earners or not. This viewpoint is shared by numerous observers who, for example, advocate the use of negative income tax as a basic measure in the fight against poverty, rather than the minimum wage (Burkhauser and Finegan, 1993).

These examples reveal another disadvantage of using the minimum wage to combat poverty: it benefits only wage earners and, moreover, only those working in the formal economy, provided it is applied there. This is clearly a very serious restriction in developing countries, although it has been exaggerated all too often. The wage received by a worker in the formal economy goes towards ensuring that an extended family is provided for; also, the minimum wage can affect wages in the informal economy by creating a national benchmark, as we shall see in Chapter 4. It can also have a direct impact on demand for goods and services coming from the informal economy.

The issue of wages in kind should be mentioned at this stage. Employers sometimes deduct the cost of food and lodging from salaries, particularly from the minimum wage of certain categories of workers, mostly the poorest, such as domestic or agricultural workers. Such practices can obviously be a serious source of exploitation. No more than 30 per cent of countries in our sample have legislative provisions on this issue; of these, only a few oblige employers to pay the full amount of the minimum wage in cash. More frequently, the legislation stipulates that a maximum of 30 per cent of the wage can be paid in kind. As a matter of fact, many legislative texts would need to be revised so as to clarify in-kind payment practices and monitor them more closely.

In conclusion, it is fair to say that the minimum wage plays, or can play, a role in the fight against poverty. However, if it is to play a meaningful role, the minimum wage must be part of an overall policy and should have a small number of achievable aims that do not contradict one another. The tendency is to use the minimum wage for a number of purposes, in both the social and economic field. Indeed, it is often used in the social field to combat wage inequality and discrimination.

2.2.2 Minimum wages and wage inequality

If a rise in the lowest wage rates is not matched by a similar rise in the highest ones, the wage hierarchy will automatically narrow. Increases in the minimum wage can also have this effect. Many countries have used this technique to a greater or lesser extent in order to reduce the wage gap at some stage in their history. The percentage of wage increases may diminish as one moves up the wage scale or there can be a rise in absolute values which, arithmetically, lifts the relative value of the lower wages. This practice can be restricted by social pressure to restore the initial wage hierarchy, even if the legislation of some countries formally forbids indexing actual wages to minimum wage adjustments. Nevertheless, effects can be lessened by the fact that minimum wages tend to concern small enterprises in which most wage structures are generally flat and

where there are few possibilities for wage earners to negotiate across-the-board wage increases.

The minimum wage can also play an active role in combating wage discrimination. In so far as there are more women than men in low-paid jobs, any increase in the minimum wage will have a beneficial effect on them and reduce wage inequality in their favour. This issue will be examined more closely in Chapter 4.

The fact remains that the minimum wage provides a benchmark; the authorities sometimes seek to strengthen this particular role so as to influence wage policy at the enterprise level or, conversely, to weaken it in order to limit its effect on labour costs. The way in which the minimum wage is used is therefore paradoxical, inasmuch as the minimum wage can be required to fulfil contradictory objectives. In particular, conflicts can arise if it is used simultaneously to protect workers' standard of living and provide economic stability. This aspect will be examined in the following paragraphs.

2.3 Minimum wages and economic policy

As we saw in table 4, minimum wage fixing criteria share an interesting characteristic: the vast majority of them are of an economic nature (employment, cost of living, productivity, general economic situation, etc.). What conclusion can we draw from the predominance of economic factors in minimum wage fixing when the primary role of the minimum wage is to provide social protection?

Wages, and in particular minimum wages, are both a cost and revenue. From an economic standpoint the minimum wage can therefore impact on three macroeconomic variables: demand, employment and inflation.

2.3.1 *Minimum wages and overall demand*

If we start our analysis from the revenue point of view, we can see that a rise in the minimum wage will stimulate overall demand in two ways: directly, by increasing the lowest wages, and indirectly, because of the knock-on effect it has on the whole wage hierarchy as the payroll is increased. In this way the minimum wage will have a positive effect on growth, which in turn should result in higher employment, if the increase is non-inflationary. The effect of an increase will be even more marked as it tends to affect low wage earners who have a greater consumption propensity to spend. However, the minimum wage has been used this way in only one or two isolated cases. The substantial minimum wage hike in France following the 1968 strikes, for example, had a very positive effect on growth. The rise was made in direct response to massive wage claims by the workers, but the positive effect that it could have on demand made it far easier for the Government to accept and for the economy to absorb.

2.3.2 Minimum wages and employment

In practice, however, authorities tend to consider minimum wages as production cost. This point of view encourages the negative aspects of minimum wage increases on employment to be emphasized. This link will be examined more closely in Chapter 3. The relationship between minimum wages and employment is the aspect that has been studied most often and is also the most controversial. In view of this, it is surprising to note that although employment is often referred to in the legislation, it is far from being the criterion most frequently cited. Indeed, as already mentioned and as can be seen from table 4, it came in fifth place. There are many reasons for this paradox.

First, it should be noted that the minimum wage was implemented in many countries well before employment and unemployment became major economic and political issues. It is not by chance that many eastern European countries, whose minimum wage legislation is much more recent, often include employment among the relevant criteria.³

Nevertheless, any suggestion that minimum wage increases must be curbed in order to avoid a rise in unemployment is somewhat spurious. Such an argument could be taken as an excuse to fix the minimum wage at a level which would make it meaningless. In Slovenia, the trade unions refute the argument that even a low minimum wage could have a serious effect on the country's textile industry. They maintain that many of the sector's businesses will close down anyway due to competition with developing countries and that this argument cannot be continually invoked to hinder the introduction of a decent minimum wage. A similar idea was put forward by the Low Pay Commission, the body which sets the minimum wage in the United Kingdom, when it pointed out that using low wages as a tool for competitiveness tended to be characteristic of businesses, notably small ones, that have very poor personnel management practices. The question that arises then is not the survival of marginal businesses but whether successful companies can recover the market share lost by the former following an increase in the minimum wage and absorb the workforce made redundant in the process (Brown, 2002).

We will see in Chapter 3, however, that studies into the link between the minimum wage and employment are far from conclusive, but this does not mean that the relevant authorities are not concerned by this question. The Government of the United Kingdom, for example, was keen to ensure that the establishment of a minimum wage should not affect its youth unemployment reduction policy. That is why it introduced reduced rates for young people aged up to 22 years.

Table 6 summarizes the main legal provisions that apply to some categories of workers, including youth. It calls for a number of observations. First of all, slightly less than half of the countries studied (45 out of 101) have implemented a minimum wage for young people. The upper age limit for youth rates tends to be 18 years or less, although some countries set youth rates for workers of 20 or 22 years of age. The United Kingdom is at the top end of this range. Setting a

lower minimum wage for young workers may, at first glance, seem like a discriminatory measure. In fact, some countries (e.g. Paraguay) apply the anti-discrimination principle of equal pay for equal work, with legislation providing that if a young worker carries out the same work as an adult, the adult rate must be paid. Generally, the implementation of a lower minimum wage for young people is justified for practical and policy reasons, which often overlap.

From a practical point of view, it is argued that young workers who have just completed their studies and thus lack professional experience are less productive; consequently, businesses need to invest in training them in order to make them more productive. A lower wage rate provides some compensation for this investment and their lower productivity. If this is the case, it would be logical for the legislation to link any abatement to workers' professional experience rather than their age. This is the case in the Republic of Korea, the United States, France and Guinea-Bissau, where the legislation specifies the maximum period during which a lower wage rate may be applied. In the United States, for example, the reduced rate for workers under 20 years of age may not be applied for more than 90 days. Poland has established a sliding scale for first-time entrants to the labour market with rates increasing over a two-year period regardless of the type of activity they are engaged in. However, most of the legislation that sets one rate for young workers makes no reference to a training period. Only the age of the worker is taken into consideration.

The basis for establishing lower minimum wage rates for apprentices is much clearer. A formal exchange takes place, the apprentice receiving training from the enterprise and in exchange accepting a lower wage that partially finances that training. It is important to note at this point that a reduced minimum wage rate for young workers and specific rates for apprentices are not interchangeable. Countries that have both systems running side by side are as numerous as those that only have either a minimum wage for young workers or legislation specifically targeted at apprentices.

Table 6 Workers receiving reduced minimum wage rates

	Youth	Trainees	Probation period	Disabled
Asia				
Australia	Yes	-	-	-
Bangladesh	Discretion to set reduced rates for juvenile workers (not implemented)	Separate minimum wage rates for trainees and apprentices in EPZs and the garment industry	-	-
Cambodia	-	-	Workers entitled to reduced minimum wage rate during probation period of 1–3 months	-
China	-	-	-	-
Fiji	Reduced minimum wage rates for workers under 18 years of age in the printing, road transport, wholesale and retail, and building, civil and engineering sectors	Minimum wage rates for apprentices in any trade or occupation vary depending on the number of years of apprenticeship completed	-	Worker, employer, or prospective employer may apply for exemption. Rate to be specified in permit
India	Two specific minimum wage rates may be established for workers under 18 years of age	Specific minimum wage rates may be established for apprentices	-	Exemption may be granted. Rate and conditions to be specified in permit
Indonesia	-	-	-	-
Japan	-	Employer may apply for exemption	Employer may apply for exemption	Employer may apply for exemption

	Youth	Trainees	Probation period	Disabled
Republic of Korea	90% of the applicable hourly minimum wage rate for workers under 18 employed less than six months	Employer may apply for exemption	Employer may apply for exemption (three months maximum)	Employer may apply for exemption
Lao People's Democratic Republic	-	-	90% of the applicable minimum wage (two months maximum)	-
Malaysia	In the catering and hotel sector and the shop assistants sector: separate minimum wage rates for workers aged between 14 and 16 and between 16 and 18 years of age	In the shop assistants sector	-	Employer or prospective employer may apply for exemption. Rate to be specified in permit
Nepal	Reduced minimum wage rate set for workers between 14 and 16 years of age	-	-	-
New Zealand	Reduced rate for workers between 16 and 17 years of age	Yes	-	Worker may apply for exemption. Rate to be specified in permit
Pakistan	-	50% of minimum wage during first year of apprenticeship, increasing annually for three years	-	-

Minimum wage fixing criteria

Table 6 (cont'd)

Table 6 (cont'd)

	Youth	Trainees	Probation period	Disabled
Papua New Guinea	75% of minimum wage rate for new entrants to workforce between 16 and 21 years of age	-	-	-
Philippines	-	75% of minimum wage for first six months	-	75% of applicable minimum wage
Singapore	-	-	-	-
Solomon Islands	-	-	-	Worker may apply for exemption. Rate to be specified in permit
Sri Lanka	Minimum wage rates set for children in certain sectors, e.g. tea plantation work	Yes	-	Exemption may be granted. Rate to be specified in permit
Thailand	-	-	-	-
Viet Nam	-	70% of applicable wage	70% of applicable wage	-
Africa				
Algeria	-	15% of minimum wage in the form of a pre-salary paid by the State	-	-
Angola	-	-	-	-
Botswana	-	-	-	Worker or prospective employer may apply for exemption. Rate to be specified in permit

	Youth	Trainees	Probation period	Disabled
Burkina Faso	-	Exempt from minimum wage provisions	-	-
Chad	80% of the relevant minimum wage rate for workers between 14 and 18 years of age	-	-	-
Gabon	-	-	-	-
Ghana	-	Exempt from minimum wage provisions	-	Exemption may be granted
Guinea-Bissau	80% of minimum wage for workers between 16 and 18 years of age 60% of minimum wage for workers younger than 16 years of age for a maximum period of six months	-	-	-
Lesotho	-	Yes, in the textile industry	-	-
Madagascar	-	-	-	-
Mauritius	Reduced minimum wage rates for workers between 15 and 18 years of age in the sugar, livestock, field crop and tea industries	Yes, in certain industries	-	Worker or prospective employer may apply for exemption. Rate to be specified in permit
Morocco	-	Yes	-	-
Mozambique	-	-	-	-

Minimum wage fixing criteria

Table 6 (cont'd)

Table 6 (cont'd)

	Youth	Trainees	Probation period	Disabled
Namibia ²	-	-	-	-
Nigeria	-	-	-	Employer may apply for exemption. Rate to be specified in permit
Sao Tome and Principe	60% for workers between 16 and 18 years of age 50% for workers under 16 years of age	-	-	-
Senegal	-	-	-	-
South Africa	-	Yes, in certain sectors	-	-
Tunisia	85% of minimum wage rate for workers under 18 years of age	-	-	-
Americas				
Argentina	Yes	Yes	-	Disabled workers may be paid a reduced rate
Bahamas	-	-	-	-
Belize	Reduced minimum wage rate for students employed outside school hours or during school holidays	-	-	Worker may apply for exemption. Rate to be specified in permit
Bolivia	-	-	-	-

	Youth	Trainees	Probation period	Disabled
Brazil	-	-	-	-
Canada ³	Ontario and Manitoba Reduced rate for students under 18 years of age employed during school holidays. Applies only in the construction sector in rural areas in Manitoba	-	-	Manitoba Employer may apply for exemption. Rate to be specified in permit
Chile	Reduced rate for workers under 18 years of age	-	-	-
Colombia	-	-	-	-
Costa Rica	50% of minimum wage during first year of employment 75% of minimum wage during second year of employment	-	-	-
Cuba	-	-	-	-
Dominican Republic	-	-	-	-
Ecuador	-	80% of wage paid to an adult for similar work	-	-

Table 6 (cont'd)

Table 6 (cont'd)

	Youth	Trainees	Probation period	Disabled
El Salvador	-	50% of minimum wage during first year of employment 75% of minimum wage during second year of employment	-	-
Guatemala	-	Yes	-	-
Haiti	-	-	-	-
Honduras	-	Minimum wage does not apply to apprentices	-	Exemption may be granted. Rate to be specified in permit
Mexico	-	-	-	-
Nicaragua	-	-	-	-
Panama	-	-	-	-
Paraguay	Not less than 60% of minimum wage	Not less than 60% of minimum wage	-	Reduced rate may apply
Peru	-	-	-	-
Trinidad and Tobago	Students on vacation jobs are exempt	Yes	-	-

	Youth	Trainees	Probation period	Disabled
United States	1. Reduced rate during first 90 days of employment for workers under 20 years of age 2. 85% for full-time students. Permit granted to employer, normally to hire maximum of six full-time students at reduced rate	Yes	-	Exemption may be granted. Rate to be specified in permit
Uruguay	-	-	-	-
Venezuela	Yes	Yes	-	-
Arab States				
Lebanon	Minimum wage does not apply to workers under 20 years of age	-	-	-
Syrian Arab Republic	-	Yes	-	-
Europe				
Albania	-	-	-	-
Austria	Determined by collective agreement	Determined by collective agreement	Determined by collective agreement	-
Belgium	Sliding scale from 70% to 94% of minimum wage rate	-	-	-

Table 6 (cont'd)

Table 6 (cont'd)

	Youth	Trainees	Probation period	Disabled
Bulgaria	-	90% of minimum wage for six months maximum	-	-
Cyprus	-	-	Reduced minimum wage rate for first six months of employment	-
Czech Republic	18–21-year-olds: 90% of minimum wage during first six months of employment 80% of minimum wage for workers aged 18 years or less	-	-	75% of minimum wage if employee receives partial disability pension 50% of minimum wage if employee receives full disability pension
Estonia	-	-	-	-
Finland	Yes, determined by collective agreement	Yes, determined by collective agreement	-	Possibility provided by law
France	Two categories: 90% of minimum wage for workers between 17 and 18 years of age with less than six months' experience; 80% of minimum wage for workers under 17 years of age	Vary from 25% to 78% of the minimum wage depending on trainee's age and type of training undertaken	-	From 35% to 90% of the minimum wage depending on degree of disability, type of workplace and income
Germany	Determined by collective agreement	Determined by collective agreement	Determined by collective agreement	-

	Youth	Trainees	Probation period	Disabled
Greece	-	-	-	-
Hungary	Reduced rates may be established by derogation; however, no derogation has been issued	-	-	Reduced rates may be established by derogation; however, no derogation has been issued
Iceland	Yes, determined by collective agreement	Determined by collective agreement	-	-
Ireland	70% of minimum wage: workers younger than 18 years of age	From 75% up to 90% in three stages, none exceeding 12 months	-	-
Israel	Reduced rate may be set. In practice there is only one minimum wage rate, applicable to workers aged 18 years or over	Yes	-	Minimum wage rates apply to disabled workers in protected undertakings unless regulations have been enacted setting reduced rates
Italy	Determined by collective agreement	Determined by collective agreement	-	-
Latvia	Yes	-	-	-
Lithuania	-	-	-	-
Luxembourg	75% of minimum wage: workers between 15 and 17 years of age 80% of minimum wage: workers between 17 and 18 years of age	-	-	Employer may apply for exemption. Rate to be specified in permit

Table 6 (cont'd)

	Youth	Trainees	Probation period	Disabled
Macedonia, former Yugoslav Republic of	-	-	-	-
Malta	Reduced rates for workers between 17 and 18 years of age, and younger than 17 years of age	-	-	-
Netherlands	30% for workers aged 15 years, rising to 85% for workers aged 22 years	-	-	Employer or worker may apply for exemption. Rate to be specified in permit
Poland	First-time entrants to labour market: 80% of minimum wage during first year of employment; 90% of minimum wage during second year of employment	-	-	-
Portugal	-	80% of minimum wage for a period not exceeding one year	-	Not less than 50% of minimum wage determined according to degree of disability
Romania	-	-	-	-
Russian Federation	-	-	-	-

	Youth	Trainees	Probation period	Disabled
Slovakia	75% of minimum wage for workers between 16 and 18 years of age 50% of minimum wage for workers under 16 years of age	-	-	75% of minimum wage if employee receives partial disability pension 50% of minimum wage if employee receives full disability pension
Slovenia	-	-	-	-
Spain	-	70%, 80% and 90% during first, second and third year of training contract	-	-
Sweden	Yes, level determined by collective agreement	Yes, level determined by collective agreement	-	-
Switzerland	-	-	-	-
Turkey	Yes, under 16 years of age	-	-	-
United Kingdom	Three rates up to 22 years of age	Yes, for apprentices under 26 years of age during first year of apprenticeship	-	-

Notes: ¹ Before enactment of the 2003 Labour Act, minimum wage regulations did not apply to apprentices. In the absence of any specific revocation, it has been assumed this exemption still applies. ² As established in the collective agreement on minimum wages in the agricultural sector. There is no national minimum wage in Namibia.

³ Based on Manitoba and Ontario legislation. Minimum wages are fixed at the provincial level in Canada.

- No legal provisions

Source: ILO minimum wage fixing database, 2004.

High youth unemployment rates generally provide the policy justification for reduced wage rates. Unemployment among young people is due to many factors. Nevertheless, as the case of the United Kingdom illustrates, legislation establishing a reduced minimum wage rate for young workers tends to be based on the hypothesis that employers will be more likely to recruit them if the cost of taking them on is reduced. Measures such as lowering social charges when young workers are recruited may also be implemented, but establishing a rate that is lower than the adult rate can appear to be more symbolic and structural. The effectiveness of this practice will be evaluated in Chapter 3.

The question of youth minimum wage rates illustrates how employment can be introduced as an argument indirectly, via other criteria. Aside from the criteria already referred to, “general economic conditions” – the second most commonly cited criterion after “cost of living” – can easily include considerations such as employment and unemployment. Employment may also be considered within the scope of two other criteria: “capacity of employers to pay” and “productivity”.

2.3.3 Minimum wages and inflation

As we have seen, cost of living is the most frequently cited criterion in minimum wage legislation and the one that is most often compulsory. As already mentioned, legislators initially introduce it in an effort to maintain the purchasing power of the minimum wage. However, the effect is twofold: a minimum wage increase protects the lowest-paid wage earners from inflation but through its impact on wages and public deficits it risks accelerating the inflationary spiral by affecting wage costs and putting pressure on overall demand. This is why governments handle this criterion with great caution. In theory, there should be no link between the minimum wage and wage hierarchy, given that the minimum wage affects only the lowest-paid wage earners. In practice, however, a minimum wage rise affects wages across the board because – and this is a fundamental and universal aspect of the minimum wage – it is considered to be the wage benchmark.

There are as many examples of this benchmark role as there are countries with minimum wages. Until 1994, the Republic of Korea used to adjust its minimum wage in the month of January. Private sector wage negotiations are also held at the beginning of the year. The social partners then took the minimum wage increase as a point of reference which also underpinned general wage increases. To avoid that link, the authorities have moved to September the date on which the minimum wage is adjusted. In doing so, they have adopted the adjustment model used by their Japanese neighbours, a mechanism that allows for the roles to be reversed. The minimum wage is only fixed once the “spring offensive” has ended. In other words, the minimum wage is raised according to the increases in real wages, negotiated in the spring within the private sector. A similar benchmark role has also been noted in Brazil, where up to 20 per cent of workers receive multiples of the minimum wage, depending on their qualification

level (Lemos, 2003). This reference role can also have the opposite effect. The Rwandan authorities, for example, currently in the process of fixing the minimum wage for the first time, are careful not to set the rate too low because some enterprises may lower their wages to bring them in line with the minimum wage.

The impact that the minimum wage can have on wages may explain its role in anti-inflationary policies. It can have a direct effect when there is an indexation clause with the cost of living index. In many countries this formal link has been challenged during periods of high inflation, for instance in Europe in the 1980s when countries such as Denmark, Austria, Belgium, Italy and France modified or even stopped wage indexation altogether. In France, although minimum wage increases continue to be partially index-linked to inflation, the legislation prohibits any reference to the consumer price index or to minimum wage adjustments during wage negotiations.

Of course, this formal ban does not stop the social partners from taking both of these elements into account implicitly. Consequently, an additional indirect effect can be noticed as pressure is applied to retain the initial wage hierarchy, the minimum wage being at the bottom of the wage scale. Thus, a rise in the minimum wage can lead to a higher payroll as a result of the increase in low wages and subsequent dispersion throughout the wage hierarchy. Another factor contributing to higher wage costs is the existence of links between minimum wages and social security benefits in many countries, a link which was examined in table 5 and which we shall revisit later.

In these circumstances, the use of the minimum wage to curb inflation can take two forms. The first is radical, consisting of keeping the minimum wage at the same level until it is so low that it plays barely any role in wage increases. The second, less radical, is aimed at limiting the impact of minimum wage increases. This is done, for example, by raising the minimum wage in line with predicted rather than observed past-year inflation rates in order to avoid transferring the pace of inflation from the previous year to the next. Another possibility is to systematically fix the minimum wage increase below the inflation rate, thus demonstrating the will to curb wage growth. This policy was followed in Brazil until 1995. Before then, adjustments invariably amounted to less than the increase in the cost of living index. The last minimum wage adjustment, in May 2004, was an increase of 8.33 per cent, greater than the inflation rate. This policy shift did not satisfy the trade unions, however, because in terms of purchasing power the minimum wage had fallen behind so much that the recent increases were unable to make up for all the years in which the adjustment had not kept pace with inflation.

Another difficulty that arises in respect of the direct or indirect costs created by minimum wages is their relationship with social security benefits in many countries (see table 5). In Brazil, for instance, this relationship is particularly strong as the minimum wage is the benchmark for retirement, sickness and

unemployment benefits. This explains why the Government was so reluctant to carry out a major re-evaluation of the minimum wage in May 2004 and in particular to implement a huge increase that would allow it to regain its initial purchasing power. Some observers estimated that it would have been necessary to double the minimum wage. Such an increase would have been difficult to envisage given the effect it would have had on wage structure. Even in a less radical form, the rise was constrained to a large extent by its links with many social security benefits.

During periods of high inflation many governments have raised minimum wage rates by less than the inflation rate in the hope that wages and salaries would increase in the same way and that this would slow inflation. What was the outcome of such a policy? What is certain is that in many Latin American countries the value of the minimum wage decreased in real terms over a long period of time, affecting many different types of social revenues. Matters are far less clear when it comes to inflation. Households, businesses, institutions – in short, all the economic stakeholders – have viewed successive minimum wage increases as a sign that prices were rising, and as a result they used this signal as the basis for their own wage negotiations. A rise in the minimum wage led to an increase in wages across the board; in turn, enterprises adjusted their prices to reflect the increase, and so on. The system thus fuelled inflation.

By furnishing the reference point for many forms of social protection the minimum wage fulfils its role of providing support for at-risk sections of the population. On the other hand, this makes it increasingly inflexible and is often the reason why its rates are adjusted so infrequently.

Table 7 summarizes statutory provisions regarding the frequency of adjustments. It shows that legislators have generally been very cautious, as only 23 per cent of the countries included in the database require that rates be reviewed on an annual or biennial basis. Of course, an obligation to review the minimum wage does not necessarily mean that rates will in fact be raised, but it considerably boosts the likelihood of an increase. This explains why a government that has decided not to raise minimum wage rates for one reason or another tends to avoid holding many meetings concerning adjustments. However, a country that waits too long between enacting increases runs the risk of being faced with demands that could have serious effects on the economy if accepted or lead to social protests if rejected. In the alternative, the government can render the minimum wage meaningless, thereby in effect doing away with a proven social and economic tool. It is interesting to note that many countries have no statutory provisions on the frequency of adjustment, but in practice increase rates annually.

This brief review of the way in which minimum wage fixing criteria are used gives us a greater insight into the role they can play and the advantages and disadvantages of each criterion. The practical effects of these policies will be examined in Chapters 3 and 4.

Table 7 Frequency of adjustment

Annual adjustment	Every two or more years	Period not stipulated
Asia		
Indonesia, Republic of Korea, New Zealand, Thailand	Bangladesh, China, India, Pakistan	Australia, ¹ Bangladesh, ² Cambodia, Fiji, Japan, ³ Lao People's Democratic Republic, Malaysia, Nepal, Papua New Guinea, Philippines, Sao Tome and Principe, Senegal, Solomon Islands, Sri Lanka, Viet Nam
Africa		
Lesotho, Mauritius, Namibia, South Africa	Gabon	Algeria, Angola, Botswana, ³ Burkina Faso, Chad, Ghana, Guinea-Bissau, Madagascar, Morocco, Mozambique, Nigeria, Tunisia
Americas		
Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Venezuela	Brazil, Haiti, ⁶ Panama, Paraguay	Argentina, Bahamas, Belize, Bolivia, Canada, Chile, Cuba, Dominican Republic, El Salvador, Nicaragua, Peru, Trinidad and Tobago, United States, Uruguay
Arab States		
Syrian Arab Republic		Lebanon
Europe		
Czech Republic, France, Israel, Poland, Portugal, Slovakia, Spain	Belgium, Greece, ⁸ Luxembourg, Netherlands, Slovenia, Turkey ⁹	Albania, Austria, Bulgaria, Cyprus, ³ Estonia, Finland, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, ³ Romania, Russian Federation, Sweden, United Kingdom

Notes: ¹ Upon parties' application to the Federal Award. In practice, yearly. ² Agricultural workers, workers in EPZs. ³ No legal time limit: in practice, yearly adjustment. ⁴ Minimum wage rates should not be adjusted in the 12 months following a revision. ⁵ Agricultural sector. ⁶ Should be raised when the official inflation rate increases by at least 10 per cent in one tax year. ⁷ Manitoba and Ontario. ⁸ As determined by collective agreement, in practice, every two years. ⁹ Biennial adjustment; in practice, however, rates have been adjusted every 6–12 months.

Source: ILO minimum wage fixing database, 2004.

Notes

¹ The Minimum Wage Fixing Recommendation, 1970 (No. 135) sets forth the criteria to be taken into account and provides a detailed explanation of Article 3 of the Minimum Wage Fixing Convention with special reference to developing countries, 1970 (No. 131). The criteria in question are the following: “(a) the needs of workers and their families; (b) the general level of wages in the country; (c) the cost of living and changes therein; (d) social security benefits; (e) the relative living standards of other social groups; and (f) economic factors, including the requirements of economic development, levels of productivity and the desirability of attaining and maintaining a high level of employment.”

² The fact that the minimum wage provides the basis not only for social security benefits but also for social security contributions can have the opposite effect. A government faced with persistent social security account deficits may be tempted to increase the minimum wage in order to reduce the deficit if contributions are greater than payments.

³ Employment is also one of the criteria cited in the Minimum Wage Fixing Convention, 1970 (No. 131), which was recently ratified by some of these countries.

Since the 1980s and the return of high unemployment in industrialized countries, the vast majority of studies on the effects of the minimum wage have concentrated on the link between the minimum wage and the level of employment. A small subset of them has looked at the impact of the minimum wage on the living standards of workers and of the entire population, but there is scant literature on its effect on income policy in general, through its links with social incomes. Although, as we saw in Chapter 2, in many countries there is a persistent link between the minimum wage and the level of social security benefits, such as maternity and old-age benefits, research has yet to turn to the question of how minimum wage policies influence public deficit and inflation, not to mention their repercussions on the targeted populations. Even during episodes of hyperinflation, the extent to which the minimum wage affects inflation is not clear and thus would warrant a review.

This chapter will therefore focus on the effects of the minimum wage on employment, on the methodologies used to analyse this question and on the advantages and drawbacks of various methodological approaches. As explained in Chapter 2, the myth that a minimum wage creates unemployment, which went virtually uncontested until the early 1990s, was shattered by several studies showing that it had little or no effect on employment, or actually had a positive effect on it. This conclusion is valid for industrialized and developing countries alike.¹ We will also explain how the success of a minimum wage policy has been measured almost exclusively in terms of employment rates, whereas other equally important variables contribute to its success in broader terms. Finally, we will draw attention to the effects of the minimum wage on the structure of employment rather than its level, as well as its impact on the informal economy.

It would be impossible to cover within the framework of this book the many studies written on the effect of the minimum wage on employment, or even to propose a representative sample.² Our aim here is to present the different methodological trends and the main findings of the literature on the minimum

wage and employment, both in industrialized and developing countries, using a few exemplary studies.

3.1 Measuring employment and the minimum wage

There are various methods to measure the effect of the minimum wage on employment. They are usually based on the estimation of equations. We will begin by defining the variables of these equations, first and foremost the two key variables, employment and the minimum wage.

3.1.1 *Employment*

Two common measures of employment are used to estimate the effect of the minimum wage: aggregate employment and employment of the target group.

Aggregate employment

By definition, the minimum wage affects labour costs of minimum wage earners. It is often useful to measure the impact of a minimum wage increase on the group of workers whose earnings tend to cluster around the minimum wage, for example young workers or workers in the manufacturing sector. In other cases, either because of a lack of data on the breakdown of employment by age or because the minimum wage affects a large number of workers, total (or aggregate) employment is considered.

Either way, employment is measured here in relative terms so as to neutralize the demographic effect with respect to the impact of a minimum wage increase on employment: the variable in question is defined as the ratio of employment (employment of youth or aggregate employment) to the working age population (often defined as the 15–59 or 15–64 ranges), sometimes with adjustments according to sex. The benefit of using the ratio of employment of a particular demographic category to a given corresponding population is that employment rate variations arising from a variety of demographic factors, as opposed to being a function of the minimum wage, are partly eliminated.

Employment of the target group

The target group is composed of workers whose fixed wage lies somewhere between the old minimum wage and the new one. The idea is to observe the employment trajectory of the group whose wages are directly affected by the minimum wage. As far as the methodology is concerned, it consists of estimating the probability that the target group will lose their jobs after a rise in the minimum wage.

3.1.2 *Minimum wage*

Over time, the equations modelled by researchers have become increasingly refined and have used different notions of minimum wage. The most common formats include the minimum wage increase, the ratio of the minimum wage to the average wage, and the ratio of the minimum wage to the median wage.

A simple concept of the minimum wage

As an empirical tool, the minimum wage is quite flexible. It can be represented by its increase, in either gross or net terms, with premiums or without, on an hourly or a monthly basis. These various measures are well able to capture fluctuations (and, more particularly, increases) in the minimum wage. But the weakness of defining the minimum wage in this way is that it fails to differentiate between a rise in a high minimum wage and a low minimum wage. Since there are good reasons to believe that the effect on employment is not independent of the level of the minimum wage, a second measure is suggested: the ratio of the minimum wage to the average wage.

The minimum wage/average wage ratio, corrected for the percentage of workers covered by the scheme

The concept is twofold. First, we consider that the minimum wage can create unemployment if it increases the cost of unskilled labour (itself related to the minimum wage) relative to the cost of skilled labour. This relative increase could cause a replacement of unskilled workers by skilled workers or by capital. The variable that represents the minimum wage ought to indicate that the minimum wage augments the cost of unskilled labour in relation to skilled labour. For this reason, the ratio of the minimum wage to the average wage is frequently used. It is also generally considered that the average wage is an indicator of average productivity, another reason why this ratio is of interest.

Second, the potential effect of the minimum wage on employment is limited to workers who have lost their jobs or have not been able to be hired specifically due to the application of a minimum wage. The effect of the minimum wage is therefore limited to sectors covered by the legislation, the so-called coverage rate. This indicator would not be able to explain, for example, the dynamics of unemployment in the agricultural sector if the minimum wage were not applicable in that sector.

To give an example, the variable representing the minimum wage could be the following: minimum wage/average wage of blue-collar workers (or average wage of manufacturing workers or of urban workers) multiplied by the coverage rate of the minimum wage, where the coverage rate is the percentage of the labour force employed in sectors where the minimum wage is applicable.

If the minimum wage is determined by sector, the variable “minimum wage” is calculated for each sector. For example, if there are two different minima for two different sectors, the variable “minimum wage” becomes: minimum wage

of the sector/unskilled labour wage of the sector, multiplied by the share of total employment that is accounted for by the sector. We then take the weighted average of these two variables.

If the minimum wage is applicable on a national scale or if data are lacking, we will often use the ratio of the minimum monthly/hourly wage, gross or net, to the total average wage or to the manufacturing or urban wage. An example of estimating the minimum wage when there are multiple rates, including the case of regional minimum wages, is given in section 4.2.1 below (footnote 1).

The ratio of the minimum wage to the median wage

The median wage represents the wage at which the population of workers is equally divided: half earn more and half earn less than the median. Why is this variable of interest, as opposed to simply focusing on the ratio of the minimum wage to the average wage? One reason is that the average is a variable which is very susceptible to a concentration of extreme values, or outliers: a few high (or low) salaries are enough to have a very significant impact on the average. This is not the case for the median, which is more sensitive to sample size than to extreme values. As a result, the average wage is a good indicator of the general level of wages in countries where wage inequality is rather low. In countries where there is a large dispersion (high inequality), however, it is preferable to use the median wage.

3.2 Conventional methods of analysing time series

3.2.1 *Basic hypothesis*

The older forms of time series analysis were based on the classical model of labour supply and demand. In this model the labour supply (that is, the number of workers employed, plus those without a job who are seeking employment) depends on the wages offered by firms. At the same time, the demand for labour by firms also depends on the wage: firms are prepared to hire a relatively large number of workers at a low wage and fewer at higher wages.

We hypothesize that at any given point in time the employment rate depends on three factors: economic activity that determines the demand for labour, labour supply and the minimum wage.

In order to isolate the effect of the minimum wage on employment, we need to neutralize the influences of economic activity and labour supply, as shown below.

Labour supply

Labour supply is measured as the sum of workers currently employed or those who would like to work (at the given market conditions) and who are available for hire. It can be estimated as the ratio of working age population to the total

population.

The behavioural patterns that affect the probability of holding or seeking a job are often gender sensitive for various reasons (fertility, childcare facilities, discrimination, etc.). The impact of the minimum wage on employment should be assessed separately for men and for women so as not to ascribe to changes in the minimum wage any employment variations which are actually partly due to the market entry and exit of women.

Economic activity

Fluctuations in economic activity are captured by the unemployment rate of adult males or by the gross national product (GNP), but not by the unemployment rate of women, since female unemployment depends on other factors besides economic activity and is inherently unstable. In developing countries, where the unemployment benefit system is weakly developed, men who are unable to find work in the formal economy have to accept an informal economy job or rely on income from other members of the household. As a result, unemployment rates for men might not accurately represent the level of economic activity in developing countries; it might be better to use GNP instead.

Summary of required data

To estimate the simplest version of this model one must be able to obtain annual time series on employment, total working age population, economic activity, the minimum wage, the average unskilled labour wage, labour supply, and the coverage rate of the minimum wage. It is important to obtain data over several periods in order to ensure a certain degree of variation in employment and the minimum wage (a minimum of ten years' worth of annual observations is required for the results of the regression to be valid). It is also necessary that the data be disaggregated by sex, because men and women have different behaviours as regards labour supply. If it is possible to obtain data in higher-frequency series, whether quarterly or monthly, one can also estimate the impact of the minimum wage on quarterly employment. If this is the case it is not necessary to have such a long time series in terms of years, so long as the number of observations exceeds ten. However, it will be necessary to seasonally adjust the data, particularly in respect of youth employment, which displays strong seasonal trends.

Example of an equation

In this type of model, the equation takes the following form:

$$\ln(\text{EMP/POP})_t = \beta_1 \ln(\text{MINWAGE/AVERAGEWAGE})_t + \beta_2 \ln(\text{REALGNP})_t + \beta_3 \text{TREND} + e$$

where EMP/POP represents the ratio of the employment rate to the working age population at time t , MINWAGE and AVERAGEWAGE are respectively the legal minimum wage and the average wage in national currency, REALGNP is

real GNP at time t , and TREND captures technological progress, which can have an impact on manufacturing hires. Both REALGNP and TREND act as indicators of economic activity. β_1 , β_2 and β_3 are the coefficients to be estimated.

All variables are expressed in log form, which facilitates statistical analysis, since the error term ϵ thereby acquires certain interesting properties.

Let us consider the following equation estimated for Colombia (Bell, 1997), in which statistically significant coefficients are followed by an asterisk:

$$\text{Colombia 1962-90: } \ln(\text{EMP/POP}) = -0.337^* \ln(\text{MINWAGE/} \\ \text{AVERAGEWAGE}) + 0.252^* \ln(\text{REALGNP}) + 0.028 \text{ TREND}$$

The coefficient of 0.252 attributed to GNP indicates the positive impact of economic growth on employment creation, independently of the other variables retained. Likewise, the coefficient of -0.337 on the ratio of the minimum wage (see section 3.1.2) variable suggests that there is a statistically significant negative relationship between a minimum wage increase and employment rates.

Variations

Youth. If one seeks to explain the impact of the minimum wage on youth employment, labour supply will be measured by the share of youth in the population. We will also correct for seasonal variations in employment with a variable that will capture this effect. It is well known that youth employment is highly seasonal. To the extent that the minimum wage may affect the level of education reached by a cohort of youth, we will introduce a variable to control for any such effects.

Women. It is common practice to estimate the impact of the minimum wage on employment separately for men and women. In addition to the factors mentioned above, female employment depends on variables related to family size, structure and income, as well as on the availability of childcare.

3.2.2 Some examples of the results obtained

Three examples are presented in Table 8.

Based on their survey of the literature, Brown, Gilroy and Kohen (1982) conclude that in the United States, a 10 per cent increase in the minimum wage reduced adolescent employment by 1 to 3 per cent on average over the period 1954–80.

The minimum wage has apparently had a less negative effect on adolescent employment in more recent years, as suggested by several studies (e.g. Card and Krueger, 1995). Using the same method, these authors estimate that each 10 per cent increase in the minimum wage reduces youth employment by 0.76 per cent, a figure lower than that obtained from older data. This result is not statistically significant from zero.

Table 8 Impact on employment of a 10 per cent increase in the minimum wage, selected countries

Author	Country	Period	Group	Results
Brown, Gilroy and Kohen (1982)	United States	1954–80	Adolescents	From -1 to -3%
Card and Krueger (1995)	United States	1954–93	Adolescents	-0.76% (not significant)
Rama (1996)	Indonesia	1988–95	Urban employment	From -0.14 to -0.25% (not at all significant)
			Manufacturing employment (large firms)	+0.75% (not significant)
			Idem (small firms)	-6.4% (not significant)

Two explanations can be offered for this difference in magnitude, but it is difficult to disentangle them. First, the effect of the minimum wage on employment in the United States has perhaps diminished in recent years because the minimum wage is lower (in terms of the average wage). Second, firms are perhaps better able to adjust to minimum wage increases, compensating for them through higher productivity, simply because their industrial structures (access to technology, human resources management, etc.) enable them to marshal their available resources more effectively and flexibly.

In Indonesia, a 10 per cent increase in the minimum wage was estimated to reduce urban wage employment by less than a quarter of a percentage point (<0.25 per cent), and more so in small firms (Rama, 1996).

3.2.3 Problems inherent in these methods

Time series analysis poses several difficulties. It assumes that only economic activity, the minimum wage and the supply of labour determine the employment of workers earning the minimum wage. However, there are other factors that vary with time (production technology, terms of trade and exchange rates) and could also have an impact on employment, but are not taken into account. In addition, time series complicate the econometrics: stationarity, endogeneity, seasonal variations and insufficient dispersion in the minimum wage over time are challenges that do not arise in simple cross-section regressions, but that time series analysis must overcome. Time series models are also very sensitive to economic activity fluctuations and to the specification of the model, i.e. including

or excluding time series variables related to the economic activity.

Non-stationarity

The problem of non-stationarity arises when one tries to explain a variable across time, whereas its value at time t depends to a large extent on past values. This is the case of most economic variables which are largely inert. For example, the estimated equation given above by way of example includes the term $\ln(\text{EMP}/\text{POP})_t$. Let us take the example of Botswana. The number of hired workers in 2001 (270,600) is essentially “explained” by the fact that the previous year the number of hired workers was 265,300. Indeed, the level of employment in a given year very much depends on the prevailing level of employment in the previous year, while economic growth, the number of new entrants into the labour force, labour costs, etc., account for only a small fraction of the variation in employment levels. In other words, there is little variation left to be explained by the minimum wage. As a result, it does not help much to explain a variable with its lagged value(s). It is therefore necessary to neutralize the effect of temporal dependence and transform the series into a stationary times series, i.e. ensuring that a variable’s expected (or average) value is not time-dependent. There are several ways to do this. Some of them are valid only when strict conditions are applied, such as a large sample size, and others solve the problem by differencing, so that the regression equation is no longer expressed in level terms but rather in growth terms (see the box at the end of this section for an example).

The fact that variables are contemporaneous

A minimum wage increase on a given date could affect the level of employment on that date, but also at a later time. Small firms especially are hesitant to lay off workers in response to a rise in production costs since their productive capacity would suffer as a result. On the other hand, higher labour cost could lead them to put off creating new jobs or to leave unfilled any posts left vacant by workers going into retirement. The impact of the minimum wage on employment can therefore be delayed.

This interpretation is reflected in the reaction of a sample of Hungarian workers who were dismissed during a period marked by a substantial rise in the minimum wage (+84.5 per cent in real terms between January 2000 and January 2002). Indeed, few of them made the link between their ill fortune and the increased minimum wage (Kertesi and Köllő, 2002). It should be kept in mind that we are not arguing that minimum wage policies do not cause absolute losses of employment, but that they could be responsible only for a limited number of terminations.

In order to circumvent this problem, we take into account the impact of the previous year’s minimum wage on the employment level of the current year. Yet the numerous studies estimating this effect of the minimum wage on the employment rate point to a rather small impact. The lagged effect is certainly

smaller in magnitude than the contemporaneous effect (except as shown in Bell, 1995 and 1997).

Endogeneity

Time series analysis assumes that each year the level of employment depends on variables that are independent of each other. It is possible that in certain countries minimum wage adjustments coincide with fluctuations in the other variables affecting the employment rate (as in the case of GDP growth, for example, whether in upswings or downturns). From time to time, the minimum wage is raised following an increase in the employment level. In cases such as these, it may be that the explanatory variables co-vary and are thus not independent of each other. If this is the case, it will be impossible to estimate the impact of the minimum wage on employment.

As seen in table 4, in a small minority of countries (Central and Latin America, the United States and several African countries) the legislation does not lay down any criteria for minimum wage adjustment. In most countries such adjustments take inflation into account, as well as other variables, such as the employment rate. In light of this, the argument that the minimum wage is exogenously determined, independently of the employment level, labour demand and so on, is not credible.

Moreover, variations in the average wage (which in several countries is one of the key variables for determining a rise in the minimum wage) can also contribute to the problem of endogeneity, as the ratio of the minimum wage to the average wage captures not only variations in the minimum wage but also those in the average wage. The average wage can also depend on economic activity and labour supply. It is therefore unlikely that explanatory variables are independent.

Seasonality

Most variables used in time series suffer from seasonality. Youth employment is a typical example, and this group of workers is particularly vulnerable to changes in the minimum wage. One can hardly consider valid the results of a regression which fails to account for seasonality, particularly in the case of youth employment.

Changing working hours

Until fairly recently it was common to estimate the impact of the minimum wage on the level of employment or on the probability of retaining one's job. Partly because of the scarcity of data on the number of hours worked, earlier studies ignored the possibility that in response to rising labour costs the firms might change shifts or working days as a substitute for lay-offs. It is likely, however, that changes in the minimum wage have an effect on the number of hours worked. Yet whether working hours increase or decrease following a rise in the minimum

wage remains unclear. A recent case study on Brazil suggests that Brazilian entrepreneurs demand longer working schedules to compensate for minimum wage increases (Lemos, 2003). For their part, Strobl and Walsh (2004) estimate that the introduction of a statutory minimum wage in Trinidad and Tobago in 1998 increased by 6.5 per cent the probability of minimum wage workers involuntarily working part time.

There is no doubt that the impact of the minimum wage depends on the number of hours worked previously (Strobl and Walsh, 2004). It is also likely that the effect varies according to different population groups as well as existing legislation on working time and the minimum wage.

Insufficient variation in the minimum wage across time

The minimum wage often does not vary sufficiently over time to permit the study of its impact on employment rates.

3.2.4 New methods of analysing macroeconomic time series

New methods have been introduced to mitigate the negative impact on statistical analysis brought about by seasonality and non-stationarity. The new techniques are more precise in statistical terms, yet they analyse the same kinds of data and are used to estimate the same basic equation. Bernstein and Schmitt (1998) demonstrate their effectiveness by applying them to a dataset used by Brown, Gilroy and Kohen in their 1982 study and covering the same period, 1954–79. Using the same data and the same regression model, Bernstein and Schmitt reach different results, as shown in table 9.

The older econometric method showed that between 1954 and 1979 a 10 per cent rise in the minimum wage lowered the employment rate among adolescents by almost 1 per cent (0.95 per cent). Studies that use newer methodology – more rigorous statistical analyses that take into account both seasonality and non-stationarity – effectively demonstrate that effects previously attributed to explanatory variables such as the minimum wage are largely accounted for by seasonal variations and non-stationarity: in fact, a 10 per cent increase in the minimum wage is associated with no more than a 0.5 per cent fall in the employment rate of adolescents, a figure which is statistically insignificant.

Table 9 Impact of a 10 per cent increase in the minimum wage on adolescent employment (in %), United States, 1954–79

Methodology	Results
Classical times series analysis	-0.95
Time series analysis controlling for seasonality and satisfying the condition of stationarity	-0.5 (not significant)

3.3 Comparing states or provinces, countries, individuals and firms across time

The idea here is to compare employment across provinces or states, countries and firms and between individuals at times when the level of the minimum wage varies. The advantage of such an approach is that by disaggregating the data, several ratios of the minimum wage to the average wage across firms and countries become available, which facilitates the analysis. As we have seen, it is difficult to estimate the impact of the minimum wage when it varies little over time. Several derivatives of this method have been successfully exploited, including those that compare employment rates across states or provinces, countries and firms, and those which compare individual work histories.

3.3.1 Comparisons across states or provinces and across countries

It is useful to compare the employment rate of workers earning the minimum wage (including young workers or unskilled labour) or just above across countries and across states or provinces within a federal State. These types of comparative studies rely however on the assumption that the employment rate across countries or states is affected in a similar way by other variables such as commodity price shocks, labour supply and economic growth.

By controlling the effect of these other variables which could affect employment, one can obtain a pure minimum wage effect. Thus, if a rise in the minimum wage is followed by a falling employment rate, it is likely that the job losses resulting from this increase will be greater in regions where there are relatively more workers earning around the minimum wage. These comparative analyses are perhaps more useful than the aggregated analysis discussed above, but they require data on the distribution of salaries and employment on a disaggregated level that are not always easily available.

A good example of such a comparative analysis is the case study by the OECD (1998) of the impact on employment of a 10 per cent minimum wage rise in nine countries. Its findings are summarized in table 10.

The dataset used covers the period 1975–96 and is broken down into various cohorts of workers. The results show that a 10 per cent rise in the

Table 10 Impact on employment of a 10 per cent rise in the minimum wage (by age), selected countries

Author	Countries	Period	Results
OECD (1998)	Belgium, Canada, France, Greece, Japan, Netherlands, Portugal, Spain, United States	1975–96	Adults (25–54): no impact Youth (20–24): impact not significantly different from zero Adolescents (14–19): -2/-4%

minimum wage has no employment impact for the youth (20–24) and adult cohorts and that only the adolescent cohort is affected, suffering a statistically significant 2 to 4 per cent drop in employment.

The findings suggest that, contrary to what one would normally expect, the negative impact of minimum wage increases on employment is not greater in countries where the ratio of the minimum wage to the average wage is highest. Hence a substantial increase could damage employment, rather than a small increase in a high minimum wage in relative terms.

3.3.2 Analysis of individual panel data: Comparison of employment histories

The idea here is to use the revaluation of the minimum wage across time to measure its effect on employment, the target group for measuring the employment rate being workers who earn an amount between the old and the new minimum wage. We compare the probability of being a worker in the target group with that of being a worker in other groups, *ceteris paribus*, after a rise in the minimum wage. Table 11 presents some conclusions from several studies.

The study on Estonia indicates that during a period when the minimum wage doubled (1995–2000) the number of workers earning the minimum wage fell by 4.8 per cent. In Trinidad and Tobago, when a statutory minimum wage was introduced, replacing the earlier occupation-based wage scale, the employment of workers earning the minimum wage fell by 9 per cent for male and 2.3 per cent for female workers. One source of bias introduced by this method is that it

Table 11 Impact of a minimum wage rise on the employment of the target group (in %), selected countries

Author	Country	Increase (% real)	Results
Hinnosaar and Rõõm (2003)	Estonia (1995–2000)	95.5	-4.8
Yuen (2003)	Canada (1988–90)	8.4	-6 (16–19 years old) -10 (20–24 years old)
Strobl and Walsh (2003)	Trinidad and Tobago (1996–98)	20–30 ¹	-9 (men) -2.3 (women)
Currie and Fallick (1996)	United States (1979–87)	7 in 1980 8 in 1981	-3

Note: ¹ Strictly speaking there is no increase in the minimum wage since a new statutory minimum wage system was introduced in Trinidad and Tobago in early 1998, replacing an occupation-based salary scale. With that scale as the basis one can make only a very rough estimate of the impact of introducing a minimum wage in terms of wage increases.

leads one to attribute higher employment losses to minimum wage increases than if time series analysis had been used, since it measures the impact on employment of the target group which is the most vulnerable to variations in the minimum wage. Evidently, the impact on aggregate employment will be considerably lower. Yet the advantage of such an approach is that it highlights the problems associated with adjustments to the minimum wage for those population groups that are the most exposed and which, in principle, ought to benefit the most.

While the newer approaches are clearly an improvement on the more traditional methods, they pose a number of problems, the main one being heterogeneity in the groups of workers used for comparative analyses.

Problems associated with the new approaches

Like the classical methods, the new approaches do not mitigate the possibility of endogeneity arising between the minimum wage and the other variables in the equation. Factors such as GNP or the level of employment can influence the values taken on by the minimum wage variable. Yet endogeneity is not the only difficulty that arises with the new methods. Another problem is heterogeneity of the groups whose employment is compared with that of the target group. Naturally, statistical analyses using these new approaches control for heterogeneity, but they can never fully cancel out its effects.

The introduction of panel methods initially sparked hopes that a reliable method for measuring the impact of the minimum wage had finally been found. These hopes were however tempered by the problems associated with heterogeneity. The new methods compare employment trends for workers who are affected by the minimum wage increase (i.e. workers whose wages lie between the old and the new minimum wage) and those who are not. Yet it may also be that these two groups of workers exhibit systematic, but non-observable, differences, and that these are the proximate cause governing the probability of having a job. Indeed, since these methods rely on a comparison of the employment rates of well-paid versus low-paid workers following a minimum wage increase, they amount to a comparison of the evolution of the employment rates between skilled and unskilled workers. We should bear in mind, however, that the employment rate of unskilled workers in industrialized countries faces a secular downward trend due less to the minimum wage than to factors such as technological progress and international competition. Therefore, it is likely that the variations in employment of this group are mainly due to factors other than the minimum wage.

Yuen (2003) provides one of the best examples of the limits inherent in this method. In order to avoid comparing the employment rate of workers earning high salaries with that of workers with low earnings, Yuen relies on a specificity of Canadian legislation which sets the minimum wage at the provincial level. This enables the author to compare the employment rate of minimum wage earners in a province where the minimum wage was recently raised with that of

workers in the minimum wage category working in a province where there was no such change. The result of this analysis shows that the minimum wage does not have a significant impact on the *average* probability of a low-skilled worker to be unemployed.

Yuen's study goes further, yielding a clear negative effect on employment, but only for a specific sub-group of low-wage workers. In Canada, then, increases in the minimum wage diminished employment prospects for low-wage workers whose productivity and qualifications are the lowest and who have little chance of finding better-paid jobs. On the other hand, such increases are associated with improving employment prospects for other categories of low-paid workers for whom career advancement opportunities are more readily accessible. Examples of workers falling into this category are students or workers temporarily "trapped" in low-paying jobs, but whose skills offer them better employment prospects in the future.

As we have seen, minimum wage rises do not always have the same impact on the level of employment of workers in the minimum wage category. They can lead to a higher employment rate for certain categories of the population and to job losses for others, in particular the most vulnerable categories such as wage earners whose level of productivity and skills are very low. It should be pointed out that keeping the minimum wage at a very low level is not a viable strategy to protect the employment level of these categories; one should rather opt for targeted policies, in particular training.

Such a disparity in outcomes is primarily due to the fact that the low-wage workers' group affected by minimum wage increases is highly heterogeneous: it comprises students, very low-skilled workers and workers with higher skills who are temporarily in low-paying jobs.

One final drawback of this method is that it is only capable of considering short-term (contemporaneous) effects as opposed to time series analysis.

3.3.3 Analysis of panel data for firms

An original article by Kertesi and Köllö (2002), inspired by the doubling of the minimum wage in Hungary between 1999 and 2002, examines the impact of the minimum wage on employment by estimating labour demand. Based on firm-level production cost data, the analysis focuses on a comparison of the demand for labour both before and after a minimum wage increase. Kertesi and Köllö estimate labour demand equations for several categories of qualifications using the following explanatory variables (1992–99): wages, capital and social security contributions. This method enables the authors to disaggregate the demand for labour according to different qualification and salary levels. Their results indicate that a 60 per cent rise in the minimum wage in 2001 was followed by a 4 per cent fall in the employment rate, which suggests that in general a relatively large increase in the minimum wage can have a significant adverse impact on employment. Nevertheless, this method may overestimate the true impact of

Table 12 Impact of the minimum wage on the demand for labour, selected countries

Author	Country	Period	Fluctuations in the minimum wage (real)	Impact on employment
Kertesi and Köllö (2002)	Hungary	1992–99	+60%	-4%
Bell (1995)	Mexico	1985–90	-32 %	No impact on skilled or unskilled labour
	Colombia	1981–87	+3.8%	From -2 to -12% (low-paid unskilled labour)

large minimum wage increases. The impact can actually be lower because some employers in eastern Europe do not comply with the new regulations on the minimum wage.

Bell (1995) used a similar approach and applied it to Colombia and Mexico. Table 12 sets out the findings of both studies.

Problems inherent in these methods

The imperfect nature of such analyses amounts to a warning that the results they generate must be treated with caution. To begin with, estimating labour demand equations is tantamount to assuming the perfect elasticity of labour supply. Yet in the real world it is very difficult for entrepreneurs to make rapid (and even medium-term) adjustments in their demand for labour according to the variations in labour costs associated with upward or downward revisions of the minimum wage. Another critique is that the study on Hungary is purely static, meaning that the model implicitly assumes that the demand for labour remains stable both before and after a minimum wage increase. In other words, the assumption is that work organization does not change in response to a rise in the minimum wage.

In addition, because the available data are firm-level and not individual, worker-level data, the explanatory variable “minimum wage” is equivalent to the ratio of the minimum wage to the average wage in a given firm. Therefore, it is the variation in this ratio which explains employment changes. But it is evident that the average wage varies enormously across firms (influenced by variables such as the sector in which they operate, their size, etc.), whereas the minimum wage varies little or not at all. In other words, most of the variation in the aforementioned ratio will be accounted for by the variation in the average wage across firms, instead of the minimum wage variation. It goes without saying that the results generated by such a regression must be interpreted with caution. This problem is partly solved in Bell’s 1995 study as the minimum wage is fixed on a regional basis in Mexico and on an urban/rural basis in Colombia. Minimum wage variation is therefore obviously more pronounced in these two countries

and accounts for a larger share of variations in the ratio of minimum wage to average wage than in Kertesi and Köllö's study on Hungary.

Yet Bell's study leaves several questions unanswered (see table 12). First, Mexico experienced a dramatic fall in the minimum wage between 1985 and 1990 (32 per cent in real terms, or 26 per cent in the ratio of the minimum wage to the average wage) but, contrary to the expected outcome, this had little tangible impact on employment. Second, in the case of Colombia, one cannot determine with any precision the actual impact on employment, as the estimates of the fall range from 2 to 12 per cent.

Estimating the impact of the minimum wage on employment with small datasets

Measuring the variables

One very important step in the estimation process is to ensure the quality of the dataset as well as the robustness of the various definitions given to variables, thus making sure that minor changes in definition or measurement of a certain variable do not yield significantly different results in terms of estimating the impact of minimum wage on employment. Next comes analysing the time series properties of the dataset, that is, their evolution over time: how do employment, GNP, wages and so on vary over time? Are there structural breaks in the time series? Do these breaks represent economic or social shocks (exchange rate fluctuations, strikes, etc.)? After having checked that the various hypotheses on which the equation is founded are valid, one must also ensure that the explanatory variables are not too highly correlated. If these conditions are satisfied, one can run the regression with a least squares estimation before analysing the time series.

Number of observations

If the time series are not long, it is virtually useless to attempt stationarity tests, since they are based on the assumption of an infinitely large sample. An alternative method is to measure the degree to which the value of a variable at time t can be explained by its value at time $t-1$ (what is called auto-regression of degree 1, or AR(1)). To give an example, if the dependent variable is employment, then

$$\text{AR}(1) : (\text{EMP})_t = a + b (\text{EMP})_{t-1} + e$$

where Emp represents the level of employment, determines to what extent employment can be explained by its lagged value.

If the coefficient on employment (b) has a high value (say, above 0.9), the employment variable is determined to a large extent by its previous values. Other independent variables will, therefore, not adequately explain variations in the employment rate. If, however, the coefficient b is not too high (say, below 0.6), then other explanatory variables have a good chance of explaining variations in employment. If indeed the coefficient b is rather low, then one can assume (more or less safely, though not with certainty) that the series is stationary and hence classical time series analysis can be performed. It is equally essential to ensure that the error term has standard statistical properties (normality and the like).

Simple quality control

Ensuring the robustness of the estimation results is the final step. Robustness means that measures such as adding or subtracting partially endogenous variables from the regression equation, adding regional dummy variables or modifying the definition of a variable have little impact on the overall results.

3.4 Conclusion on the analytical methods used to measure the impact of the minimum wage on employment

This brief survey of statistical methods used to analyse the impact of minimum wage adjustments on employment highlights several essential methodological points.

A first conclusion that can be drawn is that certain methods of estimation – traditional time series analysis and analyses drawn from firm-level data in particular – tend to overestimate the negative impact of the minimum wage on employment.

Second, one must not forget that low-wage earners affected by adjustments to the minimum wage do not form a homogeneous group (students, very low-skilled workers, workers temporarily in low-wage jobs whose training and skills make them likely to move to better employment later, etc.). A minimum wage increase could impact positively on the employment of certain groups of workers and undermine the employment prospects of others.

Third, the recent literature has yet to solve the difficulties presented by two recurrent methodological problems. The first relates to the fact that endogeneity of the minimum wage remains an elusive issue: the minimum wage is often itself a function either of the other explanatory variables in an equation with employment as the dependent variable, or of the employment rate itself, as shown in table 4 above. The second problem is that in the case of youth employment, it is difficult to take the extension of studies into account. Do young people study longer because of low employment prospects, themselves induced by a high minimum wage? Or does a high minimum wage encourage them to leave school and take up relatively high-paid jobs? Depending on the hypothesis retained, different equations must be estimated.

Fourth, although considerable progress has been made in this field, it is still uncertain how best to determine target groups and the groups to which they should be compared. Apart from a few cases, it is difficult to know with any reasonable degree of precision with what group of workers the employment of minimum wage earners should be compared. This is a serious concern since identifying such a group is essential in order to be sure that any decline in the employment of minimum wage earners can be attributed to the increase in the minimum wage.

Finally, very few studies (a 1998 OECD attempt being a notable exception) have defined minimum wage thresholds above which employment rates might be adversely affected. If such a threshold could be found, it would provide an invaluable source of information since it would help to determine whether the effect is due to the rise in the minimum wage or its level.

The striking result of the recent and more reliable studies – on a statistical level – that the impact of the minimum wage on total employment is slightly negative or nil and sometimes even positive makes it legitimate to look for the

factors behind this weak effect. We have already mentioned the low level of the minimum wage in some countries, but other factors seem to be at stake as this result is found also in countries with relatively high minimum wages. On the supply side, the possibility that most employers have to compensate for higher labour costs by slight changes in work organization leading to productivity gains is crucial. On the demand side, raising the income of workers with low propensity to save has a positive effect on consumption levels. Other elements can be evoked to explain the weak impact of the minimum wage on employment, such as the weak wage effects higher in the wage structure, as well as the fact that in industrialized countries workers paid the minimum wage often work in the service sector, insulated from international competition.

Notes

¹ Contrary to a common misconception, these studies are not limited to industrialized countries; some have focused on developing countries, particularly those in the middle-income category. See Annant and Sundaram (1998); Feliciano (1998); Infante et al. (2003), and Standing and Vaughan-Whitehead, eds. (1995).

² To give one example, the introduction of a statutory minimum wage in the United Kingdom in 1999 prompted numerous articles, some of which appeared in a special issue of the *Economic Journal* on the subject (Vol. 114, No. 494, March 2004). The quality of British data and the effort put in also allowed researchers to measure changes induced by the minimum wage at the firm level, in particular changes in work organization and the ensuing rise in productivity.

MINIMUM WAGE AND SOCIAL POLICY: DOES THE MINIMUM WAGE RAISE THE INCOME OF THE POOREST HOUSEHOLDS?

4

Whereas the economic analysis of the minimum wage focuses on its impact on employment, social policy is more concerned with the way in which the minimum wage affects poverty levels of working and non-working households (through links with welfare benefits). In Chapter 2 we centred our attention on the various objectives of the minimum wage. This chapter will focus on making a deeper analysis and quantifying the impact of the minimum wage on poverty reduction.

The central question is whether the minimum wage fulfils its objective of raising the income of the most disadvantaged workers. We will begin with a brief overview of the ways in which it affects workers' income across different categories of workers, before examining its more general impact on poverty reduction in industrialized and developing countries alike. The exclusion of certain groups of workers (homeworkers, agricultural, domestic or casual workers) from the safety net provided by the minimum wage is a serious dilemma, which we will examine next. The chapter will conclude with an attempt to re-focus the policy debate on the role of the minimum wage as an institution of the labour market, that is, on its role in protecting the least well-paid workers.

4.1 Income gains related to a minimum wage increase

Do minimum wage increases primarily benefit minimum wage earners, or do other groups of workers also gain from such a policy? These are the key questions to which we now turn.

4.1.1 Wage gains for workers earning the minimum wage

Since the very purpose of the minimum wage is to ensure a better standard of living for the least well-paid workers, it would seem obvious that wage gains for this group would be a critical determinant of the success or failure of such a policy intervention. Unfortunately, studies that examine the effect of minimum

wage rises on salary levels are far fewer than those analysing their impact on employment rates. This is something of an oddity given that the fundamental question is that of a cost–benefit type, comparing employment losses associated with minimum wage increases with income gains for minimum wage earners and their families. This imbalance may be due to a lack of interest in the social aspect of the issue, although it is equally likely that the problem lies in the technical or methodological difficulties facing such studies.

The first step is to capture a representative sample of the workers affected by minimum wage increases, based on criteria related to demographics, ethnicity, industry and skill level, as well as obtaining an estimate of the size of the affected group. To generalize, this group would be composed of workers whose age, sex, education and ethnicity are such that their wages lie between the old and the new minimum wage. Table 13 gives the example of three countries.

Once the groups affected by minimum wage increases have been defined, it is necessary to obtain figures on the average wage of the individual workers making up the groups. This is the variable to be explained. The average wage is a function of two variables: the minimum wage and general salary increases (whether due to inflation, productivity gains or other factors). Hence, the percentage of workers earning the minimum wage prior to the rise, as well as fluctuations in the employment rate and in the average wage of workers who are least likely to be affected by increases in the minimum wage, enter the

Table 13 Types and percentage of workers earning the minimum wage, selected countries

Country/ period	Types of workers	Percentage
Canada (1988–90)	Youth (aged 16–24):	9.5% of working adolescents (aged 16–19)
	Temporary workers earning low wages (students working during holidays and full-time workers who will find better-paid work in the future)	2.4% of working youth (aged 20–24)
	Permanently low-paid workers (low level of education and productivity)	
Estonia (1995–2000)	Workers with little education	5% of workers
	Youth with little education	
	Women	
	Older workers	
United States (1979–80)		21–22% of working youth (aged 14–21)

Sources: Hinnosaar and Rõõm (2003); Yuen (2003); Currie and Fallick (1996).

regression equation as explanatory variables. Available studies indicate that the salary increases are substantial. For example, in 1990 in the United States, workers who earned wages between the old and the new minimum wage benefited from a 10 per cent salary increase on average following a 13 per cent increase in the minimum wage, independently of any other source of increase (Card and Krueger, 1995).

4.1.2 Wage gains for workers earning more than the minimum wage

Are workers who earn more than the minimum wage affected by an increase in it? If that were the case, wage distribution would remain unchanged. It is true that in industrialized countries minimum wages are usually accompanied by a small wage increase for the group of workers earning slightly more than the minimum wage, but this effect is not observed among top earners. Wage distribution is thus only partially restored. Of course, this does not necessarily mean that the best-paid groups do not benefit from wage increases, though it does suggest that these are independent of the minimum wage. Hence the minimum wage serves to prevent ever-growing wage inequality.

4.1.3 An important instrument in reducing wage inequality

In this particular regard the minimum wage is a double-edged sword: on the one hand, it can serve to reduce wage inequality if it rises faster than wages in upper earnings quintiles, or it can actually increase inequality if it falls in real terms. There are two commonly used methods to estimate the impact of the minimum wage on wage inequality. The simplest consists in measuring the correlation between variations in the minimum wage (or in its level, in the case of cross-country comparisons) and the dispersion in wage inequality. Both the standard deviation and the ratio of the average wage earned by the wealthiest 10 per cent of workers to the average wage earned by the poorest 10 per cent are reliable indicators of wage inequality, and have the additional benefit of allowing cross-country comparisons. Camargo (1988) used the ratio of the average wage of managers and administrative staff to the average wage of blue-collar workers as a proxy for wage inequality. His results indicate that the fall in the minimum wage in real terms between 1963 and 1979 in Brazil exacerbated existing inequalities by reducing low-skilled workers' remuneration relative to the wages earned by white-collar workers. By contrast, if the minimum wage rises faster than wages earned by higher-paid workers, there will be a trend favouring a reduction in wage inequality. The results obtained for several developing countries are given in table 14.

Table 14 Effect of minimum wages on wage equality, selected countries

Author	Country	Effect of minimum wages
Benhayoun et al. (2001)	Morocco	The minimum wage reduces inequalities, both in the short and the long run
Grimshaw and Miozzo (2003)	Latin America	Higher minimum wages reduce wage inequalities, but not necessarily the spread in wages earned by male and female workers
Camargo (1988)	Brazil	Lower minimum wages widen the spread between blue- and white-collar workers' wages

In the United Kingdom, the Low Pay Commission highlighted the fact that the introduction of a minimum wage in 1999 had the greatest impact on reducing male–female pay inequalities since the Equal Pay Act was adopted in 1970. Within two years the spread in pay according to sex fell by two percentage points for full-time workers, reaching 82 per cent in the year 2000. Subsequently the spread widened again due to the explosion in remuneration levels of young City financiers, thus showing that the effect of the minimum wage on wage inequality is a reversible process.

It is evident that this method is seriously flawed in so far as variables other than the minimum wage – including macroeconomic variables like inflation and labour demand for low versus high qualification – can also influence the level of wage inequality.

An alternative technique consists in simulating the impact of a minimum wage increase on the distribution of wages and then measuring wage dispersion. Although it is more difficult to implement, this technique does not yield significantly different results from the simpler one.

In a literature survey concentrating on the impact of the minimum wage on wage inequality in industrialized countries, OECD (1998) confirms and completes the above arguments by showing that: (1) the minimum wage reduces wage dispersion, and the higher the minimum wage, the more the dispersion shrinks; (2) the minimum wage reduces the spread between wages earned by male and female workers, as well as the spread between young workers and their more experienced counterparts. These effects arise because young and female workers tend to cluster around the base of the wage scale. In the United States, the reduction in the minimum wage in the long term also seemed to be responsible for a large part of increasing wage disparities between native-born and immigrant workers (Butcher and DiNardo, 2002).

4.1.4 Wage gains for workers earning less than the minimum wage

This question cannot be ignored since it often happens – even in industrialized countries with a statutory minimum wage – that a small group of workers earn

less than the minimum hourly wage set by law: casual workers, young apprentices, certain agricultural workers, etc. Table 15 on page 104 provides some figures as to the size of this vulnerable group. Likewise, in many developing countries some workers earn less than the minimum wage and are not covered by the safety net, often because they work in the informal economy. We are not aware of any study that has analysed the impact of the minimum wage on workers earning less than the minimum wage, though some studies have looked at its effect on employment and a few others have examined the role of the minimum wage as a reference wage in the informal economy.

4.1.5 Impact of the minimum wage on the real average wage

Measuring this impact enables one to check whether the minimum wage does indeed influence workers' standard of living. The most straightforward method is to compare the evolution of the minimum wage and that of the average wage while holding constant other variables that could influence the average wage (economic growth, prices, technological progress). Bell (1995) and Rama (1996) demonstrate the effect of the minimum wage on the average wage for Colombia (from 1962 to 1990) and Indonesia, respectively.

On the basis of these results, it is not unreasonable to conclude that the minimum wage has a positive impact both on the purchasing power of the least well-paid workers and on the reduction in wage inequality.

4.2 How the minimum wage affects poverty

As we saw in Chapter 2, the minimum wage can contribute to poverty reduction if it is applied within the framework of a global poverty reduction strategy and if the objectives assigned to a minimum wage policy are neither too numerous nor mutually exclusive. In this section, we will attempt to measure the impact of the minimum wage on poverty reduction, as well as providing a summary of the conclusions of various studies on this issue.

4.2.1 Minimum wage levels worldwide

What is the level of the minimum wage worldwide? Is the minimum wage above or below the standard poverty threshold? The answers may be found in the maps given in figures 1 and 2, based on the ILO database and other sources, as well as in Annexes II and III.

Figure 1 classifies countries according to the level of the minimum wage in 2003–2004 converted into United States dollars, without taking into account its purchasing power in any particular country.¹ Figure 2, on the other hand, expresses these levels in terms of the purchasing power of the minimum wage, i.e. in terms of the quantity of goods and services in a given basket that can be purchased with the minimum wage.

As shown in figure 1, it is not uncommon for the minimum wage to hover around US\$30 per month. In a number of countries, especially in sub-Saharan Africa (Burundi, Central African Republic, Ethiopia, Gambia, Ghana, Malawi, Sao Tome and Principe, Sierra Leone, Sudan, Uganda, Zambia and Zimbabwe), but also in countries of the former USSR, including Azerbaijan, Belarus, Kyrgyzstan, the Russian Federation, Tajikistan, Uzbekistan, and in some other Asian countries (Lao People's Democratic Republic, Mongolia, Myanmar, Nepal, Papua New Guinea, Sri Lanka and Viet Nam), the minimum wage lies below this threshold. At the other end of the scale, the minimum wage exceeds US\$1,000 per month in Australia and Europe, except for southern Europe and eastern European countries. The Spanish Government, however, has signalled its intention to bring the minimum wage up to EUR 600 per month (around US\$750) by 2008. Moreover, in Spain, and often in Portugal and Greece as well, workers receive 13th (and sometimes even 14th) month pay. As a result, minimum wages in these countries are slightly higher than their monthly levels would seem to indicate, but they still do not come close to the levels found in the rest of western Europe.

While these figures in dollar terms may be useful for foreign investors, they are not very meaningful in terms of the goods and services that minimum wage earners can buy in their country. The purchasing power parity (PPP) index developed by the World Bank, which translates local currencies into a dollar amount that would have a similar purchasing power, provides a better measurement. For example, the minimum wage in Turkey is 441,000,000 Turkish lira per month, which represents around US\$300. However, with this amount a worker in Turkey can buy as many goods and services as he or she could buy with US\$590 in the United States. Hence in figure 2 Turkey is listed among countries where the minimum wage lies in the PPP\$500–999 range. The purchasing power measure is preferable in the sense that it enables direct cross-country comparisons of the standard of living. One drawback of this measure is that it implicitly assumes that workers buy the same basket of goods worldwide, whereas in reality the baskets vary considerably across countries. Thus it is not only the price of goods that varies internationally, but also the goods themselves (see also Annex III).²

Figure 2 is derived from translating the minimum wage in 2003–2004 into purchasing power terms. Countries where the minimum wage in terms of living standards lies below PPP\$100 per month – the lowest – include a number of African countries (Benin, Burundi, Central African Republic, Republic of the Congo, Gambia, Kenya, Madagascar, Malawi, Sierra Leone, Uganda, Zambia), the former USSR (particularly Belarus, the Russian Federation and some former Soviet republics in Central Asia), Lao People's Democratic Republic, Solomon Islands, and Sri Lanka.

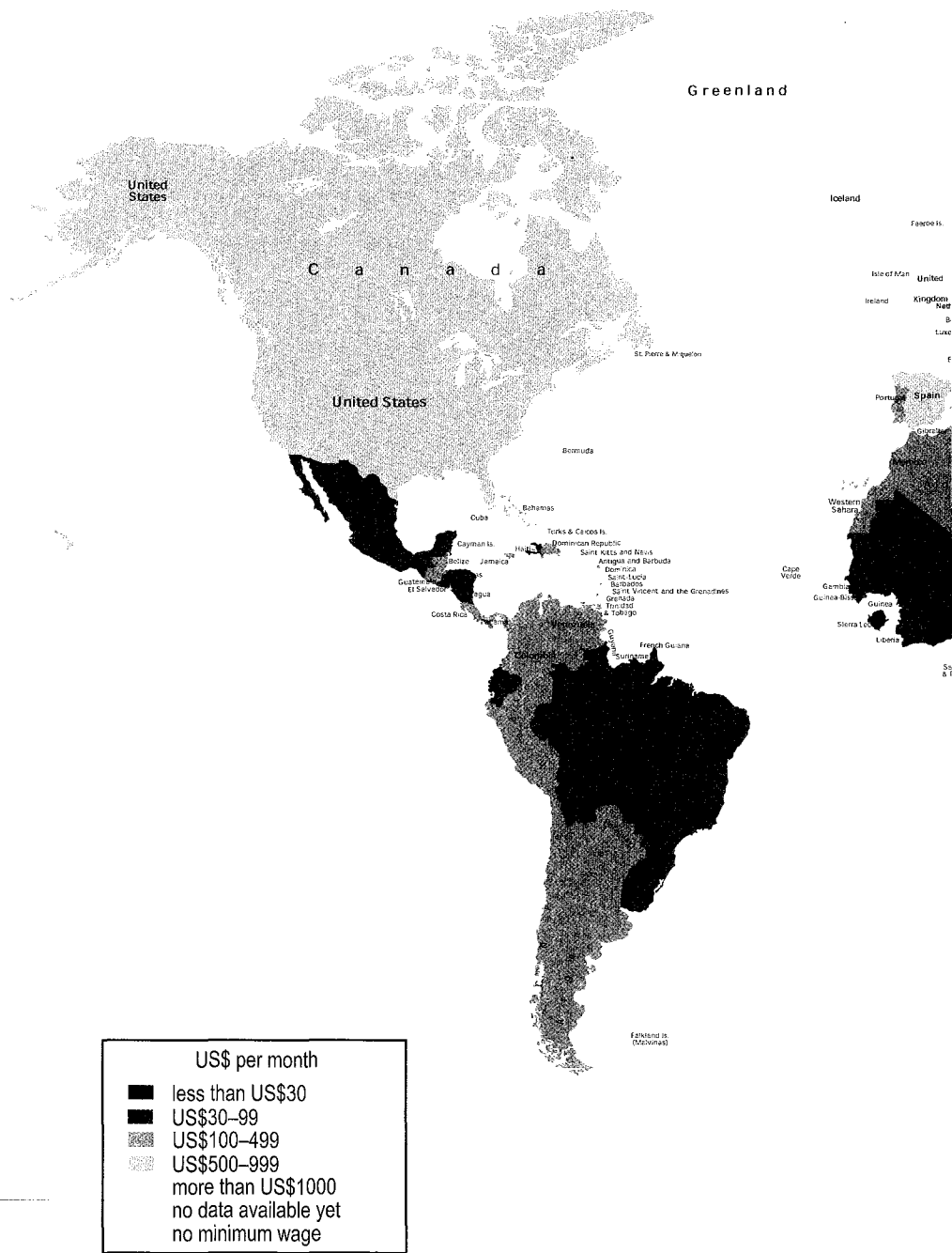
A minimum wage level of below PPP\$100 per month is equivalent to a very low consumption level, insufficient to pull families out of poverty even when the standard extreme poverty threshold of PPP\$30 per month per adult is used. According to the World Bank, PPP\$1 a day or PPP\$30 a month would be the poverty line more typical of the poorest countries in 1993, while PPP\$2 a day would correspond to the poverty line in low–middle income countries. A minimum wage set at less than PPP\$100 per month is simply insufficient to protect workers from the scourge of extreme poverty, especially since this wage is often the only source of income for an entire family, as opposed to having to support only a single worker.

Neither India nor Nepal is in the lowest group in terms of the purchasing power of the minimum wage. Rather, they are located in the group of countries where the minimum wage lies in the US\$100–199 range in PPP terms. Most African countries also find themselves in this category (except for Algeria, Egypt, Morocco, South Africa, Tunisia, and the poorest countries mentioned previously). This group also includes Indonesia, Kazakhstan and Viet Nam, as well as a few countries in Central and Latin America, including Bolivia, Ecuador, Jamaica, Mexico and Uruguay.

As for the third group of countries (PPP\$200–499), it is interesting to note that China is in this range, as are Brazil and the eastern part of the European Union.

Figure 2 highlights the geographical disparities in the minimum wage and allows cross-country comparisons in purchasing power terms. Understanding the relationship between the level of the minimum wage and the extent of (or reduction in) poverty requires a refined analysis. To this end, we will distinguish between developing countries and industrialized countries, since in the latter group the poor usually benefit from social safety nets and stricter enforcement of labour legislation.

Figure 1 Level of minimum wages throughout the world (US\$ per month, 2003–04)





or countries with multiple minimum wage rates, levels provided are the arithmetical mean of the lowest minimum wage rate applicable to an unskilled adult worker, regardless of occupation, sector and/or region; and the highest minimum wage rate applicable to an unskilled adult worker. However, for those countries that set minimum wage rates through collective agreements, one collective agreement (in general the main collective agreement for the metalwork sector) has been taken as an example and the rates for an unskilled adult worker provided. The rates are either the monthly levels set forth in the legislation, or have been calculated according to a 5-day week/40 hours per week and 4.33 weeks per month.

Source: Minimum wage rates: ILO database, U.S. Department of State Human Rights Reports 2003; Exchange rate 2003: Economic Intelligence Unit.

Figure 2 Purchasing power of minimum wages throughout the world (PPP\$ per month, 2003–04)



Source: Minimum wage rates: ILO database, U.S. Department of State Human Rights Reports 2003; Purchasing power parity conversion factor: World Bank (2003 except The Bahamas, Belize, Israel, Malta and Oman: 2002)

4.2.2 The role of the minimum wage in developing countries

In recent years, the Bretton Woods institutions have increasingly called into question the relevance of implementing a minimum wage policy in developing countries. Serious doubts and criticisms on its applicability to the developing world have emerged in the context of the World Bank poverty reduction strategy aimed at coordinating all aspects of development policies. The classic argument against the minimum wage is that it creates unemployment in the formal economy, thereby forcing some workers to seek employment in the informal economy. According to this logic, the minimum wage not only fails to protect the poorest workers struggling to make a living in the informal economy, but also has a negative impact on the most vulnerable workers in the formal economy, who are then forced into the informal economy. In this scenario the minimum wage thus protects only some workers in the formal economy who are highly paid. There is a counter-argument to this logic. The minimum wage can play a significant role in poverty reduction by helping apparently well-paid workers to provide for their families. It is highly unlikely that they would be able to do so without the minimum level of protection guaranteed by the minimum wage. The minimum wage can also boost wages in the informal economy by increasing demand for goods and services produced there, not to mention the important role that it plays as a reference wage. Finally, it ensures a better allocation of skills across the economy. These arguments will be elaborated on in the present section.

A direct impact on the poverty level of workers and their families

The minimum wage has a direct impact on poverty reduction if workers in the formal economy earning the minimum wage and their families belong to the poorest groups of the population. Studies on poverty reduction strategies published under the aegis of the World Bank offer several examples of a minimum wage policy directly benefiting the poor. One such example is Cambodia, where the minimum wage, successfully defended by trade unions, contributed directly to poverty reduction. More specifically, remittances from women workers in the textile industry (the only one to have adopted a minimum wage) played a crucial role in rural poverty reduction.

Furthermore, several studies indicate that given a comparable level of development, countries with a higher minimum wage exhibit a lower incidence of poverty, even if the impact is somewhat modest (Lustig and McLeod, 1997; Saget, 2001). Yet one must avoid the temptation of reaching simplistic conclusions and at least consider the possibility that rather than being due to causality, a strong correlation between a high minimum wage and a low rate of poverty might owe more to the likelihood of the countries concerned being deeply committed to poverty reduction in general. In other words, they may have adopted parallel policies promoting poverty reduction without explicitly using the minimum wage as a tool. In this case a virtuous circle emerges between the minimum wage and other policy instruments for poverty reduction.

Finally, it should be mentioned that in addition to the minimum wage a comprehensive policy on wages could be vital to the reduction of structural poverty by improving health and education standards, particularly for isolated rural populations. It has been generally observed that nurses and teachers are reluctant to work in these zones, which leads to high rates of absenteeism and turnover of staff, as well as poor quality of services provided. If their wages were set at higher levels, these categories of workers would have a greater incentive to provide higher-quality services in rural areas.

The minimum wage as a reference wage: An indirect effect on the informal economy

Throughout the 1990s, the minimum wage in several middle-income countries in Latin America (Brazil, Mexico, Argentina and Uruguay) was relatively low, representing 20–25 per cent of the average wage. Consequently, nearly all formal economy workers earned more than the minimum wage, while many workers in the informal economy earned exactly the amount of the minimum wage (15 per cent in Brazil, 1996). As shown in various studies focusing on Latin America, it was not uncommon for this latter group of workers to experience wage increases whenever the minimum wage rose (Neri, Gonzaga and Camargo, 2001). To a lesser extent, Ghana displays a similar trend in so far as a relatively high proportion of its informal workers earn the minimum wage (Jones, 1998).

Although thus far no study has analysed in detail the role of the minimum wage as a reference wage, we can put forward a few hypotheses.

First, it is likely that employers operating in the informal economy can be pressured to respect the statutory minimum wage, as at least some of their workers are generally aware of its level. They may be all the more inclined to yield to this pressure given that the statutory minimum wage is generally low. In this case, the statutory minimum wage could serve as a reference for a sort of “minimum living wage” at the bottom of the wage scale.

Second, the notion of a fair wage is not alien to the wage determination process in the informal economy, as evidenced by the impact the minimum wage can have on the wages in this part of the economy. This phenomenon can be explained by the fact that the determination of wages in the informal economy cannot be explained by demand and supply impulses alone, not to mention the fact that some employers in the informal economy may be prepared to pay a premium to attract productive, stable and motivated workers.

Alternatively, another reason why the minimum wage could also be used in the informal economy as the reference wage is that its level is an indicator of workers’ productivity (because it represents a bare minimum income necessary for subsistence). If this is the case, increases in the minimum wage could have an impact on the incidence and level of poverty in the informal economy, provided that they are not too great. The question is then whether partial implementation of a minimum wage is sufficient to lift impoverished workers above the poverty

threshold. It also has an important equity dimension: is partial implementation of the minimum wage in the informal economy sufficient to ensure that the poor will benefit from economic growth?

Is there an optimal minimum wage for reducing poverty?

Using the minimum wage as a policy instrument to fight poverty in developing countries is not without problems. To begin with, the minimum wage can substantially reduce the poverty of workers only if it is set at a high enough level. However, such a level could be accompanied by perverse effects such as job losses for some workers, employers' non-compliance with the law, and even attendant price increases. Conversely, if the minimum wage increase is too modest, it will probably be insufficient to pull a significant number of workers out of poverty.

In view of this, does the solution lie in setting the minimum wage at such a low level that it answers the demands of the informal economy, as in the case of the Latin American countries mentioned above?

However difficult it may be to answer this question, one thing is clear: trade unions would normally not lend their support to a minimum wage strategy that is not primarily geared to the formal economy. Moreover, a number of unions advocate a minimum wage that corresponds to the actual wage paid to the majority of workers hired in the formal economy. In this case, it is clear that the minimum wage will be too high to have any direct positive impact on the poorest workers in the informal economy.

The position held by trade unions was analysed in depth in Chapter 1. In countries where collective bargaining is not very developed, which is the case of a number of developing countries, formal economy wages are determined more by the minimum wage level than through negotiations with the unions. In other words, the process of adjusting the minimum wage has become a substitute for collective bargaining as it no longer serves merely to protect the most vulnerable workers but also to set the average effective wage in firms. Trade unions fear that without a sufficiently high minimum wage, wages in the formal economy do not benefit from any protection. Naturally, the drawback of this approach is that the impact of the minimum wage on poverty reduction is limited.

Thus, as argued in Chapter 1, strengthening collective wage bargaining is a precondition for the minimum wage to play a greater role in the fight against poverty.

4.2.3 The role of the minimum wage in industrialized countries

Industrialized countries usually comply with minimum wage regulations (except when it comes to migrant workers in certain sectors of the economy), so it can be said that the minimum wage does protect the income threshold of workers and their families. Yet the question remains whether it really targets the least well-off workers and, if this is the case, whether it provides sufficient protection to prevent the emergence of the phenomenon of the working poor.

Does the minimum wage also benefit workers in wealthy households?

Those opposed to the notion of a minimum wage argue that it is not a very effective instrument in sustaining the income of poor families since it is not targeted, and that workers who receive the minimum wage may not necessarily come from the poorest households. In other words, the minimum wage will benefit not only the poorest but also relatively better-off workers coming from households which have other sources of income. Perhaps the largest such group comprises young workers. It should be borne in mind however that they cannot remain dependent on other sources of household income indefinitely. Similarly, when households break apart women are left to provide for themselves financially, often earning little more than the minimum wage. For this reason, it is important for the minimum wage threshold to protect all workers and not become a tool dependent on household income. Most importantly, the literature does point to a positive impact of the minimum wage, primarily for the poorest.

The minimum wage benefits poorest workers more

A study was carried out by Bernstein and Schmitt (1999) to determine the extent to which the minimum wage is more beneficial to the poor. Their method involves comparing household incomes of minimum wage earners before and after a rise in the minimum wage threshold to determine whether the household income of these workers is located in the lower or upper half of the income range. The authors show how a US\$1 minimum wage rise in the United States was distributed among workers: 40 cents went to workers belonging to the poorest 20 per cent of households and the remaining 60 cents was divided among the other 80 per cent of households. This is equivalent to the poorest 20 per cent of workers accruing 40 per cent of the total gains from a minimum wage increase. Also, the poorest 40 per cent of households captured more than 60 cents on an increase of one dollar. It is clear from these results that the poorest workers benefit more than proportionately from a minimum wage increase. This outcome is confirmed by other studies carried out in OECD countries (OECD, 1998).

It is important to note that the minimum wage is a powerful instrument in safeguarding wages in sectors where workers are poorly organized and in those dominated by minorities. This is certainly the case in the United States at least, where less than 5 per cent of workers earning the minimum wage belong to trade unions, as opposed to 15 per cent of total workers. In addition, this group is often predominantly composed of victims of discrimination, including women (Bernstein and Schmitt, 1999).

The working poor

The phenomenon of the working poor, that is, people living in poverty although they have a paid job, first attracted notice in the United States. It spread rapidly to Europe in the 1990s, at a time of rising unemployment. Today there is an estimated total of 7 million working poor in the European Union and about the

same number in the United States; these are rough estimates at best, however, since the way poverty thresholds and active workers are measured varies significantly across countries. A comparative analysis indicates that in the United States the poverty threshold is defined in dollar terms as well as in terms of family size, whereas in the European Union that threshold is defined as a percentage of the median income (50–60 per cent). These thresholds too can vary from one country to another, not to mention the fact that the definition of “worker” is itself not homogeneous. The Bureau of Labor Statistics in the United States takes into account all currently employed persons or those who have been looking for a job for at least six months. Its French counterpart, meanwhile, also takes into consideration workers who have worked for at least one month during the course of a given year (European Foundation for the Improvement of Working and Living Conditions, 2004).

The question we are interested in investigating is the role that the minimum wage can play in solving this problem of growing proportions. The answer is not immediately obvious, since a worker is considered poor if he or she lives in a household whose total income is below the poverty level. Therefore, it is not so much the wage of individual workers (the only variable that the minimum wage can influence) that is considered but the worker’s household income. To give an example, 11 per cent of the working poor in France earn more than the full-time minimum wage. They fall below the poverty threshold because they provide the only source of income for their households (INSEE, 2000). As such they generate an even larger number of poor people, namely their dependants. The figures given above thus do not adequately capture the extent of poverty associated with being a low-paid worker. Conversely, not all low-paid workers are impoverished. As a matter of fact, 87 per cent of low-paid workers in the United Kingdom are not poor.³ The corresponding figures in France and Spain are of a comparable magnitude (European Foundation for the Improvement of Working and Living Conditions, 2002), the reason being that these low-paid workers live in households where the other spouse is also a wage earner.

In fact, one of the main causes of workers’ poverty is linked to periods of unemployment related to precarious contracts and the rise of part-time employment. Thus, while the minimum wage can act to protect workers when they are effectively employed, it can do little to protect them during periods of unemployment, when other redistributive mechanisms such as unemployment benefits and family allowances are mobilized.

Despite these limitations, the minimum wage can still play a role in combating poverty. It is important to note that the share of low-paid workers among the working poor is high (European Foundation for the Improvement of Working and Living Conditions, 2004, p. 33), so that even if low wages alone cannot explain the level of poverty, they are certainly a contributing factor. This hypothesis is confirmed in a study of OECD countries showing that the level of poverty among the working age population is systematically higher in countries

where the share of low-paid jobs⁴ among total jobs is greater (Marx and Verbist, 1998). Yet we know that where the minimum wage is low the proportion of low-paid jobs is high (OECD, 1998). Therefore, in industrialized countries an inverse relation between the incidence rate of poverty among the working age population and the minimum wage is observed. The available statistical analyses of this phenomenon indicate that the salary level alone can be a significant root cause of poverty among workers. This is particularly true where the minimum wage is set at a very low level or applies only partially (as in the case of apprentices or subsidized jobs), or even not at all. Quite often this category of workers is composed predominantly of young people (INSEE, 2000; Mosisa, 2003); a more active minimum wage policy stance targeting vulnerable workers could be instrumental in reducing poverty among them.

4.3 The different forms of protection

In general, legislation governing the minimum wage lists the categories of workers who are legally entitled to the minimum wage, or at the very least provides a broader definition of the workers covered. However, certain groups of workers are subject to specific provisions or may be specifically excluded from the principal legislation. If this is the case, these groups of workers either do not benefit at all from minimum wage laws or are covered by another form of wage protection that may be higher, lower or equivalent. In other cases, notably in countries where the minimum wage is fixed for a limited number of sectors and occupations, some categories are excluded by default, for example when they are not included in the definition of workers.

Among these excluded categories are, first and foremost, youth, apprentices and trainees, workers on probation, agricultural workers, disabled workers, casual workers and homeworkers. One should not forget to add to this group the armed forces and the police: indeed, in many countries they are excluded from the scope of minimum wage legislation but benefit from a substantially higher minimum wage fixed by special provisions, as in Cambodia, for instance. This is why they are omitted from the analysis that follows.

Because certain categories of workers are quite frequently excluded by default from the minimum wage statute, it is difficult to identify with precision the various groups of workers who do not benefit from the minimum wage and those who are entitled to one, albeit at a lower rate. Table 15 gives a classification based mainly on the primary legislation governing the minimum wage. Countries where the minimum wage is fixed through collective bargaining agreements are therefore not included.

4.3.1 Workers without any form of wage protection

The impact of a minimum wage policy on poverty cannot be studied seriously without discussing legislation that applies to the poorest groups of workers. These include domestic, agricultural and casual workers, as well as those who work from home (homeworkers). Table 15 lists the countries in which these groups are not covered by the minimum wage or receive a lower minimum wage.

Most common among the excluded groups are domestic workers. In a number of Asian countries they are not covered by minimum wage legislation. As mentioned above, these countries define only the categories of employment where the minimum wage applies, and the excluded groups are not listed. In Indonesia and Nepal, for example, the minimum wage is defined as being applicable only in firms, and in a given subset of firms at that. By default, then, domestic workers are not covered in either country, nor do they benefit from minimum wage protection in Cambodia, the Republic of Korea, Lao People's Democratic Republic, the Solomon Islands, Sri Lanka and Thailand. (Up until 2003 they were also excluded from minimum wage protection in China.) In India, there is a minimum wage system targeted at the informal economy which covers most unskilled occupations and sectors. However, domestic workers are not among those covered. In several other countries (e.g. Bangladesh, Cyprus, Malaysia) minimum wages are fixed for a small number of occupations and sectors, which do not include domestic work. Domestic workers are also without minimum wage protection in Guinea-Bissau, Haiti, Lebanon, Morocco, the Netherlands, Tunisia and, in certain cases, in Canada and the United States. Only four countries provide them with a minimum wage that is lower than the standard one, namely Chile, Ecuador, Paraguay and the Philippines. By reading table 15 "backwards", that is, by sorting the data by country where domestic workers are covered, one can see that many developing countries provide for such a provision. In most Latin American countries and in Lesotho, domestic workers are explicitly included in legislative coverage.

Agricultural workers constitute the second broad category of workers most often excluded from minimum wage legislation. They do not benefit from the protection afforded by a minimum wage threshold in Bolivia, Botswana, Cambodia, Cyprus, Lao People's Democratic Republic (except for the formal economy), Malaysia, Nigeria (seasonal workers are not covered, nor are those working in firms with fewer than 50 employees), Pakistan, Sri Lanka (only workers in plantations are covered), Thailand and, for certain types of agricultural labour, Canada and the United States. However, in two of these countries, there are developments towards extending the scope of application of minimum wage legislation to agricultural workers. In Bolivia, the Supreme Decree is currently in the process of adoption (ILO, 2005, p. 374), while in Pakistan there is ongoing discussion on the need to include agricultural workers in minimum wage coverage.

Other countries, particularly in Africa, offer a threshold of protection below the standard minimum wage. Several reasons can be put forward to explain why agricultural workers are afforded a lower standard of protection. First and foremost, they often are partially paid in kind, and in rural areas the cost of living is lower. Other reasons include the difficulty of enforcing the minimum wage in isolated rural areas, the policy objective of maintaining a high employment rate in areas where there are few alternatives to employment in the agricultural sector and perhaps even a bias against agricultural labour. Several African countries (Burkina Faso, Chad, Guinea-Bissau, Madagascar, Morocco, Mozambique, Senegal and Tunisia), as well as El Salvador, Guatemala, Nicaragua, Panama and the Solomon Islands, have enacted a minimum wage for agricultural workers, although it is lower than the prevailing standard minimum wage.

Casual workers are not covered in Belgium, Belize and Malaysia. As for homeworkers, they are excluded from minimum wage legislation in Thailand and, in certain cases, in the Philippines and the United States.

Table 15 represents a qualitative approach, as precise figures on the number of workers not covered by minimum wage legislation are difficult to obtain. Very few data are available for industrialized countries. Taking the case of the United States, casual agricultural workers and homeworkers represent the largest components of the group excluded from coverage by the minimum wage, equivalent to 4.5 per cent of wage earners in 1981 (Abowd, Kramarz and Margolis, 1999, based on figures 4 and 5).

In conclusion, table 15 clearly shows that the two most vulnerable categories of workers are agricultural workers and even more so domestic workers, who most often do not fall within the scope of application of the minimum wage in a sizeable minority of developing countries. Paradoxically, it is not uncommon to observe that the minimum wage applies to sectors where workers are well organized, whereas the initial and primary objective of a minimum wage policy is to protect the most vulnerable. Identifying universal factors to explain this conclusion is not an easy task, particularly as geographic location, culture and the level of development do not suffice to explain this phenomenon: domestic workers and, to a lesser extent, agricultural workers are excluded from minimum wage provisions in a number of Asian countries but are covered in most of Latin America and in some African countries. The legislative treatment of vulnerable workers often exhibits strong cross-country differences, even in countries with similar levels of development. For example, agricultural workers are not included in the minimum wage coverage of six Asian countries but are included in all others; domestic workers, on the other hand, are covered in Brazil and Colombia but not in Thailand, although these three countries are similar in terms of socio-economic development. The disparity of these exclusions warrants a country-by-country analysis.

Table 15 Categories of workers excluded from the principal legislation on the minimum wage

	Excluded from coverage by the primary legislation on minimum wage	Receive a minimum wage below the standard minimum wage
Domestic workers	Bangladesh, ¹ Cambodia, India, Indonesia, ² Korea, Republic of, Lao People's Democratic Republic, ² Malaysia, Nepal, Solomon Islands, Sri Lanka, ² Thailand, Guinea-Bissau, Tunisia, ² Morocco, Lebanon, Manitoba (Canada), ³ Haiti, United States ⁴ , Netherlands, ⁵ Cyprus	Chile, Paraguay, Philippines, Ecuador
Agricultural workers	Pakistan, Thailand, Cambodia, Malaysia, Lao People's Democratic Republic, ⁶ Sri Lanka, ⁷ Nigeria, ⁸ Botswana, Manitoba and Ontario (Canada), ⁹ United States, ⁹ Bolivia, Cyprus	Burkina Faso, Chad, Guinea-Bissau, Madagascar, Morocco, Mozambique, Senegal, Tunisia, Solomon Islands, Guatemala, Nicaragua, El Salvador, Panama
Casual workers	Malaysia, Belize, Belgium	Korea, Republic of ¹⁰
Homeworkers	Philippines (homeworkers doing sewing), Thailand, United States (homeworkers making crowns)	

Notes: The table cites only the most common breakdown of employment by category of worker. Other categories include part-time workers, who are covered in most countries by minimum wage legislation on a pro-rated basis according to the number of hours worked, but who are excluded from minimum wage coverage in Ghana and Nigeria. Although specifically excluded in the same two countries, piece-rate workers are covered in a number of others where, for example, the legislation sets their wage to correspond to the minimum wage of a worker of average productivity.

¹ Domestic workers are specifically included within the scope of the minimum wage. In practice, however, minimum wage rates have been established only for EPZ, agricultural and textile workers. ² Regarding the definition of "worker" or "entrepreneur", in Indonesia, Lao People's Democratic Republic, Nepal and Tunisia the law applies only to workers employed by firms. Domestic workers are therefore excluded because they do not work in or for a firm. ³ In Manitoba, Canada, the exception concerns workers who work fewer than 24 hours per week for the same employer. ⁴ The exception concerns domestic workers hired on a casual basis (such as baby-sitters). ⁵ "According to our information, most workers in the Netherlands are covered by minimum wage provisions, except apprentices and domestic workers." *Source:* Direct request from the Committee of Experts on the Application of Conventions and Recommendations, 2003; available in the APPELX database: <http://webfusion.ilo.org/public/db/standards/normes/appl/> ⁶ The minimum wage applies only to the formal economy. ⁷ The minimum wage applies in the plantations, not in the rest of the agriculture sector. ⁸ The exception applies to seasonal agricultural workers and to all workers who work for firms with fewer than 50 employees. ⁹ Even though the majority of agricultural workers in the United States and Canada are covered by minimum wage legislation, some are excluded due to the nature of their work or to the farm size. Harvesting by hand, seasonal work and livestock shepherding are some of the notable exceptions. ¹⁰ Submitted for approval to the Ministry of Labour and Employment.

4.3.2 How many workers earn less than the minimum wage?

The reasons why many workers worldwide earn less than the “standard” minimum wage include the following: the workers may not be covered by minimum wage legislation, or they have a sector-specific minimum wage lower than the economy-wide standard, or else they are victims of non-compliance with the legislation on worker protection. Unfortunately, it is very difficult to obtain even rough estimates of the number of workers who fall into these categories.

Table 16 gives an overview of the percentage of workers who receive less than the minimum wage across a geographic spectrum of countries. The data should be treated with caution, however: being largely drawn from household surveys, they may be subject to various sampling and compiling errors. We have noted, for example, that certain part-time workers were wrongly counted as full-time workers because of mistakes in reporting the number of hours worked. As such, workers are earning less than the minimum monthly wage because they are working part time. Data from the Moroccan and Tunisian social security authorities may have overstated the number of workers earning less than the minimum wage, since the authorities gather only data on monthly wages declared by the employer and not on the number of working hours; this means that some of workers receiving less than the minimum monthly wage could be part-time workers.

Table 16 Workers earning less than the minimum wage (in %), selected countries

Author(s)	Country	Year	Source	Percentage of workers earning less than the minimum wage
Strobl and Walsh (2003)	Trinidad and Tobago	1998	HS	33
				60 (micro firms) 70 (women)
Maloney and Nuñez (2001) ¹	Argentina	1998	HS	18 (informal workers) ~ 0 (formal workers)
	Bolivia	1997	HS	10 (informal workers) ~ 0 (formal workers)
	Brazil	1998	HS	15 (informal workers) ~ 0 (formal workers)
	Chile	1996	HS	15 (informal workers) ~ 5 (formal workers)
	Colombia	1998	HS	10 (informal workers) ~ 0 (formal workers)
	Honduras	1999	HS	60 (informal workers) 25 (formal workers)

(Table 16 cont'd)

Table 16 (cont'd)

Author(s)	Country	Year	Source	Percentage of workers earning less than the minimum wage
	Mexico	1999	LFS Urban zone	10 (informal workers) ~ 0 (formal workers)
	Uruguay	1998	HS	10 (informal workers) ~ 0 (formal workers)
Bravo and Vial (1997)	Chile	1994	HS	9.4
ILO (1997b)	Guatemala	1997	HS	49.4
Gindling and Terrell (1995)	Costa Rica	1976–91	HS	33 (full-time workers) 37.4 (part-time workers) 34 (all workers) 45 (micro firms) 32.8 (independent workers)
Bell (1995)	Mexico	1988	HS	2.16 (formal workers) 16.48 (informal workers)
Rama (1996)	Indonesia	1993	LFS	15 (urban) 26.9 (women, industrial sector) 20.6 (youth, industrial sector)
Abowd, Kramarz and Margolis (1999) ²	France	1990	LFS	7
	United States	1981	HS	4.1
Currie and Fallick (1996)	United States	1980	HS	3.2 (youth, 14–21)
Ashenfelter and Smith (1979)	United States	1973	HS	0.8 (covered workers) 13.7 (non-covered workers)
Hinnosaar and Rõöm (2003)	Estonia	1995–2000	LFS	8
Benhayoun et al. (2001)	Morocco	1995–99	SS	13 (formal workers)
Bennour et al. (2004)	Tunisia	2001	SS	22.8 (formal workers)

Notes: HS: Household Surveys. LFS: Labour Force Survey. SS: Social security files.

¹ Numbers based on figure 2, where “formal” refers to workers employed in firms which hire more than five workers and “informal” to those hired by micro firms with five workers or less. ² Authors’ estimates based on figures 3 and 4.

As shown in table 16, the percentage of workers paid less than the minimum wage is clearly greater in developing countries than in the industrialized world: it was as high as 33 per cent in Trinidad and Tobago six months after the introduction of a national statutory minimum wage in 1998, and 33 per cent on average in Costa Rica from 1976 to 1991. By contrast, the figure ranged between 1 and 4.5 per cent in the United States, 7 per cent in France and 8 per cent in Estonia. More generally, it seems that the degree of compliance with relevant legislation is closely correlated with the level of development, as shown by Morrisson, Solignac Lecomte and Oudin (1994). The two poorest countries in their sample, Niger and Swaziland, have experienced a very low rate of implementation of minimum wage legislation in general, and outside the capital it is almost entirely disregarded.

Variations in these rates are not limited to cross-border instances but are also significant within countries. Indonesia is a good example: there the proportion of urban workers who are paid less than the minimum wage ranges from zero to 40 per cent across provinces, whereas the national average is 15 per cent (Rama, 1996).

As stated above, the high percentage of workers paid less than the standard minimum wage can be attributed partly to the fact that they are not covered by existing legislation or else fall into a lower minimum wage threshold category. Nevertheless, non-compliance with minimum wage regulations in developing countries remains an important component of explanation.

4.3.3 Developing countries: The reasons behind non-compliance with legislation

A number of reasons have been put forward to explain the lack of respect for legal provisions on the minimum wage. The main ones are discussed in the following paragraphs. We will see that the impact of the wage level is less marked than one would expect. But first of all we should briefly present the control mechanisms of the application of minimum wage legislation.

Control mechanisms

The application of the provisions on the minimum wage consists of three broad stages: informing workers and employers of the minimum wage rates; establishing sanctions to prevent and punish non-compliance with the legislation; and setting up supervision mechanisms of wages effectively paid by enterprises. Information of workers and employers is in general ensured by the obligation of enterprises to post notices, the publication of details in different newspapers and in the official gazette, and the inclusion of the minimum wage in payslips, etc. Sanctions can be pecuniary or include imprisonment (see www.ilo.org/travail/database for examples of national practice). As far as supervision mechanisms are concerned, the labour inspectorate is legally the responsible body; only rarely are trade unions in charge, though in practice their role can be decisive.

Is the minimum wage too high?

It has been observed that the higher the ratio of the minimum wage to the average wage (i.e., when the minimum wage is relatively higher with respect to the distribution of actual wages), the more likely the employers are to flout minimum wage legislation. This phenomenon was analysed by the Inter-American Development Bank for 12 Latin American countries in 1998; the results of the study point to quite a significant effect: in countries where the minimum wage represents less than 30 per cent of the average wage (as in Argentina, Bolivia and Chile), minimum wage provisions were breached in only 10 per cent of cases, but in countries where the minimum wage represents 60 per cent or more of the average wage, the incidence rate of such violations rose to more than 35 per cent (as in El Salvador, Paraguay and Venezuela). Gindling and Terrell (1995), for their part, show that the highest non-compliance rates are found when the ratio of minimum wage to average wage is the highest, as was the case in Costa Rica from 1982 to 1986.

There seems to be a link between non-compliance and the level of the minimum wage: the higher the minimum wage, the greater the frequency of breaches of worker protection legislation. Yet other explanations too have been put forward in an attempt to understand this phenomenon.

Is firm size a factor?

Several studies focusing on Latin America indicate that the proportion of workers earning less than the minimum wage is higher in firms with fewer than six workers (which is the usual definition of informal firms) than in larger ones. The most common explanation for this phenomenon is that the production process in small firms is less capital-intensive and that small firms are less likely to be subject to scrutiny by the relevant authorities. However, once it is established that this proportion is higher in small firms, the absolute difference in incidence rates of non-compliance with existing legislation is not that significant. As shown in table 16, the spread rarely exceeds 10–15 percentage points, except in Honduras and Trinidad and Tobago, two countries where the minimum wage is high in relative terms. It is interesting to note that in a number of middle-income countries the percentage of workers earning less than the minimum wage is rather low in the informal economy (see table 16). In Brazil this figure is as low as 15 per cent; in other words, 85 per cent of workers are paid at least, if not more than, the minimum wage. If it is indeed true, as we suggested earlier, that informal economy firms consist primarily of small operators, it appears that they are actually partially implementing minimum wage legislation.

Other studies too show that firm size alone is not in itself a sufficient explanatory variable. In their study on Algeria, Thailand and Tunisia, Morrisson, Solignac Lecomte and Oudin (1994) demonstrate that as of the early 1990s the proportion of employers agreeing to pay their employees at least the minimum

wage was similar in firms with ten or more workers as in those employing between two and five workers.

The role of institutions

Even for countries that have achieved a comparable level of development and where minimum wage levels are similar, the degree to which legislation is observed can vary greatly depending on the quality of social dialogue, including the participation of the social partners in setting the minimum wage, the period of time given to enterprises to implement the new minimum wage, and the effectiveness with which the relevant legislation is enforced (Inter-American Development Bank, 1998; Islam and Nazara, 2000).

Observers sometimes blame the complexity of the system for inciting employers to disregard minimum wage legislation, but the few available studies on the subject do not confirm this hypothesis. For example, the legislation was simplified in Costa Rica between 1988 and 1990 but this did not increase the proportion of workers earning at least, or more than, the minimum wage (Gindling and Terrell, 1995). It is thus more likely that the key problem concerns the dissemination of information, as the majority of studies indicate that a large proportion of employers, particularly those running small businesses, are not aware of the prevailing minimum wage. This problem also extends to industrialized countries (small businesses operated by ethnic minorities in north London, to give just one example). Most studies also show, and this comes as no surprise, that non-compliance with minimum wage legislation frequently results from the asymmetry of power between employers and workers.

In conclusion, the high level of the minimum wage and the difficulty of small, labour-intensive firms to cushion the cost of the minimum wage only partly explain the non-compliance phenomenon. Unawareness of minimum wage levels, lack of control and non-participation in the negotiation process, as well as asymmetry of power between employers and workers also seem to play a part. It therefore appears necessary to strengthen the institutional process of minimum wage fixing, the labour inspectorate and the organization of sectors not yet fully represented by the social partners.

Notes

¹ In order to do so, we converted the minimum wage denominated in the local currency into United States dollars, using the official exchange rate.

² A study currently being carried out at the ILO aims to achieve cross-country comparisons of standards of living based on food prices and country-specific nutrition habits. Initially conducted for 12 countries, the research carried out for a study published by Anker (2004) is progressively being extended to the rest of the world.

³ Low-paid workers are defined here as those who earn below 50 per cent of the average wage.

⁴ For the purposes of this study, low-paid jobs are defined as those paying less than 66 per cent of the median wage.

CONCLUSION

Several important conclusions can be drawn from the analysis made in our study.

First, there is a strong relation between minimum wage fixing mechanisms and the degree of development of collective bargaining. In some countries bargaining is sufficiently structured and institutionalized to play a pivotal role in wage determination, limiting the function of minimum wage fixing to the protection of the lowest-paid workers or even totally absorbing this function. In other countries, however, the state-dominated process of minimum wage setting is the only institutional framework available for wage bargaining.

In the latter case – and this brings us to another important conclusion – the social partners, notably trade unions, often place great constraints on the system by seeking wage increases that can appear excessive. If minimum wage consultations are the only forum where trade unions can make their demands known, the resulting minimum wage is less a threshold as such than the effective wage earned by the majority of workers. Consequently, for trade unions the stakes in minimum wage negotiations are high. Such situations are hardly conducive to the protection of the most vulnerable elements of the workforce, who might find themselves unemployed or forced into the informal economy. The only viable solution to prevent this undesirable state of affairs lies in promoting a better-structured collective bargaining system.

Another important conclusion relates to the problems arising from the multiple roles that governments assign to the minimum wage in their social and economic policies. Depending on the socio-economic situation prevailing in a country, its government may use the minimum wage to fight inflation, increase employment, encourage a more equitable distribution of income, or combat poverty. Although its various uses point to the richness of this policy instrument, there is a risk of losing sight of its original purpose, namely protecting the most vulnerable workers and reducing wage inequality. In this regard, we must mention the close links between the minimum wage and social security benefits, noted in

many countries. The multiple functions thus fulfilled by the minimum wage may well be mutually exclusive. Indeed, these links are being called into question in several countries: Spain, for example, is considering discontinuing them altogether.

Given that the primary objective of the minimum wage is to improve the standard of living of the lowest-paid workers and their families, a number of observers have condemned its perverse effects: instead of protecting low-paid workers, the minimum wage may lead to a fall in the employment rate, indirectly lowering the income of workers and thereby exacerbating poverty. Our survey of the literature indicates that the negative impact of the minimum wage on employment is often exaggerated. It is at any rate a complex issue, bringing into play the specificities of particular classes of workers, since the effect of the minimum wage on employment may differ from one category to another.

More importantly, it seems that the minimum wage very rarely reaches a level where its positive impact on low salaries is cancelled out by its negative impact on employment. Our main conclusion is, therefore, that the merits of a minimum wage policy cannot be judged by its effect on employment alone, but must rather be considered in the light of the total benefits it generates for the economy and for workers' welfare. One aspect of this wider analysis is to compare the job losses resulting from a minimum wage rise to the salary increases of workers earning the minimum wage before the rise. In addition, those job losses must be analysed taking into account workers who have found work after being laid off apparently because of the minimum wage rise. Even if the most vulnerable workers may be adversely affected by a rise in the minimum wage, such policy initiatives can also help to protect other categories of vulnerable workers, namely youth, women, migrants and workers not covered by a collective agreement. It should also be noted that minimum wage policies have proved effective in reducing wage inequality.

There is a general tendency to assume that the minimum wage is a policy instrument suited only to rich countries with the means to apply it (availability of statistics that allow for the minimum wage to be fine-tuned to socio-economic conditions, enforcement of the relevant legislation by conducting on-site inspections, etc.). While this assertion may contain more than a grain of truth, one cannot ignore the fact that the minimum wage has proved to be a useful tool in promoting social equity in a number of developing countries, particularly those in the middle-income category. As regards other countries, despite the lack of data some initial and partial results on its implementation in low-wage sectors such as agriculture are encouraging.

In sum, a minimum wage policy ought to focus on the primary objective of the minimum wage, which is to protect the income of the lowest-paid workers and those who are least able to formulate their interests in a collective forum. By assigning it a number of other roles – combating inflation and unemployment, or even defending market share and attracting foreign direct investment –

governments may cause the minimum wage to lose its ability to protect the most vulnerable workers. Similarly, if minimum wage negotiations are the only forum where the social partners are able to engage in dialogue, trade unions will tend to ask for wages that may appear to be excessive. In order to re-focus the attention of the minimum wage on establishing an acceptable threshold for the lowest salaries, and to avoid putting too much pressure on the minimum wage, governments must enable collective bargaining on wages and working conditions to develop.

We will conclude by highlighting some avenues of research that should be explored in order to gain a better insight into the workings of the minimum wage and find ways of improving it. First, there have been few studies on the role of the minimum wage in the determination of wages in the informal economy. Consequently, very little is known regarding either its direct or indirect impact on this part of the economy. It seems that the minimum wage does play the role of a reference wage, but we still do not know to what extent this is the case, whether employers are in favour of it, or even to what extent informal workers are aware that such a thing as a minimum wage exists, let alone its level. Second, there has been little research on the impact of the minimum wage on wage structure within formal sector firms in developing countries. Third, it would be interesting to study the effectiveness of the various models of minimum wage setting discussed in Chapter 1. Finally, research efforts ought to be marshalled to determine, by means of a cross-country analysis, the gap between the minimum wage and the minimum income required to meet the subsistence needs of a worker and his or her family.

ANNEX I

PRESENTATION OF THE MINIMUM WAGES DATABASE

The database includes 101 countries, three of which (Cape Verde, Saudi Arabia, Singapore) have no minimum wage legislation. The tables therefore refer to 98 countries.

The database comprises six main sections.

1. The determination mechanism: How the minimum wage is fixed

This section is divided into two parts: “Procedure” and “Organs to be consulted”.

1.1 *Procedure*

Specifies whether the minimum wage is set by the government or a public authority, or through collective agreements entered into between the social partners. No two countries are exactly the same and in some cases a more detailed explanation is provided (Australia and Germany, for example).

The type of minimum wage the country has implemented is also briefly summarized. In some countries one rate can apply nationwide or there may be regional variations. In others, multiple rates are set that vary according to sectors or occupations. Certain countries have implemented a combination of these two systems.

1.2 *Organs to be consulted*

Summarizes which organs are consulted during the wage fixing process. This will be done with either a bipartite or tripartite committee or the social partners directly, or there may be no obligation to carry out consultations.

Details are also provided on whether these organs are composed of the social partners, independent members or government representatives. It is also

noted whether or not there is a legal obligation to consult these organs during the minimum wage fixing process.

2. Coverage

This section covers the following:

- scope of application;
- minimum wage variations by occupation, sector and region;
- categories of workers with specific minimum wage levels: apprentices, youth, the disabled, etc.;
- specific employment relationships subject to the minimum wage, such as piece-rate workers and contractors; and
- categories of workers excluded from the scope of minimum wage legislation.

3. Criteria

A note is made whenever a country's legislation stipulates that any of the following criteria must be taken into consideration: needs of workers and their families; cost of living; level of wages and incomes in the country; social security benefits; economic development; productivity; level of employment; capacity of employers to pay; and inflation rate. Any other criteria referred to are included in the final category, entitled "Other provisions".

4. Level

- Minimum wage rates for unskilled adult workers are provided in local currency, US\$ and purchasing power parity. Minimum wage rates are converted to US\$ using the average exchange rate for 2003.¹ Rates are expressed in terms of purchasing power, using the purchasing power parity factors elaborated by the World Bank (PPP\$) for 2003, unless otherwise indicated. For example, the monthly minimum wage in Turkey is 441,000,000 Turkish lira. This is equivalent to US\$293.83 and PPP\$590.93, meaning that a worker receiving the minimum wage in Turkey and living alone has the same standard of living as someone living in the United States and earning US\$590.93 per month.
- Minimum wage rates may vary with occupation, sector and region, and in some cases also vary according to factors such as age, level of qualification, etc. In countries where there is more than one minimum wage rate, the highest and lowest minimum wage rates have been included.

- This section also provides information on whether wages may be paid in kind, and in particular whether an in-kind allowance can result in a worker receiving wages that are lower than the relevant minimum wage rate. Finally, it gives information on whether the minimum wage is calculated hourly, daily, weekly, monthly, or on another basis.

5. Frequency of adjustment

Many countries stipulate how frequently minimum wage rates should be adjusted. This information is included in this section, along with a note concerning countries that do not appear to have any legal provisions establishing how frequently this adjustment must take place.

6. Enforcement

This section lists the various bodies, such as labour inspectorates, that ensure compliance with minimum wage legislation. It also sets forth the amount of any fines that may be levied in the event of non-compliance, along with any other penalties that may be imposed, such as imprisonment.

Note

¹ Source: Economic Intelligence Unit.

ANNEX II

LEVEL OF MINIMUM WAGES

WORLDWIDE, 2003–04

Level of minimum wages worldwide (US\$ per month)

Amount (US\$ per month)	Country
Europe	
Less than \$30	Armenia, Azerbaijan, Belarus, Kyrgyzstan, Moldova, Republic of, Russian Federation, Tajikistan, Uzbekistan
\$30–99	Albania, Bulgaria, Kazakhstan, Romania, Ukraine
\$100–499	Bosnia and Herzegovina, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Portugal, Slovakia, Turkey
\$500–999	Cyprus, Greece, Israel, Malta, Slovenia, Spain
\$1,000 +	Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Sweden, Switzerland, United Kingdom
No minimum wage	Georgia
Americas	
Less than \$30	-
\$30–99	Bolivia, Brazil, Ecuador, El Salvador, Haiti, Honduras, Mexico, Nicaragua, Uruguay
\$100–499	Argentina, Barbados, Belize, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Grenada, Guatemala, Jamaica, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela
\$500–999	Bahamas, Canada, United States
\$1,000 +	-
No minimum wage	Guyana

Amount (US\$ per month)	Country
Africa	
Less than \$30	Burundi, Central African Republic, Ethiopia, Gambia, Ghana, Malawi, Sao Tome and Principe, Sierra Leone, Sudan, Uganda, Zambia, Zimbabwe
\$30–99	Angola, Benin, Botswana, Burkina Faso, Cameroon, Chad, Congo, Republic of the Côte d'Ivoire, Egypt, Gabon, Guinea-Bissau, Kenya, Lesotho, Madagascar, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Senegal, Swaziland, Tanzania, United Republic of, Togo
\$100–499	Algeria, Djibouti, Mauritius, Morocco, South Africa, Tunisia
\$500–999	-
\$1,000 +	-
No minimum wage	Cape Verde, Democratic Republic of the Congo, Eritrea, Guinea
Asia	
Less than \$30	Lao People's Democratic Republic, Mongolia, Myanmar, Nepal, Papua New Guinea, Sri Lanka, Viet Nam
\$30–99	Bangladesh, Cambodia, China, India, Indonesia, Malaysia, Pakistan, Philippines, Solomon Islands, Thailand
\$100–499	Fiji, Korea, Republic of
\$500–999	Japan, New Zealand
\$1,000 +	Australia
No minimum wage	Singapore
Arab States	
Less than \$30	
\$30–99	Syrian Arab Republic
\$100–499	Jordan, Lebanon, Oman
\$500–999	-
\$1,000 +	-
No minimum wage	Bahrain, Kuwait, Saudi Arabia
Data not yet available: Islamic Republic of Iran, The former Yugoslav Republic of Macedonia, Rwanda, Turkmenistan, Yemen, Afghanistan, Liberia, Suriname, Somalia, Cuba, Turks and Caicos Islands, Saint Kitts and Nevis, Antigua and Barbuda, Saint Lucia, Saint Vincent and the Grenadines, Seychelles, Grenada, Iraq, Democratic People's Republic of Korea, Taiwan (China), Vanuatu, Samoa, New Caledonia	

- = No countries with a minimum wage above this level.

Note: For countries with multiple minimum wage rates, the levels provided are the arithmetical mean of the lowest minimum wage rate applicable to an unskilled adult worker, regardless of occupation, sector and/or region; and the highest minimum wage rate applicable to an unskilled adult worker. However, for countries that set minimum wage rates through collective agreements, one collective agreement (in general the main collective agreement for the metalwork sector) has been taken as an example and the rates for an unskilled adult worker provided. The rates are either the monthly levels set forth in the legislation, or have been calculated according to a five-day week/40 hours per week and 4.33 weeks per month.

Source: Minimum wage rates: ILO; U.S. Department of State Human Rights Reports 2003; Exchange rate 2003: Economic Intelligence Unit.

ANNEX III

PURCHASING POWER OF MINIMUM WAGES WORLDWIDE, 2003–04

Purchasing power of minimum wages worldwide (PPP\$ per month)

Amount (PPP\$ per month)	Country
Europe	
Less than \$99	Armenia, Azerbaijan, Belarus, Kyrgyzstan, Moldova, Republic of Russian Federation, Tajikistan, Uzbekistan
\$100–199	Albania, Kazakhstan,
\$200–499	Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Ukraine
\$500–999	Bosnia and Herzegovina, Greece, Iceland, Israel (PPP – 2002), Portugal, Slovenia, Spain, Turkey
More than \$1,000	Austria, Belgium, Denmark (used PPP – US\$), Finland, France, Germany, Ireland, Italy, Luxembourg, Malta (PPP – 2002), Netherlands, Norway, Sweden, Switzerland, United Kingdom
No minimum wage	Georgia
Americas	
Less than \$99	-
\$100–199	Bolivia, Ecuador, Haiti, Jamaica, Mexico, Uruguay
\$200–499	Barbados, Belize (PPP – 2002), Brazil, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Peru, Trinidad and Tobago, Venezuela
\$500–999	Argentina, Bahamas (PPP – 2002), Grenada, Paraguay, United States
More than \$1,000	Canada

The fundamentals of minimum wage fixing

Amount (PPPS per month)	Country
No minimum wage	Guyana
Africa	
Less than \$99	Benin, Burundi, Central African Republic, Congo, Republic of the, Gambia, Kenya, Madagascar, Malawi, Sierra Leone, Uganda, Zambia
\$100–199	Angola, Botswana, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Guinea-Bissau, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Senegal, Sudan, Swaziland, Tanzania, United Republic of Togo
\$200–499	Algeria, Djibouti, Egypt, Lesotho, Mauritius, Morocco, South Africa, Tunisia
\$500–999	-
More than \$1,000	-
No minimum wage	Cape Verde, Dem. Rep. of the Congo, Eritrea, Guinea
Asia	
Less than \$99	Lao People's Democratic Republic, Mongolia, Solomon Islands, Sri Lanka
\$100–199	Bangladesh, India, Indonesia, Malaysia, Nepal, Pakistan, Papua New Guinea, Viet Nam
\$200–499	Cambodia, China, Fiji, Philippines, Thailand
\$500–999	Japan, Korea, Republic of
More than \$1,000	Australia, New Zealand
No minimum wage	Singapore
Arab States	
Less than \$99	-
\$100–199	Syrian Arab Republic
\$200–499	Jordan, Lebanon, Oman (PPP – 2002)
\$500–999	-
More than \$1,000	-
No minimum wage	Bahrain, Kuwait, Saudi Arabia

- = No countries with a minimum wage above this level.

Data not yet available: Islamic Republic of Iran, The former Yugoslav Republic of Macedonia, Rwanda, Turkmenistan, Yemen, Afghanistan, Liberia, Suriname, Somalia, Cuba, Turks and Caicos Islands, Saint Kitts and Nevis, Antigua and Barbuda, Saint Lucia, Saint Vincent and the Grenadines, Grenada, Seychelles, Iraq, Democratic People's Republic of Korea, Taiwan (China), Vanuatu, Samoa, New Caledonia; PPP not available for Cyprus, Zimbabwe, Sao Tome and Principe, Myanmar for 2002 or 2003.

Note: For countries with multiple minimum wage rates, the levels provided are the arithmetical mean of the lowest minimum wage rate applicable to an unskilled adult worker, regardless of occupation, sector and/or region; and the highest minimum wage rate applicable to an unskilled adult worker. However, for countries that set minimum wage rates through collective agreements, one collective agreement (in general the main collective agreement for the metalwork sector) has been taken as an example and the rates for an unskilled adult worker provided. The rates are either the monthly levels set forth in the legislation, or have been calculated according to a five-day week/40 hours per week and 4.33 weeks per month.

Source: Minimum wage rates: ILO; U.S. Department of State Human Rights Reports 2003; Purchasing power parity conversion factor: World Bank (2003 except for Bahamas, Belize, Israel, Malta and Oman: 2002).

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