



The workplace impacts of domestic violence and abuse

**A KPMG report for Vodafone
Group**

04 July 2019



Important notice

This document has been prepared by KPMG LLP ("KPMG") solely for Vodafone Group Services Limited ("Vodafone" or "Addressee") in accordance with the terms of engagement agreed between Vodafone and KPMG.

KPMG's work for the Addressee was performed to meet specific terms of reference agreed between the Addressee and KPMG and that there were particular features determined for the purposes of the engagement.

The document should not be regarded as suitable to be used or relied on by any other person or any other purpose. The document is issued to all parties on the basis that it is for information only. This document is not suitable to be relied on by any party wishing to acquire rights against KPMG (other than Vodafone) for any purpose or in any context. Any party other than Vodafone that obtains access to this document or a copy and chooses to rely on this document (or any part of it) does so at its own risk. To the fullest extent permitted by law, KPMG does not accept or assume any responsibility to any readers other than Vodafone in respect of its work for Vodafone, this document, or any judgements, conclusions, opinions, findings or recommendations that KPMG may have formed or made.

KPMG does not assume any responsibility and will not accept any liability in respect of this document to any party other than Vodafone.

KPMG does not provide any assurance on the appropriateness or accuracy of sources of information relied upon and KPMG does not accept any responsibility for the underlying data used in this document. No review of this document for factual accuracy has been undertaken.

The opinions and conclusions expressed in this document are those of KPMG and do not necessarily align with those of Vodafone.

Contents

1	Executive summary	1
2	About the study	3
2.1	Context	3
2.2	Scope of our study and limitations	3
3	The prevalence of domestic violence and abuse	5
3.1	Estimates of the prevalence of domestic violence and abuse	5
3.2	The estimated number of employed women experiencing domestic violence and abuse	7
4	The workplace impact of domestic violence and abuse	8
4.1	Impacts relating to work absenteeism	8
4.2	The impact of domestic violence and abuse in terms of reduced workplace productivity	12
4.3	The impact of domestic violence and abuse on victim's career progression and earnings	15
Appendix 1	Findings from research on the prevalence and cost of domestic violence and abuse	19
Appendix 2	Our approach to estimating the prevalence and impact of domestic violence and abuse	26

1 Executive summary

Vodafone commissioned KPMG to conduct analysis relating to the workplace impact of domestic violence and abuse¹, focusing on the prevalence of domestic violence and abuse across a number of countries and the specific impacts arising from this for employers and employee victims. Our analysis was not intended to capture the full range of economic and social impacts of domestic abuse for victims or wider affected parties. Details of the scope of our work are set out in Section 2.

Our analysis is based on data and insights from existing literature and studies relating to the prevalence and impact of domestic abuse and publicly available statistics from organisations such as the World Bank, the International Labour Organisation (ILO) and the United Nations (UN). We have also drawn on evidence from the “Vodafone domestic abuse survey”: a survey Vodafone commissioned Opinium Research LLP (‘Opinium’) to undertake in nine countries² to obtain insights on the workplace issues associated with domestic violence and abuse. Our analysis also covers these nine Vodafone markets.

Due to data availability, our analysis primarily focuses on domestic violence and abuse against women, both in terms of the number of employed women affected³ and the workplace related impacts of this. As a result, it will underestimate the overall workplace impacts across all employees given that it does not capture impacts associated with domestic violence and abuse experienced by men. Our analysis also does not capture any workplace related impacts for perpetrators of domestic violence and abuse.

In summary, our analysis, indicates the following:

- Across 107 countries for which data was available, we estimate 80 million working women have experienced domestic violence and abuse in the last 12 months. This is equivalent to approximately 15% of the female workforce of these countries.
- In the nine Vodafone markets, we estimate 30 million working women have experienced domestic violence and abuse in the last 12 months. Across the nine countries, this is equivalent to between 4% and 12% of all women.
- Evidence suggests that victims of domestic violence and abuse may take additional time off work due to the violence they experience.⁴ This may be due to the injuries they sustain, emotional stress or in order to seek help. In the nine Vodafone markets, we estimate that approximately \$1.1 billion to \$2.1 billion of economic output⁵ is lost each year as a consequence of absenteeism related to domestic violence and abuse.
- Domestic violence and abuse may also result in those experiencing it being less productive whilst at work, for example, due to anxiety or stress, leading sufferers to be less able to

¹ Domestic violence and abuse is defined in this study as: ‘Any form of physical, sexual, emotional or psychological abuse, including financial control, stalking and harassment. It occurs between opposite- or same-sex intimate partners, who may or may not be married, common law, or living together. It can also continue to happen after a relationship has ended. It can also occur between family members.’

² The nine markets are: Germany, India, Ireland, Italy, Kenya, South Africa, Spain, Turkey and United Kingdom. These countries were selected by Vodafone based on its operational footprint.

³ The estimates of individuals affected are based on reported figures of women who have experienced physical and/or sexual intimate Partner violence (IPV). As explained in Section 3, evidence suggest that domestic violence and abuse is typically underreported. Therefore, our analysis is likely to underestimate the true rates of prevalence and impacts.

⁴ Walby et al (2004) ‘The Costs of Domestic Violence’, Women and Equality Unit, University of Leeds., Department of Justice Canada (2009) An Estimation of the Economic Impact of Spousal Violence in Canada., Duvvery et al (2012) Estimating the costs of domestic violence against women in Vietnam.

⁵ Economic output is the total value of all goods and services produced over a given time period by a firm, industry or country.

concentrate on tasks or be more prone to accidents.⁶ Reduced productivity from employees will result in an overall reduction in productivity at a business level, leading to economic losses for employers.

- Across the nine markets, the Vodafone domestic abuse survey found that between 21% and 56% of those who had experienced domestic violence and abuse, reported being less productive at work as a result of the violence and abuse. When these proportions are applied to the female working population in these nine countries, this is equivalent to approximately 9 million working women.
- While there is a lack of evidence relating to the extent to which the workplace productivity of domestic violence and abuse victims is decreased, our scenario analysis indicates that, in total across the nine Vodafone markets:
 - if productivity of domestic violence and abuse victims were 1% lower, the value of lost economic output would be \$0.9bn per year;
 - if productivity were 5% lower, the value of lost economic output would be \$4.3bn per year; and
 - if productivity were 10% lower, the value of lost economic output would be \$8.6bn per year.
- Additionally, evidence from the Vodafone domestic abuse survey shows that between 41% and 88% of those who had experienced domestic violence and abuse during their working life reported that it had impacted their career progression.
- In seven of the nine countries surveyed a small proportion of individuals who had experienced domestic violence and abuse during their working life reported missing out on a promotion as a result. When scaled up, this would be equivalent to approximately 4.5 million women missing out on a promotion as a result of domestic violence and abuse, costing them, in total, approximately \$12.9 billion per annum in lost potential earnings. For each woman, this is equivalent to an average loss of potential earnings of \$2,900 per annum.
- In summary, dependent on the extent to which workplace productivity of victims of domestic violence and abuse is impacted, our analysis suggests that across the nine Vodafone markets analysed, the workplace impact could be between \$2.0 billion and \$9.7 billion per annum for businesses as a result of domestic violence and abuse related absences and presenteeism. A further cost to employees of \$12.9 billion per annum is also incurred through lost earnings related to the impact on career progression.

⁶ Vara-Homa, A. (2014) 'Violence against women and its financial consequences for businesses in Peru.' In. University of San Martin de Porres, Lima, Peru.

2 About the study

2.1 Context

At a global level, it is estimated that in 2013, on average, 35% of women had experienced either physical and/ or sexual violence by an intimate partner or sexual violence by a stranger.⁷

And evidence suggests that the impacts of domestic violence and abuse are significant. For example, the United Nations (UN) has estimated that the global cost of violence against women was \$1.5 trillion in 2016, equivalent to approximately 2% of global gross domestic product (GDP).⁸

Domestic violence and abuse is detrimental to the whole economy, with the burden of violence not being solely borne by victims, but also by wider society.⁹ For example, governments provide medical, legal and social services in support of victims. And businesses can lose economic output as a result of lost working days and reduced productivity of employees experiencing domestic violence and abuse.

With a global workforce of approximately 104,000 direct employees,¹⁰ Vodafone recognises that domestic violence and abuse is likely to be an issue affecting some of its employees. Therefore, it has launched a policy aimed at providing greater support for employees affected by domestic violence and abuse.¹¹

To better understand the potential business impacts of domestic violence and abuse, Vodafone has commissioned KPMG to undertake analysis relating to the overall workplace impact of domestic violence and abuse.

For the purposes of this study domestic violence and abuse is defined in the following way:

Domestic violence and abuse (sometimes defined as intimate partner violence or family/carer violence) is any form of physical, sexual, emotional or psychological abuse, including financial control, stalking and harassment. It occurs between opposite- or same-sex intimate partners, who may or may not be married, common law, or living together. It can also continue to happen after a relationship has ended. It can also occur between family members.

2.2 Scope of our study and limitations

The scope of our study for Vodafone on the overall workplace impact of domestic violence and abuse, includes analysis covering the following areas:

- The prevalence of domestic violence and abuse
- The impact on employers of domestic violence and abuse, in terms of:
 - The number of lost work days as a result of domestic violence and abuse
 - The value of lost work days (e.g. in terms of lost economic output)

⁷ CARE (2018) Counting the cost: The Price Society Pays for Violence Against Women

⁸ UN Women (2016) 'The economic costs of violence against women'. Available at:

<http://www.unwomen.org/en/news/stories/2016/9/speech-by-lakshmi-puri-on-economic-costs-of-violence-against-women>

⁹ Walby, S. and Olive, P. (2014) 'Estimating the costs of gender-based violence in the European Union'. European Institute for Gender Equality.

¹⁰ Vodafone (2018) Vodafone Group Plc Annual Report 2018.

¹¹ <https://www.vodafone.com/content/index/media/vodafone-group-releases/2019/vodafone-foundation-announces-global-plans-for-app-to-help-those-affected-by-domestic-abuse.html>

- The impact on productivity as a result of domestic violence and abuse
- The impact on the working life of those affected by domestic violence and abuse, in terms of:
 - The impact on career progression
 - The financial cost to those affected by domestic violence and abuse as a result of delayed or limited career progression

Our analysis does not seek to estimate the economic impact of the domestic violence and abuse policy Vodafone is launching. Rather, our analysis is intended to provide an indication of the prevalence of domestic violence and abuse in a number of countries, and the potential scale of impact it has on employers and employees, from a workplace perspective. As a result, our analysis does not attempt to capture the full range of socio-economic impacts associated with domestic violence and abuse and focusses only on the business related impacts detailed above.

Our analysis draws upon data and insights from existing literature and studies relating to the prevalence, and impact, of domestic violence and abuse, therefore, was limited to some extent by the data and information available. We have also drawn on evidence from the “Vodafone domestic abuse survey”: a survey Vodafone commissioned Opinium Research LLP (‘Opinium’) to undertake in nine countries, selected by Vodafone, and in which Vodafone operates.¹² The purpose of the survey was to obtain information in relation to the prevalence, and types, of domestic violence and abuse experienced by individuals and how it has affected individuals in the workplace.

KPMG’s analysis similarly covers the nine countries selected by Vodafone for the Opinium survey. Where data were available, we have also undertaken some analysis covering additional countries. Our analysis, however, does not assess the global-level business impacts of domestic violence and abuse.

While domestic violence and abuse affects both men and women, our initial research revealed that there is a lack of comprehensive data on the number of male victims of domestic violence and abuse and the impacts of this. Therefore, our analysis primarily focuses on domestic violence and abuse against women, both in terms of the number of employed women affected and the workplace related impacts of this. As a result, it will underestimate the overall workplace impacts across all employees.

Our analysis also only focuses on the impacts of domestic violence and abuse for the victims. A number of studies evidence that there are workplace impacts for the perpetrators of domestic violence and abuse.¹³ Where relevant we have noted this evidence in our literature review summary, however our quantitative analysis focuses only on workplace impacts for victims.

¹² The nine markets are: Germany, India, Ireland, Italy, Kenya, South Africa, Spain, Turkey and United Kingdom.

¹³ Vara-Homa, A. (2014) ‘Violence against women and its financial consequences for businesses in Peru.’ In. University of San Martin de Porres, Lima, Peru and Duvverly et al (2012) Estimating the costs of domestic violence against women in Viet Nam.

3 The prevalence of domestic violence and abuse

3.1 Estimates of the prevalence of domestic violence and abuse

In order to assess the potential scale of business impacts of domestic violence and abuse, it is important to consider the number of people who may be experiencing domestic violence and abuse.

While at a global level it is estimated that in 2013, on average, 35% of women experience physical and/or sexual violence by an intimate partner or sexual violence by a stranger¹⁴, evidence suggests factors such as culture and social views on domestic violence can result in different prevalence rates of domestic violence and abuse across countries.¹⁵ Data collated by the UN shows a wide variation across countries in the proportion of women who have experienced physical and/or sexual Intimate Partner Violence (IPV) in the last 12 months and over their lifetime. The data for the nine Vodafone markets are shown in Figure 1 below, along with regional averages where data was available.

Figure 1: Percentage of women who have experienced physical and/or sexual Intimate Partner Violence (IPV) in the last 12 months and over their lifetime¹⁶

	Percentage of women experiencing physical and/or sexual IPV in last 12 months	Percentage of women experiencing physical and/or sexual IPV over their lifetime
Germany	3%	19%
India	22%	42%
Ireland	3%	19%
Italy	6%	19%
Kenya	26%	39%
South Africa	16%	30%
Spain	2%	19%
Turkey	11%	35%
United Kingdom	5%	19%
Africa average¹⁷	23%	33%
Asia average¹⁸	12%	23%
Europe average¹⁹	5%	22%
Latin America & Caribbean average²⁰	12%	25%
Middle East average²¹	21%	38%
North America average²²	-	21%
Oceania average²³	24%	48%

Source: UN Women, Global Database on Violence against Women. Available at: <http://evaw-global-database.unwomen.org/en/countries>

¹⁴ CARE (2018) Counting the cost: The Price Society Pays for Violence Against Women.

¹⁵ Morrison, A. R and Orlando, M. B (2004) The costs and impacts of gender-based violence in developing countries: Methodological considerations and new evidence.

¹⁶ Year of data varies by country and ranges from 2007 – 2017.

¹⁷ Africa includes: Angola, Burkina Faso, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Equatorial Guinea, Ethiopia, Gabon, Ghana, Kenya, Liberia, Malawi, Mali, Mozambique, Namibia, Nigeria, Rwanda, Sao Tome and Principe, Sierra Leone, Uganda, Zambia and Zimbabwe.

¹⁸ Asia includes: Armenia, Azerbaijan, Bangladesh, Bhutan, Cambodia, Georgia, India, Indonesia, Kyrgyzstan, Lao, Maldives, Myanmar, Nepal, Philippines, Singapore, Tajikistan, Timor-Leste and Vietnam.

¹⁹ Europe includes: Albania, Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Tuvalu, Ukraine and United Kingdom.

²⁰ Latin America & Caribbean includes: Bolivia, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Peru and Trinidad and Tobago.

²¹ Middle East includes: Afghanistan, Egypt, Jordan and Turkey.

²² North America includes: Canada and the United States.

²³ Oceania includes: Australia, Fiji, Kiribati, Marshall Islands, Nauru, Palau, Samoa, Solomon Islands, Tonga and Vanuatu.

We note that the UN data relates specifically to intimate partner violence. This is only a subset of the wider definition of domestic violence and abuse (see Section 2 above), which also captures, for example, domestic violence and abuse from a family member. As a result, it is likely that the data above may underestimate domestic violence and abuse based on this broader definition. However, given that the UN provides comprehensive data, comparable across a number of different countries, we use this in our analysis in the remainder of this report.

Evidence also suggests that domestic violence and abuse is typically an underreported crime. Victims may not report domestic violence and abuse for a number of reasons, including fear of reprisals, lack of information about victim's rights or lack of trust in the justice system.²⁴ The European Union Agency for Fundamental Rights (EUFRA) found that in the European Union, only one in three victims of partner violence and one in four victims of non-partner violence report their most recent serious incident to the police or another service.²⁵ Therefore, the prevalence rates in Figure 1, as used in our analysis, are likely to be an underestimate. As a result, our estimates of the number of working women experiencing domestic violence and abuse, and the workplace impacts of this, will also be underestimated for each country.

Furthermore, while the UN reports data relating to the prevalence of domestic violence against women it does not produce equivalent data for domestic violence and abuse against men. In general, when conducting our research we found more limited data and analysis relating to domestic violence perpetrated against men.

Limited data was available for some countries, however. For example, in the UK, data is reported by the Office for National Statistics (ONS) on domestic violence and abuse experienced by both men and women. It reported that in 2018 an estimated 1.3 million women and 0.7 million men had experienced domestic abuse in the last year. This suggests that in the UK reported incidents of domestic violence and abuse were approximately double for females compared to males.²⁶

We were only able to gather data on the prevalence of domestic violence and abuse against men for two of the nine countries we are assessing. This data has been set out in Figure 2 below.

Figure 2: Percentage of men who have experienced domestic violence and abuse in the last 12 months and over their lifetime

	Percentage of men experiencing physical and/or sexual IPV in last 12 months	Percentage of men experiencing physical and/or sexual IPV over their lifetime
Kenya ^{27,28}	49%	21%
United Kingdom ²⁹	4%	-

Source: KPMG review of literature (see footnotes).

As explained in Section 2, given the lack of comprehensive data on the number of male victims of domestic violence and abuse, our analysis in the remainder of this report focuses on domestic violence and abuse against women, both in terms of the number of employed women affected and the workplace related impacts of this.

²⁴ http://www.europarl.europa.eu/doceo/document/E-8-2018-002437_EN.html?redirect

²⁵ European Union Agency for Fundamental Rights (2014). Violence against women: an EU-wide survey. Main results.

²⁶ Office for National Statistics (2018) Domestic abuse in England and Wales: year ending March 2018. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/domesticabuseinenglandandwales/yearendingmarch2018>

²⁷ National Crime Research Centre (2014) Gender Based Violence in Kenya.

²⁸ The figures for Kenya represent Gender Based Violence (GBV), rather than domestic violence. GBV has a broader definition and will capture additional acts such as human trafficking, forced marriages or honour killings.

²⁹ Office for National Statistics (2018) Domestic abuse in England and Wales: year ending March 2018. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/domesticabuseinenglandandwales/yearendingmarch2018>

3.2 The estimated number of employed women experiencing domestic violence and abuse

Using UN data relating to the proportion of women who have experienced domestic violence and abuse (specifically IPV) in the last 12 months and over their lifetime, and population and employment data from the World Bank and International Labour Organisation (ILO), we have estimated the number of women in employment that may be affected. The results of this analysis are set out in Figure 3.

Figure 3: Estimates of the number of employed women, aged 15-64, who have experienced physical and/or sexual IPV in the last 12 months and over their lifetime

	Estimated employed women experiencing domestic violence and abuse in the last 12 months (000's)	Percentage of total workforce	Percentage of total women	Estimated employed women experiencing domestic violence and abuse in their lifetime (000's)	Percentage of total workforce	Percentage of total women
Germany	427	1%	1%	2,748	6%	7%
India	24,514	4%	4%	46,499	7%	7%
Ireland	23	1%	1%	151	6%	6%
Italy	399	2%	1%	1,283	5%	4%
Kenya	1,965	7%	8%	2,935	10%	12%
South Africa	999	4%	3%	1,887	8%	7%
Spain	129	1%	1%	1,244	6%	5%
Turkey	833	2%	2%	2,679	7%	7%
United Kingdom	574	1%	2%	2,216	6%	7%
Africa	31,430	6%	7%	30,847	6%	7%
Asia	36,929	3%	4%	56,867	5%	6%
Europe	4,092	1%	1%	18,195	6%	6%
Latin America & Caribbean	5,206	3%	4%	8,070	5%	6%
Middle East	2,291	2%	2%	3,753	4%	3%
North America	-	-	-	-	-	-
Oceania	187	1%	1%	941	6%	7%

Source: KPMG analysis

These estimates suggest that across the nine countries analysed, between 4% and 12% of employed women will have experienced physical and/ or sexual IPV. As noted above, the number of women experiencing domestic violence and abuse may be higher than this due to the wider definition of this compared to IPV.

4 The workplace impact of domestic violence and abuse

Evidence from a range of studies relating to the economic impacts of domestic violence and abuse suggests that the costs of it can be significant and wide ranging, affecting a number of different groups in society, in addition to the victims. In terms of the workplace impacts of domestic violence and abuse – the focus of this study – there is evidence that it can affect an individual’s capacity and ability to work³⁰, having both immediate, as well as longer term, impacts.

A study by Vara-Horna (2014)³¹ identified four main types of cost to business of domestic violence and abuse:

- Absenteeism: the cost of employees taking additional days off work as a result of domestic violence and abuse, employees arriving to work late or leaving early and changes in shift patterns.
- Staff turnover: the cost of employees leaving their jobs (either voluntarily or involuntarily) and the cost of recruiting and training replacement staff.
- Presenteeism: this includes the loss of productivity of employees who may be less able to concentrate, produce lower quality outputs or are at increased risk of causing accidents at work.
- Negative consequences for the organisation: including internal costs of employees being witness to violence against women and the external reputation cost.

Our analysis of the workplace impact of domestic violence and abuse, focuses on the costs in terms of absenteeism and presenteeism due to the greater availability of data and evidence relating to these impacts that can be used to inform our analysis.

While the costs identified above in the Vara-Horna study are those incurred by employers, evidence suggests that there are additional workplace impacts for the individuals that are victims of domestic violence and abuse. These impacts can include reduced or slower career progression, as well as earnings impacts both due to the impacts on career progression but also as a result of absenteeism. The potential career progression impacts are assessed as part of our study in Section 4.3.

4.1 Impacts relating to work absenteeism

4.1.1 Overview of evidence from existing literature

Evidence suggests that victims of domestic violence and abuse may be absent from work for additional days, above the average for all employees, as a result of the violence they experience. For example, they may require time off work as a result of the injuries they sustain, emotional stress or in order to seek help.³²

³⁰ Walby et al (2004) 'The Costs of Domestic Violence', women and Equality Unit, University of Leeds.

³¹ Vara-Horna, A. (2014) 'Violence against women and its financial consequences for businesses in Peru.' In. University of San Martin de Porres, Lima, Peru.

³² Walby et al (2004) 'The Costs of Domestic Violence', Women and Equality Unit, University of Leeds.

A number of studies have estimated the scale and cost of work absences related to domestic violence and abuse:

- In Uganda, a study undertaken by the Center for Domestic Violence Prevention estimated that 9% of women surveyed who had experienced violence in the past 12 months had to take time off work due to domestic violence, with victims taking an average of 11.8 days off work per annum.³³
- Duvvury et al (2015) estimated that domestic violence in Egypt resulted in women missing 560,000 working days in 2014, representing a cost of LE 26.9m (equivalent to \$1.8m) to the Egyptian economy.³⁴
- Duvvury et al (2012) found that 14% of women experiencing domestic violence in Vietnam required time off work, taking on average 5.5 days off work per annum.³⁵ The study estimated that the domestic violence resulted in an average loss of earnings of 382,234 VND (equivalent to \$17.09) per incident, and an overall productivity loss of 1.78%.

Studies suggest that the scale of absences from work due to domestic violence and abuse can be influenced by a number of different factors.

In a report for the Department of Social Services Australia, KPMG found that the number of absences from work was dependent on the type of abuse experienced. The study found that, in Australia, victims of physical abuse were absent from work, on average, 7.2 days per year, whilst victims of sexual violence were absent for an average of 8.1 days, and victims of stalking were absent for an average of 10.1 days per year.³⁶

Meanwhile, a report by Zhang et al (2012) found that the number of work absences ranged between 10 and 33 days per year dependent on the diagnosis of mental health issues related to domestic violence and abuse.³⁷ The study also estimated the reduction in productivity (expressed as a percentage of income), related to spousal violence. It was estimated that the value of lost productivity was equivalent to 3.9% of income for female victims and 2.2% of income for male victims.

The studies referred to above, provide evidence in relation to absenteeism and, in some cases, the earnings and productivity losses associated with this. For employers, absence of employees from work can result in reduced output, with revenue impacts. And at an economy level this can translate in to reduced economic output³⁸ and productivity, as well as fiscal impacts linked to the reduction in income-related tax revenues from lower earnings of domestic violence and abuse victims and due to reduced company output.³⁹

4.1.2 Insights from the Vodafone domestic abuse survey

As part of the Vodafone domestic abuse survey undertaken by Opinium across the selected Vodafone markets, individuals who reported having being victims of domestic violence and abuse were asked about how this had affected their working life. This survey found that on average 22% of respondents who had experienced domestic violence and abuse reported that they had 'sometimes stopped going into work and/or would take days off'. Figure 4 below presents the results for each surveyed country.

³³ Center for Domestic Violence Prevention (2013) Economic costs of domestic violence in Uganda. Available at: <http://www.cedovip.org/index.php/resources/reports/5-economic-cost-of-domestic-violence-in-uganda/file>

³⁴ Duvvury et al (2015) The Egypt Economic Cost of Gender-based Violence Survey (ECGBVS) 2015

³⁵ Duvvury et al (2012) Estimating the costs of domestic violence against women in Viet Nam

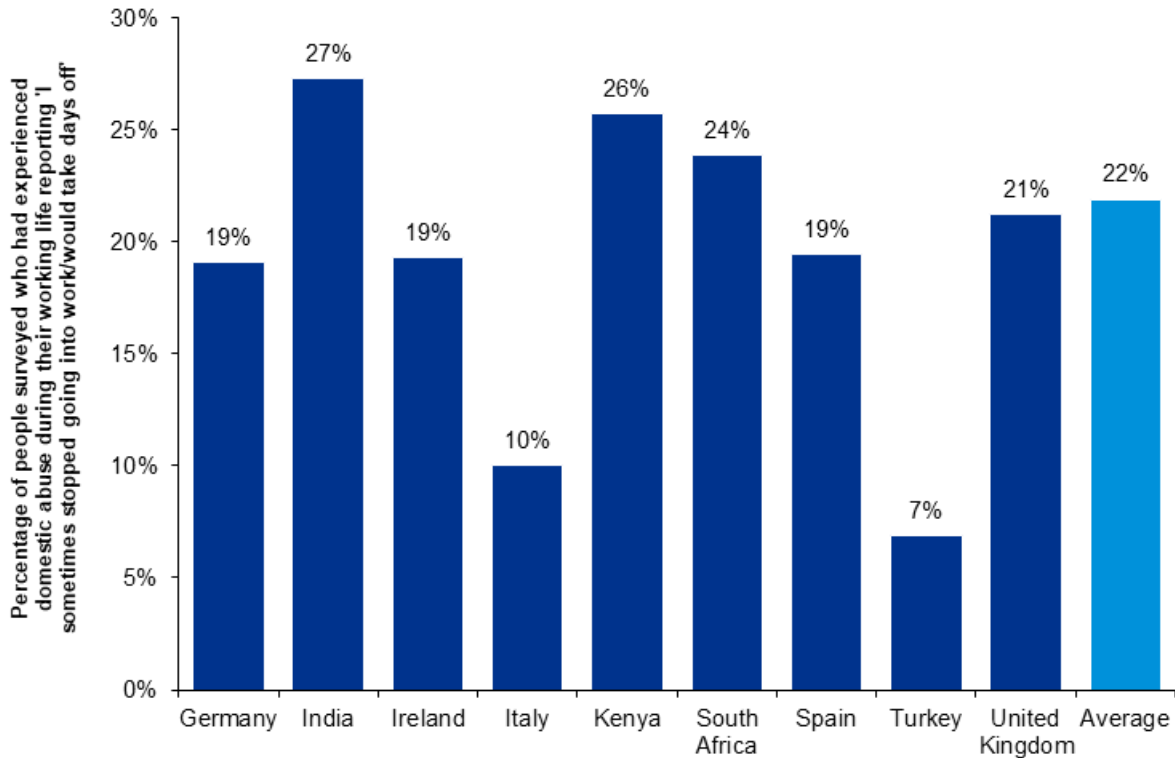
³⁶ KPMG (2016) The Cost of Violence Against Women and Their Children in Australia

³⁷ Zhang, T., Hoddenbagh, J. McDonald, S., & Scrim, K. (2012) An Estimation of the Economic Impact of Spousal Violence in Canada. Ottawa, Department of Justice, Research and Statistics Division.

³⁸ Economic output is the total value of all goods and services produced over a given time period by a firm, industry or country.

³⁹ Walby, S. and Olsen, W. (2002) 'The impact of women's position in the labour market on pay and implications for UK productivity'. Women & Equality Unit.

Figure 4: Percentage of people surveyed who had experienced domestic violence and abuse during their working life reporting 'I sometimes stopped going into work/would take days off'⁴⁰



Source: KPMG analysis of Vodafone domestic abuse survey

While the survey provided insights on the proportion of victims of domestic violence and abuse reporting taking time off work, evidence relating to the scale of this absence, in terms of number of days off, was not captured. Further, the survey sample sizes were not large enough for us to be able to draw detailed insights regarding the factors (e.g. type of abuse, frequency of abuse or occupation) that may drive differences in the number of people reporting that they had time off work as a result of domestic violence and abuse.

4.1.3 Assessment of the potential impact of work absenteeism related to domestic violence and abuse

As set out above, there is a wide range of evidence that as a result of domestic violence and abuse victims may take additional days off work. We have sought to estimate the impact of this in terms of lost economic output, drawing on evidence relating to:

1. the average number/proportion of domestic violence and abuse victims who take additional days off work;
2. the value of lost output for each day of absence; and
3. the number of days absence per year.

We applied the results of the Vodafone domestic abuse survey (set out in Figure 4) to our estimate of the number of working women, aged 15-64, who have experienced domestic violence and abuse in

⁴⁰ For Germany, Italy, Spain and Turkey there was a low response rate to relevant questions in the Vodafone domestic abuse survey. As a result, for these four countries, the survey results are not statistically significant and may not be representative of the general population.

the last 12 months (see Section 3) to estimate the number of female domestic violence and abuse victims who take additional days off work.

To estimate the value of lost output for each day of absence, we sourced data on the level of output generated per employee from the ILO. Assuming a 5 day work week, and 52 working weeks per year, we estimated the value of output per worker per day. This represents the value of lost output per day of absence.

We were unable to source output per worker data for three countries: India, Kenya and South Africa. For these countries, we have used the average gross value added (GVA) generated per worker as a proxy for output per worker. GVA is a measure of the value of goods and services produced. It is estimated at a national level by adjusting output for intermediate consumption meaning it will underestimate the output loss. As with output, we have estimated the average GVA generated per worker per day by dividing it by the total number of work days per year.

In terms of the number of days of absence from work as a result of domestic violence and abuse, we were unable to obtain comprehensive statistics relating to this. Some evidence is available from existing studies – as outlined in Section 4.1.1 above – however these generally drew on data collected through a bespoke survey developed for the study or, in some cases, country-specific data on absences relating to certain physical or mental health issues.

The studies reported a range of average days of workplace absence due to domestic violence and abuse – from 5.5 to 33 days of additional work absence.

For our analysis we used the lower-band of the range from existing literature, equivalent to 5.5 days of work absences per year, as well as the median of 10.1 days. Our resultant estimates of the total cost of work absences related to domestic violence and abuse are presented in Figure 5 below.

Figure 5: Estimated cost of work absenteeism related to domestic violence and abuse per annum⁴¹

	Estimate of the number of employed women who have taken time off work as a result of domestic violence in the last 12 months ('000s)	Value of output lost per worker per day	Total value of output lost due to absenteeism	
			Minimum reported level	Median reported level
Germany	81	\$357	\$160m	\$293m
India	6,686	\$13	\$479m	\$880m
Ireland	5	\$640	\$16m	\$29m
Italy	40	\$363	\$80m	\$146m
Kenya	505	\$10	\$27m	\$50m
South Africa	238	\$53	\$70m	\$128m
Spain	25	\$307	\$42m	\$78m
Turkey	57	\$163	\$52m	\$95m
United Kingdom	122	\$333	\$223m	\$409m
Total	7,759	-	\$1,148m	\$2,108m

Source: KPMG analysis

We estimate that across the nine Vodafone markets, economic output to the value of between approximately \$1.1bn and \$2.1bn is lost each year as a consequence of absenteeism related to

⁴¹ We note that for four countries (Germany, Italy, Spain and Turkey) there was a low response rate to relevant question in the Vodafone domestic abuse survey. As a result, for these four countries, the survey results are not statistically significant and may not be representative of the general population.

domestic violence and abuse (using the lower end of the range, and median level from existing studies). Due to the scale of working women affected by domestic violence and abuse in India, the analysis suggests that India's economic output is reduced by the most - an estimated \$479m to \$880m of lost output per year - despite its output per worker being among the lowest of the countries analysed.

4.2 The impact of domestic violence and abuse in terms of reduced workplace productivity

4.2.1 Overview of evidence from existing literature

In addition to economic output being reduced as a result of workplace absence due to domestic violence and abuse, there is evidence⁴² to suggest that when victims are present at work they may be less productive than would otherwise be the case, resulting in additional economic output losses at the economy level. Reasons cited in studies for this reduced productivity include the anxiety and stress they may be experiencing leading to victims being unable to concentrate on their tasks, leading them to be slower, produce work of a lower quality and/ or potentially being more prone to accidents. Further, victims may be less timely, arriving at work later or leaving earlier. These type of impacts have previously been grouped under the term 'presenteeism'.

A number of studies have evidenced the issue of presenteeism related to domestic violence and abuse, and its impact on the productivity of individuals and businesses:

- Swanberg et al (2005) found that in the United States, 71% of employed female victims of IPV reported having difficulty concentrating in the workplace due to the violence they had experienced. A further 63% stated that they did not work at their optimal level in the year following incidents of IPV.⁴³
- In Uganda, 8% of those surveyed who had experienced domestic violence and abuse in the last 12 months reported that their daily work had suffered because of domestic violence and abuse.⁴⁴
- The International Center for Research on Women (2009) found that 66.5% of households interviewed reported that a member of the household's work had been affected by domestic violence and abuse.⁴⁵
- Reeves and O'Leary-Kelly (2007) studied the impact of domestic violence and abuse on workers in the United States. The study found that the lost productivity amongst employees attributable to domestic violence and abuse was 3.9% for females and 2.2% for male victims.⁴⁶
- In Peru, Vara-Horna (2014) estimated that a reduction in labour productivity from victim presenteeism cost businesses US\$613.9m.⁴⁷ The study also estimated the cost of presenteeism for perpetrators of domestic violence and witnesses to domestic violence. It was found that the business cost of presenteeism related to witnesses of domestic violence and abuse was nearly as great as that of victims, estimated at US\$594.1m. Further, the cost of

⁴² Vara-Horna, A. (2014) 'Violence against women and its financial consequences for businesses in Peru.' In. University of San Martin de Porres, Lima, Peru.

⁴³ Swanberg et al (2005). 'Intimate Partner Violence, Employment and the Workplace: Consequences and Future Directions.' University of Kentucky.

⁴⁴ Center for Domestic Violence Prevention (2013). 'Economic costs of domestic violence in Uganda'.

⁴⁵ International Center for Research on Women (2009) 'Intimate Partner Violence: High Costs to Households and Communities.'

⁴⁶ Reeves and O'Leary-Kelly (2007) 'The Effects and Costs of Intimate Partner Violence for Work Organizations.'

⁴⁷ Vara-Horna, A. (2014) 'Violence against women and its financial consequences for businesses in Peru.' In. University of San Martin de Porres, Lima, Peru.

presenteeism for perpetrators of violence was estimated at US\$2,291.9m; almost four times higher than that of victims.

4.2.2 Insights from the Vodafone domestic abuse survey

The results of the Vodafone domestic abuse survey also provide some insights in relation to the presenteeism impacts – both in terms of the types and prevalence of workplace impacts arising when victims of domestic violence and abuse are present at work.

Within the survey, participants were asked about the ways in which domestic violence and abuse may have impacted their work performance. The results are set out in Figure 6 below.

Figure 6: Percentage of people surveyed who had experienced domestic violence and abuse during their working life reporting different types of presenteeism⁴⁸

	My work decreased in quality	I was less productive	I couldn't fulfil my potential	I was distracted and found it hard to concentrate at work	I couldn't perform as well as I could before the abuse started	I was injured and as a result I couldn't perform well at work	I had more work-related accidents / made more general mistakes
Germany	48%	38%	33%	29%	14%	10%	5%
India	35%	28%	25%	31%	23%	10%	20%
Ireland	26%	39%	39%	47%	26%	9%	7%
Italy	20%	35%	20%	20%	10%	5%	10%
Kenya	40%	51%	34%	54%	40%	9%	14%
South Africa	39%	56%	43%	54%	34%	10%	16%
Spain	31%	31%	31%	25%	25%	0%	6%
Turkey	28%	24%	34%	24%	17%	7%	10%
United Kingdom	12%	21%	23%	30%	14%	15%	5%
Average	32%	38%	33%	40%	26%	9%	12%

Source: KPMG analysis of Vodafone domestic abuse survey

Between 21% and 56% of survey participants who had experienced domestic violence and abuse reported that, as a result of experiencing domestic violence and abuse, they became less productive at work. And across all countries approximately, a fifth, or more, survey participants who had experienced domestic violence and abuse during their working life reported that they could not fulfil their potential.

The results from the survey highlight that the prevalence of presenteeism related to domestic violence and abuse could be substantial, affecting a large number of victims. However, the survey insights are limited in that they do not provide evidence in terms of the scale of impact, for example in terms of the level of reduction in productivity and work quality.

4.2.3 Assessment of the potential reduction in workplace productivity related to domestic violence and abuse

Evidence from existing literature and the insights gathered from the Vodafone domestic abuse survey, show that domestic violence and abuse can lead to presenteeism and a reduction in labour productivity.

⁴⁸ For Germany, Italy, Spain and Turkey there was a low response rate to relevant questions in the Vodafone domestic abuse survey. As a result, for these four countries, the survey results are not statistically significant and may not be representative of the general population.

We have estimated the potential cost of work presenteeism related to domestic violence and abuse for the nine selected Vodafone markets based on estimates of the number of people who experience a reduction in productivity (presenteeism) as a result of domestic violence and abuse, using the data from the Vodafone domestic abuse survey and our estimates of prevalence of domestic violence and abuse amongst employed women aged 15-64 (see Section 3).

As with our analysis of the impact of absenteeism, to analyse presenteeism impacts we used measures of the average output per worker sourced from the ILO or GVA per worker data where this was not available.

While there is a body of evidence (as detailed above) that productivity of victims of domestic violence and abuse is on average reduced while they are present at work, there is a lack of detailed and comprehensive evidence on the extent to which productivity is reduced and the persistence of this over time. Therefore, to demonstrate the potential impacts of this we have estimated the impacts at the economy level using assumptions about the potential scale of productivity reduction. We have assessed the impacts based on a 1%, 5% and 10% reduction in worker productivity over a year. We note that domestic violence and abuse may not persist for a victim for a full year, however, there is evidence to suggest that the productivity impact persists beyond the period of violence in to the year following incidents of IPV.⁴⁹ The results of our analysis are shown in Figure 7 below.

Figure 7: Estimated cost of lost economic output related to presenteeism, US\$ million per annum⁵⁰

	Estimated number of employed women who have reduced productivity as a result of domestic violence ('000s)	1% reduction in productivity	5% reduction in productivity	10% reduction in productivity
Germany	163	\$151m	\$755m	\$1,510m
India	6,933	\$235m	\$1,174m	\$2,349m
Ireland	9	\$15m	\$75m	\$151m
Italy	140	\$132m	\$658m	\$1,317m
Kenya	1,011	\$26m	\$128m	\$256m
South Africa	559	\$78m	\$388m	\$775m
Spain	39	\$31m	\$157m	\$315m
Turkey	201	\$85m	\$427m	\$853m
United Kingdom	122	\$105m	\$526m	\$1,053m
Total	9,176	\$858m	\$4,288m	\$8,577m

Source: KPMG analysis

Our analysis shows that an estimated 9 million employed women in the nine markets analysed may have been less productive at work as a result of experiencing domestic violence and abuse. This is equivalent to approximately 1% of the total workforce producing output below their potential. And as noted above, as this only captures estimates of female victims of domestic violence and abuse, the overall impacts covering male victims also, is likely to be higher.

While the scale of reduction in productivity is unclear, if these individuals' output at work was reduced over the course of a year by only a small amount the overall impacts could be significant:

- if female victim's work productivity falls by 1%, the value of lost economic output would be approximately \$0.9bn across the nine markets;

⁴⁹ Swanberg et al (2005). 'Intimate Partner Violence, Employment and the Workplace: Consequences and Future Directions.' University of Kentucky.

⁵⁰ We note that for four countries (Germany, Italy, Spain and Turkey) there was a low response rate to relevant question in the Vodafone domestic abuse survey. As a result, for these four countries, the survey results are not statistically significant and may not be representative of the general population.

- if productivity falls by 5%, the value of lost economic output would be approximately \$4.3bn across the nine markets; and
- if productivity falls by 10%, the value of lost economic output would be \$8.6bn across the nine markets.

4.3 The impact of domestic violence and abuse on victim's career progression and earnings

4.3.1 Overview of evidence from existing literature

Another main type of workplace impact of domestic violence and abuse identified in studies is in relation to the earnings and career progression of victims. A number of studies point to evidence that individuals who experience domestic violence and abuse, on average, earn less than the general population. Findings from a selection of studies are set out below:

- Duvery et al (2012) found that women in Vietnam who were currently experiencing domestic abuse earned 35% less than those who were not abused.⁵¹
- Morrison and Orlando (1999) reported similar findings for Chile and Nicaragua, where they found that the presence of any kind of IPV, regardless of the type of abuse, is associated with reduced earnings of 34% in Chile and 46% in Nicaragua.⁵²
- Sanchez et al (2004) found that women who suffered from domestic violence and abuse in Colombia earned 14% less than those who did not suffer violence.⁵³

Overall, these studies suggest that those experiencing domestic violence and abuse are more likely to be in lower paying jobs than their counterparts who are not abused. However, we note that there may be an issue of causality. Ashe et al (2017) note the potential simultaneity between earnings and violence, with domestic violence and abuse leading to a direct reduction in earnings. Evidence found some domestic violence risk factors considered within studies, such as physical abuse in childhood, may directly impact earnings by affecting self-esteem, as well as effort and ability to work.⁵⁴

The different types of workplace impacts of domestic violence and abuse for victims are likely to be interlinked. For example, impacts on career progression may arise, at least in part, from the reduced workplace productivity that evidence suggests results from domestic violence and abuse, as well as the additional absences from work, and the mental health issues that can be related to domestic violence and abuse.

4.3.2 Insights from the Vodafone domestic abuse survey

As part of the Vodafone domestic violence and abuse survey participants were asked how domestic abuse had affected their worklife, including whether they considered if it had affected their career progression.

In each of the nine countries covered by the survey, a large proportion of victims of domestic violence and abuse (between 41% and 88%) reported that it had impacted their career progression. Between

⁵¹ Duvery et al (2012) Estimating the costs of domestic violence against women in Viet Nam.

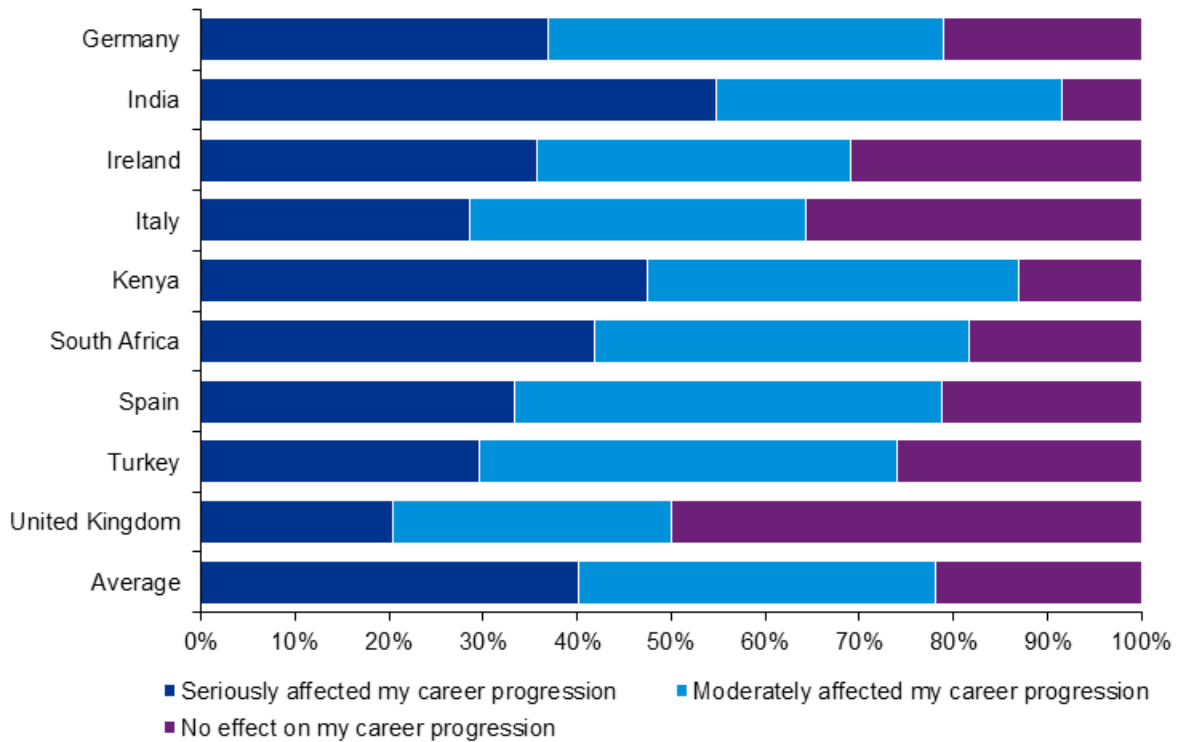
⁵² Morrison, A.R and Orlando, M.B (1999) Social and Economic Costs of Domestic Violence: Chile and Nicaragua.

⁵³ Ribero, R., and F. Sánchez (2004) Determinantes, efectos y costos de la violencia intrafamiliar en Colombia. Centro de Estudios sobre Desarrollo Económico, Universidad de los Andes.

⁵⁴ Ashe et al (2017). Methodological Approaches for estimating the Economic Costs of Violence against Women and Girls. What Works.

17% and 53% of respondents who had experienced domestic violence and abuse stated it had “seriously affected my career progression”.

Figure 8: Percentage of people surveyed who had experienced domestic violence and abuse during their working life reporting domestic violence and abuse affecting their career progression, by level of affect⁵⁵



Source: KPMG analysis of Vodafone domestic abuse survey

Further to the results outlined above, between 5% and 28% of those surveyed who reported they had experienced domestic violence and abuse during their working life stated that as a result they could not progress in their career. And in seven of the nine countries a small proportion of the people surveyed who reported they had experienced domestic violence and abuse during their working life reported they had missed out on a promotion as a result.

We note that these results are self-reported and no evidence as to how, or the reason why, career progression may have been impacted was provided by survey respondents.

⁵⁵ For Germany, Italy, Spain and Turkey there was a low response rate to relevant questions in the Vodafone domestic abuse survey. As a result, for these four countries, the survey results are not statistically significant and may not be representative of the general population.

Figure 9: Percentage of people surveyed who had experienced domestic violence and abuse during their working life reporting domestic violence and abuse affecting their career progression, by type of impact⁵⁶

	Percentage of people surveyed who had experienced domestic abuse during their working life reporting “I could not progress in my career”	Percentage of people surveyed who had experienced domestic abuse during their working life reporting “I missed out on a promotion”
Germany	19%	-
India	21%	17%
Ireland	19%	7%
Italy	5%	-
Kenya	14%	6%
South Africa	22%	10%
Spain	17%	17%
Turkey	28%	-
United Kingdom	17%	6%
Average	19%	9%

Source: KPMG analysis of Vodafone domestic abuse survey

4.3.3 Assessment of the potential costs associated with impacts on career progression for victims of domestic violence and abuse

The evidence detailed above points to victims of domestic violence and abuse being impacted in terms of career progression, promotions and more generally in terms of their earnings. As with the productivity impacts, there is limited detailed and comprehensive evidence in relation to the scale of impact of domestic violence and abuse on career progression, although there is wider information available about the earnings associated with career progression for employees at different levels of seniority. We have drawn on this broader data and evidence in our analysis.⁵⁷

To estimate the proportion of all employed female victims of domestic violence and abuse that may have been affected in terms of their career progression we drew on the data collected through the Vodafone domestic abuse survey. In particular we used the proportion of survey respondents who stated that “I missed out on a promotion” (see Figure 9 above). We note that a higher proportion of victims of domestic violence and abuse reported that they considered their career progression had been affected (see Figure 8 above), but to be conservative in our analysis and to reflect the lost earnings that would be associated with promotions rather than progression more generally, we considered it appropriate to use the promotion related survey results.

To estimate the extent to which the earnings of female victims of domestic violence and abuse may be affected by the missed promotion/career progression opportunities, we used data from the ILO on the distribution of employed women by Standard Occupational Classification (SOC) code and the average income by SOC code. SOC codes are used to categorise jobs based on skill level and content⁵⁸, therefore were used in our analysis as a proxy for the levels of seniority of roles.

For India and Kenya, we were unable to collect data on average income by occupation. As an alternative for these countries we used the average income by occupation at a regional level, as estimated based on the ILO data.

In our analysis we assumed that the missed promotion opportunity manifested in a failure for the individual to move up to the next occupational level (classified by the SOC codes) and therefore to earn the wages associated with this higher level occupation. Due to the assumptions required in the

⁵⁶ For Germany, Italy, Spain and Turkey there was a low response rate to relevant questions in the Vodafone domestic abuse survey. As a result, for these four countries, the survey results are not statistically significant and may not be representative of the general population.

⁵⁷ Our approach and data sources are set out in greater detail in Appendix 2 of this report.

⁵⁸ <https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2010>

analysis, these results can be considered as indicative of the potential earning impacts of more limited career progression only.

The results of our analysis are set out in Figure 10 below.

Estimation of the cost of reduced career progression for victims of domestic violence and abuse

Based on the approach set out above, we have estimated the cost of reduced career progression for female victims of domestic violence and abuse.

Figure 10: Estimate of the cost of reduced career progression related to domestic violence per annum⁵⁹

	Estimated number of women who have experienced a reduction in career progression due to domestic violence and abuse ('000s)	Average weighted cost of reduced career progression per person	Estimated total cost of reduced career progression
Germany	-	-	-
India	4,209	\$2,148	\$9,043m
Ireland	2	\$6,264	\$10m
Italy	-	-	-
Kenya	112	\$1,300	\$146m
South Africa	101	\$32,417	\$3,267m
Spain	21	\$7,637	\$164m
Turkey	-	-	-
United Kingdom	35	\$7,474	\$260m
Total	4,480	\$2,877	\$12,890m

Source: KPMG analysis

Across the nine countries covered by our analysis, we estimate that, in total, over 4.4m female victims of domestic violence and abuse have missed out on career progression/ promotion opportunities as a result of the abuse they have experienced and this has resulted in lost potential earnings for them of approximately \$13bn for each year they were working at a lower level of occupation than they may otherwise have been.

Our analysis suggests that the cost to women of reduced career progression from domestic violence and abuse is greatest in India – at an estimated \$9.0bn per annum. This is primarily driven by the large number of employed women who have experienced domestic violence and abuse and the relatively high proportion (compared to other countries) who then experienced a resultant reduction in career progression.

⁵⁹ We note that for four countries (Germany, Italy, Spain and Turkey) there was a low response rate to relevant question in the Vodafone domestic abuse survey. As a result, for these four countries, the survey results are not statistically significant and may not be representative of the general population.

Appendix 1 Findings from research on the prevalence and cost of domestic violence and abuse

To inform our study, we conducted a review of the available literature and data relating to domestic violence and abuse. This review focussed on the studies relevant to the area of our study, specifically the economic impacts of domestic violence and abuse and in particular the workplace impacts for employers and employees. We did not seek to capture evidence relating to the wider societal and economic impacts, including the fiscal impacts associated with the cost of provision of services relating to domestic abuse, including health care, criminal justice, social services, housing and civil legal costs, or the human and emotional costs, borne by the victim of domestic violence and abuse.

Figure 11: Summary of literature review findings

Study	Country coverage	Main findings
CARE (2018), Counting the cost: The Price Society Pays for Violence Against Women	Bangladesh, Zambia, Cambodia	<ul style="list-style-type: none"> — The report draws from 13 existing studies to present evidence on the prevalence of violence against women and the related economic costs. The report presents global and regional evidence of the impact of domestic violence but draws particular focus on Bangladesh, Zambia and Cambodia. — The report identifies two broad categories of costs of domestic violence: <ul style="list-style-type: none"> – Direct costs: costs incurred in response to and/or in treatment of domestic violence. For victims of domestic violence this may include medical costs, legal action, housing and relocation costs. Further costs may be incurred by the state in providing support and prevention services and a loss of productivity in the national economy due to absenteeism. – Indirect costs: costs incurred following domestic abuse, including opportunity costs incurred e.g. loss of income and productivity due to injury. — The report presents estimates of the annual cost to victims of domestic violence and their families in Bangladesh and Zambia: <ul style="list-style-type: none"> – Bangladesh: total annual cost of domestic violence US \$227 per person, including US \$51 in lost income. – Zambia: total annual cost of domestic violence of US \$460 per person, including US \$312 of lost income.
KPMG (2016) The Cost of Violence Against Women and Their Children in Australia	Australia	<ul style="list-style-type: none"> — The study estimates that the impact of violence against women and their children on the production and business sector cost the Australian economy AUD \$1.9bn in 2015/16. The impact of the production and business sector cost captures the cost of: <ul style="list-style-type: none"> – Absenteeism

		<ul style="list-style-type: none"> - Search and hiring costs - Lost productivity of victim, perpetrator, management, co-workers and friends and family - Lost unpaid work - Retraining costs - Permanent loss of labour capacity <p>— In estimating the impact on business, the study made a number of assumptions based on evidence from previous studies, including:</p> <ul style="list-style-type: none"> - In 35% of cases, 9 times a year victims were late to work or left early due to violence. - Victims were, on average, 38 minutes late to work or left work early. <p>— Victims of physical violence were absent from work for 7.2 days a year, whilst victims of sexual violence were absent for 8.1 days and victims of stalking 10.1 days.</p>
Duvvury et al (2015) The Egypt Economic Cost of Gender-based Violence Survey (ECGBVS) 2015.	Egypt	<p>— Analysis is based upon data from a survey of 1,000 participants and 43 households which found that:</p> <ul style="list-style-type: none"> - 46% of ever married women aged 18-64 years in Egypt have experienced some form of spousal violence - 43% reported emotional violence - 32% physical violence - 12% sexual violence - 17% of women aged 18-64 years have ever experienced some form of violence by their current or most recent fiancé. - More than 43% reported experiencing spousal violence in the past 12 months. <p>— It was estimated that domestic abuse resulting in women in Egypt missing 560,000 working days over the last 12 months (2014). This is equivalent to costing LE 26.9m</p>
Vara-Horna, A. (2014) 'Violence against women and its financial consequences for businesses in Peru.' In. University of San Martin de Porres, Lima, Peru.	Peru	<p>— The study utilises primary data obtained from a survey of 211 businesses in five economically important towns in Peru. The survey interviewed 1,309 female employees and 1,881 male employees.</p> <p>— The results from the survey were extrapolated to estimate the cost of domestic violence for all employees in Peru.</p> <p>— The study estimates that cost of domestic violence against women for businesses due to a reduction in labour productivity. The study found that:</p> <ul style="list-style-type: none"> - Across all victims of domestic violence 4 million work days were missed due to absenteeism from domestic violence. This cost businesses \$404m per annum. - Across all perpetrators of domestic violence, it is estimated that approximately 8 million workdays are lost due to domestic violence, costing businesses \$764.2m per annum. - The cost of presenteeism for businesses was estimated to be \$613.9m per annum for victims and \$2,291.9m per annum for perpetrators. - It was estimated that businesses lost \$44.8m per annum as a result of perpetrators coming to work late

		<p>due to domestic violence. This cost was not found to be significant for victims of domestic violence.</p> <ul style="list-style-type: none"> - The cost of staff turnover due to victims leaving their jobs because of domestic violence was estimated to cost businesses \$54.6m per annum. <p>— In addition to the business impacts of victims and perpetrators of domestic violence, the study found that there witnesses to domestic violence also suffered from presenteeism impacts. It was estimated that presenteeism from witnesses of domestic violence (to both victims and perpetrators) cost businesses \$594.1m per annum.</p>
<p>Ararat, M., Alkan, S., Bayazit, M., Yüksel, A. & Budan, P. (2014) Domestic Violence Against White-collar Working Women in Turkey. Istanbul, Universite Caddesi.</p>	<p>Turkey</p>	<ul style="list-style-type: none"> — The study identifies a number of channels through which domestic violence can impact an individuals' working life and create costs for businesses. These include: <ul style="list-style-type: none"> - increased sickness absence; - increased frequency of leaving work early; - reduced productivity; and - changing jobs more frequently. — The study draws on evidence on the prevalence of domestic violence amongst women from the Directorate General on the Status of Women (DGSW), which estimates that:⁶⁰ <ul style="list-style-type: none"> - 39% of women in Turkey had been exposed to physical violence - 15% of women exposed to sexual violence - 44% to psychological abuse - 23% to economic abuse — Insights on the implications of IPV for the workplace were gathered using a primary survey of white-collar working women employed across 19 companies. All companies were headquartered in Istanbul. — 18% of survey participants reported that they witnessed or heard that a colleague was a victim of domestic violence. The survey found that women were more likely to be aware of domestic violence amongst co-workers when compared to men. — Survey respondents observed a number of different signs of domestic violence amongst co-workers. These signs were: <ul style="list-style-type: none"> - 28.1% observed depression - 23.3% observed a change in performance - 19.1% observed signs of anxiety and fear - 13.6% observed isolation and quietness - 13.3% observed absenteeism or being late - 12.5% observed scars and injuries - 6.7% observed mentions of a partner's bad mood or anger - 6.6% observed disturbing visits or calls by the partner — 8% of the respondents to the survey thought that domestic violence would have a negative impact on women's career. Of these, 92% thought that it would considerably or completely impact work life.

⁶⁰ Directorate General on the Status of Women (2009) Domestic Violence against Women.

		<ul style="list-style-type: none"> — Of those surveyed who had experienced domestic violence, the following psychological impacts were reported: <ul style="list-style-type: none"> - 54.4% reported feeling unhappy - 35.9% reported being tired - 32.6% reported being inattentive and preoccupied — Of those surveyed who had experienced domestic violence, the following behavioural impacts were reported: <ul style="list-style-type: none"> - 19.6% reported not paying attention to her physical appearance - 16.3% reported having difficulty about improving herself - 13% reported negative impacts on their relationships with co-workers — Of those surveyed who had experienced domestic violence, the following job performance effects were reported: <ul style="list-style-type: none"> - 4.4% reported being late to work - 3.3% reported work absences - 3.3% reported not taking more responsibility at work - 3.3% reported not being able to work from home
Center for Domestic Violence Prevention (2013) Economic costs of domestic violence in Uganda ⁶¹	Uganda	<ul style="list-style-type: none"> — The study estimates the cost of violence against women in Uganda. The study primarily focuses on the cost of providing services for victims of domestic violence but includes analysis of whether domestic violence resulted in victims missing work. — The study draws upon findings from the 2008/9 ICRW survey that finds: <ul style="list-style-type: none"> - Approximately 9% of women surveyed had to take time off work due to violence, on average taking 11.8 days off. - 8% of survey respondents also reported that their daily work had suffered as a result of domestic violence.
Duvvury et al (2012) Estimating the costs of domestic violence against women in Vietnam	Vietnam	<ul style="list-style-type: none"> — The study assesses the direct and indirect costs of domestic violence on women in Vietnam. The study utilises the results from a survey of 1,053 women across four provinces and three central cities in Vietnam. — Of the total number of incidents of domestic violence reported, 14% require the woman to take time off work. — On average, women reported taking 5.5 days off as a result of all incidents of domestic violence. — It was also reported that there were times when men would miss paid work following an incident of domestic violence. On average, men would take 6.5 days off work per annum as a result of all incidents of domestic violence. — The study found that Vietnamese women experiencing domestic abuse earned 35% less than those who were not abused. — Average daily earnings for each woman was used to estimate to monetary cost of domestic violence. It was

⁶¹ <http://www.cedovip.org/index.php/resources/reports/5-economic-cost-of-domestic-violence-in-uganda/file>

		<p>estimated that the average loss of earnings as a result of domestic violence was 382,234 VND per incident.</p> <ul style="list-style-type: none"> — The earnings loss of results in an overall productivity loss of 1.78% in Vietnam.
<p>Zhang, T., Hoddenbagh, J., McDonald, S., & Scrim, K. (2012) An estimation of the economic impact of spousal violence in Canada. Ottawa, Department of Justice, Research and Statistics Division.</p>	<p>Canada</p>	<ul style="list-style-type: none"> — The study uses data from the police based Uniform Crime Reporting Survey 2 (UCR2) and the self-reported 2009 General Social Survey (GSS). — The study finds that the total economic impact of spousal abuse in Canada in 2009 is CAD \$7.4bn, equivalent to CAD \$220 per Canadian. The total economic costs includes the impact borne by the justice system, costs borne by primary victims and impacts borne by third parties. — Victim costs were found to be the greatest area of cost, accounting for 80.7% of the total economic impact. Victim costs include medical attention, lost wages, lost education, value of stolen/damaged property and pain and suffering. — When estimating the economic cost of work loss for victims of violence, the study draws upon findings of a study by Lim et al (2008)⁶² which presented the number of workdays missed because of mental health issues. The assumed average number of workdays missed per year were: <ul style="list-style-type: none"> – 33 days for people with diagnosed mental health issues – 27 days for people with undiagnosed mental health issues – 10 days for people with no mental health issues — The study also assesses the cost to employers of domestic violence, including the cost of lost output, tardiness and distraction and administration costs (e.g. re-arranging workloads to account for absent employees). — In estimating the cost of lost output for employers, the study adopts the assumption that the marginal rate of return on investment in labour is 5.2% (based on a study by Boardman et al⁶³). The study multiplies the marginal rate of return by the lost wages to estimate the lost output as a result of spousal violence. — The study estimates the economic cost of tardiness and distraction using figures of lost productivity (expressed as a proportion of income) as estimated by Reeves and O’Leary-Kelly.⁶⁴ The study assumes that the percentage of income counted as lost productivity as a result of spousal violence was 3.9% for female victims and 2.2% for male victims. This was applied to the average income of Canadian spousal abuse victims to estimate the cost to employers of tardiness and distraction. — The study assumes that when employees are absent, employers must re-arrange workloads and complete other administrative tasks. The study draws on evidence from the Health and Safety Executive⁶⁵ which assumes that administrators lose 0.5 hours of productivity because of employee absenteeism. To be conservative, the study

⁶² Lim et al (2008) A New Population-Based Measure of the Economic Burden of Mental Illness in Canada.

⁶³ Boardman et al (2008) Discount Rates for the Evaluation of Public-Private Partnerships.

⁶⁴ Reeves and O’Leary-Kelly (2007) The Effects and Costs of Intimate Partner Violence for Work Organizations.

⁶⁵ Health and Safety Executive (1999) The Cost to Britain of Workplace Accidents and Work-related Ill Health in 1995/96, 2nd Edition.

		assumes 0.25 hours of lost productivity, split evenly between managers and administrators. This is multiplied by the hourly wage of managers and administrators and the number of missed days of work to estimate the administrative cost to employers of domestic violence.
Almenara Estudios Economicos y Sociales (2010) The Economic and Social Costs of Domestic Violence Against Women in Andalusia	Andalusia, Spain	<ul style="list-style-type: none"> — In 2002, 13.6% of the population of adult women in Andalusia experience domestic violence, of which 10.1% are victims of IPV. — It is estimated that domestic violence costs firms and employers €385.3m annually.
Walby (2009) The Cost of Domestic Violence: Update 2009. Lancaster University.	United Kingdom	<ul style="list-style-type: none"> — This report provides an update of the Walby (2004) study “<i>The Cost of Domestic Violence</i>” (see below for summary of study). — The study estimates to lost economic output due to time off work taken due to injuries. The study uses estimates developed by the Department for Transport on the effects of injuries sustained in road traffic accidents as proxies for the cost of injuries sustained as a result of domestic violence. — It is estimated that in 2008, domestic violence cost the UK economy £1,920m per annum in lost economic output.
International Center for Research on Women (2009) Intimate Partner Violence: High Costs to Households and Communities.	Bangladesh, Morocco, Uganda	<ul style="list-style-type: none"> — In Uganda, it is estimated that approximately 9% of incidents of domestic violence resulted in women taking time from paid work, totalling on average 11 days per year. — In Bangladesh, 66.5% of household interviewed reported a household member’s work being affected by domestic violence. It was estimated that the average value of lost work was \$5 (TK 340) per incident, equivalent to 4.5% of the average monthly income of households observed.
Reeves and O’Leary-Kelly (2007) The Effects and Costs of Intimate Partner Violence for Work Organizations.	United States of America	<ul style="list-style-type: none"> — The study tested the impact of domestic violence on tardiness and distraction at work by observing two groups: employed intimate partner violence (IPV) victims and employed non-victims in a southern US state. The study compared the tardiness and distraction (presenteeism) costs between the two groups to understand the level of presenteeism attributable to domestic violence. — The study found that the percentage of income counted as lost productivity was 12.3% for female victims, 10.2% for male victims, 8.4% for female non-victims and 8.4% for male non-victims. This implies that the lost productivity attributable to domestic violence was 3.9% for females and 2.2% for male victims.
Walby (2004) The Cost of Domestic Violence, Women and Equality Unit, Ministry of Women and Equality ⁶⁶	United Kingdom	<ul style="list-style-type: none"> — The study examines the cost of domestic violence across a wide range of factors, including health, housing, employment and mental wellbeing. — In terms of employment impacts, the study finds that domestic violence reduces a person’s capacities and capabilities at work. This results in economic costs for both the employee and the employer. — Costs to employees identified include:

⁶⁶ http://eprints.lanacs.ac.uk/55255/1/cost_of_dv_report_sept04.pdf

		<ul style="list-style-type: none"> - Lost days as a result of injuries, fear and anxiety, time spent seeking help - Lost productivity as a result of working beneath potential - Lost promotion opportunities as a result of working beneath potential - Loss of employment as a result of poor work performance and/or requirement to move locality - Disruption in education and training programmes <p>— Costs to employers identified include:</p> <ul style="list-style-type: none"> - Cost of absenteeism - Lower productivity because of poor concentration and disruption - Cost of recruiting and re-training if a person leaves their job - Overall, as a result of the impacts on employees and employers from domestic violence, the economy loses productivity and output from women. - The study adopts estimates of the lost economic output per incidence of violence, varying by the degree of the incident (i.e. fatality, serious injury or slight injury). These estimates are sourced from Home Office cost of crime data. - The study scales up the estimates of lost economic output per incidence to estimate that domestic violence costs the UK economy £2.7bn in lost economic output. - The study highlights that overall, the victims of violence typically bear the majority of the cost of violence, with victims incurring up to six times the cost when compared to the costs incurred by the state.
<p>Morrison, A.R and Orlando, M.B (1999) Social and Economic Costs of Domestic Violence: Chile and Nicaragua.</p>	<p>Chile and Nicaragua</p>	<ul style="list-style-type: none"> — The study estimates the impact of IPV on women's labour force participation, hours worked and earnings. — Evidence from the study suggests that IPV has no impact on labour force participation. — However, the study finds that the presence of any kind of IPV, regardless of whether it is sexual, physical or psychological, is associated with a reduction in earnings. The study finds that earnings are reduced by 34% in Chile and 46% in Nicaragua. — The earnings loss results in an overall productivity loss of 2% in Chile and 1.6% in Nicaragua.

Appendix 2 Our approach to estimating the prevalence and impact of domestic violence and abuse

Approach to estimating the number of employed women experiencing domestic violence and abuse

Our analysis estimates the number of employed women, aged 15-64, who have experienced domestic violence and abuse in the past 12 months and over their lifetime. We have taken the following approach in our analysis:

- We sourced data from the World Bank on the population of women, aged 15-64 in each country and applied the female employment to population ratio to this to estimate the population of employed women, aged 15-64 in each country.^{67, 68}
- United Nations (UN) data on the percentage of women who have experienced IPV physical and/or sexual abuse in the last 12 months and over their lifetime was sourced. The data was available for 106 countries, including each of the nine markets selected by Vodafone for the study.
- For the countries that data was available for, we applied the percentage of women who have experienced IPV physical and/or sexual abuse to our estimates of the number of employed women, aged 15-64.

Approach to estimating the potential impact of work absenteeism related to domestic violence and abuse

We estimated the value of lost output for businesses as a result of domestic violence and abuse using the following approach:

- To estimate the number of women who take time off work as a result of domestic violence, we have applied percentage of survey respondents who have experienced domestic abuse and report 'I sometimes stopped going into work/would take days off' from the Vodafone domestic abuse survey (set out in Figure 4) to our estimates of the number of employed women, aged 15-64, who have experienced domestic violence and abuse in the last 12 months.

We note that for four countries (Germany, Italy, Spain and Turkey) there was a low response rate with less than 50 respondents, to relevant question in the Vodafone domestic abuse survey. As a result, for these four countries, the survey results are not statistically significant and may not be representative of the general population. However, we were unable to source alternative data for these four countries.

⁶⁷ World Bank. World Development Indicators: Population ages 15-64, female.

⁶⁸ World Bank. World Development Indicators: Employment to population ratio, 15+, female (%) (modelled ILO estimate).

- We sourced data on the level of output generated per worker per year from the International Labour Organisation (ILO).⁶⁹ Based on this data, we estimated the value of output per worker per day, assuming a 5 day work week and 52 working weeks per year.
- Output per worker data was not available for three countries: India, Kenya and South Africa. For these three countries, our analysis uses the average gross value added (GVA) generated per worker as a proxy for output per worker. GVA data was sourced from the World Bank.⁷⁰ We note, that by using GVA instead of output, we likely underestimate the output loss. GVA as a measure is estimated by adjusting output for intermediate consumption and therefore, in general, will be lower than output.
- We were unable to obtain comprehensive data relating to the average number of days of absence from work as a result of domestic violence and abuse. We have therefore relied upon evidence from existing studies. The studies report a range of average days of workplace absence due to domestic violence and abuse. To be conservative, we have adopted the lower bound estimate of additional work absences from these studies (5.5 days⁷¹) and the median estimate of additional work absences based on these studies (10.1 days).

Approach to estimating the potential reduction in workplace productivity related to domestic violence and abuse

We have estimated the cost to businesses of reduced productivity, referred to as 'presenteeism', related to domestic violence and abuse using the following approach:

- We have applied the proportion of respondents to the Vodafone domestic abuse survey who reported being victims of domestic violence and abuse and being less productive at work as a result of this, to our estimates of the number of employed women, aged 15-64, who have experienced domestic violence and abuse in the last 12 months.

As with our absenteeism analysis, there was a low response rate to the relevant Vodafone domestic abuse survey question for four countries: Germany, Italy, Spain and Turkey. As a result, the results of our analysis for these countries should be considered as indicative only.

- To estimate the cost to business of reduced productivity, we have used output per worker data sourced from the ILO⁷² or where unavailable (as was the case for India, Kenya and South Africa) we have used GVA per employee as a proxy, however, we note that this will likely underestimate the impact.
- Given a lack of comprehensive data from statistical agencies, or from existing studies, on the impact of domestic violence and abuse on productivity, our analysis is based on scenarios of the impact assuming different levels of worker productivity reductions. Our analysis models the impact of a 1%, 5% and 10% reduction in output (or GVA where relevant) per worker for the estimated number of employed women who have experienced domestic violence and abuse in the last 12 months and report a reduction in productive as a result.

Our analysis, therefore, is theoretical and should be used only as an indication of the potential cost to businesses of reduced productivity or 'presenteeism' related to domestic violence and abuse.

⁶⁹ International Labour Organisation. Output per worker (GDP constant 2010 US \$) – ILO modelled estimates, November 2018.

⁷⁰ World Bank. World Development Indicators. Gross value added at basic prices (GVA) (current US\$).

⁷¹ Based on Duvvury et al (2012) Estimating the costs of domestic violence against women in Viet Nam.

⁷² International Labour Organisation. Output per worker (GDP constant 2010 US \$) – ILO modelled estimates, November 2018.

Approach to estimating the potential costs associated with impacts on career progression for victims of domestic violence and abuse

We have estimated the impact of slower or more limited career progression for victims of domestic violence and abuse in terms of the forgone earnings for the victim resulting from this. Our approach is set out below:

- We have estimated the number of female victims of abuse, affected in terms of career progression, by applying the proportion of respondents to the Vodafone domestic abuse survey who reported missing out on a promotion because of their domestic violence and abuse to our estimate of the number of employed women, aged 15-64, who had experienced domestic violence and abuse in the last 12 months.

Similar to our other areas of analysis, for four countries (Germany, Italy, Spain and Turkey) there were low response rates to the relevant question in the Vodafone domestic abuse survey therefore the findings can be considered as indicative only.

- To understand the potential earnings impacts from missed promotions, we estimated the number of employed women affected by domestic abuse, by occupation level, using ILO data on the percentage of employed women by standard occupational classification (SOC).⁷³ These estimates assume that victims of domestic abuse are distributed across the SOC levels in the same way as the overall population of employed women.
- To estimate the value of lost earnings we sourced data on the average monthly income by gender and SOC from the ILO.⁷⁴ This data was not available for India and Kenya. For these two countries, we estimated the average regional monthly income for by gender and occupation (based on the same ILO data) and used the Asia average for India and the Africa average for Kenya.
- Our analysis is based on the assumption that a promotion equates to a movement up to the next SOC level. We estimated the wage differentials between SOCs for each country, which we used to represent the value of lost earnings for those that missed out on a promotion as a result of domestic violence and abuse. Lost earnings were scaled up by our estimated number of affected women to estimate the total impact on career progression.

⁷³ International Labour Organisation. Employees by sex and occupation (thousands)

⁷⁴ International Labour Organisation. Mean nominal monthly earnings of employees by sex and occupation (local currency)

Contact us

Heather Sharp

Director, KPMG Economics

T +44 (0)7917 267216

E heather.sharp@kpmg.co.uk

Fiona Lunn

Assistant Manager, KPMG Economics

T +44 (0)7469 131862

E fiona.lunn@kpmg.co.uk

www.kpmg.com

© 2019 KPMG LLP, a UK limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

For full details of our professional regulation please refer to 'Regulatory Information' at www.kpmg.com/uk

The KPMG name and logo are registered trademarks or trademarks of KPMG International Cooperative.