Far from Clean: Labour Exploitation in the UK's Hand Car Wash Sector

Akilah Jardine, Alexander Trautrims and Alison Gardner Rights Lab, University of Nottingham

Contents

Introduction	. 2
Researching labour exploitation in hand car washes (HCWs)	. 3
History of HCWs	. 4
Business model	. 5
Labour exploitation in HCWs: a continuum of abuse	. 7
Hand car wash workers and the Bottom of the Pyramid	. 9
The cost of labour exploitation in HCWs to the UK 1	11
The wider international context of HCWs : Why are HCWs a problem in the UK? 1	13
Routes to improving labour conditions in the HCW sector	15
Educate HCW owners/managers1	15
Engagement with workers1	16
Public engagement1	16
Conclusion 1	17
References 1	18

Introduction

Hand car washing, the process of washing a vehicle by hand, is a relatively new business activity in the United Kingdom (UK). Prior to 2004, hand car washes (HCWs) were virtually nonexistent (Clark & Colling, 2018). However, it is estimated that between 10,000 and 20,000 HCW operations exist in the UK today, making up 70% of the share of the car wash market and inhibiting the growth of the automated car wash industry (Petrol Retailers Association, 2018). Many have sprung up on the side of the road, in petrol stations, disused forecourts, supermarket car parks, and former public car parks, offering a low cost and conveniently accessible car wash service (Jardine, Trautrims, & Kenway, 2018). In an age of technological advances, such labour intensive operations are fuelled largely by an abundant low-skilled workforce. They are often described as operations run by migrants for migrants, allowing low-skilled migrant workers the opportunity to earn an income to improve their livelihood opportunities (Clark & Colling, 2018). However, reports on this sector suggest that workers are left economically and socially vulnerable. They work long hours, are paid below the national minimum wage (NMW), and operate under poor working conditions, such as without adequate protective safety gear and equipment (Jardine, Trautrims, & Gardner, 2018). Reportedly, while some workers are victims of labour and employment violations, others are exploited and forced into modern slavery (Jardine, Trautrims, & Kenway, 2018). At present, the UK does not have a system to register and licence HCWs, and thus such businesses have been able to flourish without almost any regulatory overview. These activities are also not captured by the UK's Standard Industrial Classification (SIC) code which categorises and describes business activities and therefore there is a lack of visibility across the sector.

Despite offering a popular service and operating in plain sight, there is a lack of data available on this sector. This makes it difficult to assess the number and locations of HCWs in the UK, their business operations and the incidence rate of labour exploitation. Although considerable research has touched on high-risk sectors for labour exploitation and modern slavery in the UK, such as the food industry, construction, and care (Crates, 2018; Emberson & Trautrims, 2019; Phillips & Trautrims, 2018; Scott, Craig, & Geddes, 2012), not much attention has been paid to exploitation in the less formalised HCW sector. To date, few studies have been published on this increasingly common phenomenon.

Our research, therefore, asks a) to what extent does labour exploitation in HCWs constitute 'modern slavery' or lower levels of exploitation such as underpayment of wages? b) Why are exploitative HCWs widespread in the UK? c) What are the ways in which exploitative practices could be addressed? Using the HCW sector in the UK as a case study, this chapter illustrates how such a high-risk area for labour exploitation and modern slavery is able to flourish almost without any regulatory overview in an affluent country. In the absence of data on this sector, the chapter primarily draws on prior joint-research conducted by the Rights Lab at the University of Nottingham and the Office of the UK's Independent Anti-Slavery Commissioner (IASC) on labour exploitation in the sector (Jardine, Trautrims, & Kenway, 2018), and existing academic and grey literature on this area. We interviewed relevant stakeholders including law enforcement officials and industry practitioners, and distributed a survey to all police forces in the UK. The chapter will begin by outlining the research methods used in our research with IASC. It will then provide a background of the HCW sector, exploring its growth in the UK and the business model. The following section will discuss the nature and prevalence of labour exploitation in car wash activities to establish the linkages between the Bottom of the Pyramid (BOP) and slavery. Subsequently, it will explore the current state of regulation in the UK and the challenges in addressing exploitative labour practices. It will then briefly touch on some of the costs to the UK of HCWs operating using exploitative labour. In highlighting the potential linkage between the enforcement of environmental regulation and labour standards, the following section then looks

to Germany and France to explain why such comparable economies do not share the same experience or challenges of HCWs as the UK. To conclude, the chapter will discuss ways in which exploitative practices could be addressed to safeguard workers' rights and prevent the exploitation of vulnerable individuals. This chapter concludes that the current state of the HCW sector gives rise to vulnerability and precarious labour and therefore stricter enforcement of regulations is critical to improve compliance and protect vulnerable individuals at the BOP.

Researching labour exploitation in hand car washes (HCWs)

As aforementioned, little academic literature about labour exploitation in HCWs is available. In addition to our research, very few other researchers have researched this area (for example Clark, 2018; Clark & Colling, 2016, 2018). Subsequently, the qualitative approach adopted by the research involved gathering data and information from a range of sources. Table one below illustrates the data sources consulted.

Our data collection involved two stages. The first stage involved a review of literature and unstructured interviews with different stakeholders. The purpose of this stage was to familiarise ourselves with the problem of HCWs. We reviewed existing published work relating to labour exploitation and modern slavery in car washes. This included academic and grey literature such as scholarly articles, online press reports, and work published by law enforcement, industry bodies, and other agencies. We also reviewed evidence submitted to the UK parliament's Environmental Audit Committee who at the time of the research, conducted an inquiry into the social and environmental impact of HCWs. Following the review of existing literature, we carried out nine unstructured interviews with representatives from law enforcement agencies, car wash associations, and a HCW provider. The literature review and unstructured interviews provided us with a broad overview of problems associated with the sector, the impact on the wider car wash sector in the UK, and the current state of regulation. We recognised that HCWs would be a difficult area to investigate as the topic raises ethical and practical challenges, particularly when engaging with vulnerable workers (Clark & Colling, 2018). Subsequently, during unstructured interviews, we were able to grasp the sort of information that law enforcement officials would be able to share with the research team. This enabled us to refine the scope of the study and gave us a useful insight into how we could go about collecting further data.

The second stage of our data collection focused on obtaining new data and information to fill gaps. We recognised that there was a lack of in-depth information on the nature and prevalence of the problem. During the second stage of data collection, we carried out four semi-structured interviews and surveys with law enforcement. Our questions were designed from interesting aspects that emerged from the data collected during stage one. For instance, we explored the characteristics and vulnerabilities of workers operating in HCWs, the nature of exploitative practices, and the challenges of addressing labour exploitation in the sector. Interviews were conducted by telephone with four (4) police officials from different forces (Greater Manchester Police, Police Scotland, Gwent Police and the Police Service of Northern Ireland). The aim of the interviews was to understand whether different areas of the UK have different experiences with regards to HCWs. The interviews lasted approximately 1 hour each and were recorded by note-taking. Separately, survey questions were distributed via email by IASC to 43 police forces' modern slavery single point of contacts (SPOCs). Seventeen (17) SPOCs completed and returned the surveys. The survey questions asked SPOCs about specific information on employer and worker characteristics, working and living conditions, and issues concerning modern slavery. The recording and storage of police data vary significantly among forces, as a result, the time period of information referred to in the responses varied.

Data Sources					
Stage 1	Newspapers	• Online press reports of exploitation and criminal activity relating to labour issues at car washes from 26 March 2015 – March 2018			
	Literature	 Academic articles (Clark, 2018; Clark & Colling, 2016, 2018) Written evidence submitted to the Environmental Audit Committee and final report on the social and environmental impact of HCWs (Cockbain, 2018; Environment Agency, 2018; Environmental Audit Committee, 2018; Gangmasters and Labour Abuse Authority, 2018b; Health and Safety Executive, 2018; Jardine, Trautrims, & Gardner, 2018; Petrol Retailers Association & Car Wash Association, 2018 ; Downstream Fuel Association, 2018) Reports from anti-slavery organisation Unseen on car washes (Unseen, 2018) Petrol Retailers Association 2018 Market Review (Petrol Retailers Association, 2018) Report published by the Gangmasters and Labour Abuse Authority on labour exploitation within UK sectors (Gangmasters and Labour Abuse Authority, 2018a) International Car Wash Association 2017 European Car Wash Consumer Study (International Car Wash Association, 2017) 			
	Unstructured	Nine (9) stakeholders			
	Interviews	 Gangmasters and Labour Abuse Authority (2018) National Crime Agency (2018) Petrol Retailers Association (2018) Car Wash Association (2018) Belgian Association Vehicle Cleaners ((Belgische Beroepsvereniging Reiniging Voertuigen - BBRV) (2018) International Car Wash Association (2018) Waves car wash ltd (2018) Sussex Police (2018) East Midlands Modern Slavery Police Transformation Coordination Unit (2018) 			
Stage 2	Semi-structured Interviews Surveys	 Four (4) police forces : Greater Manchester Police ; Police Scotland; Gwent Police ; and the Police Service of Northern Ireland (2018) Seventeen (17) police forces' modern slavery single point of 			
		contacts (2018)			

Table 1. Data sources

The data was prepared and analysed using Microsoft Word and Excel. The semi-structured interview notes were uploaded into Microsoft Word. Survey responses were all returned in Word format. Interview notes and survey responses were then transferred into Excel. The text was categorised according to key areas of inquiry to make the data more manageable.

An inductive approach was adopted in the process of qualitative data analysis to capture respondents' perspectives and experiences. Working systematically through the text, we familiarised ourselves with the data and identified key aspects that emerged. We then collated

extracts from the responses and matched them to specific codes. Following this, we reviewed the codes to identify significant themes. This process involved refining and collating codes and reviewing themes and extracts to ensure they accurately represented the data set as a whole.

Themes were then analysed in detail to elaborate and draw conclusions on the nature and prevalence of labour exploitation in the HCW sector. For instance, key conclusions were drawn around the prevalence of the issue across the UK, the spectrum of exploitative practices, and the difficultly of addressing violations. Separately, we also identified approaches adopted by law enforcement agencies and industry bodies to investigate abuses and improve compliance.

The main limitation to this study was the absence of data and information on this sector and the difficulties of obtaining HCW workers' perspectives. Whilst the lack of this information has limited the scope of the research, the analysis provides a more in-depth understanding of the nature and prevalence of this problem. This includes information on business practices, employer and worker characteristics and working conditions. It also highlights certain areas worthy of further exploration, such as improved understanding of workers' consent to exploitation and how that interacts with policing and support mechanisms. Finally, it identifies several ways forward to improve compliance and protect workers in HCWs from abuse. These include: increased enforcement of regulations; educating workers and employers; implementing licensing schemes; undertaking multi-agency collaborations; and improving public engagement.

History of HCWs

There is no one definitive reason to explain the growth of HCWs in the UK. Clark and Colling (2018) suggest that the growth of operations is largely due to the result of economic restructuring in petrol retailing and the change in regulation around alcohol and smoking. They maintain that in the 1990s supermarkets began dispersing on retail parks and due to the deregulation of licensing restrictions in these areas, were able to expand their operations to include the sale of alcohol and petrol. Their expansion into alcohol retailing allowed consumers to buy large quantities of alcohol at affordable prices. Subsequently, with the change in regulation that banned smoking in public places in 2007, consumers began staying at home to drink. This greatly affected pubs, roadside public houses and other establishments which were forced to close (Clark, 2018). The closure of these businesses led to an abundant availability of spaces where HCWs were able to locate their businesses.

Separately, the closure of mechanical car washes also led to the establishment of HCWs on former forecourt sites. Prior to HCWs, the predominant forms of car washes were rollover and drive through jet washes which operated mostly on forecourt sites by fuel retailers and supermarkets. However, the price of operating these services led retailers to seek cheaper alternative services, and in some cases rent spaces on their forecourt to independent operators (Clark, 2018). The HCW services began to flourish on these sites because of the ease in setting up establishments and the competitive advantage it afforded over its mechanical counterparts.

Business model

HCW businesses provide a largely commoditised service that competes predominantly on costs and convenience of access (Jardine, Trautrims, & Gardner, 2018). In comparison to automated car washes (ACWs), HCWs are easier to establish, conveniently accessible, and could offer a competitively cheaper alternative to other car wash services. Though a labour-intensive business activity, they have the commercial advantage of a cheap and abundant workforce. As aforementioned, they are often described as being run by migrants for migrants. Clark and Colling's (2018) research identified different categories of migrant labour employed in HCWs. For instance, they identified a category of workers who worked in HCWs to improve their English and viewed HCWs as an opportunity to develop their skills to move them up the job ladder. Additionally, their research identified workers who relied on agents and networks to secure work, because they spoke limited English and lacked qualifications and skills.

Evidently, similar to migrant workers in other low-skilled sectors, individuals often take up work in HCWs to improve their socio-economic circumstances. For many workers, the wages and conditions of work, though poor, are a better opportunity in subjective comparison to alternative employment options (Jardine, Trautrims, & Kenway, 2018). Car wash owners may then take advantage of workers' desperation to improve their circumstances and their limited options for employment.

Our research findings revealed that there is a high proportion of Albanian and Romanian owners/managers and workers in HCWs (Jardine, Trautrims, & Kenway, 2018). The presence of Romanians might be attributed to the UK's rules on accessing its labour market for citizens from A2 nations - Romania and Bulgaria - that joined the European Union (EU) in 2007. Up until 2013, citizens coming to work in the UK from these countries had to apply for and be granted a worker's authorisation document before starting work, unless they were self-employed (UK Government, 2016a, 2016b). This may have encouraged self-employment and entrepreneurship via HCWs. Regarding Albanian workers and car wash owners/managers, the visa schemes differ as Albania is not in the EU. To work in the UK, Albanian nationals must apply for a work visa, which may be granted via different categories, if the necessary requirements are met (UK Government, 2019b). An assessment of available work visa schemes suggest that HCW work is unlikely to satisfy the requirements of the current visa routes. In addition, following Brexit the government is tightening immigration requirements, with a compulsory registration scheme for EU migrants until December 2020, and a points based immigration system planned from January 2021, which explicitly cuts the migration options open to low-skilled workers (Home Office, 2020). This could increase the risk of exploitation and abuse for workers who may not qualify for the right to work in the UK.

Operations and investigations on HCW activities have described multiple forms of abuse concerning the working and living conditions of workers. Our research sought to develop a better understanding of these conditions. Regarding their wages and employment, survey responses and interviews reflected existing HCW concerns identified by the press, academic literature and law enforcement. For example, research by Clark and Colling 'found widespread denial of employment status, avoidance of the minimum wage, and working time regulations' (2018). Similarly, police respondents reported workers that were employed without a contract or on a zero-hour contract, paid cash in hand and not given a payslip, paid below the NMW, or not paid at all. Survey responses from police forces SPOCs indicate that some workers were aware of the NMW but content with being paid below it, while others were unaware that there was a minimum wage.

An assessment of current research and reporting in this area also highlighted potential concerns for the health and safety of workers. Substances such as hydrochloric acid, detergents and other cleaning chemicals can be hazardous to workers, particularly if they do not have the proper gear to handle chemical substances or adequate training (Environmental Audit Committee, 2018). In one case, media coverage referred to an investigation that discovered workers with leprosy-like damage to their skin, due to exposure to chemicals (Rose, 2017). Our research findings indicated that some employees were found working without proper health and safety gear such as waterproof boots, gloves and goggles. A police respondent noted: 'Most car washes did not provide adequate protection equipment and uniforms for staff. On some visits, the Health and Safety personnel who accompanied our team have closed down the car washes due to safety concerns.' Another commented that 'a few premises had the electric meters bypassed, 1 premise had no toilet facilities, most staff worked long hours over a short number of days. 'Regarding rest breaks, some workers were not allowed breaks, had limited access to basic facilities and were operating in potentially hazardous environments.

Whilst HCWs are not illegitimate businesses, there is a commercial rationale for the violation of labour, employment, health and safety, and environmental regulations. Subsequently, the practice of undercutting such standards is sufficiently systemically dominant to be leading to widespread labour and employment violations (Jardine, Trautrims, & Gardner, 2018).

Labour exploitation in HCWs: a continuum of abuse

As part of the United Nations 2030 sustainable development agenda, the UK has made a commitment to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. This also includes the commitment to take immediate and effective measures to eradicate forced labour and end modern slavery and human trafficking. Our research found that HCWs and labour violations committed within them are widespread across the UK. Police officials interviewed acknowledged a rise in HCW businesses in their localities and reported that workers were most often likely to be subject to some form of labour violation. This included working excessive hours or being paid below the NMW. The lack of data on the sector makes it difficult to assess the extent to which labour abuse within these operations constitutes modern slavery or lower-level forms of abuse. There is a lack of evidence on the number of workers referred to the National Referral Mechanism (NRM), the UK's system for identifying and supporting victims of modern slavery and human trafficking, and subsequently positively identified as victims. This is partly due to the NRM system aggregating all labour and criminal exploitation into one category, rather than breaking it down by sector.

Research by Clark and Colling (2018) found no evidence to indicate that workers were victims of modern slavery. However, an assessment of reports, interviews and surveys with police officials, suggest that labour exploitation in HCWs does not rigidly fit into a specific category of labour abuse. Rather, evidence points to a continuum of exploitation which includes modern slavery. Not all workers experiencing abusive labour practices in HCWs are technically 'enslaved'. Article 1 of the United Nations Slavery Convention 1926 defines slavery as 'the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised.' Thus, modern slavery encompasses the extreme end of the spectrum of labour exploitation and requires the restriction of freedom to be present, via mechanisms such as coercion, threat, debt and intimidation. An assessment of intelligence on HCWs indicates that labour exploitation does not always satisfy this threshold. However, even where it does satisfy it, and workers are restricted in their freedoms, potential victims may still not be identified. This is due to victims themselves accepting their situation due to the lack of viable economic alternatives. Their wages and working conditions, though poor, allow them the opportunity to make a better income than possible at home or in other informal sectors in the UK. Thus, they are more likely to accept coercive, violent or deceptive arrangements. This makes it difficult to get a full picture on the scale of modern slavery. Potential victims may never enter the NRM whether through their own lack of self-identification as a victim or due to police accepting their reported contentment with their working conditions.

Separately, an assessment of media coverage, investigative and operative reports suggest that car wash owners use a number of methods to control their workers. This includes financial coercion, withholding of workers' identification documents and in some instances, physical abuse(Jardine, Trautrims, & Kenway, 2018). Our research found that the use and methods of control also vary among HCWs. Also, interviews with police officials indicate that not all HCW workers are restricted in their freedom. While some police forces surveyed did not report on methods used

to control workers, 24% of responses described various methods of control such as withholding of workers' passport or identification documents, debt bondage, physical abuse and withholding or non-payment of wages. One respondent reported that in four locations, car wash staff 'were subject to physical assaults and threats...in one location staff had their entire routine dictated to them...when they should eat and when they had to go to bed.' Another police respondent commented that 'assaults [were] common if workers disagreed with the rules. Bondage against those that broke the rules if they wanted to continue working at location, this could be money or passport being taken from them.' Subsequently, other workers were found living in accommodation that was imposed on them and the rent was taken directly from their wages.

Police authorities' perspectives varied on whether labour exploitation in HCWs in their localities met the threshold for modern slavery. For instance, an official from one police force voiced that within their vicinity, though some workers were subject to labour abuse, they were content with their working conditions. The official suggested that it was 'more of an HMRC (Her Majesty's Revenue and Customs) national minimum wage or tax evasion issue,' as opposed to the more serious offence of modern slavery. Moreover, they referred to Her Majesty's Inspectorate of Constabulary and Fire & Rescue Service report on policing response to modern slavery and human trafficking which highlighted that 'exploitation in which an individual chooses to work for less than the national minimum wage or to live in undesirable conditions, without being forced or deceived into doing so, would not constitute modern slavery' (HMICFRS, 2017). This view was also echoed by other respondents who suggested that though some workers have been referred into the NRM, evidence shows that the majority of workers interviewed may not meet the threshold for modern slavery. This is because workers voluntarily chose to work in HCWs under poor circumstances and had the choice to leave. Contrarily, some officials suggested that in their locality labour exploitation in HCWs mainly satisfies the threshold for modern slavery. They reported that many workers are forced into debt bondage to pay for costs such as transportation or accommodation. One respondent held, 'next to sexual exploitation, hand car wash is the second most prominent type of exploitation.' Further, there were cases where workers were positively identified as victims and were repatriated back to their country of origin upon their request.

The variances of police perspectives could indicate different recruitment channels for workers to specific regions that may affect the level of abuse, inconsistencies in the identification of abuse and exploitation, engagement with workers, and how workers are viewed. For instance, while some police respondents referred to workers as 'victims' regardless of whether they were positively identified as such, others referred to workers as 'illegal workers.' In particular, one police respondent appeared to emphasise the workers' potential status in the UK by referring to them solely as 'illegal workers' though acknowledging that they came across workers who 'worked long hours over a short number of days,' did not know the UK had a NMW, and were 'surprised how high the rate was.' This recalled an observation within the HMICRFS' (2017) report that 'victims who come into contact with the police are not always recognised as such and therefore remain in the hands of those who are exploiting them. Others are arrested as offenders or illegal immigrants. While law enforcement has a duty to refer individuals to immigration and enforcement, the vulnerability of victims must be considered in parallel' (HMICRFS, 2017). Further, disregarding exploitation in HCWs because it is of a lower-level form of abuse or because workers appear 'content with conditions' risks subjecting workers to further and escalating victimisation.

Regarding corporate complicity in modern slavery, HCW activities may not be adequately captured by the UK's antislavery frameworks. For instance, in 2015 the UK established the Modern Slavery Act (MSA) to aid its efforts in the eradication of slavery. Section 54 of the legislation requires companies with an annual turnover of ± 36 million or more to report on the

steps that they have taken, or have not taken, to tackle slavery in their supply chains and operations. By requiring only large companies to report, the MSA fails to acknowledge that smaller-scale operations like car washes can also be complicit in related human rights abuses and violate labour standards. With increasing scrutiny of business activities, a number of voluntary initiatives have been established to promote best practice with suggestions on the steps businesses can take to address slavery. This includes Corporate Social Responsibility (CSR) activities such as establishing anti-slavery policies and conducting a risk assessment to comply with legislation and protect a company's brand image (New, 2015). Whilst a company's engagement with the antislavery agenda may affect their reputation, there is no evidence that this will have an implication for business behaviour. New (2015) for instance, notes that Krispy Kreme Doughnuts, though acknowledging that they do not '...engage in verification of product supply chains to evaluate and address risks of human trafficking and slavery, nor conduct audits of suppliers to evaluate supplier compliance with company standards against trafficking and slavery in supply chains,' have not experienced any negative effect. As companies with the benefits of a greater turnover and incentive of legislation may show little effort to mitigate modern slavery risks, it is questionable what impact anti-slavery policy and CSR initiatives can have on smaller businesses without the resources or same incentives. Accordingly, the proposition that HCWs might improve conditions based on brand reputation considerations is not likely for independent HCWs (Jardine, Trautrims, & Gardner, 2018).

Hand car wash workers and the Bottom of the Pyramid

According to the World Bank, four billion people, a majority of the world's population make up the base or bottom of the economic pyramid (BOP)(Hammond, Kramer, Katz, Tran, & Walker, 2007). These individuals are in relative poverty, with annual incomes less than US \$3000. Absolute poverty reflects the amount of purchasing power of household income required to meeting basic living standards such as food, shelter and healthcare (United Nations Development Programme, 1997). Relative poverty relates to income distribution and describes a household income that is less than the average or median income within a country. Subsequently, individuals in relative poverty often fall behind most others in their community (United Nations Development Programme, 1997). Sengupta (2010) defines extreme poverty as a combination of income poverty, human development poverty and social exclusion. He maintains that income poverty is economic deprivation, creating an inability to meet basic needs, whether relative or absolute. Additionally, he argues that human development poverty is a social, cultural and political form of poverty where there exists a lack of access to resources such as food, health and education that is essential for human development. Subsequently, social inclusion goes beyond having the necessary income to purchase goods and services, and rather concerns situations where individuals lack social capital for various reasons such as being marginalised, discriminated or excluded from social relations.

Whilst modern slavery and labour exploitation is not synonymous to poverty, such deprivation of basic necessities and opportunities to improve one's socio-economic circumstances, may increase individuals vulnerability to exploitation. Exploitation can involve a degree of fraud, force or coercion to lure, abuse and in some cases enslave individuals. Subsequently, while factors such as discrimination, conflict, and low worker protection can make an individual vulnerable to exploitation(Gold, Trautrims, & Trodd, 2015), poverty itself is also a means of coercion as it gives individuals only a selected few options to improve their livelihood (Zwolinski, 2007). Many workers may have no alternative options to earn an income and therefore accept precarious work. Though allowing individuals to earn some form of an income, others may be left economically vulnerable as income generated is for self-preservation as opposed to economic advancement. Therefore, individuals may be unable to elevate themselves from a cycle of poverty and exploitation.

Regarding the wages paid, the average wage reported via surveys was f_{40} for a day's work which ranged between 8 and 12 hours a day. As one police respondent noted: 'Generally we found workers to be very happy to engage with police and tell us how much they were earning, which tended to be around £40 - £60 per day, working between 8-10 hours. They were aware of the minimum wage and were content with their conditions.' More significantly low wages included f_{10} for a day's work. Two police forces reported that in some cases cigarettes and food were used as payment. A police official also reported that individuals from Romania were often trafficked to their locality via bus, costing individuals roughly a £150 debt for the journey. The official stated that HCW jobs are advertised in Romania, promising workers £35 a day, which workers deemed a good wage. However, on arrival in the UK, workers were placed in dilapidated and cramped accommodation, with a lack of basic facilities such as electricity or water. The official also reported that individuals were then forced to work for two weeks and only paid f_{10} for their labour. As a result, some survived by vacuuming coins from the cars they washed. Jointresearch by the University College London and the National Crime Agency (NCA) on labour trafficking into, within and from the UK, recognised that workers identified as victims in some cases were found to be underfed and surviving on a nutritionally limited diet (e.g. bread, jam and beans), and though working long hours with few or no breaks during the day, were often provided with very little food or money to buy food (Cockbain, 2018). In one case the traffickers provided 15 victims housed in a single property with a total of $f_{.25}$ per day for food.

Separately, the circumstances of workers may prevent them from meeting basic living standards, such as shelter. An analysis of literature on labour abuse in car washes, suggests that in some cases workers were living on either the car wash site or off-site in cramped and dilapidated accommodation. This was sometimes provided by car wash owners. A notable case is the death of Romanian national Sandu Laurentiu-Sava who was electrocuted in August 2015 while showering in squalid accommodation adjacent to the car wash where he worked. This was as a result of his employer bypassing the electricity meter (Gillett, 2017). Survey responses and interviews further indicated other potential accommodation styles and conditions identified during law enforcement investigations. The most common categories of accommodation included workers who lived on-site at the car wash, workers living in a house of multiple occupancy (HMO) off-site, and workers living off site in makeshift accommodation such as caravans. Several responses suggest that it is common for workers to be housed in HMO, provided by HCW owners. In this situation, it is usual for workers to pay the owners for the accommodation or for a portion of their salary to be deducted. A police respondent noted: 'Across our visits there is some commonality in regard to the reduction in pay against minimum wage, offset by accommodation provision. In the majority of cases however the view is that the workers are more than happy with that (usually declared at $\frac{1}{2}5$ per hour) – even when minimum wage is discussed there is a clear lack of interest and that generally there is satisfaction with the conditions.' In the UK, when calculating the NMW or national living wage (NLW), accommodation provided to workers can be taken into account. As of April 2019, an employer cannot charge their worker more than £7.55 per day for providing daily accommodation, and more than £52.85 per week when weekly accommodation is provided (UK Government, 2019a). This is known as the 'offset' rate, and charges above this will need to be taken into consideration when calculating NMW. If the accommodation is provided free of charge, the offset rate will be added to the worker's wages and then calculated to determine whether the worker's wages are below the NMW.

In line with existing research, some respondents described workers living in cramped housing with mattresses on the floor, limited facilities, and health and safety issues. While responses to our survey indicate varied accommodation styles, 41% per cent commented on the condition of the accommodation available to workers. Fifty-seven per cent (57%) described accommodation

as poor, 14% said it was acceptable, and 29% acknowledged that conditions varied, as some were 'generally in good condition and clean' while others were 'far from ideal.'

Though HCW activities are at risk of exploitative labour and employment practices, police officials acknowledged that some workers, though operating in poor conditions and paid below the NMW, did not self-identify as victims of labour abuse or modern slavery and were accepting of their working conditions. One respondent highlighted a case where workers were positively identified as victims of modern slavery and human trafficking but nevertheless returned to work in exploitative car washes: 'Workers entered the NRM and are placed into safe accommodation; many workers left the safe house and went back to work for traffickers after they got positive conclusive grounds decision as they wanted to earn money.'

Whilst low-wage work does not equate to poverty (Filandri & Struffolino, 2019), the nature of HCW work risks economically and socially depriving individuals of a sustainable livelihood. This is further exacerbated by low-skilled migrant workers operating in the UK's current 'hostile environment' to immigration (Grierson, 2018). Responses from law enforcement officials acknowledge the difficultly of engaging with car wash workers as they may be distrusting of the police and immigration officials. Separately, though operating in plain sight, a challenge with combatting exploitation in car washes is the acceptance and normalisation of informal labour and employment practices by the general and often unsuspecting public. Unregulated and potentially illegal HCWs continue to be utilised because of their low-cost and easily accessible car wash service.

The cost of labour exploitation in HCWs to the UK

There are several costs to the UK of HCWs operating with exploitative labour practices. Such activities have resulted in the loss of tax payments, such as business rates, corporation tax and value-added tax (VAT). Additionally, national insurance (NI) contributions are likely to have been missed. Some have been non-compliant by accepting only cash as a form of payment for service and not declaring these payments for tax purposes and, as noted above, paying their workers significantly below the NMW.

In 2018, the Clewer Initiative, the Church of England's modern slavery initiative, launched the Safe Car Wash mobile application to provide a community intelligence-led approach to identify slavery at car washes in the UK. The app found that 80% of car wash visits reported had a cashonly policy, 41% of users had to pay the manager directly and 87% of users were not offered a receipt (Jardine & Gardner, 2019). Car wash prices that are unfeasibly cheap could also indicate that labour and employment obligations are not being met (Chesney, Gold, & Trautrims, 2017). HCW provider Waves' assessment of the industry suggests that the breakeven cost, including value-added tax (VAT), is £6.88 for an outside wash and £11.10 for an in and outside wash. As demonstrated in table 2 below, these figures take into consideration expenses such as labour costs and the price of materials and resources used such as electricity, water, chemicals, and equipment, business rates, insurance, amongst other costs. Though this figure will vary to some extent throughout the UK, HCWs that charge significantly below this cost could indicate that they are evading tax, NI and NMW obligations, resulting in loss of revenue for the public purse. According to the Petrol Retailers Association and the Car Wash Association, with an anecdotal estimate of between 10,000-20,000 HCWs in the UK, the cost to the public purse could fall between £700,000,000 and £1 billion annually in unpaid taxes (Petrol Retailers Association & Car Wash Association, 2018).

Based on 200 cars per week cleaned, 35hrs per worker at NLW, 25+ yrs old plus statutory pension. No vehicle movements or productivity calculations. Regional variations may apply.

	Outside only wash	In and out wash (mini valet/Gold) As outside, plus				
	Wash, TFR, Shampoo, Rins	0				
	Leather	and wipe dashboards				
Average time to complete (total minutes)	18	39				
	£	£				
	<u>Apr-18</u>	<u>Apr-18</u>				
DIRECT COSTS						
Labour cost inc. hourly rate, pensions etc. (r						
vehicle movement)	2.81	6.09				
Water	0.06	0.06				
Elec	0.08	0.16				
Chemicals	0.16	0.21				
Consumables	0.01	0.02				
Maintenance	0.06	0.08				
Rent (highly variable, average amount assumed)	0.9	0.9				
SUB-TOTAL	4.08	7.52				
OTHER (HIDDEN) COSTS Rates (based on £15K RV and small business rates						
relief)	0.45	0.45				
Insurance	0.17	0.17				
Supervisor/manager	0.75	0.8				
Trade effluent	0.03	0.03				
Uniforms	0.02	0.03				
Internet	0.03	0.03				
Mobile phone	0.01	0.01				
Credit card charges	0.03	0.04				
Bank charges	0.04	0.05				
Accountancy/payroll/legal	0.12	0.12				
SUB-TOTAL	1.65	1.73				
TOTAL COSTS	5.73	9.25				
COST PLUS VAT	6.88	11.10				

Table 2: Cost of car wash. Extract from evidence submitted by the Downstream Fuel Association to the Environmental Audit Committee inquiry on the environmental and social impact of hand car washes (Downstream Fuel Association, 2018)

The cost of investigating labour exploitation in HCWs is also relatively high. The visibility of HCWs on the high street and increased press coverage around potential illegalities has heightened investigations into this sector. However, the growth of HCWs in the UK coupled with a degree of invisibility have made it difficult for law enforcement bodies to investigate operations to ensure that they comply with the relevant regulations. Investigations, where they do occur, appear to be costly. This is evident from the GLAA's investigations into labour abuse in this sector. According to GLAA, 25 investigations into HCWs took a total of 1384 days to be completed (average 55.36 days per investigation) and amounted to a cost of £286,685 (£11,467 per investigation) (Gangmasters and Labour Abuse Authority, 2018b). The cost and time of conducting investigations has resulted in enforcement and regulatory bodies allocating resources to cases where substantial evidence of labour abuses have been provided based on prioritisation methods. By adopting intelligence-led risk-rated approaches, agencies are then able to prioritise high-risk cases. However, it is important to note that this risks neglecting lower-level forms of labour abuse that may escalate into modern slavery (FLEX Labour Exploitation Advisory Group, 2016). This, coupled with the aforementioned fact that many HCW workers may not self-report as victims, means it is important to consider whether the GLAA is resourced sufficiently to be able to prevent slavery in HCWs. If resourcing restricts it to investigating only those with the most severe risk attached or with the most intelligence provided, it is evident that alternative or complementary approaches are needed. An alternative model to funding investigations is found at the Health and Safety Executive (HSE) which has a Fee for Intervention (FFI) off-setting its investigation costs as those found to be in breach of health and safety legislation are held responsible for paying investigative and enforcement costs (Health and Safety Executive, 2018).

The wider international context of HCWs: Why are HCWs a problem in the UK?

Hand car washes are often described as unregulated operations, however, like other businesses operating in the UK, there are regulations to which they should adhere. These include planning permission, paying business rates, environmental policies – including permission to dispose of liquid waste – paying national insurance, corporate tax, national minimum wage, and health and safety. Though an increasingly common phenomenon in the UK, HCWs as a business activity barely exist in comparable economies such as Germany and France. Research by the International Car Wash Association found that HCWs were the least popular form of car wash service in Germany, as only 6% of motorists interviewed use HCWs (International Car Wash Association, 2017). In France, this figure drops to 4%.

Interestingly, the scarcity of HCWs in Germany and France could be attributed to the enforcement of environmental practices as opposed to labour and employment regulations. Incorrect handling and disposal of wastewater, chemicals used to wash cars, oil residues and debris washed off cars, can result in the discharge of trade effluent into surface water drains and pollute the environment. Similar to the UK, Germany has a number of environmental policies, particularly influenced by European Union law, to regulate wastewater. For instance, under Germany's Federal Water Act (Wasserhaushaltsgesetz, WHG) a permit is required to discharge wastewater and to discharge substances into groundwater (Irmer, Huber, & Walter, 2013). A person washing a car must then have the relevant permit to discharge wastewater or utilise designated establishments that have been authorised to do so. Generally, environmental policies in Germany are often strictly enforced by environmental bodies (Elshorst, 2013).

Likewise, in France, there are several regulations pertaining to the protection of the environment. Similar to Germany, France's regulations around environment and wastewater management places some restrictions on the washing of cars. For instance, in Paris, article 99-3 of the Departmental Health Regulations for Paris, forbids the discharge of wastewater on public roads and directly prohibits the washing of cars on public roads, private roads open to public traffic, banks, ports and wharves, as well as in parks (The Departmental Health Regulations, 1979). Like Germany, persons discharging wastewater must have the relevant permissions to do so.

The UK has several comparable regulations to protect the environment and a number of regulatory bodies to ensure compliance. Though environment policy is devolved in the UK, like Germany and France permits are also required from relevant environmental agencies to discharge trade effluent. There is no evidence to suggest that environmental policies are more strictly enforced in Germany and France than in the UK. However, the phenomena of HCWs in the UK, suggests that environmental policies may need to be more strictly enforced to better regulate car wash activities particularly as many have been established on sites that do not have the appropriate drainage systems in place to dispose and recycle wastewater, thus posing a threat to the environment. In England, the Environment Agency (EA) operates by a 'risk based and proportionate' response approach, meaning assessing the severe impact of operations on the environment (Environment Agency, 2018). Such an approach heavily relies on sufficient evidence that an activity poses a significant risk to the environment, thus allocating resources to more severe incidents. HCWs tend not to be considered the most severe incidents and therefore are usually addressed through 'advice and guidance to correct any problems or warning letters.' Contrarily, under Scotland's General Binding Rules (GBR), a set of compulsory rules which cover certain low-risk activities, the prosecution is based on a more observable threshold, as it only needs to be proved that trade effluent was disposed into surface water drainage systems (Scottish Environment Protection Agency, 2011). Lack of data on the HCW sector makes it a challenge in comparing the impact of environmental policies in England and Scotland.

To encourage good practice in the prevention of pollution to the environment, Natural Resources Wales, the Northern Ireland Environment Agency, and the Scottish Environment Protection Agency, established the Guidance for Pollution Prevention Vehicle Washing and Cleaning (GPP13). GPP13 educates car wash businesses on the relevant environmental regulations and outlines measures they should take to prevent their operations from harming the environment (Natural Resources Wales, Northern Ireland Environment Agency, & Scottish Environment Protection Agency, 2017). The advantage of such a document is that it sifts through environmental regulations, drawing on those that are specifically relevant to car washing. This provides businesses with a comprehensive understanding of the measures that they should adopt to ensure that they are complying with the law.¹

There is no definitive reason to explain the proliferation of HCWs in the UK compared to other countries such as France and Germany. However, inadequate enforcement of regulations and in effect turning a 'blind-eye' to the impact of HCWs on the environment may have contributed to the growth of such operations in the UK, opening the floodgates to non-compliancy in other areas such as labour and employment practices. As aforementioned, inadequate training in the correct handling and disposal of potentially hazardous chemicals and waste not only damages and pollutes the environment but also threatens the health and safety of the workers. Whilst it may be difficult to investigate unlawful labour conditions, particularly where workers do not self-

¹ The Environmental Agency for England have not endorsed GPP13.

identify as victims, enforcement of environmental policies potentially provide an alternative avenue for identifying and investigating unregulated operations.

Separately, it is important to note that though stricter enforcement of environmental policies may reduce unlawful operations, exploitation of BOP individuals would remain a concern due to their vulnerability. Vulnerable workers may be compelled to seek alternative options for work. Consequently, cleaning up the sector may leave workers with no better option than entering an exploitative labour relationship or forced to work in other high-risk sectors such as construction and agriculture. In addition to addressing exploitative conduct, policies need to consider the root causes and vulnerabilities that give rise to abusive practices.

Routes to improving labour conditions in the HCW sector

In contrast to sectors such as agriculture, for example, not only are HCWs not categorised in their own separate industry code, but they also do not require a licence to operate from the GLAA. In November 2018 the Environmental Audit Committee proposed that the UK government compel HCWs to require licences to operate to prevent exploitation of workers and environmental pollution. The Committee recommended that the government trial a licensing scheme that collates key compliance requirements to strengthen enforcement (Environmental Audit Committee, 2018). However, the government has instead endorsed voluntary industry-led initiatives in favour of piloting a licensing scheme. In the absence of adequate enforcement of labour standards and environmental policies, there are a number of proposed solutions to preventing exploitation and safeguarding the rights of vulnerable workers employed in HCWs.

Educate HCW owners/managers

In his 2018-2019 strategy, the Director of Labour Market Enforcement (DLME), highlighted that effective labour market enforcement should consist of a mix of compliance and deterrence approaches (Metcalf, 2018). According to DLME, 'The compliance approach is premised on the idea that violations of employment regulations are the result of employer ignorance and incompetence.' Thus, while regulations must be strictly enforced to drive compliance, it is also vital to educate employers on labour and employment policies they must adhere to. An assessment of research on HCWs suggests that some are legitimate businesses that have planning or leasing permission but breach other relevant regulations. Some HCW employers may lack a comprehensive understanding of the policies around establishing and running a business. Employers should, therefore, be educated on labour and employment standards, and their responsibilities to prevent exploitative labour practices. Such an approach will ensure that employers are not simply punished for non-compliance, but rather demonstrate what compliance looks like, and work with businesses to continuously improve practices. The GLAA also adopt a preventative and educative approach to improve compliance, allowing the allocation of resources to high-risk cases of labour exploitation (Gangmasters and Labour Abuse Authority, 2018b). The GLAA is currently working in collaboration with Waves, Tesco supermarket's largest HCW provider and a consortium of stakeholders to pilot an industry code of practice for the car wash sector, which forms the basis of the Responsible Car Wash Scheme (RCWS). The scheme aims to accredit car washes that comply with the code.² The code's ethos is to, 'bring legitimacy to the sector, promoting compliance and raising standards through the dissemination of best practice'

² www.rcws.org.uk

and 'be a positive force for improving the working conditions of employees.' Such a code not only ensures that car washes are compliant, but it could also educate entrepreneurs, particularly migrant employers. Some may be unaware of the necessary regulations they should abide by to establish and operate a business in the UK, and thus are inadvertently complicit in violations.

Engagement with workers

In line with promoting a compliance approach, the DLME acknowledges the importance of promoting worker rights, supporting awareness and access to enforcement. To improve engagement with workers, authorities can ensure workers are also educated on labour and employment policies, such as the NMW, NLW, health and safety policies and working time regulations. Further, there also needs to be effective channels to allow workers to enforce such rights.

Authorities might wish to consider educating workers about the risks of labour abusive practices and slavery, and how to report abuses. Reports from police officials interviewed show that though some workers were unwilling to disclose any, or accurate, information of their working conditions, all forces ensured that workers were aware of any support available to them. All officials interviewed reported distributing leaflets translated in different languages to educate workers on their labour and employment rights. Separately, to improve engagement with workers, some police forces have begun using officers and community actors from the same national or ethnic background as workers.

Evidently, a number of factors may hinder engagement with workers. Workers may not selfidentify as victims of labour abuse or may be accepting of their working conditions. Thus, confusion around the relevance of consent in identifying cases of labour abuse or modern slavery may result in law enforcement officials choosing not to engage with workers further than initial or early-stage contact. Separately, officials reported the difficulty in engaging with workers, as some feared retaliation from their employers or denouncement to immigration officials if they were from outside of the EU. As we noted above, HMICFRS' (2017) report acknowledged the failure of some forces to adequately identify potential victims as they were ultimately treated as illegal immigrants. Recognising that law enforcement has a duty to report cases of illegal immigration, it is equally obligatory that officials recognise and address the vulnerability of exploited workers. Another issue highlighted by respondents is that some workers do not want to be referred into the NRM, as their focus is on securing employment to support themselves and their families. One official suggested that measures should be adopted to prevent workers from being drawn towards unregulated and exploitative employment practices such as support in applying for a NI number, developing their skills and applying for other job opportunities.

Public engagement

A challenge highlighted by officials was the lack of resources to investigate all HCWs for potential labour abuse violations. As a result, some officials reported the importance of adopting a prevention approach by raising awareness among the public to be vigilant to the signs of labour exploitation in HCWs. There have been a number of campaigns and press coverage to raise awareness of exploitative practices, and how to 'spot the signs' of modern slavery in car washes. Most notably, the Safe Car Wash app allows individuals to pinpoint their geographical location when at a car wash, and enables users to anonymously answer a series of questions such as whether the workers have access to suitable clothing, if there is evidence of workers living onsite and the cost of the car wash service. Data entered is then fed back to the NCA and GLAA. Such data has the potential to draw a better picture of the size of the HCW sector, geographical locations of operations, and provide an improved insight into the prevalence of labour exploitation in these operations. HCWs are widespread and operate in plain sight, and educating the public on the signs of labour exploitation and modern slavery can help shed light on abusive practices. Anti-slavery organisation Unseen's assessment of calls made to its Modern Slavery Helpline concerning car washes illustrate that the public has an important role to play as the majority of reports were made by members of the public (Unseen, 2018).

However, it is also important to protect the public from spaces where criminality may be occurring and to avoid encouraging citizen vigilantism. Sometimes reports from members of the public may not be sufficiently detailed: the GLAA has reported that the majority (62%) of referrals it receives regarding HCWs are often vague and relate to workers not looking happy or engaging in conversation with customers (Gangmasters and Labour Abuse Authority, 2018b). Research from Birks and Gardner (2019) also found that members of the public were reticent about reporting potential instances of labour abuse, as they found widely shared 'signs' of modern slavery to be too vague, and were sometimes concerned about worsening workers' situations, particularly in relation to potential immigration violations. Awareness-raising activities about labour exploitation in HCWs, therefore, need to focus on promoting awareness and reporting by members of the public in a way that safely collates useful information whilst discourages racial profiling and discrimination.

Conclusion

The conventional approach to the base of the pyramid concept focuses on finding or creating fortune at the BOP (Gupta & Khilji, 2013). Prahalad et al. (2012), for instance, argue that business participation in BOP markets and innovation allows them to generate profit. By targeting the purchasing power of poor people as customers through the production of goods and services, businesses are said to create a win-win relationship for eradicating poverty. Arguably, this is often achieved by targeting poor people as consumers or empowering them as suppliers, producers and employees (Agnihotri, 2013). Whilst there are innovative approaches businesses can adopt to help eradicate poverty (Polak & Warwick, 2013) such methods are not viable in addressing the exploitation of BOP workers in independent HCWs. Extracting profits from car wash workers will not improve their conditions or reduce poverty. Not all car wash workers are 'free consumes' as some do not have the free will to choose the goods and services they want to consume. Access to basic necessities such as food and shelter in some cases are provided by employers to exercise control over their workers. In this case, HCW owners/managers are able to further extract profit from forced consumption, compelling workers to remain at the BOP.

The lack of visibility questions the extent to which the government can regulate a sector that essentially does not exist in policy. Reducing poverty and improving the labour and employment conditions of workers heavily relies on licensing and registering HCW activities and improving the enforcement of existing regulations to ensure that car washes are compliant. However, the lack of enforcement of regulations and the structure of the sector increases workers vulnerability to exploitative practices, particularly as they already work predominately in the informal sector. This has resulted in an environment that is undercutting legitimate businesses in the formal economy, and shifting low-wage and precarious labour towards the bottom of the pyramid.

Moreover, activities such as HCWs are largely not captured by anti-slavery legislation and therefore do not have to report on the steps they are taking to ensure compliance in tackling slavery. Their operations are also not picked up by corporate risk management systems of companies that are in-scope of the MSA as the spent on HCW is a relatively minor expense. Further, no formal relationships are usually established with the service providers of HCWs (Jardine, Trautrims, & Gardner, 2018). Whilst voluntary CSR initiatives may fill the gap in the absence of inadequate legislation, such principles alone are incapable of addressing exploitation in car washes as they do not deal with the underlying causes that contribute to vulnerability and precarious labour. Further, unlawful operations will continue to flourish in the UK if consumers continue to utilise their services, as opposed to more regulated operations – such as those run by supermarkets – because of the considerably lower prices offered (Jardine, Trautrims, & Gardner, 2018).

HCWs are not illegitimate business activities, but unregulated operations threaten workers' rights, pollute the environment, and pose a significant risk to the public purse. Much more should be done to clean up the sector: licensing and registering car washes; enforcing labour, employment, health and safety, and environmental standards; improving engagement with car wash owners/managers and workers; and educating the public on unlawful operations so that they can make more informed decisions when choosing a car wash provider. Moreover, further research on the impact and effectiveness of interventions is required. Particularly research on the comparison of regulations and enforcement mechanisms across countries would be desirable. Additionally, further research is needed on the correlation between environmental regulations and the social impact of HCWs to progress understanding of the growth of HCWs in the UK in comparison to other economies. Like other sectors in the UK, HCWs can be commercially viable and economically sustainable for workers while operating in an ethical, legal and responsible manner. However, government intervention is critical to strengthening enforcement, ensuring compliance and protecting society's most vulnerable individuals.

References

- Agnihotri, A. (2013). Doing good and doing business at the bottom of the pyramid. *Business Horizons*, (56), 591–599. https://doi.org/10.1016/j.bushor.2013.05.009
- Birks, J., & Gardner, A. (2019). Introducing the Slave Next Door: Local media and public perceptions of modern slavery. *Anti-Trafficking Review (Forthcoming Autumn 2019)*.
- Chesney, T., Gold, S., & Trautrims, A. (2017). Agent based modelling as a decision support system for shadow accounting. *Decision Support Systems*, 95(C), 110–116. https://doi.org/10.1016/j.dss.2017.01.004
- Clark, I. (2018). Abandoned spaces and technology displacement by labour: the case of hand car washes. *New Technology, Work and Employment*. https://doi.org/10.1111/ntwe.12123
- Clark, I., & Colling, T. (2016). New insights into informal migrant employment: Hand car washes in a mid-sized English city. *Economic and Industrial Democracy*. https://doi.org/10.1177/0143831x16669840
- Clark, I., & Colling, T. (2018). Work in Britain's Informal Economy: Learning from Road-Side Hand Car Washes. *British Journal of Industrial Relations*. https://doi.org/10.1111/bjir.12286

- Cockbain, E. (2018). Written evidence submitted to the Environmental Audit Committee hand car washes inquiry by Dr Ella Cockbain, Lecturer in Security and Crime Science, UCL. Retrieved from http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/en vironmental-audit-committee/hand-car-washes/written/83094.pdf
- Crates, E. (2018). Construction and the Modern Slavery Act: Tackling Exploitation in the UK. Retrieved from https://www.ciob.org/sites/default/files/CIOB Report on UK Construction and the Modern Slavery Act_0.pdf
- Downstream Fuel Association. (2018). Written evidence submitted by the Downstream Fuel Association (DFA) Industry Code of Practice.
- Elshorst, D. (2013). *Enviromental law in Germany*. Retrieved from https://www.cliffordchance.com/briefings/2013/10/q_a_on_environmentallawingermany .html
- Emberson, C., & Trautrims, A. (2019). Public procurement and modern slavery risks in the English adult social care sector. In Olga Martin-Ortega & Claire Methven O'Brien (Eds.), *Public Procurement and Human Rights : Opportunities, Risks and Dilemmas for the State as Buyer* (pp. 180–191). https://doi.org/https://doi.org/10.4337/9781788116312
- Environment Agency. (2018). Written evidence submitted to the Environmental Audit Committee hand car wash inquiry by the Environment Agency. Retrieved from http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/en vironmental-audit-committee/hand-car-washes/written/85913.pdf
- Environmental Audit Committee. (2018). Hand car washes Tenth Report of Session 2017-19 Report, together with formal minutes relating to the report. Retrieved from https://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/981/981.pdf
- Filandri, M., & Struffolino, E. (2019). Individual and household in-work poverty in Europe: understanding the role of labor market characteristics. *European Societies*. https://doi.org/10.1080/14616696.2018.1536800
- FLEX Labour Exploitation Advisory Group. (2016). Labour Compliance to Exploitation and the Abuses In-Between. Retrieved from labourexploitation.org/sites/default/ files/publications/LEAG position paper 01.pdf
- Gangmasters and Labour Abuse Authority. (2018a). The nature and scale of labour exploitation across all sectors within the United Kingdom. Retrieved from https://www.gla.gov.uk/media/3537/external-nature-and-scale-of-labour-exploitation-report-final-version-may-2018.pdf
- Gangmasters and Labour Abuse Authority. (2018b). Written evidence submitted to the Environmental Audit Committee hand car washes inquiry by Gangmasters and Labour Abuse Authority. Retrieved from http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/en
- Gillett, F. (2017, January 18). Man jailed after worker is electrocuted in shower at Bethnal Green "bed in shed" flat. *Evening Standard*. Retrieved from https://www.standard.co.uk/news/crime/man-jailed-after-worker-is-electrocuted-inshower-at-bethnal-green-bed-in-shed-flat-a3443246.html
- Gold, S., Trautrims, A., & Trodd, Z. (2015). Modern slavery challenges to supply chain management. *Supply Chain Management*. https://doi.org/10.1108/SCM-02-2015-0046

vironmental-audit-committee/hand-car-washes/written/83129.pdf

- Grierson, J. (2018, August 27). Hostile environment: anatomy of a policy disaster. *The Guardian*. Retrieved from https://www.theguardian.com/uk-news/2018/aug/27/hostile-environment-anatomy-of-a-policy-disaster
- Gupta, V., & Khilji, S. E. (2013). Revisiting fortune at base of the pyramid (BoP). South Asian Journal of Global Business Research, 2(1), 8–26.
- Hammond, A. L., Kramer, W. J., Katz, R. S., Tran, J. T., & Walker, C. (2007). *The Next Four Billion*. World Resources Institute and International Finance Corporation.
- Health and Safety Executive. (2018). Written evidence submitted to the Environmental Audit Committee hand car washes inquiry by the Health and Safety Executive. Retrieved from http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/en vironmental-audit-committee/hand-car-washes/written/85519.pdf
- HMICFRS. (2017). *Stolen freedom: the policing response to modern slavery and human trafficking*. Retrieved from www.justiceinspectorates.gov.uk/hmicfrs
- Home Office. (2020). *The UK's points-based immigration system: policy statement*. Retrieved from https://www.gov.uk/government/publications/the-uks-points-based-immigration-system-policy-statement/the-uks-points-based-immigration-system-policy-statement
- International Car Wash Association. (2017). 2017 European Car Wash Consumer Study. Retrieved from http://www.prowash.fi/wp-content/uploads/2017/11/ICA-European-Consumer-Study-2017.pdf
- Irmer, U., Huber, D., & Walter, A. (2013). *Water Resource Management in Germany*. Retrieved from https://www.umweltbundesamt.de/sites/default/files/medien/378/publikationen/wawi_t eil_01_englisch_barrierefrei.pdf
- Jardine, A., & Gardner, A. (2019). Safe Car Wash App Report. Retrieved from https://static1.squarespace.com/static/58f723af1b631bc0c1e17415/t/5ca1f6a1ec212d250e b89ee5/1554118348298/Safe+Car+Wash+App+FINAL+%28March+2019%29.pdf
- Jardine, A., Trautrims, A., & Gardner, A. (2018). Written evidence submitted to the Environmental Audit Committee hand car washes inquiry by the Rights Lab, University of Nottingham. Retrieved from http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/en vironmental-audit-committee/hand-car-washes/written/83103.pdf
- Jardine, A., Trautrims, A., & Kenway, E. (2018). Labour exploitation in hand car washes. Retrieved from http://www.antislaverycommissioner.co.uk/media/1238/labour-exploitation-in-hand-car-washes.pdf
- Metcalf, D. (2018). United Kingdom Labour Market Enforcement Strategy 2018/19. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment _data/file/705503/labour-market-enforcement-strategy-2018-2019-full-report.pdf
- Natural Resources Wales, Northern Ireland Environment Agency, & Scottish Environment Protection Agency. (2017). *GPP 13: Vehicle washing and cleaning*. Retrieved from http://www.netregs.org.uk/media/1414/gpp-13-v2-plussepa-plusniea-plusnrw.pdf
- New, S. J. (2015). Modern slavery and the supply chain: the limits of corporate social responsibility? *Supply Chain Management*, 20(697–707). https://doi.org/10.1108/SCM-06-2015-0201
- Petrol Retailers Association. (2018). Market Review 2018. Retrieved from https://www.ukpra.co.uk/assets/documents/market-review-pra-2018.pdf

- Petrol Retailers Association, & Car Wash Association. (2018). Written evidence submitted to the Environmental Audit Committee hand car washes inquiry by the Petrol Retailers Association and the Car Wash Association. Retrieved from http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/en vironmental-audit-committee/hand-car-washes/written/83130.pdf
- Phillips, A., & Trautrims, A. (2018). Agriculture and Modern Slavery Act Reporting: Poor Performance Despite High Risks. Retrieved from https://www.antislaverycommissioner.co.uk/media/1220/modern-slavery-act-andagriculture-poor-performance-briefing.pdf
- Polak, P., & Warwick, M. (2013). The business solution to poverty : designing products and services for three billion new customers (1st ed.). California: Berrett-Koehler Publishers.
- Prahalad, C. K., Di Benedetto, A., & Nakata, C. (2012). Bottom of the pyramid as a source of breakthrough innovations. *Journal of Product Innovation Management*, 29(1), 6–12. https://doi.org/10.1111/j.1540-5885.2011.00874.x
- Rose, E. (2017, October 11). Acid-burned hands and sleeping four to a room: The horrors of your local car wash. *Evening Standard*. Retrieved from https://www.standard.co.uk/news/modern-slavery/acidburned-hands-and-sleeping-four-to-a-room-exploitation-is-rife-in-car-washes-a3656091.html
- Scott, S., Craig, G., & Geddes, A. (2012). Experiences of forced labour in the UK food industry.
- Scottish Environment Protection Agency. The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended)., (2011).
- Sengupta, A. (2010). *Human Rights and Extreme Poverty*. Retrieved from https://www.jstor.org/stable/pdf/25664389.pdf?refreqid=excelsior%3A547f7da3e75a5c62 f30c4f5cf292ef86
- The Departmental Health Regulations. Order of 23 November 1979 on health regulations of the department of Paris., (1979).
- UK Government. (2016a). Entitlement: residence rules right to reside: right to reside for nationals of Bulgaria and Romania (A2 nationals). Retrieved July 12, 2019, from https://www.gov.uk/hmrc-internal-manuals/tax-credits-technical-manual/tctm02087
- UK Government. (2016b). Migrant Workers: A2 Worker Authorisation Scheme. Retrieved July 12, 2019, from https://www.gov.uk/hmrc-internal-manuals/claimant-compliance-manual/ccm20140
- UK Government. (2019a). National Minimum Wage and Living Wage: accommodation. Retrieved July 12, 2019, from https://www.gov.uk/national-minimum-wageaccommodation
- UK Government. (2019b). Work in the UK. Retrieved July 12, 2019, from https://www.gov.uk/browse/visas-immigration/work-visas
- United Nations Development Programme. (1997). Human Development Report 1997.
- Unseen. (2018). Annual Assessment 2017. Retrieved from https://www.unseenuk.org/uploads/20180413150810356.pdf
- Zwolinski, M. (2007). Sweatshops, Choice, and Exploitation. *Business Ethics Quarterly*. https://doi.org/10.5840/beq20071745