## Technical Note 1: Assessing economic factors in the domestic work sector

This technical note explains how to assess and take account of economic factors when setting a minimum wage for the domestic work sector.

Economic factors in other sectors may relate to productivity, the percentage of wage earners affected, and the minimum to average wage ratio, among other things. In the domestic work sector, household income can be used instead of productivity, as well as slight variants on the other economic indicators. This is in order to assess the ability of households to pay a given wage.

The steps presented here will enable the identification of the actual households that employ domestic workers, and the households' income levels. By following these steps, a minimum wage level can be identified that is affordable for the majority of households that employ domestic workers thereby limiting the adverse employment effects.

These steps should be taken after assessing the needs of workers and their families and should be read in conjunction with the chapter on domestic work and setting the minimum wage (chapters 5 and 8 ).

The outcome of the steps in this technical note will provide social partners with a range of potential minimum wages that align with the capacity of households to pay. This can then be combined with the assessment of the needs of workers and their families.

## 1. Data requirements

Determining the income of households that employ domestic workers requires data. When assessing economic factors, which include the capacity of households to pay, the data should consist of, at a minimum, information at the household level, including:

- the total number of household members
- the characteristics of its members (including age, employment status)
- the total household income
- whether the household employs a domestic worker.

If available, it would also be useful to know whether the domestic worker lived in or outside the employer's home, and the number of hours worked.

All this information most frequently comes from household budget, income, and/or expenditure surveys. Ideally, the data would be available for multiple years.

The availability of data is essential because minimum wage setting should be evidence-based. If these surveys are not available, other means could be used to collect data on the wages, hours and working conditions of domestic workers and of domestic workers' employers.

In Namibia, a special module on domestic work was added to the existing labour force survey. In Botswana, data were gathered through qualitative research, including a series of interviews with various stakeholders.

## 2. Data preparation

Once the data described above are obtained, these steps should be followed.
(1) Compute a per capita household income, in order to control for household size. Larger households may have a larger income because more people are working. Box 1 provides a review of the methodology to compute a per capita household income. Ideally, disposable household income data, as opposed to total household income, ${ }^{1}$ would be used, since a domestic worker's wage is usually paid from the former.
(2) Rank the households by per capita household income in order to determine the household income distribution. This step ranks households from the lowest to the highest income.
(3) Identify relevant questions in the surveys that enable the identification of households that employ domestic workers, and then identify these households in the data.
(4) Compute the same exercise for all years for which the data are available.

Once these computations have been made, a series of analyses can be conducted to assess the capacity of households that employ domestic workers to pay a given wage. Some of these analyses are described below - but the list should not be considered exhaustive.

[^0]
## Box 1

## Measuring per capita household income, from the ILO Global Wage Report 2014/15

## Box A2 Measuring per capita household income

Household income can be measured as the sum of incomes from all different sources accruing to a given household over a certain period of time. The link between total household income and living standards depends on the number of persons who must live on this income: a total annual income of, say, US\$6,500 does not have the same meaning for a single-person household as it does for a household with two adults and three children. To account for family size, and reflect living standards, we could simply divide total household income by the number of household members. In the hypothetical case illustrated in figure A2, we would divide US\$6,500 by five, and obtain a per capita household income of US $\$ 1,300$.

Figure A2 Illustration of the components of household income


Such a simple method, however, does not take into account the fact that there exist economies of scale when people live together (e.g. only one dwelling instead of two), and that children need fewer calories than adults. To take these further considerations into account, and to obtain an adjusted measure of the "possibility of households to consume", we follow Deaton and Zaidi's formula and calculate per capita household income as: $E=(A+\alpha K)^{\theta}$ where $A$ represents the number of adults, $K$ is the number of dependent children, $\alpha$ represents the spending of a child relative to an adult, and $\theta$ captures the economies of scale in a given household (Deaton and Zaidi, 2002). We use the adjustment factors as specified in table A4, and illustrate the use of the formula with our hypothetical example. We see that the effective per capita household income would be set in a range from US $\$ 2,493$ to US $\$ 2,728$.

Table A4 Equivalent scale parameters guide

|  | $\boldsymbol{\alpha}$ | $\boldsymbol{\theta}$ | In our example: |
| :--- | :---: | :---: | :--- |
| Advanced economies | 0.75 | 0.6 | $\mathrm{PCHHI}=6500 \div(2+0.75 \times 3)^{0.6}=$ US $\$ 2728$ |
| Middle-income or emerging economies | 0.50 | 0.8 | $\mathrm{PCHHI}=6500 \div(2+0.50 \times 3)^{0.75}=$ US $\$ 2540$ |
| Low-income or developing economies | 0.30 | 0.9 | $\mathrm{PCHHI}=6500 \div(2+0.30 \times 3)^{0.90}=$ US $\$ 2493$ |

Note: PCHHI refers to per capita household income.

## 3. Data analysis

By analysing the types of households that employ domestic workers we can attempt to predict the extent to which an increase in the minimum wage will affect the number of hours that domestic workers' work, their employment, or the employment of family members who are able to work because of the domestic worker's presence.

For example, if the data shows that wealthier families employ a disproportionate share of domestic workers, modest increases in the minimum wage are unlikely to have an impact on employment. This is because modest increases are unlikely to significantly change the overall percentage of household expenditure spent on a domestic worker's employment (see question 2 below for an example). If however, the majority of employers have incomes in the bottom half of the distribution, the implications could be different.

The analyses described here aim to identify the types of households that employ domestic workers in order to assess the economic factors that are specific to the domestic work sector and are required to set the minimum wage.

## (1) Which type of households employ which domestic workers?

a. Do wealthier families primarily hire domestic workers? Do families with more limited means more frequently hire domestic workers?

In the three countries for which data are provided below, domestic workers are over-represented among the wealthiest households (this is not to say that in other countries poorer families may employ a significant share of domestic workers).

- In Costa Rica, in 2013, 24 per cent of households employed domestic workers. Among these households, more than half ( 59 per cent) were from the richest 30 per cent of households.
- In Namibia, in 2012, 9 per cent of all households employed domestic workers; among those households, more than half ( 65 per cent) were from the richest 25 per cent of households.
- In the Philippines, in 2009, 5.8 per cent of all households employed domestic workers. Among these households, 81 per cent belonged to the richest 20 per cent of households.

Figure 1 Domestic worker employment in Costa Rica, by decile of the disposable household income of the employer, 2013


Note: Deciles divide a group into ten parts. For example, in the figure, the first decile refers to the poorest 10 per cent of households, while the tenth decile refers to the wealthiest 10 per cent of households.
Source: ILO commissioned study. Triegos, J.D., 2015, "The application of minimum wages in the domestic work sector in Costa Rica".

Figure 2 Domestic worker employment in Namibia, by the disposable household income of the employer, 2012


Source: ILO commissioned study. Budlender, D., 2013, "Wages and conditions of work of domestic workers in Namibia".

Figure 3 Domestic worker employment in the Philippines, by the disposable household income of the employer, 2009


Source: ILO, Domestic Workers in the Philippines: Profile and Working Conditions (Geneva, ILO).

## b. Does this differ by live-in or live-out status?

i. Understanding differences in households that employ live-in and live-out domestic workers will improve the accuracy of the analysis of these households. If data is available on whether domestic workers concerned are either living in or out of the household, it will be possible to determine, for instance, whether live-in domestic workers primarily live in rural areas where housing options may be limited, or if live-in domestic workers are primarily concentrated in the homes of wealthier households (irrespective of the location).

For example, data from the Philippines shows that while 60 per cent of households with domestic workers (both live-in and live-out) were in the top 10 per cent of the wealthiest households, this was the case for 67 per cent of households with live-in domestic workers.

In other words, the wealthiest households are not only those most likely to have a domestic worker - they were also most likely to employ a livein domestic worker. Live-in domestic work represents about 30 per cent of domestic work in the Philippines.

In the absence of a survey question that identifies whether a domestic worker lives in or out, a proxy to use is the number of hours worked. Since live-in domestic workers are those who work the most hours, it could be presumed by looking simply at hours worked that those who work the most are live-in workers.

An alternative would be to use survey questions related to payment in kind, if available. Those domestic workers who receive accommodation as part of their payment in kind can be considered to live in.

In Costa Rica, using the number of hours worked, this would suggest that live-in workers represent about 21 per cent of domestic workers. Using criteria based on in-kind payment, the percentage of live-in domestic workers ranges from about 5.2 per cent to 22 per cent, depending on the data source used.

## c. Has this trend changed over time?

i. Data over time is not always available. When it is, such data can be particularly useful to confirm whether a trend is consistent over time (rather than a singular, anomalous, event). If trends are consistent over time, this can lend further support to the results.

In the Philippines for example, the percentage of households that employed domestic workers increased between 2003 and 2009. Moreover, domestic workers continued to be primarily employed by the wealthiest households.

## (2) What percentage of household expenditure or income is spent on employing domestic workers?

Once the profile of households that employ domestic workers has been assessed, it is possible to calculate the percentage of household income or expenditure spent on domestic work. This calculation
is somewhat akin to calculating the total wage bill of an enterprise - that is, the sum of the wages of all employees in a company. (See chapter 5)

If total expenditure increases too much, too rapidly, this may prompt negative employment effects or a decline in the number of hours worked. By contrast, modest increases in the minimum wage, which engender modest rises in household expenditures, could prove beneficial to workers without excessively burdening employers.

For example, Figures 4 and 5 show the percentage of household income spent on employing domestic workers in Costa Rica and the Philippines. While the percentage of household income spent on domestic work varies depending on the household's income, on average, households spent about 4 per cent of their income on domestic work in both countries.

Figure 4 Percentage of household expenditure spent on paying for domestic work services in Costa Rica, by decile, 2013


Note: Deciles divide a group into 10 parts. For example, in the figure, the first decile refers to the poorest 10 per cent of households, while the tenth decile refers to the wealthiest 10 per cent of households.
Source: ILO commissioned study. Triegos, J.D., 2015, "The application of minimum wages in the domestic work sector in Costa Rica".

Figure 5 Expenditure on domestic workers in the Philippines: share of household expenditure, by expenditure decile, 2003 and 2009


Note: FIES refers to the Family Income and Expenditure Survey.
Source: ILO, Domestic Workers in the Philippines: Profile and Working Conditions (Geneva, ILO).

## (3) Simulating the impact

Depending on the data set available, it may be possible to simulate how an increase in domestic workers' minimum wage would affect household expenditure. An increase in the minimum wage could have several effects on household expenditure and they all depend on how households would react.

For example,

- a household could consider that the increase in the minimum wage is too great and so would dismiss the domestic worker (this would be an employment effect);
- the household could think the increase was significant, retain the domestic worker, but reduce the domestic worker's hours (an hours effect);
- a third option would be for the household to retain the domestic worker and the hours worked (so make no change to the employment or hours worked).

It is important to bear in mind that all of these effects will depend on (i) the size of the increase in the minimum wage and (ii) the size of the increase in the employer's household income, where the domestic worker is employed, since this generally increases over time.

First, if a minimum wage for domestic workers has never existed before, it is important to establish a baseline. In other words, before simulating the introduction of a minimum wage, the percentage of household income that households currently spend on domestic work will need to be assessed. (See Question 2.)

Once a baseline has been established, simulation effects can be carried out with the data for all households. For the purposes of illustration, we will use two examples of individual households.

## Household A

The average median household income in the United States in 2014 was US $\$ 53,657 .{ }^{2}$ The minimum wage in the United States in 2014 was US $\$ 7.25$ per hour. Household A employs a domestic worker and pays the minimum wage. As in most households, Household A spends about 4 per cent of its income (US\$2,146) on domestic work per year. This amounts to about 5.7 hours of domestic work per week.

If the minimum wage increased to US\$10 per hour, the household budget for domestic work would have to increase from US $\$ 2,146$ to US $\$ 2,960$ per year, or about 5.5 per cent of total household income. If the minimum wage were to increase to US\$15 per hour, this would more than double the percentage of household income spent on domestic work, to about 8.2 per cent of total income.

This example shows that an increase in the minimum wage to US\$10 per hour might be manageable for this family (without changing hours or employment) since it would increase their expenditure by 1.5 per cent. But an increase in the minimum wage to US $\$ 15$ per hour could have a negative effect since it would double their expenditure on domestic work.

Table 2 Household expenditure on domestic work in Household A, in US dollars

| Annual household <br> income <br> 53657 | Minimum wage | Hours <br> worked per <br> week (52 <br> weeks in a <br> year) | Annual <br> expenditure on <br> domestic work | Percentage of <br> household income <br> spent on domestic <br> work |
| :--- | :--- | :--- | :--- | :--- |
| Case 1 | 7.25 | 5.7 | 2146 | 4.0 |
| Case 2 | 10.00 | 5.7 | 2960 | 5.5 |
| Case 3 | 15.00 | 5.7 | 4290 | 8.2 |

## Household B

Household B is a higher-earning family. Applying the calculations to a higher-income family is particularly pertinent since the examples shown above demonstrate that wealthier families tend to employ a disproportionately higher share of domestic workers.

To illustrate, in 2014, the wealthiest 5 per cent of families had household incomes amounting to at least US\$206,568 in the United States. If Household B only wanted 5.7 hours of domestic work per week - like Household A - this would amount to only 1 per cent of their total household budget (see calculations for Household B, Table 3, below).

Moreover, in this second household, if the minimum wage were to increase to US\$10, it would only amount to 1.4 per cent of the total household budget. If the minimum wage were to increase to US\$15 per hour, this would amount to about 2.1 per cent of the household's total expenditure.

In this example, an increase in the minimum wage would double Household B's expenditure on domestic work (like Household A). However, unlike Household A, it would be unlikely that doubling the expenditure would change the employment or the hours worked. This is because Household B's expenditure on domestic work, as a share of total household income, is considerably lower (only 1 per cent at a US $\$ 7.25$ minimum wage, as compared with 4.0 per cent for Household A).

[^1]Table 3 Household expenditure on domestic work in Household B, in US dollars

| Annual household <br> income <br> 206568 | Minimum wage | Hours <br> worked per <br> week (52 <br> weeks in a <br> year) | Annual <br> expenditure on <br> domestic work | Percentage of <br> household income <br> spent on domestic <br> work |
| :--- | :--- | :--- | :--- | :--- |
| Case 1 | 7.25 | 5.7 | 2146 | 1.0 |
| Case 2 | 10.00 | 5.7 | 2960 | 1.4 |
| Case 3 | 15.00 | 5.7 | 4290 | 2.1 |

In reality, as the data from the selected countries showed, wealthier households tend to employ domestic workers for a number of hours equal to about 4 per cent of their household income.

Four per cent of Household B's income would amount to US $\$ 8,263$ per year. At the minimum wage (US\$7.25 per hour), this would pay for 1,140 hours of domestic work annually, or about 21.9 hours of domestic work per week; considerably more hours per week than the median family income (Household A) buys.

Table 4 Household expenditure on domestic work in Household B, assuming a greater number of hours worked by domestic workers, in US dollars

| Annual household <br> income <br> 206568 | Minimum wage | Hours <br> worked per <br> week (52 <br> weeks in a <br> year) | Annual <br> expenditure on <br> domestic work | Percentage of <br> household income <br> spent on domestic <br> work |
| :--- | :--- | :--- | :--- | :--- |
| Case 1 | 7.25 | 21.9 | 8263 | 4.0 |
| Case 2 | 10.00 | 21.9 | 11397 | 5.5 |
| Case 3 | 15.00 | 21.9 | 17095 | 8.3 |

So this step - Step 3 - takes the analysis further by simulating the increase in household expenditure which would occur in light of an increase in the minimum wage (assuming no changes in employment or hours worked).

If Household A employs a domestic worker for 5.7 hours per week, and Household B for 21.9 hours per week, the results show that while an increase in the minimum wage to US $\$ 10$ might be sustainable for households (i.e. be unlikely to provoke changes in employment or hours worked), this would not be the case for an increase to US $\$ 15$ per hour.

However, the analysis should not stop here because this simple analysis assumes that household income does not increase over time, whereas in practice it usually does, especially for the wealthiest households who predominantly employ domestic workers. This scenario is described in the next section.

## (4) Making adjustments

It is quite unrealistic to assume that household income remains constant. Generally, the wages and income of the wealthiest households have increased over time. In many countries inequality has indeed increased because of higher growth in the wages and income of wealthier families.

If wealthier families disproportionately hire domestic workers - as in Costa Rica, Namibia and the Philippines - this has important implications for setting and adjusting the minimum wage.

For example, the federal minimum wage in the United States has remained unchanged since 2009. As a result, the purchasing power of the minimum wage has declined by about 9 per cent (because of increases in prices). By contrast, since 2009, the purchasing power of the richest 5 per cent of households has increased by about 4 per cent.

Subsequently, as households employing domestic workers became wealthier, and the domestic worker's wage remained the same (while value of that same wage decreased), the percentage of household income spent on employing a domestic worker also declined.

This can also be seen from Table 5, which takes as its basis the household income of the richest 5 per cent of families in the United States in 2012.

Assume that this household spends about 4 per cent of its income on domestic work and the domestic worker's wage is US $\$ 7.25$ per hour. If household income grows by 9 per cent, and the domestic worker's wage remains the same, the percentage of household income spent on domestic work declines from 4 per cent to 3.7 per cent. Hence, in order to retain the same percentage of household income allocated to domestic work ( 4 per cent), the domestic worker's wage would have needed to increase to US\$7.68 per hour in 2014.

Table 5 Percentage of household income spent on domestic work

|  | 2012 | 2014 | Growth |
| :--- | :--- | :--- | :--- |
| Annual household income | 189512 | 206568 | $9 \%$ |
| 4 per cent of household income | 7581 | 8030 | $9 \%$ |
| Annual cost of domestic work (20.1 hours <br> per week for US\$7.25 per hour) | 7581 | 7581 | $0 \%$ |
| Percentage of household income spent on <br> domestic work | $4 \%$ | $3.7 \%$ |  |

## 4. Conclusions

The analyses presented above show how data can be used to assess the capacity of households to pay for domestic work. Of course, more complex methods exist and could be used to estimate the effect of minimum wages on hours worked and employment. Understanding the profile and income of households that employ domestic workers, the type of domestic workers they employ, and how or if these trends have changed over time can help to identify the characteristics of employers of domestic work.

Once the employers are identified in the data, it becomes possible to calculate the percentage of household income spent on domestic work and how this may vary for different types of employers.

Generally, household incomes increase over time and, in the absence of increases to the minimum wage, the percentage of household expenditure on domestic work therefore declines. For this reason, understanding trends in the household income of domestic workers' employers - i.e. how fast they are increasing - can also inform discussions about how much it is possible to increase the minimum wage for domestic workers.

## Technical Note 2: <br> Combining the concepts - payment in kind, hourly and monthly rates, live-in and live-out domestic workers

The criteria and process for setting the minimum wage for domestic workers are the same as for all other workers. The first step to determine the wage for domestic workers therefore is to begin as if setting a national monthly minimum wage as for all other workers (see technical note 1 and chapters 8 and 5).

However, this should be based on the standard work week for domestic workers, if this is different from that of other workers, and on the proportions of live-in and live-out domestic workers in the workforce.

Once these indicators have been calculated, the prevalence of payments in kind must then be taken into account.

The following technical brief provides a step-by-step method to work through these concepts using an illustrative example. An application of these concepts as applied to Costa Rica appears in Technical Note 3.

## 1. Treating live-in and live-out domestic workers equally

Live-in domestic workers typically work long hours each day, and are paid a weekly or a monthly rate that is not necessarily based on the same normal hours of work followed by other workers. In some countries, these domestic workers are paid on a monthly or weekly basis, rather hourly, disregarding the long hours they work.

For these workers, a minimum wage should be set that takes account of their long working hours - especially if they are excluded from limits on working time, and/or from overtime protections. A minimum wage can also be set while taking account of the cost of food and accommodation provided by the employer, under certain conditions (see section 8.10 on payment in kind).

Live-out domestic workers tend to work on an hourly basis, and earn an hourly wage. A monthly wage rate therefore is not a practical solution for them. They too are often excluded from limits on working time and/or from overtime protections. If their hourly wage rate is too low, they are also vulnerable to working very long hours.

For these workers, the hourly wage rate must be set in reference to the normal weekly hours (also referred to as the standard work week) that applies to domestic work, or, in the absence of working time protection, in reference to the same provisions afforded to other workers.

Depending on the proportions of live-in and live-out domestic workers, their respective standard work weeks and practices of payment in kind, a country might consider setting separate minimum wages for live-in and live-out domestic workers.

The following steps will ensure that the option chosen treats both live-in and live-out domestic workers equally, while taking account of the specificities of their working arrangements.

## Zubistina, a fictional country, is preparing to set a minimum wage for domestic workers.

1) Calculate the relevant social and economic indicators.
(These are presented in Technical Note 1 and 3, chapter 5, and chapter 8).
For the purposes of this example, the nominal monthly gross minimum wage for all workers will be set at 500 local currency units (LCU) per month.
2) Determine the composition of the domestic work labour force.

The responses to this question will help determine if a country should either set an hourly minimum wage for all domestic workers or a monthly and an hourly minimum wage for domestic workers.

What percentage of domestic workers live in and live out? In the absence of data on live-in and live-out domestic workers, hours worked can be used as a proxy. Domestic workers who work hours which are approximately equal to or exceeding normal weekly hours are likely to be live-in.
i. If the percentage of live-in domestic workers equals 0 (i.e. there are only live-out domestic workers), an hourly minimum wage is necessary. Proceed to step 4.
ii. If the percentage of live-in domestic workers is greater than 0 but less than 100 (i.e. there are both live-in and live-out domestic workers), it may be necessary to consider both an hourly and a monthly minimum wage. Proceed to step 3.
iii. If the percentage of live-in domestic workers is 100 (i.e. all domestic workers are live-in), it may be necessary to consider both an hourly and a monthly minimum wage. Proceed to step 3 .
3) Assess the legal coverage of domestic workers in terms of working time provisions - including limits on normal working hours, overtime, and/or daily or weekly rest. This will also help to determine whether an hourly or both an hourly and a monthly minimum wage should be set.

Are domestic workers covered by limits on normal weekly hours?
i. If yes:

1. Identify the limits on normal weekly hours (i.e. standard work week) that applies to domestic workers, and proceed to point " a " below.
a. Do overtime provisions also apply to domestic workers?

- If yes, both an hourly and a monthly minimum wage could be set. Proceed to step 4 below.
- If not, proceed to point "ii.2" below.
ii. If no:

2. Are domestic workers covered by daily or weekly rest provisions?

- If yes, both an hourly and a monthly minimum wage could be set. The standard work week can be calculated by using the limits on rest. Proceed to step 4.
- If not: An hourly minimum wage could be set using the limits on normal weekly hours set for workers generally, or for a comparable sector. Proceed to step 4.

Before proceeding to step 4 , what have we learned from the first 3 steps? The first three steps aimed to determine whether a minimum wage should be set hourly and monthly or exclusively hourly.

Generally, a minimum wage can be set monthly and hourly when: (i) domestic workers are covered by working time provisions (standard work week, or rest periods, and overtime provisions) and (ii) there are both live-in and live-out domestic workers.

If domestic workers are not covered by working time provisions, an hourly minimum wage should always be set to ensure that domestic workers are remunerated for each hour they work. Otherwise, if those same domestic workers receive a minimum wage that is set monthly, there is no limit on the number of hours they may have to work to earn the monthly minimum wage.

Generally, if a monthly minimum wage is set, it is good practice to have an hourly minimum wage as well. The hourly minimum wage can simply be calculated as the pro rata monthly minimum wage based on the standard workweek, and vice versa for calculating the monthly wage rate. This accommodates different working hours in the domestic work sector and also facilitates the calculation of overtime in cases where it may apply.

Table 6 summarizes some of the results obtained from following the steps above using a fictitious example of a country's domestic work labour force.

Table 6 Composition of the domestic work labour force

| Number of <br> domestic <br> workers in <br> total | Number of live- <br> out domestic <br> workers | Number of live-in <br> domestic workers | Covered by <br> working time <br> provisions | Type of <br> minimum wage <br> which can be set |
| :--- | :--- | :--- | :--- | :--- |
| 100 | 50 (of whom all <br> work full time) | 50 | No | Hourly |
| 100 | 50 (of whom all <br> work full time) | 50 | Yes | Hourly and <br> monthly |
| 100 | 100 (of whom all <br> work full time) | 0 | Hourly and <br> monthly |  |
| 100 | 100 (of whom all <br> work full time) | 0 | No | Hourly |
| 100 | $25(10$ work full <br> time, 15 work part <br> time) | 75 | Yes work full | 75 |
| 100 | $25(10$ wourly and <br> time, 15 work part <br> time) | Live-out: yes <br> Live-in: no | Hourly* |  |

*In cases where only a segment of the domestic work labour force is protected by working time provisions, the minimum wage should always be set hourly.
4) Determine the corresponding hourly minimum wage.

The chosen rate should correspond to the monthly value noted in step 1 . In our example, the minimum wage set using the standard work week for domestic workers was equal to 500 LCU per month. The corresponding pro rata hourly minimum wage can be calculated as follows:

| Monthly minimum wage in LCU | 500 |
| :--- | :--- |
| Standard work week for domestic workers in the <br> legislation | 45 hours |
| Standard hours worked in a year based on the standard <br> work week for domestic workers (presuming paid <br> holidays are included) | 45 hours a week x <br> 52 weeks in a year $=$ <br> 2,340 hours worked per <br> year |
| Standard hours worked per month based on standard <br> work week for domestic workers | 2,340 hours worked per <br> year divided by 12 <br> months $=195$ hours per <br> month |
| Hourly minimum wage in LCU | 500 LCU per month <br> divided by 195 hours per <br> month $=2.56$ LCU per <br> hour |

Proceed to step 5.
5) Determine limits and the type of valuation for payments in kind.

Once both an hourly and/or monthly minimum wage have been determined, allowances for payment in kind can be assessed. The table below presents a practical example of the different ways to value payments in kind, described in section 8.10.

For the purposes of this example, we will apply a limit on payment in kind equal to 25 per cent of the wage.

| Valuation of payment in <br> kind | Monthly minimum wage: <br> 500 LCU | Hourly minimum wage: <br> 2.56 LCU |
| :--- | :--- | :--- |
| Prohibition of payment in <br> kind as part of the <br> minimum wage | 0 LCU permitted in kind | 0 LCU permitted in kind |
| As a percentage of the <br> minimum wage (e.g. 25\% <br> of the wage paid in kind) | Up to 125 LCU in <br> payment in kind permitted | Up to 0.64 LCU in <br> payment in kind permitted |
| As a level: <br> Breakfast: 0.50 LCU per <br> day <br> Lunch: 1 LCU per day <br> Dinner: 1 LCU per day <br> Lodging: 5 LCU per day | Live-in domestic worker <br> with lodging and all <br> meals: <br> $7.50 \times 30$ days per month <br> $=225$ LCU per month in <br> payment in kind | Live-out domestic worker <br> who works 4 hours per <br> day, 5 days a week with <br> lunch each day: 1 x 5 = 5 <br> LCU per week in payment <br> in kind |

"Market value" and a "fair and reasonable value" are two other ways that the value of payment in kind could be set. However, no standard methods of calculating these concepts are available.

If market value is used, it is important to bear in mind that the market value should be based on the market value of accommodation or food available to the domestic worker in the neighbourhood where that worker would ordinarily live with their own family.

Market value should not be based on the value of the food and/or accommodation in the employer's neighbourhood or surroundings - since these may be higher than the worker would normally choose, or be able, to pay for.

## Technical Note 3: An application of the technical notes: Costa Rica

In Costa Rica, minimum wages are set by skill level. There are minimum wages for unskilled, semiskilled, skilled and specialized workers, plus five additional rates depending on the educational level. The minimum wage, which applies to unskilled workers, is known as the salario minimo minimorum and serves as the wage floor, below which no wage can be set, with the exception of the minimum wage for domestic work.

In 2015 the salario minimo minimorum was $283,799.64$ colones per month. The minimum wage for domestic workers was $169,142.26$ colones per month. This represented about 60 per cent of the salario minimo minimorum (the national minimum wage floor).

The underlying justification for the lower minimum wage for domestic workers related to the share of payment in kind and concerns about employment. Payment in kind was legally prohibited as part of the minimum wage, but was nonetheless a common practice in the domestic work sector in Costa Rica. It was therefore argued that a lower minimum wage plus payment in kind for domestic workers would equate to the total value of payment received for work by other unskilled workers.

In other words, if a domestic worker and an unskilled worker in a different sector both received the salario minimo minimorum in cash, the value of payment received by the domestic worker would be higher because of the additional value of payment in kind received.

It was also presumed that the majority of households that employed domestic workers were from the middle class, a section of society where women needed to work. The availability of domestic work facilitated the entry of middle class women into the labour market. Subsequently, it was presumed that increases in the minimum wage for domestic workers would discourage or even prevent middle class women's entry into the labour market.

The following document applies the analyses suggested in Technical Notes 1 and 2 to illustrate how the use of data can significantly inform the process of setting minimum wages for domestic workers.

The data presented are from a detailed study on the application of minimum wages in the domestic work sector in Costa Rica. While only the major findings are presented below, the study as a whole provides an example of the type and depth of analysis required as part of the preparatory process to set and/or adjust a minimum wage for domestic workers. ${ }^{1}$

The study relied on two data sources for its analyses: the Encuesta Nacional de Hogares (ENAHO) from 2010 to 2014 and the Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) from 2013.

## 1. Surveying the scene

## What are the composition and characteristics of the domestic work labour force in Costa Rica?

Between 2010 and 2014, domestic work represented about 9 per cent of wage employment. In 2013, 24 per cent of households employed a domestic worker - this had increased from 18 per cent of households in 2004.

[^2]In the absence of a survey question that identifies whether a domestic worker lives in or out, one proxy to use is the number of hours worked. Since live-in domestic workers are those who work the greatest number of hours, it could be presumed that those who work the most are live-in workers.

Another alternative would be to use survey questions related to payment in kind, where available. Those domestic workers who receive accommodation as part of their payment in kind can be considered as live-in.

The majority of domestic workers ( 52 per cent) worked fewer than 40 hours per week (see Figure 6 for breakdown). Of the total, 27 per cent worked between 40 to 48 hours per week and 21 per cent worked more than 48 hours per week.

Using the number of hours worked, this would suggest that live-in workers represent about 21 per cent of domestic workers. Using criteria based on payment in kind, the percentage of live-in domestic workers ranges from about 5.2 per cent to 22 per cent, depending on the data source used.

Figure 6 Hours worked by domestic workers


Source: Trejos, J. D., 2015, ibid.

## 2. What minimum wage level would cover the needs of domestic workers and their families?

A full overview of how to calculate the needs of workers and their families is provided in chapter 5. This section highlights the major findings.

When compared with both the rural and urban poverty lines for a single person, the minimum wage for domestic workers exceeds both. Figure 7 shows the ratio between the minimum wage and the poverty line. For example, in 2014, the minimum wage of a domestic worker was twice the poverty line for a single person in rural areas.

Figure 7 Ratio between the minimum wage for domestic workers and the poverty line in rural and urban areas for one person, 2010-14


Source: Trejos, J. D., 2015, ibid.
However, the Minimum Wage Fixing Convention, 1970 (No. 131), explicitly makes reference to the notion that the minimum wage should take into account the needs of workers and their families. To account for the needs of workers and their families, it is important to know the average family size and the number of working members per household.

Table 7 shows these descriptive statistics for different types of families: all households, the poorest 50 per cent of households, and the households of domestic workers. Households of domestic workers do not refer to the households in which domestic workers work - rather they refer to the household size of the domestic worker's own family.

Table 7 shows that, while the average household size is 3.35 people nationwide, domestic workers' households are slightly larger ( 3.78 people) and more people in them work ( 2.11 people work compared to 1.44 people in all households). However, although more people work in domestic workers' households, not all of them work full time.

This can be seen from the fourth row (full-time equivalent working members per household), which captures the number of people working in a household by standardizing the number of hours they work. The needs of families of different sizes are also provided in the table (row 6 ); this is calculated by multiplying the average household size by the national poverty line for a single person. A more appropriate estimation for row 6 would be to use the equivalence scales for household size presented in Box 1 .

Finally, to calculate the minimum wage required to lift the different family types out of poverty, we divide the income required by the number of people in the household who work (full-time equivalent).

Table 7 Characteristics of households by different household type, 2014

|  | All <br> households | Poorest 50\% <br> of <br> households | Domestic <br> worker <br> households |
| :--- | :--- | :--- | :--- |
| (1) Average household size | 3.35 | 3.65 | 3.78 |
| (2) Average working members per household | 1.44 | 1.15 | 2.11 |
| (3) Average hours worked | 44.62 | 44.07 | 40.79 |
| (4) Full-time equivalent working members per <br> household | 1.34 | 1.05 | 1.80 |
| (5) National poverty line - single person | 99572 |  |  |
| (6) Income required for family size [(1) x (5)] | 333380 | 363237 | 376210 |
| (7) Minimum wage per worker required to meet <br> family's needs [(6) $\div$ (4)] | 248556 | 344347 | 209389 |
| (8) Statutory minimum wage for domestic workers in <br> 2014 | 165017 colones |  |  |

Source: Trejos, J. D., 2015, ibid.
The results of this analysis are shown graphically in Figure 8. This shows the minimum wage of a domestic worker in relation to the minimum wage per worker required to meet the needs of varying household types. Irrespective of household type, the minimum wage of a domestic worker is insufficient to meet the value of the needs required to lift their families out of poverty.

If the minimum wage were based on all households, it would need to be at least 248,556 colones per month. If the minimum wage were based on the needs of the poorest 50 per cent of households, it would need to be at least 344,347 colones per month. If the minimum wage were based on the households of domestic workers, it would need to be at least 209,389 colones per month.

In sum, in order for the minimum wage to lift domestic workers and their families out of poverty, in 2014, the minimum wage would have needed to be between 209,389 colones and 344,347 colones per month. This would imply an increase in the minimum wage for domestic workers in 2014 of between 27 per cent and 109 per cent.

Figure8 The domestic worker minimum wage in relation to the needs of different family types, 2014


Source: ILO commissioned study. Triegos, J.D., 2015, ibid.

## 3. Which economic factors should be considered when setting a minimum wage for domestic workers?

Convention No. 131 also makes reference to the need to consider economic factors when fixing the minimum wage. A full overview of how to calculate economic factors is outlined in chapter 5 and technical note 1 . This section highlights the major findings.

As described earlier, one of the justifications for a lower minimum wage for domestic workers was previously linked to the need for middle class women to be able to work. If the minimum wage for domestic workers was too high, it was argued, then middle class families may not be able to afford it, and middle class women may opt to stay at home instead. This would have negative implications for the labour force participation patterns of women, as well as on the employment of domestic workers.

To assess the veracity of these claims, first we establish a typology of households that employ domestic workers. As can be seen, Figure 9 shows that 59 per cent of domestic workers were employed by the richest 30 per cent of households and about 70 per cent of domestic workers were employed by the richest 40 per cent of households.

Moreover, when the sum of wages paid by these households to domestic workers is combined, the richest 40 per cent of households account for 88 per cent of all wages paid to domestic workers. This is presumably because of the greater number of hours they contract and/or the higher wages paid by these households. Subsequently, any increase in the minimum wage of domestic workers would be borne by those households with the greatest disposable income available.

Figure 9 Domestic worker employment in Costa Rica, by decile of the disposable household income of the employer, 2013


Note: Deciles divide a group into ten parts. For example, in the figure, the first decile refers to the poorest 10 per cent of households, while the tenth decile refers to the wealthiest 10 per cent of households.
Source: ILO commissioned study. Triegos, J.D., 2015, ibid.
Secondly, according to the study, in about half of the households that employ domestic workers, women do not work. This suggests that the underlying reasons for hiring a domestic worker are completely unrelated to the need for a secondary earner in half of the households that employ domestic workers.

Thirdly, in Costa Rica, households tend to spend about the same percentage on domestic work. On average, households spend about 4 per cent of their income on domestic work and this fluctuates within a narrow range of about 3.6 per cent for the richest households to about 4.5 per cent among the poorest households.

Since households spend about the same percentage of income, but have different income levels, this implies that households with different income levels hire domestic workers for a different number of hours or for higher wages. It therefore seems that changes would be more likely observed in the number of hours worked rather than in employment..

Using household survey data, it would be possible to simulate the effect of a proposed increase in the minimum wage on household expenditure. This could provide an indication of the percentage increase in expenditure on domestic work that households may incur following an increase in the minimum wage.

In the previous sub-section, it was shown as an example that in order for the minimum wage for domestic workers to lift workers and their families out of poverty in 2014, the minimum wage for domestic workers would have needed to increase by between 27 per cent and 109 per cent.

It is possible to simulate the effect of a $10,20,27,50,75$, and 109 per cent increase of the minimum wage on the household expenditure of domestic work. This would provide a sense of the burden this could present to households, and the subsequent impact on employment. Small increases in expenditure, particularly among the wealthiest households who are the primary employers, are unlikely to have a significant negative impact - however, large increases in total expenditure may.

While such simulations were not completed as part of the commissioned study (Triegos, J.D., 2015, ibid), the evidence presented here shows that the wealthiest families provide the bulk of employment for domestic workers and pay for the majority of their wages.

## 4. Are domestic workers covered by working time provisions?

Until the reform of Costa Rica's labour code in 2009, domestic workers not only had a lower minimum wage, but also a different, and longer, standard working week. While the labour code limited daily working time to eight hours per day for workers in the private sector, daily working time was set at ten hours per day for domestic workers.

However, in 2009, an amendment to the labour code (Law No. 8726, 2 July 2009) established the eight-hour work day for domestic workers, equalizing the working time provisions with those of other workers in the private sector. The general weekly hours limit for all workers, including domestic workers, is 48 hours. Overtime provisions also apply to domestic workers.

## 5. Should there be an hourly or monthly minimum wage in Costa Rica?

Given that all domestic workers are covered by working time provisions, they work a range of hours, and there are both live-in and live-out domestic workers, then both an hourly and a monthly minimum wage would be appropriate for Costa Rica. The availability of multiple rates would facilitate the correct payment of service for the actual number of hours worked for both live-in and live-out domestic workers.

This is what occurs in practice, albeit indirectly. While the minimum wage decree only fixes the minimum wage for domestic workers by month, there is a clause in the decree that states how various rates should be calculated. In the case of the monthly minimum wage, it should be divided by 26 to calculate the daily wage. The daily wage - which refers to eight hours - could then be divided by eight to calculate an hourly wage.

## 6. How should payment in kind be regulated?

As explained earlier, payments in kind are not permitted as part of the minimum wage in Costa Rica. However, the prevalence of payment in kind in the domestic work sector partly served as justification for creating a lower minimum wage for domestic workers. The theory was that payments in kind could be received in addition to the lower cash minimum wage.

Currently, the law in Costa Rica states that the value of payment in kind should be specified in the contract. In cases where the value is not specified, it is valued at 50 per cent of the cash wage for the purposes of social security, vacation days, and so on.

It is interesting to note, however, that according to the data, between 52 per cent and 69 per cent of domestic workers do not receive any payment in kind (depending on the data source used). Hence, the majority of domestic workers are paid a lower wage without the added value of these benefits.

Between 31 per cent and 48 per cent of domestic workers do receive either food and/or accommodation as payment in kind (depending on the data source used). In order to accommodate these workers, and not discriminate against those who do not receive these benefits, one approach would be to define the value of in-kind payments as levels, as has been done in Switzerland.

In practice, this would imply that all domestic workers would receive the same minimum wage. Reductions to the minimum wage would be made exclusively for the benefits in kind actually
received. The value of the payments in kind received would be based on the price set by the government (or relevant authority) in the minimum wage decree (that is, accommodation per month $=$ 33,000 colones; breakfast $=100$ colones, and so on). See Technical Note 2 for a description.

## 7. Conclusions

Analyses based on the needs of different types of households suggest that in order for the minimum wage for domestic workers to lift workers and their families out of poverty in 2014, the minimum wage would have needed to be between 209,389 colones and 344,347 colones per month. This would imply an increase in the minimum wage of between 27 per cent and 109 per cent.

The evidence also refutes the claim that a lower minimum wage is required to facilitate the entry of middle class women into the labour market. Data analyses indicate that the majority of households that employ domestic workers are among the wealthiest households. These showed that 59 per cent of domestic workers were employed by the richest 30 per cent of households, and about 70 per cent of domestic workers were employed by the richest 40 per cent of households.

When the sum of wages paid by these households to domestic workers is combined, the richest 40 per cent of households account for 88 per cent of all wages paid to domestic workers. This is presumably because of the greater number of hours they contract and/or the higher wages paid by these households.

In addition, among families that employ domestic workers, half are households where women do not work, suggesting that other reasons underlie the rationale for employing domestic workers.

Since there are both live-in and live-out domestic workers and all domestic workers are covered by wage and working time provisions, an hourly and a monthly minimum wage could be set. The hourly minimum wage would accommodate live-out domestic workers working fewer hours, while the monthly minimum wage could accommodate live-in domestic workers and those live-out domestic workers who work full time. This is the current practice in Costa Rica. The law stipulates the monthly amount but also provides instructions to calculate the pro rata daily and hourly minimum wage.

Between 31 per cent and 48 per cent of domestic workers receive payments in kind. In order to accommodate them, and to avoid discriminating against those who do not receive them, one approach would be to define the value of payments in kind as levels. In practice, this would imply that all domestic workers would receive the same wage. Deductions to the minimum wage would be made exclusively for the value of the benefits in kind actually received.


[^0]:    ${ }^{1}$ According to the Canberra Group, an expert group mandated to provide conceptual and definitional guidance to national statistical offices, "total income" and "disposable income" are the main income aggregates produced (UNECE, 2011, p. 17). Disposable income is obtained by deducting from total income all current transfers paid, such as direct taxes, social insurance contributions or other transfers. Disposable income is usually the preferred measure in analysing income distribution, but it is less frequently available than total income.

[^1]:    ${ }^{2}$ DeNavas-Walt, C.; Proctor, B. (2015). Income and Poverty in the United States: 2014, Current Population Reports. U.S. Census Bureau.

[^2]:    ${ }^{1}$ Trejos, Juan D., 2015, "La aplicación de los salarios mínimos para el servicio doméstico en Costa Rica". Unpublished study commissioned by the International Labour Organization. Available upon request.

