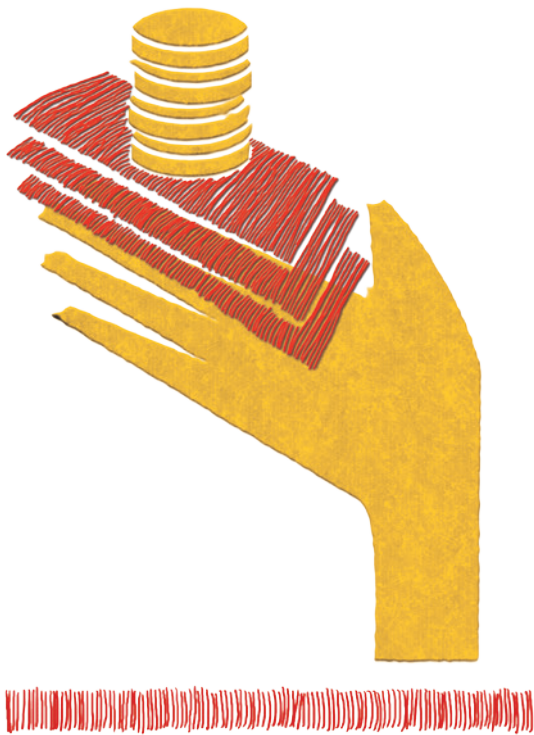




# LABOUR MINUTE COSTING

A TOOL FOR ESTABLISHING  
LIVING WAGE FLOORS  
IN GARMENT FACTORIES

by Klaus Hohenegger & Doug Miller  
for Fair Wear Foundation



## payment of a living wage

Fair Wear Foundation's living wage strategy focuses on a step-by-step process of identifying and overcoming obstacles to the payment of living wages. Payment of a living wage – one that is sufficient to meet basic needs of workers and their families, and to provide some discretionary income – is one of FWF's eight core labour standards, derived from United Nations and ILO norms.

While many organisations focus on the question of *How much is a living wage?* in different countries, FWF's emphasis is on questions of *How can living wages be implemented?* The complexity of international supply chains means that a significant number of practical questions need to be answered if wages for workers are to improve, even once a living wage benchmark has been agreed upon by a brand, a factory, and workers.

For brands interested in working towards living wages, this paper provides tools to calculate realistic estimates of how much a wage increase for the lowest-paid workers at a factory will cost in total, and at per-garment and per-style levels.

While this paper is written with FWF's member companies and other clothing brands as the primary audience, both trade unions and factory owners, who have a role in any implementation of the methodology, will hopefully find the paper of interest as well.

Specifically, the methodology addresses three related questions:

1. How to calculate the total cost of bringing a factory's lowest-paid workers up to any given living wage benchmark – e.g. creating a wage 'floor' in a factory
2. How to incorporate the increase in wages into normal product costing systems, in a transparent and verifiable manner
3. How to ensure that increased costs can be shared fairly among all of a factory's customers, without violating EU competition law

## NOTES FOR FWF MEMBERS AND OTHER APPAREL BRANDS

Any brands interested in implementing the Labour Minute Costing approach should carefully consider the points raised in the *Background and Assumptions* section. The methodology is only practical and appropriate under certain circumstances. FWF is also aware that the methodology raises a number of questions that do not yet have clear answers.

From 2016, FWF will lead a five-year Strategic Partnership with the Netherlands Ministry of Foreign Affairs, and Dutch trade unions CNV Internationaal (whose support made this report possible) and Mondiaal FNV. Living wages are one of the three focus areas of the partnership. In practical terms, this means FWF will have additional resources available to work with members to pilot ways of answering the types of questions described in the *Background and Assumptions* section. More details will be available later in 2016, but FWF would welcome contact from members who are interested in moving ahead on these issues.

FWF encourages members to consider experimenting with implementation of this methodology. To maximise the benefits and likelihood of success, FWF members should contact FWF before starting work to discuss possibilities for extra support, cooperation with other members, and how the work may count towards Brand Performance Check scoring.

## PART 1: BACKGROUND AND ASSUMPTIONS

The methodology outlined in this paper is part of an evolving approach to living wage implementation. It is based on a number of assumptions about the relationship between clothing brands and factories:

**Brand/Factory trust relationship:** This costing methodology assumes a high degree of trust between a buyer and supplier. This would normally come from a long-standing commercial relationship. If factories are to increase payments to workers, they need to be reasonably sure of continued future support from their customers.

**Costing Knowledge:** In order for discussions to be meaningful, the factory must have a clear and detailed understating of its costs; and the brand and the factory must have a shared understanding of costing methodology.

**Open Costing:** There must be a willingness on the part of the factory to engage in an open costing approach, which is already used by a number of brands in the industry. Under an open costing approach the buyer (brand) and seller (factory) agree on those costs which are chargeable, and the margin that the supplier can add to these costs. The level of transparency in open costing can vary from disclosing only the total cost of working minutes to detailed workplans discussed with the buyer on manufacturing process steps, and related efficiency factors.

**Which workers are covered?** The steps outlined here focus on raising the wages of the *lowest-paid workers* in a factory to a particular living wage benchmark. This process will create a wage 'floor' in the factory.

**Changes to pay grade systems:** As in many companies, there will be a variety of pay grades and bonus schemes in place for experience, skill level, etc. It is assumed that if the factory adopts a higher 'floor' for the lowest-paid workers, then others workers will expect adjustment upwards as well. Such adjustments are common if, for example, national minimum wages increases have to be implemented. Any such adjustments based on the Labour Minute Costing methodology would normally need to be negotiated between management and workers.

In future research, FWF expects to develop additional guidance on how brands can support such negotiations, and how to factor additional costs resulting from these adjustments into the overall costing systems. There are also opportunities during such discussions to examine and redress gender-based differences in wage levels.

**Negotiating the wage benchmark:** FWF does not endorse a particular living wage benchmark; rather FWF believes that any living wage targets should be agreed upon through negotiations between management and workers, and ideally trade unions wherever possible.

In some cases, factories or even brands may have a relationship with local unions that can facilitate these negotiations. In many other cases, however, such relationships will not exist. FWF expects to do significant work in the Strategic Partnership on testing out ways for brands, their suppliers and local trade unions to develop functional relationships, and to provide guidance to brands on how to facilitate appropriate dialogue between factories and workers in their supply chains.

**Third-party verification:** Brands and factories must be willing to have 3rd party verification (e.g. by FWF for member brands) to confirm that any additional payments in support of living wages are actually being paid to the workers. Member brands should notify FWF of any attempts to implement the methodology well in advance in order to ensure that appropriate resources are available for verification, and to discuss opportunities for extra support for innovative activities.

**Openness to trade unions:** Brands and factory managers will need to commit to long-term engagement with the workers and whenever possible, with local trade unions. An environment will need to be created where living wages are negotiated between workers and factories, in line with FWF code principles of freedom of association and collective bargaining. As noted above, FWF expects to develop additional guidance on how members can encourage support for trade unions at suppliers, and on what brand-local union relationships might look like.

**Wage increases as an overall part of product costs:** Work by FWF and other organisations indicates that labour is generally a very small part of the total retail cost of a product – somewhere on the order of 2-5%, depending on the complexity of the garment. Wage increases would likely represent a very small part of a garment's retail price, although steps would need to be taken to somehow compensate for the effects of escalating price increases as each step in a supply chain adds a percentage markup. For more information on how cost increases are amplified up supply chains, please see FWF's [Climbing the Ladder](#) and [Living Wage Engineering](#) reports.

**Agreement between brands on wage benchmarks:** All FWF brands sourcing from the same factory should agree to the same living wage benchmark, through negotiations with factory management and workers' representatives. The more of a factory's customers who are willing to commit to improved wages, the higher the likelihood of success. Brands sourcing from the same factory who are not FWF members should be encouraged to participate in the same process.

**Competition law/anti-trust considerations:** Many brands have raised concerns that any joint work to improve wages would violate competition laws. FWF has been working with leading competition law firm Arnold & Porter to address these concerns, and to develop strategies for living wage implementation that would not fall foul of competition law. This methodology is part of that effort.

Arnold & Porter's [legal opinion to FWF](#) has made clear that the law does allow room for manoeuvre on living wages. Based on this advice, and experience from research and experimentation, the methodology outlined in this paper has been designed to avoid any problems with competition law. Certain activities may be carried out jointly between brands, but others need to be separate and confidential. Problems can be avoided as long as companies follow a [few simple guidelines](#).

**FOR MORE INFORMATION ON THESE AND OTHER ISSUES RELATED TO LIVING WAGES, PLEASE VISIT [FWF'S LIVING WAGE PORTAL](#).**



## PART 2: LABOUR MINUTE COSTING METHODOLOGY

### Outline of the methodology:

The methodology consists of four main steps, which are explained in further detail below.

1. A brand (or ideally multiple brands) sourcing from a single factory agree with factory managers and local/national trade unions on a living wage benchmark for the lowest paid workers in a factory.
2. The brands agree to pay a small increase on garment prices to support a new living wage floor.
3. A set of calculations are done to determine a standard current labour cost per minute for all factory production, and then to determine the cost per minute increases required to reach the wage floor.
4. These calculations are then fed into the normal negotiation processes for product prices, with the time needed to produce a garment as the major area of negotiation and competition between brands.

The examples used in this paper are based on actual experience in Macedonia, from pilot projects supported by Dutch trade union CNV Internationaal. The figures used in this document are based on real factory costs, although in some places, noted in the text, generic industry estimates have been included to help illustrate concepts.

## HOW COSTS ARE CALCULATED AT GARMENT FACTORIES

Different kinds of businesses have different ways of calculating and assigning their costs. Clothing brands commonly calculate costs per style, using a margin/markup calculation to cover the cost of goods, overhead and profit.

In garment factories the most common method for calculating prices is known as **working minute cost**, a concept that many buyers will be familiar with. The use of minutes to measure value reflects the time pressure that most factories operate under.

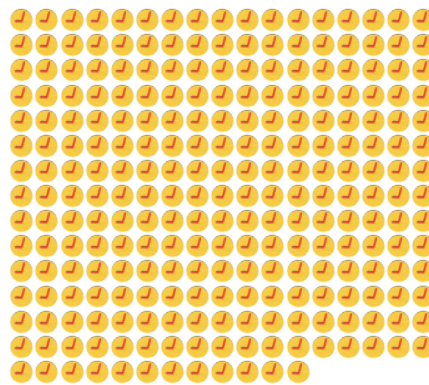
Working minute cost is calculated by dividing the total annual operating cost of running the factory by the total available working minutes in a year. The working minute cost includes all of the factory's costs, both labour (wages, benefits, taxes, etc) and overheads (rent, utilities etc.). This is true for both cut-make-trim (CMT) and 'full business' (FOB) models.

### Calculating the working minute cost.

Example: Our sample factory in Macedonia calculated their working minute cost as follows:



58 OPERATORS



250 DAYS



= 6 890 400 MINUTES

$$\text{WORKING MINUTE COST} = \frac{\text{ANNUAL OPERATING COSTS}}{\text{TOTAL PRODUCTION TIME PER YEAR}}$$

$$\text{WORKING MINUTE COST} = \frac{€292\,530}{6\,890\,400 \text{ MINUTES}} = 4.3 \text{ CENTS PER MINUTE}^*$$

\* For ease of calculation, the Working Minute Cost has rounded to €0.043

In order to begin meaningful discussions about wage improvements, the labour costs need to be separated out from the other costs included in the working minute price. For the purposes of this methodology, costs fall into one of three categories:

**DIRECT LABOUR:** Costs for all staff directly related to the product, such as cutting, sewing, packing etc.

**INDIRECT LABOUR:** Costs for all staff indirectly related to the product, such as quality control, maintenance, management, etc.

**OVERHEAD:** Depending on the way in which a factory structures its cost centres, this would normally be all non-staff costs, such as rent, insurance, electricity, etc. Simply put, the working minute cost for a factory is calculated as follows:

$$\text{WORKING MINUTE COST} = \text{DIRECT LABOUR MINUTE COST} + \text{INDIRECT LABOUR MINUTE COST} + \text{OVERHEAD (OTHER FACTORY MINUTE COSTS)}$$

*Cost Breakdown in an example Macedonian CMT factory*

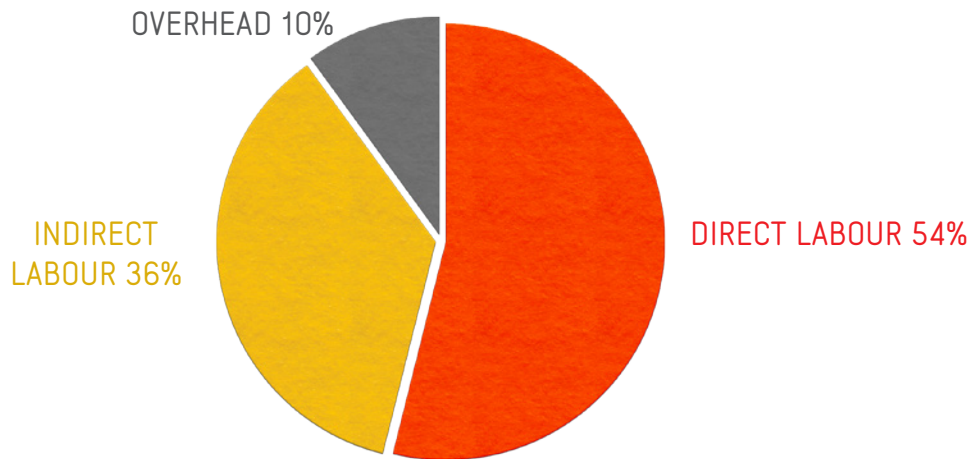


While in many industries such information would be held as confidential, the move among many factories and brands towards 'open costing' (see p.3) makes such discussions possible in the apparel industry.

## IDENTIFYING A FACTORY'S LABOUR COSTS

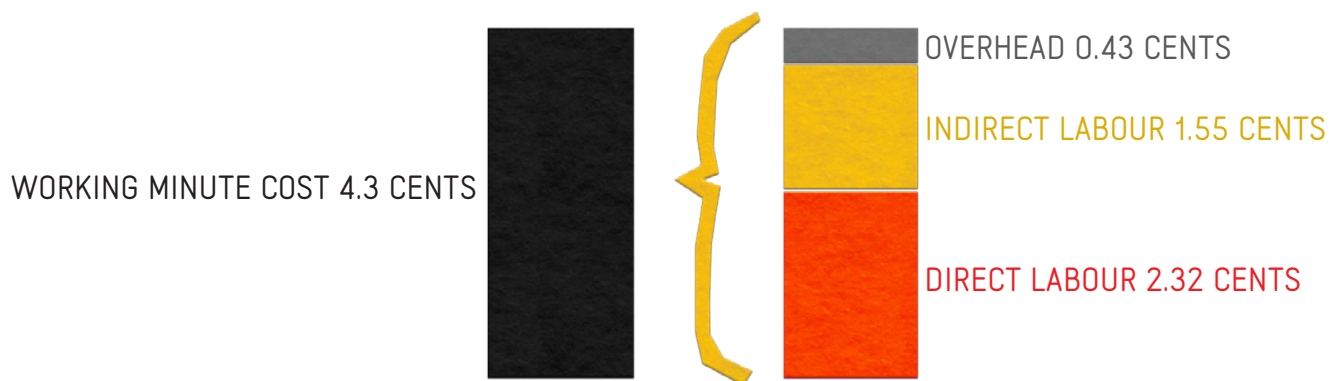
Naturally, each of these three types of costs represents a percentage of the factory's total costs. In the example factory, direct wage costs constituted 54% of the total operating cost. Indirect labour and management accounted for 36%. Factory overheads accounted for 10%. These percentages will vary from factory to factory.





If these percentages are applied to the working minute cost of 4.3 cents, the per-minute breakdown is 1.55 cents for indirect labour, 0.43 cents for factory overheads, and, most importantly for these calculations, is 2.32 cents for direct labour. The cost of direct labour is known as the **Labour Minute Cost**, and can be used by the factory to calculate the labour cost for all orders. Under this methodology, the Labour Minute Cost remains the same for all customers and all products made by the factory.

*Breakdown of the 4.3 cent Working Minute Cost:*



## CALCULATING THE UNIT LABOUR, CMT AND FOB COSTS

Once the Labour Minute Cost is known, the next step in the process is to determine how many minutes it will take to manufacture each 'unit' of production: e.g. each individual garment. This is known as the **unit labour cost**. To determine this we need to know the manufacturing time per garment from the beginning to the end of an assembly line and then multiply this by the labour minute value. The time it takes to make any garment is generally referred to in the industry as the Standard Allowed Minutes or SAMs or Standard Minute Values (SMVs).

For some basic garments and product groups there is an understanding across the industry as to how long it should take to produce a garment under normal circumstances. However, each product will have its own time calculation based on its complexity and the nature of its components. These are likely to be measured in the factory by the sampling or engineering department. The time required to make a garment is an area of negotiation between brands and factories, and can ultimately become an issue for workers if the estimates are unrealistic.

Once a production time for a given garment is agreed upon, the calculation of Unit Labour Cost – the amount it costs to make a given garment – can be made.

$$\text{UNIT LABOUR COST} = \text{LABOUR MINUTE COST} \times \text{STANDARD ALLOWED MINUTES PER PRODUCT}$$

At this point, it is possible to determine what the cut-make-trim (CMT) price is going to be. This is contained in the following formula:

$$\text{CMT PRICE} = \text{UNIT LABOUR COST} + \text{UNIT NON-LABOUR COSTS} + \text{FACTORY PROFIT MARGIN}$$

*Unit non-labour costs* = Overhead & indirect labour working minute cost x time required to produce garment

*Factory profit margin* can vary from a few percent of the CMT price to 15% or more, depending on the country, product type, and other factors. In most cases, the profit margin includes both profits paid to the factory's owners, and the amount needed to reinvest in the factory for future expansion or improvements.

To reach the FOB price, the cost of material & trims is added to the CMT cost:

$$\text{FOB PRICE} = \text{MATERIAL AND TRIMS INPUT} + \text{UNIT LABOUR COST} + \text{UNIT NON-LABOUR COSTS} + \text{FACTORY PROFIT MARGIN}$$

## THE EFFICIENCY ISSUE

While Standard Allowed Minutes assumes something of an ideal scenario, in many cases other factors will influence how quickly a factory can actually produce a particular garment. The skill levels of workers, a suboptimal factory layout, or frequent absenteeism can all reduce the efficiency of a factory.

Brands will generally show a keen interest in a factory's efficiency and this will be a matter of negotiation as it is also in the factory's interest to factor in its true operating efficiency. Moreover this is important from a worker's point of view because introducing an efficiency factor into the equation *increases* the CMT price paid. So an efficiency figure may be built into the formula.

FWF recommends that brands agree on an efficiency factor in their calculation with the supplier. For example, a factory and buyer may agree on an efficiency figure of 75%, as compared to Standard Allowed Minutes. In practice, this means the factory needs 1.33 times as long as a 100% efficient factory to produce a garment<sup>1</sup>. For example, a garment needing 60 Standard Allowed Minutes will require 80 minutes for production time in a factory rated as 75% efficient. In some countries the efficiency factor may be considerably lower than this example.

<sup>1</sup> Standard industry practice expresses efficiency as a percentage; however to calculate the time needed, it is easiest to convert the percentage to a ratio (100 ÷ 75 = 1.333); then multiply by the Standard Allowed Minutes: 60 x 1.333 = 80 minutes.

It is in both the buyer's and the factory's interest to increase efficiency. However, initiatives to improve efficiency may have negative consequences for workers, and should be subject to social dialogue/collective bargaining processes at the factory.

## COSTING EXAMPLE: DRESS SHIRT




All of the costing element described so far will now be applied to an example dress shirt requiring 30 standard minutes production time:



Unit labour cost for this garment is calculated as follows:

$$\begin{array}{ccccccc} \text{LABOUR} & \times & \text{STANDARD} & \times & \text{EFFICIENCY} & = & \text{UNIT} \\ \text{MINUTE COST} & & \text{MINUTES} & & \text{PERCENTAGE (75\%)} & & \text{LABOUR COST} \\ \hline \text{€0.0232} & \times & 30 & = & \text{€0.70} & \times & 1.333 & = & \text{€0.93} \end{array}$$

With this known, the CMT price can be calculated, using the labour minute cost and other components of the working minute cost:

DIRECT LABOUR € 0,0232	INDIRECT LABOUR € 0,0155	OVERHEAD €0,0043								
										
WORKING MINUTE COST	$\times$	STANDARD MINUTES	$\times$	EFFICIENCY PERCENTAGE (75%)	=	PRODUCTION COST	$+$	FACTORY PROFIT MARGIN	=	CMT PRICE
€0.043	$\times$	30	=	€1.29	$\times$	1.333	=	€1.72	$+$	€0.17 = €1.89

\* For the purposes of this example, a 10% profit margin has been used to keep the math simple. Real-world margins will vary from a few percent to 15%, depending on the situation.

To reach FOB pricing, the cost of materials is added to the equation:

$$\begin{array}{l}
 \text{DIRECT LABOUR } \text{€ } 0.0232 \\
 \text{INDIRECT LABOUR } \text{€ } 0.0155 \\
 \text{OVERHEAD } \text{€ } 0.0043
 \end{array}$$

$$\text{MATERIAL COSTS } + \left( \text{WORKING MINUTE COST } \times \text{STANDARD MINUTES } \times \text{EFFICIENCY PERCENTAGE (75\%)} = \text{PRODUCTION COST } + \text{FACTORY PROFIT MARGIN} = \text{CMT PRICE} \right) = \text{FOB}$$

$$\text{€}4.85 + \left( \text{€}0.043 \times 30 = \text{€}1.29 \times 1.333 = \text{€}1.72 + \text{€}0.17 = \text{€}1.89 \right) = \text{€}6.74$$

## DETERMINING THE LIVING WAGE BENCHMARK

Once the costing has been determined under the existing wage levels, attention can turn to calculating the increase needed to create a new wage 'floor' in the factory.

The first step is to reach agreement on a living wage benchmark for the country or region. This is of course a critical part of the exercise and a consensus will need to be reached between all stakeholders, including brands sourcing from the factory. **Workers and/or their representatives/ trade unions need to be involved in the process of determining the costs of meeting their food and non food basic needs as well as estimating an element of discretionary income.**

While there is as yet no international standard for defining a living wage, FWF has developed a Wage Ladder tool to help its members and other brands easily access living wage benchmarks proposed by local unions and other stakeholder groups. The Wage Ladder also allows brands and factories to easily create graphics that compare a factory's current wage levels to a variety of benchmarks. Information in the Wage Ladder can provide a basis for negotiations with workers and management over which 'rung' on the ladder should be chosen as the new wage floor for the factory. Several organisations are also working to establish a set of principles to assist in calculating workable benchmarks.

Workers and/or their representatives/trade unions can also play an important part in monitoring the implementation, making sure the paid price uplifts actually lead to payment of increased wages to the workers. As noted in the *Background and Assumptions* section, FWF is planning future projects with members to develop guidance on how brands can support these negotiations.

The following example draws on real data from a living wage project which FWF undertook in Macedonia with a number of FWF members and related factories in 2014. FWF consulted with the trade unions in the country via a roundtable to assist the social dialogue process on this issue. It was discovered that there was no official living wage benchmark for this country, but a number of organizations had calculated a living wage estimate which assisted in the work.

At the time of the project, in 2014, the legal minimum wage was 8 050 Macedonian Denar (MKD), about € 130, for the garment industry. The benchmarks ranged from 12 705 MKD (€ 203) to MKD

48 700 (€ 791) per month. As can be seen in the chart, it is not unusual for a range of living wage estimates to be published by different organisations, reflecting different viewpoints and methods of calculating the living wage. This variance underscores the importance of negotiating an acceptable wage benchmark with workers. Attempts to impose a living wage benchmark on a factory will lack credibility with workers.

LIVING WAGE BENCHMARKS FOR 2014	MONTHLY AMOUNT
Legal Minimum Wage	MKD 8 050 (€ 130)
Clean Clothes Campaign estimate for 60% of average national wage (for comparison, not a benchmark)	MKD 12 507 (€ 203)
Local Stakeholder Living Wage Benchmark A	MKD 15 000 (€243)
Local Stakeholder Living Wage Benchmark B	MKD 17 000 (€276)
Local Stakeholder Living Wage Benchmark C	MKD 32 059 (€ 521)
Clean Clothes Campaign Living Wage Estimate	MKD 48 700 (€ 791)

## SETTING A NEW WAGE FLOOR

Once a living wage benchmark has been agreed upon, the next step in the process is to compare that benchmark to the factory's current situation. In order to determine the amount by which the labour minute cost needs to increase, it is necessary to know the difference between what the workers are currently earning and the agreed-upon living wage floor, on a monthly basis.

### STEP 1

The factory should be asked to calculate the wage data of all its employees for one quarter (3 months). Based on this, it is possible to construct an annual wage bill multiplying the total for the 3 months by 4 to reach a 12-month total. By dividing this total by 12 we arrive at the monthly average. This approach gives an accurate monthly estimate without all the work involved in providing actual figures for the entire year.

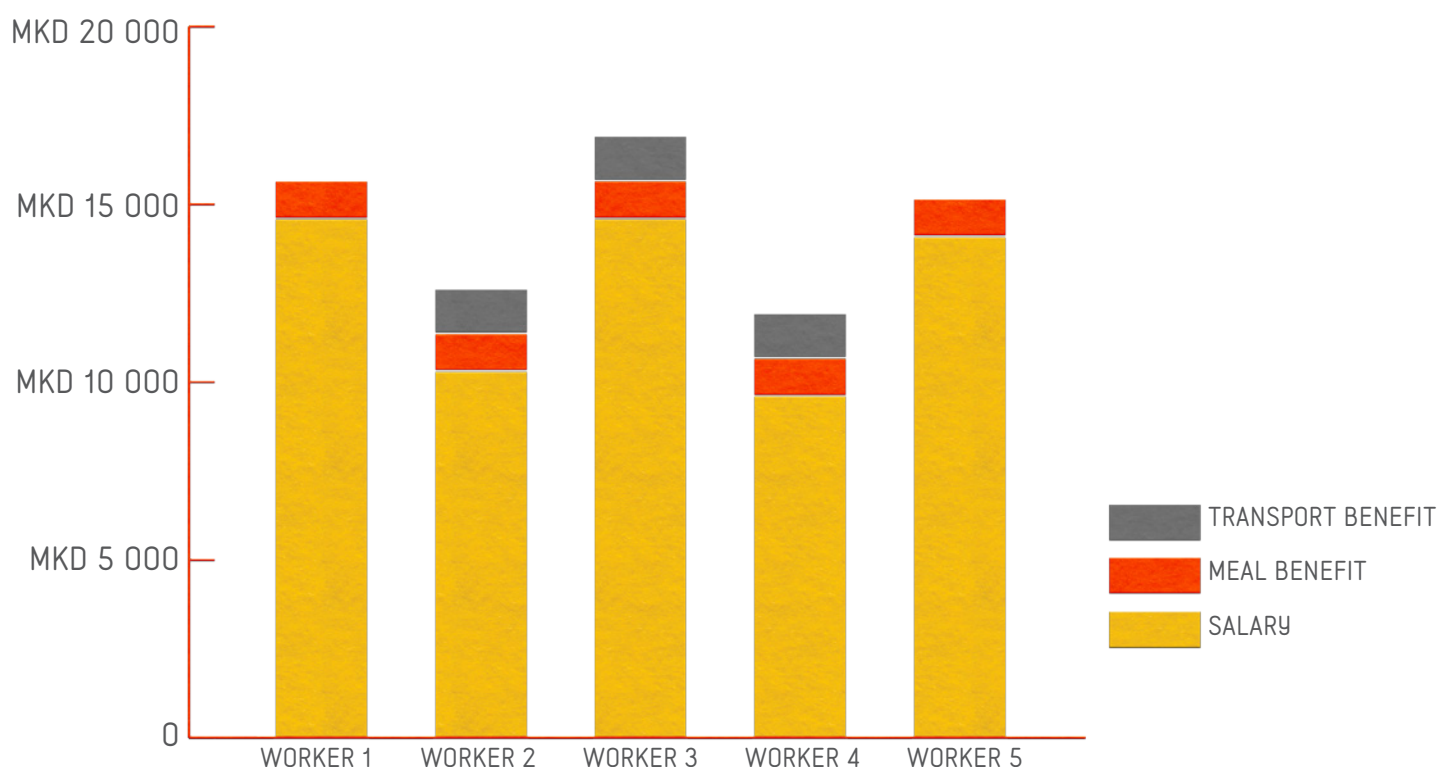
### STEP 2

For the purposes of the calculation, basic wages and in-kind benefits should be included, **but overtime & production bonuses should be excluded**. They are excluded because the objective is to raise basic wages so that workers do not depend on excessive overtime or attempting to meet unrealistic production targets just to meet basic expenses. Gross earnings (i.e. including payroll and social security taxes<sup>2</sup>) should be used.

<sup>2</sup> This will vary from country to country



For five example workers, the data is as follows:



### STEP 3

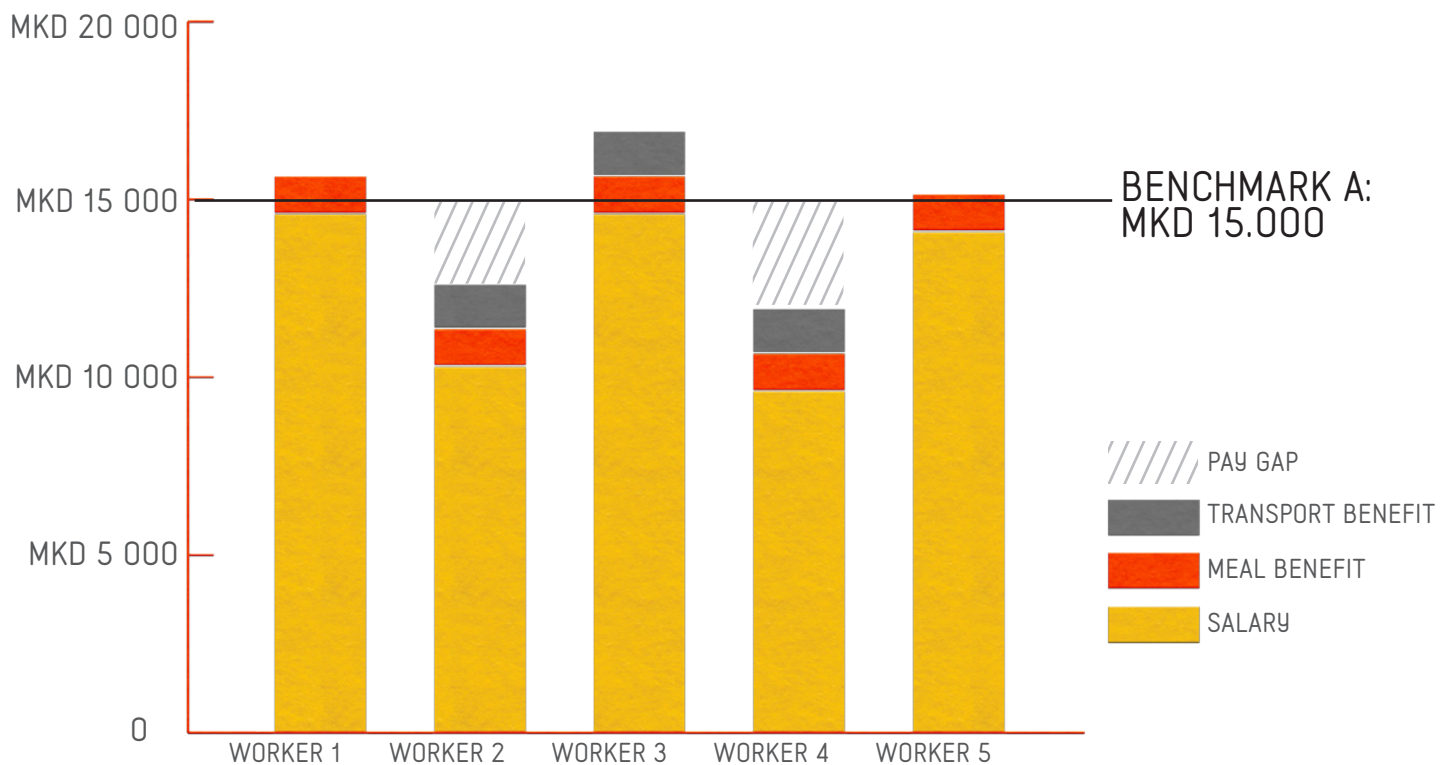
Following the negotiation process with the factory and worker representatives described above, gather the amounts for the agreed-upon living wage benchmark.

### STEP 4

Compare the total wage amount per worker (salary + in kind benefits) with the benchmark figure to determine the difference to be covered. The difference between current costs and the amount needed to reach the benchmark is referred to as the Living Wage Factor, which is calculated in the methodology on a per-minute basis.

### EXAMPLE 1: LIVING WAGE BENCHMARK A: MKD 15 000 (€ 243)

Example 1 is a modest increase over existing wage levels. Indeed, some of our sample workers are already above the benchmark. Workers 2 and 4, however, would require monthly increases of MKD 2 366 and MKD 3 059 respectively in order to reach MKD 15 000.



When those monthly increases for all 85 workers in the factory are calculated for a full 12-month year, the total amount needed is MKD 5 246 913 – or € 85 250 per year.

A per-minute living wage factor is then calculated by dividing the annual increase required over the factory's total annual capacity:

$$\text{LIVING WAGE FACTOR} = \frac{\text{TOTAL NEEDED TO REACH WAGE FLOOR}}{\text{ANNUAL CAPACITY IN MINUTES}}$$

$$\text{LIVING WAGE FACTOR} = \frac{€85\,250}{6\,890\,400} = 1.24 \text{ CENTS/MINUTE}$$

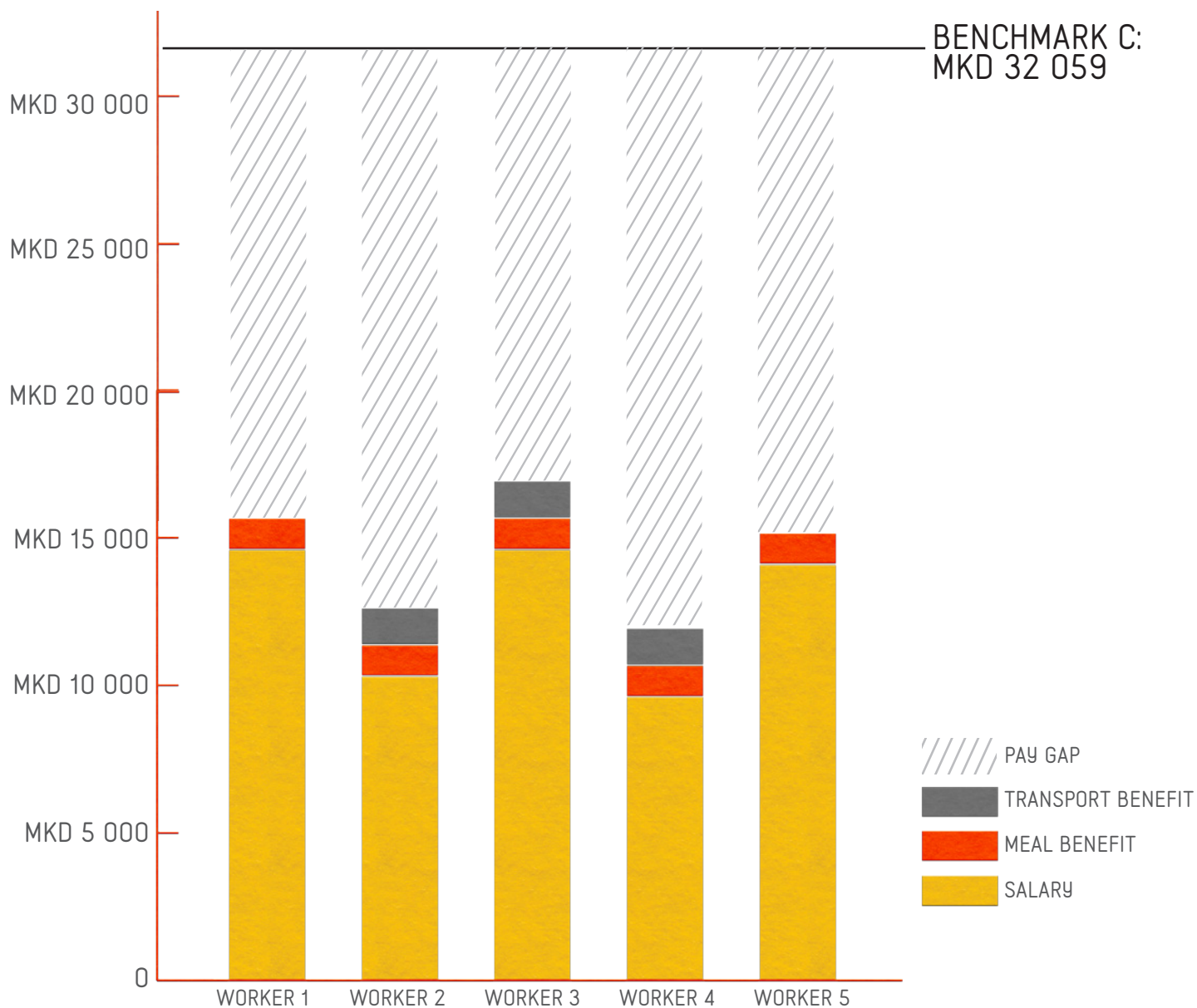
The new working minute cost can then be calculated:

$$\text{LIVING WAGE FACTOR} + \text{EXISTING WORKING MINUTE COST} = \text{NEW WORKING MINUTE COST}$$

$$1.24 \text{ CENTS} + 4.3 \text{ CENTS} = 5.6 \text{ CENTS/MINUTE}$$

## EXAMPLE 2: LIVING WAGE BENCHMARK C: MKD 32 059 (€ 521)

Example two uses a much more ambitious living wage target. To reach this benchmark, all five example workers – and all workers in the factory – would require an increase:



Calculating the increases for all 85 workers for the entire year results in a total of € 505 460 which would be needed to reach Benchmark C.

$$\text{LIVING WAGE FACTOR} = \frac{€505\,460}{6\,890\,400} = 7.3 \text{ CENTS/MINUTE}$$

The new working minute cost can then be calculated as before.

$$\begin{array}{rcl} \text{LIVING WAGE FACTOR} & + & \text{EXISTING WORKING MINUTE COST} & = & \text{NEW WORKING MINUTE COST} \\ 7.3 \text{ CENTS} & + & 4.3 \text{ CENTS} & = & 11.6 \text{ CENTS/MINUTE} \end{array}$$

## STEP 5

Any efficiency factor – which should be agreed upon with the factory and worker representatives (as discussed on page 10) – can now be added to the equation:

### EXAMPLE 1: DRESS SHIRT REQUIRING 30 STANDARD MINUTES USING STAKEHOLDER BENCHMARK A OF 15 000 MKD, WITH ADDITION OF THE LIVING WAGE FACTOR

In the original calculation, the unit labour cost, based on a labour minute cost of 2.32 cents/minute gave a unit labour cost of 93 cents per garment. The additional cost of the living wage factor can now be calculated:

$$\begin{array}{ccccccc} \text{LIVING WAGE FACTOR} & \times & \text{STANDARD MINUTES} & \times & \text{EFFICIENCY PERCENTAGE (75\%)} & = & \text{EXTRA COST PER GARMENT} \\ \text{€0.0124} & \times & 30 & = & \text{€0.372} & \times & 1.333 & = & \text{€0.50} \end{array}$$

This gives a new unit labour cost of €1.43 per garment. The full CMT calculation would be as follows:

**LIVING WAGE FACTOR**  
€ 0,0124

**DIRECT LABOUR**  
€ 0,0232

**INDIRECT LABOUR**  
€ 0,0155

**OVERHEAD**  
€0,0043

In this example, the profit amount has not been increased, even though standard practice is to add a percentage to the production cost.

$$\begin{array}{ccccccccccc} \text{NEW WORKING MINUTE COST} & \times & \text{STANDARD MINUTES} & \times & \text{EFFICIENCY PERCENTAGE (75\%)} & = & \text{PRODUCTION COST} & + & \text{FACTORY PROFIT MARGIN} & = & \text{CMT PRICE} \\ \text{€0.056} & \times & 30 & = & \text{€1.68} & \times & 1.333 & = & \text{€2,24} & + & \text{€0.17} & = & \text{€2.41} \end{array}$$

In this calculation, the Living Wage factor is simply added in as a part of the working minute cost.

One important issue to consider is that ideally, the factory's (and eventually the brand's) profit calculation should be based on the costs before the living wage factor is added in. Otherwise, the 10% profit margin on this garment would increase to 22 cents, and the CMT would increase to €2.46. Because most supply chains are based on percentage markups, these increases can ripple up the supply chain, with each step earning extra profit based on the living wage. This effect, which FWF refers to as *Compounding Price Escalation*, will need to be addressed as progress is made towards living wage implementation. Please see FWF's [Climbing the Ladder](#) report for more information.

## FOB

In the Full Business Model, the increase is also only 50 cents, as the living wage factor only affects the minute costs for labour:

$$\begin{aligned}
 & \text{LIVING WAGE FACTOR } \text{€ } 0.0124 \quad \text{DIRECT LABOUR } \text{€ } 0.0232 \quad \text{INDIRECT LABOUR } \text{€ } 0.0155 \quad \text{OVERHEAD } \text{€ } 0.0043 \\
 & \text{MATERIAL COSTS } \text{€ } 4.85 + \left( \text{NEW WORKING MINUTE COST } \text{€ } 0.056 \times \text{STANDARD MINUTES } 30 = \text{€ } 1.68 \times \text{EFFICIENCY PERCENTAGE (75\%)} = \text{€ } 2.24 + \text{OVERHEAD } \text{€ } 0.0043 = \text{€ } 2.24 + \text{€ } 0.17 = \text{€ } 2.41 \right) = \text{€ } 7.26
 \end{aligned}$$

## EXAMPLE 2: DRESS SHIRT REQUIRING 30 STANDARD MINUTES USING STAKEHOLDER BENCHMARK C OF MKD32 059

Although this is a much more ambitious benchmark than Example A, the same steps can be taken to calculate the per-garment costs for Benchmark C.

In the original calculation, the Unit Labour Cost, based on a labour minute cost of 2.32 cents/minute gave a unit labour cost of 93 cents per garment. The additional cost of the living wage factor can now be calculated:

$$\begin{aligned}
 & \text{LIVING WAGE FACTOR } \text{€ } 0.0734 \times \text{STANDARD MINUTES } 30 = \text{€ } 2.20 \times \text{EFFICIENCY PERCENTAGE (75\%)} = \text{€ } 2.94 \\
 & \text{EXTRA COST PER GARMENT}
 \end{aligned}$$

This gives a new unit labour cost of €3.87 per garment. The full CMT calculation would be as follows:

$$\begin{aligned}
 & \text{LIVING WAGE FACTOR } \text{€ } 0.0734 \quad \text{DIRECT LABOUR } \text{€ } 0.0232 \quad \text{INDIRECT LABOUR } \text{€ } 0.0155 \quad \text{OVERHEAD } \text{€ } 0.0043 \\
 & \text{NEW WORKING MINUTE COST } \text{€ } 0.116 \times \text{STANDARD MINUTES } 30 = \text{€ } 3.48 \times \text{EFFICIENCY PERCENTAGE (75\%)} = \text{€ } 4.64 + \text{OVERHEAD } \text{€ } 0.0043 = \text{€ } 4.64 + \text{€ } 0.17 = \text{€ } 4.81 \\
 & \text{CMT PRICE } \text{€ } 4.81 + \text{€ } 0.17 = \text{€ } 4.98
 \end{aligned}$$

As with Benchmark A, this calculation assumes that the factory's profit margin remains unchanged.



The FOB calculation results in the same per-garment increase of €2.94, because materials cost is held separate from labour costs:

$$\begin{array}{l}
 \text{LIVING WAGE FACTOR } \text{€ } 0.0734 \\
 \text{DIRECT LABOUR } \text{€ } 0.0232 \\
 \text{INDIRECT LABOUR } \text{€ } 0.0155 \\
 \text{OVERHEAD } \text{€ } 0.0043
 \end{array}$$

$$\begin{array}{l}
 \text{MATERIAL COSTS} + \left( \begin{array}{l} \text{NEW WORKING MINUTE COST} \times \text{STANDARD MINUTES} \times \text{EFFICIENCY PERCENTAGE (75\%)} \end{array} \right) = \text{PRODUCTION COST} + \text{FACTORY PROFIT MARGIN} = \text{CMT PRICE} = \text{FOB} \\
 \text{€4.85} + \left( \begin{array}{l} \text{€0.116} \times 30 = \text{€3.48} \times 1.333 \end{array} \right) = \text{€4.64} + \text{€0.17} = \text{€4.81} = \text{€9.66}
 \end{array}$$

### BUT ISN'T THAT A HUGE COST INCREASE?

Benchmark C is a very ambitious target – it nearly triples the salary of some workers. And an FOB increase from 6.74 to 9.66 may appear, at first glance, to be impractical. It is important, however, to consider this increase within the full supply chain context.

If the garment is placed within a generic supply chain markup system, we get the following. It is a simplified model, but illustrates an important point:

$$\begin{array}{l}
 \text{ORIGINAL FOB} + \text{AGENCY FEE ETC* 10\%} = \text{LANDED COST} + \text{BRAND MARKUP 100\%} = \text{WHOLESALE COST} + \text{RETAILER MARKUP 100\%} = \text{RETAILER EX VAT} + \text{VAT 20\%} = \text{RETAIL COST} \\
 \text{€6.74} + 0.67 = 7.41 + 7.41 = 14.82 + 14.82 = 29.64 + 5.92 = 35.56
 \end{array}$$

\*Agent fees, shipping, import taxes, and other costs are common at this point in the supply chain, and the percentage will vary. For the sake of illustration, these costs have been held to a simple 10%. Brand and Retailer markups will also vary, but 100% provides a simple but realistic estimate for this example. This markup covers the operating costs (employees, marketing costs, rent, etc.) and profit margin for clothing brands and retail shops.

€2.94 may be a large increase if we look only at the factory level, however when taken within the context of the entire supply chain, it is only 8.2% of the retail price of €35.56. If it would be possible to simply add the living wage factor to the retail cost, an 8.2% increase at retail would support a nearly 300% wage increase. If the markup system could be controlled, the retail prices would only go from €35.56 to €38.50. And that's assuming no other savings could be found across the supply chain to offset the increase.

One of the challenges to be addressed in the future, however, is that the pricing system shown here, if not managed, would inflate the cost of the living wage increase. Even if the factory agreed not to increase its profit margin, as was assumed in the calculations, all the other steps in the chain would still do so. If the increased labour costs were simply plugged into the markup system shown here, a €2.94 increase in wages would end up costing €15.50 extra at retail, with over €12 of that not going to workers. FWF will be looking into ways to overcome this dynamic in future work. What this example also highlights is the importance of involving the entire brand, not just the purchasing department, in discussions about living wages.

## PRACTICAL CONSIDERATIONS AND NEXT STEPS:

What is clear from FWF and the authors' experience is that unless a brand owns its own factory, there is little it can do to raise wages on its own.

However, many brands are extremely nervous about any collaboration between potential competitors on issues even tangentially linked to product costs and pricing. Brands are understandably concerned about violating anti-trust or competition law.

FWF recommend all companies turn to A&P's [legal guidance on collaboration](#) with other factories and brands for safe collaboration to raise wages in shared factories.

The good news is that, with some key precautions (like setting clear meeting agendas and clear boundaries for discussions, and keeping good minutes), brands can safely collaborate with their shared factory to analyse data about current labour costs, and agree to raise the labour minute cost across products.

On the other hand, it is important that brands do not share other sensitive information as part of this process. For example, brands should never discuss FOB prices for certain products (e.g. t-shirt production) or distribute information about labour-minute costing across factories.

So when taking next steps to raise wages, it is important to carefully read and consider Arnold & Porter's guidance as a roadmap for progress.

In most cases, for an actual increase to occur, collective action by multiple brands will be essential. Success is most likely where several FWF brands source from the same facility and provide sufficient critical mass to engage the factory in the process of establishing a new wage floor.

It will be necessary to fix the new floor wage by way of an agreement between all stakeholders because the living wage unit labour cost may be offset by reductions in other variable costs such as fibre or even currency transaction costs. This might result in the FOB not changing and the supplier not feeling remunerated sufficiently to deliver the increase in pay. The most transparent method for carrying this out would be via a gazetted collective agreement with a recognised trade union.

If this model is accepted as a way forward, FWF would be expecting its members in shared factories to find more real money to pay for the establishment of the new living wage minimum.

*Since low wages are collectively caused, achieving living wages is a collective responsibility. Finding the money to pay for this may have to be shared by buyers, suppliers and customers.*

As we have seen with Example A, the additional amount to be added to the FOB is in many cases negligible as a percentage of overall costs, although there will be price escalation as it passes through the various stages of the value chain. Such escalation already occurs regularly as exchange rates or the prices of cotton or polyester fluctuate; these changes are currently absorbed by the industry without too much difficulty. Subject to the price elasticity of the product in question the market may be able to bear such a price increase, particularly if the increase in the FOB is passed on to the consumer. Even more ambitious targets, like Benchmark C, are not nearly as expensive as they may appear at first, and are certainly in the realm of possibility.

Brands may seek to put pressure on their suppliers to become more efficient in an effort to make up the shortfall. Experience has shown that efficiency savings are often swallowed up by the manufacturer and/or buyer rather than passed on to the workers. While there is certainly room in many factories for efficiency improvements, this argument tends to pull attention away from the efficiency question which undoubtedly prevails further downstream the value chain. Moreover, it is generally accepted that the path to higher productivity is to be found via higher wages rather than vice versa.

### NEXT STEPS:

FWF expects to further develop and refine the Labour Minute Cost methodology outlined in this paper in the coming years in more factories and more countries.

In addition, FWF plans to begin work on a number of related issues. A consistent theme in this methodology is the need for brands to somehow facilitate or participate in negotiation with workers, and ideally trade unions. FWF is aware that a host of issues make this a complex proposition for brands. However, finding ways for local or national unions and international supply chains to interact in constructive ways is a key issue of interest to FWF in the coming years. It is one of the main focus areas of FWF's Strategic Partnership with the Dutch Ministry of Foreign Affairs, and unions FNV and CNV. FWF will be looking to members in the coming months and years to help make progress on questions of what better dialogue with worker and unions might look like in apparel supply chains.

There are also many practical questions around dealing with supply chain price escalations, the effects of changes to factory pay structures based on wage floors, and methods to offset cost increases, all of which require more study and experimentation. FWF looks forward to working with its members and stakeholders in the coming years to help provide clear guidance on all of these issues.

As noted earlier, any FWF members who are interested in further implementing the Labour Cost Minute methodology, or in working on related living wage and social dialogue questions are asked to contact FWF for more information.

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**Doug Miller** has a background in academic industrial relations. Between 2000 and 2008 he was seconded to the then International Garment and Leather Workers Federation (now part of IndustriALL). Following the conclusion of an international framework agreement between the ITGLWF and the Spanish multinational Inditex Doug took up a jointly sponsored chair in Worker Rights in Fashion at the University of Northumbria. Since 2012 Doug is Emeritus Professor and has been working with various organisations principally on the question of how to implement a living wage.

**Klaus Hohenegger** has 20 years' experience in the textile industry and profound know-how of the apparel/textile value chain. Klaus has managerial experience in running a number of apparel factories and has worked at the sourcing and buying departments of a number of brands. Since 2010 Klaus has been director of Sourcing Solutions GmbH, a Swiss-based consultancy which supports brands and factories on a range of issues related to product development, sourcing, manufacturing and CSR.

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