RESEARCH BRIEF:
Working Conditions, Productivity and Profitability
Evidence from Better Work Vietnam

The paper summarized in this brief contributes strong evidence supporting the business case for better working conditions. Recent research from the Better Work impact assessment in Vietnam demonstrates profitability of garment factories increases as working conditions improve. The boost in profitability is driven by increased productivity among workers in better working environments, and the financial benefit accrued by the factory from this productivity improvement is shared with workers in the form of higher wages.

I. SUMMARY OF KEY FINDINGS
Among apparel factories enrolled in Better Work Vietnam, recent research finds profitability is significantly higher in factories where there are better working conditions, greater compliance with labour standards and more innovative human resource management practices. Better working conditions result in increased productivity among workers, which leads to the improvement in profitability in these factories. Furthermore, instead of suppressing wages, more profitable factories with more productive workers also pay workers more. Recent research combines data from compliance assessments conducted by Better Work and from survey responses given directly by factory workers and managers to yield the following results:

• Factories experience a 5.9% boost in profitability when workers perceive improvements in working conditions traditionally associated with ‘sweatshops’ including improvements in their sense of physical security and assurance in wage payments. Similarly, profitability is 7.6% higher where workers experience a comfortable environment and trusting workplace.

• Greater compliance with labour standards is associated with higher profitability.

• Profitability improves in factories with better working conditions because workers are more productive. Workers in factories with better working conditions reach their daily production targets up to 40 minutes faster than similar workers who are working in factories with worse conditions.

• In Better Work Vietnam factories studied, a 1% increase in wage levels is associated with a 0.6% increase in revenues relative to their costs.

• Productivity gains that increase profitability of the factory are shared with workers in the form of higher wages. Factories with statistically significant better working conditions also offer statistically significant higher wages, holding demographics, hours and productivity constant.

• Effective implementation of improved conditions among workers is crucial to induce higher profitability. In contrast to the worker perception finding, working conditions improvements have only a mixed impact on profitability when measured from the perspective of managers.

• Higher productivity predicts a factory will have a better position in the supply chain.

II. BACKGROUND
The global apparel sector has long been associated with harsh working conditions characteristic of ‘sweatshops’. Apparel workers in such factories often face the threat of workplace injuries, low and unreliable pay, forced overtime hours and verbal and physical abuse. These sweatshop conditions are often viewed as the inevitable consequence of the fine division of labour common in the early stages of industrialization in developing countries, where global pressure drives apparel production in pursuit of ever-lower costs.

A contrasting view suggests that sweatshop conditions in the garment sector are not inevitable. Instead, poor conditions persist because garment factory managers lack knowledge of best-practices in human resources management – such as positive motivational techniques or multi-dimensional pay packages – and resort to strategies like verbal and physical abuse to elicit the greatest effort from workers. A study examining management operations supports this contrasting view. The study showed a 17 percent increase in productivity among a subset of Indian textile firms whose managers received previously unavailable information on international best-practice management techniques, such as quality control and inventory tracking. Researchers conducting the study found that information barriers had prevented these factories from adopting such changes earlier. Similarly, other studies have shown that human resources innovations, including incentive and multi-dimensional pay, team work, communication and problem-solving all increase productivity and profits.
Despite evidence that improved conditions can support business operations, poor working conditions persist in the garment industry. Unlike management innovations such as inventory tracking, better management practices related to labour conditions may not necessarily translate into better business outcomes and higher profitability. For example, if factories were previously able to coerce effort from workers through harsh treatment and pay workers significantly below the value factories received from that work effort, they may see no profit advantage in moving away from a sweatshop model of operation. Furthermore, factory managers may believe that the only way to keep their firms profitable while meeting high-pressure time, quality and cost demands of international buyers is through coercing effort from workers through harsh treatment, low pay and little to no investment in basic improvements in the factory environment. With this mindset, using abuse or irregular pay practices to maintain profits represent a “low road” to development, in contrast to steps such as linking compensation to work effort or implementing other human resources innovations.

The analysis summarized here investigates whether improving human resource practices and factory working conditions can compete with sweatshop practices to maximize business profits. Using survey response data collected by independent research teams from apparel workers and managers in Vietnam, as well as data from Better Work compliance assessments, researchers find that factories increase their profitability as they move away from sweatshop conditions to more humane and innovative labour management practices.

### III. RESEARCH APPROACH

Better Work impact assessment surveys collect data on factory characteristics, performance and workplace practices from factory managers. Workers are surveyed on topics including working conditions, hours, compensation and mental and physical health. Better Work staff regularly complete unannounced compliance assessment visits, where factories are assessed for compliance with core international labour standards and national labour laws. The data elicited directly from workers and managers used in the current analysis were collected from 2010-2013 in apparel factories enrolled in Better Work Vietnam. More than 5,100 workers in 185 factories provided responses.

Researchers used factor analysis, a statistical technique commonly used in social science research when compiling large amounts of individual survey data, to analyze survey responses. Factor analysis unites closely-related variables under a larger, single ‘factor’ that captures the essential elements of the related variables and represents the driving force behind relationships of interest within the data.

Tables 1 and 2 show working conditions grouped into each factor, from the perspective of workers and from the perspective of HR managers, respectively. The first factor in the analysis of worker responses is characterized by variables that represent ‘sweatshop’ working conditions: it includes conditions such as verbal and physical abuse, dangerous workplaces and unreliable payment of wages. A second factor includes variables that are related to the factory environment. Finally, a third factor combines variables that constitute a multi-dimensional pay package, including benefits, bonuses and training. The working conditions listed in each of the factors in Tables 1-2 are listed in order of the relative weight they have on the factor.

### Table 1. Factors for working conditions assessed by workers

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>“Sweatshop conditions”</th>
<th>Factor 2</th>
<th>“Working environment and trust”</th>
<th>Factor 3</th>
<th>“Multi-dimensional pay and benefits”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accidents and Injuries</td>
<td>Physical Abuse</td>
<td>Verbal Abuse</td>
<td>Sexual Harassment</td>
<td>Excess Pay Deductions</td>
<td>Canteen Satisfaction</td>
</tr>
</tbody>
</table>

For HR managers, Factor 1 similarly relates to the harshest aspects of work. Issues related to pay emerge in Factor 2. Factor 3 captures issues related to communication and problem solving.

---

better skilled workers reach their production targets 30-40 minutes faster than their unskilled counterparts. In addition, as would be expected, multi-skilled workers produce higher productivity among workers. To measure productivity, workers are asked to report how long it takes them to reach their production target on a typical Friday. Holding all other demographic and job factors constant, productivity gains from better working conditions benefit both the factory, in the form of higher profitability, and workers, in the form of higher wages, thereby increasing profitability. In fact, the opposite is true. Learn more about the benefits of better working conditions...
Higher worker productivity improves a factory’s position in the supply chains with important buyers, and productivity can be improved through improved compliance with labour standards.

V. CONCLUSIONS AND RECOMMENDATIONS

Current research undertaken by the impact assessment of Better Work has found that the presence of better working conditions predicts higher profitability in garment factories. Researchers tested three hypothesized causal mechanisms for why improved working conditions lead to improved factory financial performance, as summarized in the following table.

<table>
<thead>
<tr>
<th>Hypothesized mechanism for improved profitability</th>
<th>Current evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better working conditions improves worker productivity?</td>
<td>Yes</td>
</tr>
<tr>
<td>Factories save costs by paying workers less in exchange for better working conditions?</td>
<td>No</td>
</tr>
<tr>
<td>Factories become more profitable by improving supply chain position?</td>
<td>Yes, through improved worker productivity</td>
</tr>
</tbody>
</table>

Researchers find that workers in factories with more compliant and better working conditions are more productive than their otherwise similar counterparts, which leads to greater profitability. In addition, factories that gain financially from more productive workers do not lower wages in exchange for better working conditions. Finally, although evidence is mixed that greater compliance leads directly to a better supply chain position, as a factory’s workers become more productive, its supply chain position improves.


Core donors to Better Work are:
Netherlands Ministry of Foreign Affairs
Swiss State Secretariat for Economic Affairs
Ministry of Foreign Affairs of Denmark The US Department of Labor
Funding is also provided by DFID, Government of France, Government of Canada, Irish Aid, GMAC, Royal Government of Cambodia and private sector donors, including The Walt Disney Company, Levi Strauss Foundation, Gap Inc. and FUNG (1937) Management Ltd