

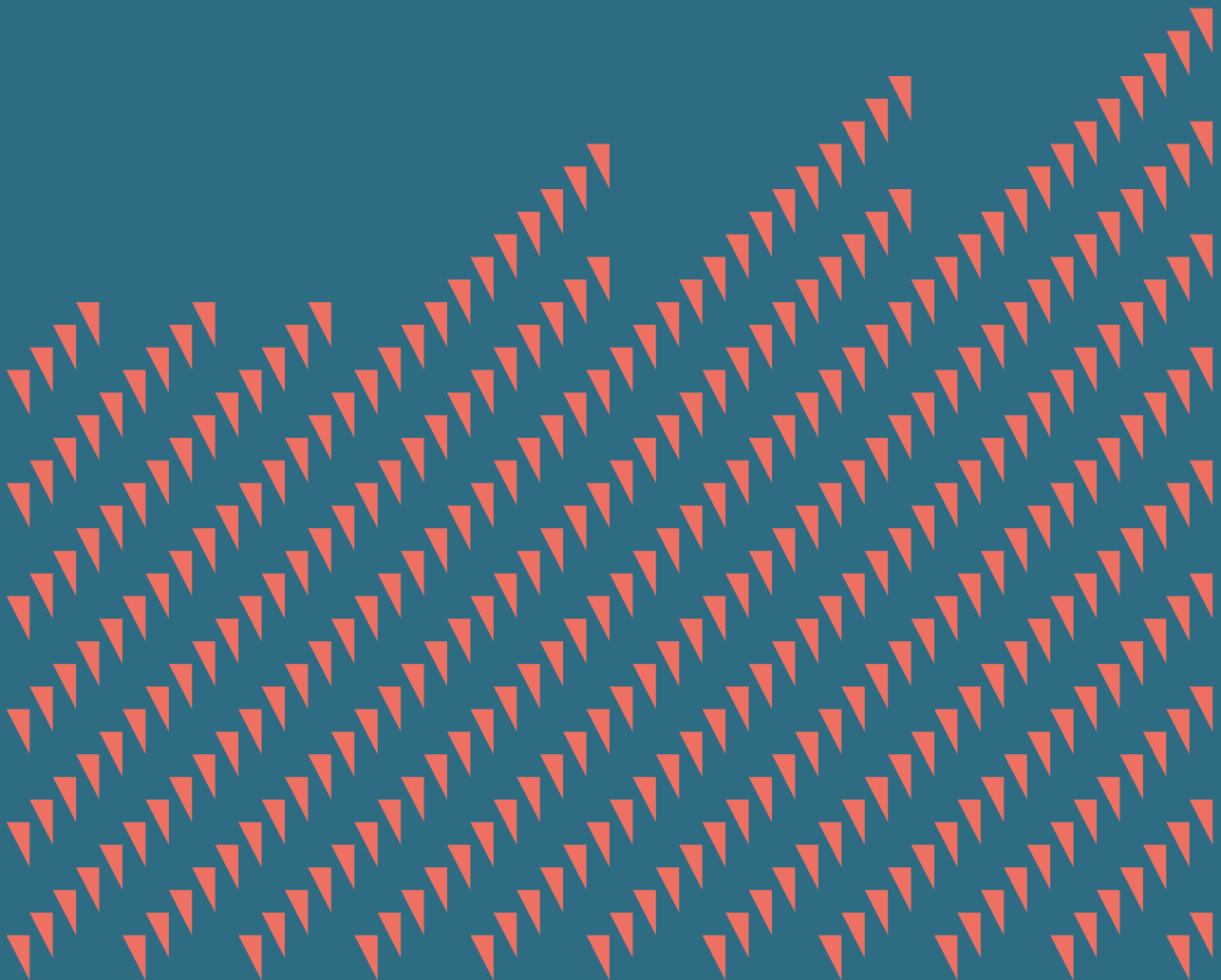


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Under the wage floor

Exploring firms' incentives to comply
with the minimum wage

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January 2020



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Summary

The National Minimum Wage/National Living Wage (hereafter the NMW) is widely regarded as a policy success: since its introduction in 1999, the wage floor has ended very low pay (at least in the formal sector) and improved the living standards of millions. With carefully calibrated uplifts each year, the NMW has had few, if any, negative employment effects. Since 2016, however, governments have increased their ambition when it comes to the minimum wage. Rates have been raised considerably, and the new government has committed to lifting the NMW up to a level equivalent to two-thirds of the median wage by 2024.

While a bigger NMW 'bite' is good news for workers, it clearly places pressure on firms that employ staff at or near the wage floor. Firms themselves report adopting a range of tactics to cope with minimum wage costs to date, including cutting other staff benefits, squeezing profits or striving to increase productivity. But one strategy which they are unlikely to self-report is breaching the law and simply not paying the NMW. Worryingly, the (limited) data suggests an increase in measured underpayment over the past two years, after a largely downward trend since 1999. As the government takes forward its plans to increase minimum wage rates, the risk of underpayment can only increase.

Firms that are caught underpaying their workers are required to repay the wages owed, and may also be subject to sanctions. Both individual workers and the state (in the form of HM Revenue and Customs' (HMRC's) dedicated NMW enforcement unit) can pursue recalcitrant employers through the civil system, while serious offenders may face criminal prosecution and potentially an unlimited fine.

In practice, however, firms rarely suffer significant financial loss if they are found to have breached the NMW. Employment tribunal records suggest that since 2017, just one of the 141 firms found to have underpaid the minimum wage was subject to a financial penalty in addition to repaying the arrears owed. HMRC is somewhat more effective: in 2017-18, it identified 1,116 firms that were non-compliant, enforced repayment of arrears owed, and levied (additional) penalties to the tune of £14.1 million. However, one-in-four underpaying firms were given the chance to 'self-correct' (meaning they simply paid back arrears with no penalty), and half received a 'prompt payment' discount, reducing their penalty from the maximum 200 per cent of arrears to 100 per cent. As a result, we estimate the average minimum wage violation detected by HMRC in 2017-18 incurred a penalty worth 90 per cent of the value of arrears owed. Finally, of the several thousand firms that have failed to pay the minimum wage over the last twenty years, only 14 have been criminally prosecuted, incurring an average fine of less than £3,000 each.

Putting aside all the normative reasons why firms comply with the law, there is an economic incentive to pay the NMW only if the expected costs of non-compliance (calculated by multiplying the probability of detection with the costs, largely financial sanctions, of being detected) are greater than the expected benefits (the savings the firm makes as a result of underpayment). Using data on the financial penalties levied for underpayment (both in theory and in practice), we calculate the minimum probability of detection needed to incentivise a purely profit-maximising firm to pay its workers their full due. We show that if the maximum civil penalty (200 per cent of unpaid wages) is levied, such a firm needs to believe it has a one-in-three chance of being caught underpaying the NMW to have a hard, financial incentive to comply. Likewise, this thought experiment suggests the average 90 per cent penalty levied by HMRC in 2017-18 needs to go hand-in-hand with a detection rate of at least 53 per cent to act as an effective deterrent.

In reality, the probability of NMW underpayment being detected is likely to be far lower than these rates. Using data from the *Annual Survey of Hours and Earnings* (ASHE), we estimate that in April 2018 there were at the *very least* 11,000 firms that underpaid their workers. HMRC identified 1,456 firms in 2018-19 who failed to pay the NMW. As a result, there was an absolute upper bound probability of 13 per cent that underpayment was detected by HMRC (and for many smaller firms, this figure would be far lower). While increases in HMRC resource and to the NMW penalty multiplier in recent years have led to an impressive rise in wages recovered and penalties levied, the uptick in measured underpayment suggests there is still a long way to go when it comes to identifying and effectively deterring non-compliance.

Of course, most firms do not make decisions about whether to comply with the NMW using a purely economic cost-benefit calculus: individuals' exposure to sanctions, as well as reputational and ethical considerations, also likely play a large role in determining behaviour. However, policy only weakly exploits this. In the 20 years since the introduction of the minimum wage, there have been only a handful of prosecutions or disqualifications of individual directors, and only limited criminal fines levied even for the severest of violations. Moreover, the Department for Business Energy and Industrial Strategy's (BEIS's) naming scheme which exposes firms to reputational risk if they fail to pay the minimum wage is currently under review, meaning no firms have been named since July 2018.

Taken together, it is clear that the current NMW penalty and enforcement regime provides insufficient deterrence for firms contemplating underpayment. Policy makers can increase the incentives to comply with the NMW through three types of action: by raising the probability of detection; increasing the magnitude of the legal penalties levied;

and intensifying the risks of non-compliance for the individuals responsible. The creation of a (properly resourced) single enforcement body should improve intelligence sharing, thereby increasing the chance that underpaying firms are caught. But our analysis suggests that even very high rates of detection need to go hand-in-hand with tougher sanctions such as higher penalties and greater use of criminal prosecution to be an effective deterrent.

Finally, we note that the NMW is relatively privileged when it comes to enforcement: significant resource is allocated to HMRC's activities and when discovered, minimum wage underpayment attracts penalties larger than any other labour market violation. As a result, there are clearly even lower incentives for firms to abide by other key employment standards such as paying for overtime or offering holiday entitlement. Our three-year programme of research on labour market enforcement looks more relevant than ever.

Underpayment of the minimum wage has increased since 2016 and could be a bigger issue in the future

Introduced in 1999, today the National Minimum Wage and the more recently introduced National Living Wage are widely viewed as policy successes.¹ Over time, the minimum wage has lifted millions of men and (especially) women out of very low pay and protected the pay of those at the bottom of the wage distribution through the downturn. It is estimated that workers earned around £8 billion more in 2018 than they would have in the absence of the minimum wage, with the total increase in pay over the first 19 years of the NMW summing to £60 billion in 2018 prices.²

Critically, the minimum wage has delivered this considerable boost to living standards with few, if any, of the forewarned reductions in employment.³ But if firms have not reduced staff levels in response to a rising wage floor, how have they absorbed the significant costs of the policy? Employers themselves suggest they have used strategies such as lowering profits, putting up prices and increasing productivity.⁴ But another way that firms could 'manage' minimum wage pressure is to pay below the prevailing rate (an approach, of course, that few would readily report).

There are various ways that workers can be underpaid the minimum wage, many of which are hard to detect (or alternatively, easy to conceal). Most straightforwardly, a firm could simply pay an hourly worker a lower rate than the minimum wage requires. More

¹ On top of existing rates differentiated by age, a new 25-year-old-plus minimum wage – the National Living Wage – was introduced in April 2016. Throughout this briefing note we use the terms 'minimum wage' or 'NMW' in the text as a shorthand for all rates collectively.

² Low Pay Commission, 20 years of the National Minimum Wage. A history of the UK minimum wage and its effects, April 2019

³ Ibid. See also: A Dube, Impacts of Minimum Wages: review of the international evidence, November 2019

⁴ See, for example: C D'Arcy & G Davies, [Weighing up the wage floor: Employer responses to the National Living Wage](#), Resolution Foundation, February 2016

artfully, firms could fail to pay staff for all the time they actually work. For example, they could require a salaried worker to work longer than their contracted hours;⁵ they could set workers paid by the piece so many tasks that they are not able to complete them sufficiently quickly to ensure their average hourly rate is at or above the minimum wage;⁶ or they could fail to pay workers for travelling they do in the course of the job.⁷ Likewise, even if the actual gross rate that workers are paid is lawful, firms could unlawfully deduct items which bring the actual pay received below the minimum wage.⁸

As a result, it is difficult, if not impossible, to accurately assess the scale of non-compliance.⁹ In 2019, best estimates using the *Annual Survey of Hours and Earnings* (ASHE) pay data suggest that more than 350,000 of the 1.4 million workers aged 25 and over in Great Britain paid at or very close to the wage floor were underpaid. There are good reasons why we should be careful using the reported level of underpayment: some of the behaviour identified could be legitimate due to lawful pay deductions or apprentice status; much that is unlawful probably goes unreported in employer surveys; and many of the drivers of underpayment uncovered by compliance efforts, including unpaid overtime and travel time, would not be captured in this data. However, the *trends* we observe across time are more likely to be meaningful.¹⁰

As Figure 1 shows, the rate of measured minimum wage underpayment has largely fallen within each of the discrete time periods for which we have consistent data, a pattern that makes sense as the policy has bedded in. Worryingly, however, in the most recent time series non-compliance rates have moved in the opposite direction. In 2016, just over 22 per cent of workers aged 25 years and above that were paid up to the minimum wage-plus-5p were underpaid; today, that figure stands at 26 per cent. One potential reason for this increase is that the 'bite' of the NMW (its ratio to the median wage) has grown significantly in recent years. In April 2015, the minimum wage for those aged 25 and over was equivalent to 52 per cent of the median hourly wage for that age group; in April 2019, this figure stood at close to 60 per cent.

5 See, for example: G Kik et al., How has the UK Restaurant sector been affected by the fissuring of the worker-employer relationship in the last 10 years?, Directorate of Labour Market Enforcement, July 2019

6 See, for example: M López-Andreu et al., How has the UK hotels sector been affected by the fissuring of the worker-employer relationship in the last 10 years?, Directorate of Labour Market Enforcement, July 2019

7 See, for example: J Rubery et al., The Recruitment and Retention of a Care Workforce for Older People, University of Manchester, February 2011

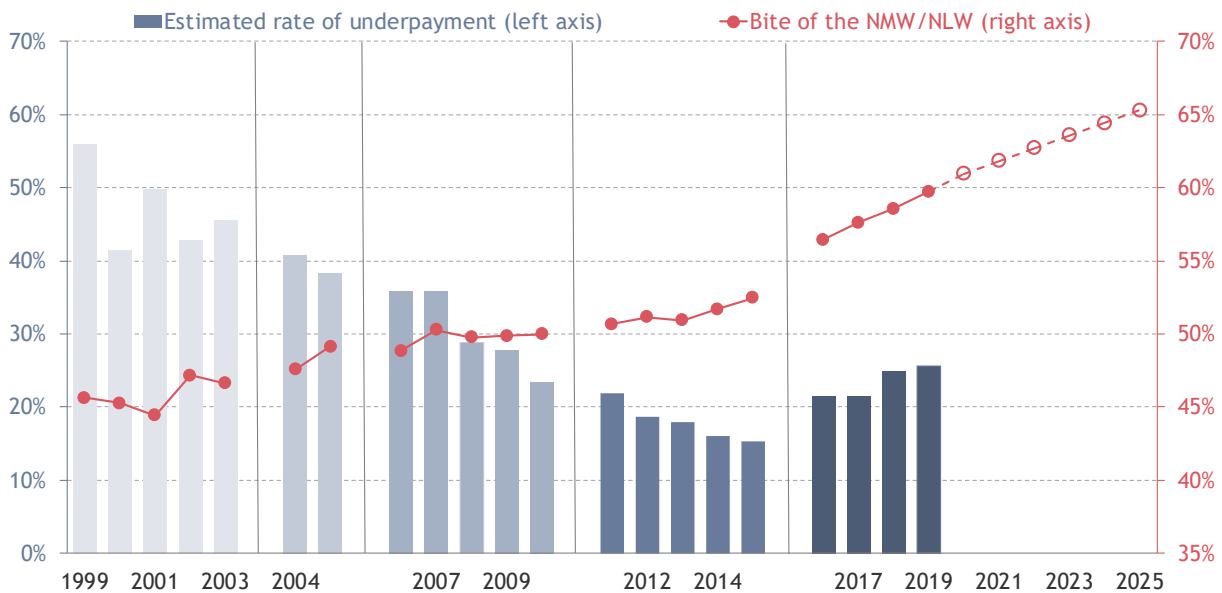
8 While it is legal under certain circumstances for employer deductions to bring net hourly pay below the minimum wage (for example, if the employer provides accommodation, for worker-side tax or National Insurance contributions, or for the repayment of a loan, advance or accidental overpayment of wages), there are numerous documented cases where unlawful deductions have been made. See, for example: S Goodley & J Ashby, 'Revealed: how Sports Direct effectively pays below minimum wage', The Guardian, December 2015; S Butler, 'Minimum wage: football clubs and Wagamama among worst underpayers', The Guardian, March 2018

9 See, for example: F Ritchie et al., Measuring compliance with minimum wages, University of West England: Economics Working Paper Series, 2017

10 Low Pay Commission, Non-compliance and enforcement of the National Minimum Wage, Low Pay Commission April 2019

FIGURE 1: NMW non-compliance and the 'bite' of the minimum wage have both risen in recent years

Estimated rate of underpayment for covered workers (those paid at or below the NMW/NLW-plus-5p), and 'bite' of the NMW/NLW (minimum wage rate as share of median wage), aged 25 and over: UK/GB, 1999-2025



NOTES: Different methods are used to calculate underpayment rates 1999-2003, 2004-05, 2006-10 and 2011 onwards. Data for 2016-19 are for different points in the minimum wage year than all other years, so cannot be directly compared to 2011-15 data. Figures for 2016-19 are GB, not UK. Bite is for April of relevant year. SOURCE: Low Pay Commission analysis of ONS, Annual Survey of Hours and Earnings, 1999-2018; RF analysis of Office for National Statistics (2019) Annual Survey of Hours and Earnings, 1997-2019: Secure Access. [13/12/19]. 15th Edition. UK Data Service. SN: 6689, <http://doi.org/10.5255/UKDA-SN-6689-14>

Critically, the bite is set to increase significantly in coming years: the new Conservative government committed to raising the wage floor to two-thirds of median earnings by 2024 (alongside extending the 25-plus rate to those aged 21 and over).¹¹ We can therefore expect the number of workers in scope to rise substantially: if the wage floor had been set at two-thirds of the median in 2018, then (assuming no 'spillover' effects that shift people up the wage distribution) we estimate that the number of workers entitled to the rate would have been more than double.¹² Taken together, the increase in the value of the NMW relative to average wages and a larger number of workers entitled to the rate will squeeze firms' margins further. While this does not mean that underpayment will automatically increase (the firms drawn increasingly into the NMW net could, on the whole, be of a more law-abiding nature than those that already have many workers at the wage floor), the risk of underpayment for all clearly increases.

¹¹ Prime Minister's Office, The Queen's Speech, Background briefing note, December 2019

¹² N Cominetti, K Henehan & S Clarke, *Low Pay Britain 2019*, Resolution Foundation, May 2019

There is often no bright line between mistaken and deliberate underpayment

NMW underpayment is clearly a bad thing: it cheats workers of their rightful due and leaves compliant firms undercut by those who do not abide by the law. How should policy respond? We can distinguish two broad policy approaches: compliance-based (which assumes underpayment is largely mistaken and aims to correct through the provision of information and assistance) and deterrence-based (which regards a substantial share of underpayment as intentional and therefore seeks to alter the cost-benefit trade-off for employers who might violate the law).¹³

Of course, not all minimum wage non-compliance is intentional: some results from genuine mistakes made by firms. The quarterly data from the *Labour Force Survey* is instructive in this regard, showing that underpayment is higher in the three months immediately after the NMW is increased each year than in subsequent quarters, suggesting that firms often take a short time to adapt to new rates.¹⁴ Inadvertent delays could also occur when staff graduate from apprentice or youth rates. Likewise, complexity as to what constitutes a lawful or an unlawful deduction, for example, or what offsets are allowed, means there is plenty of scope for employers to simply get things wrong.

That said, the record of detected minimum wage violations makes clear that many cases of underpayment are intentional. Perhaps even more importantly, it is often not possible to draw a bright line between inadvertent and intentional underpayment. Firms clearly have a responsibility to learn about the legal requirements with which they should comply, and to ensure that staff right across the firm behave appropriately.¹⁵ As a result, underpayment which is not explicitly intentional may nonetheless be negligent if a firm simply fails to learn whether or not their pay policy was compliant, or to enforce it wholesale throughout the business. A deterrence-based approach not only disincentivises intentional underpayment – it should also reduce inadvertent underpayment by giving firms a greater incentive to *learn* about their legal obligations.

With the bite of the NMW set to rise substantially, and with early evidence of rising underpayment, now is a good time to review the potency of the current deterrence-based regime. This means considering whether the incentives for firms to learn about, and

¹³ See, for example, the work of Professor Judy Fudge outlined in: D Metcalf, United Kingdom Labour Market Enforcement Strategy, Directorate of Labour Market Enforcement, May 2018

¹⁴ Low Pay Commission, Non-compliance and enforcement of the National Minimum Wage, April 2019

¹⁵ Examples of employers falling short in this regard include a firm where a middle manager retained late night taxi fares provided for workers by a company, and another where 'ghost' workers were kept on the payroll for the benefit of supervisors, leaving the actual staff having to work harder or longer for the same money. See: N Clark & E Herman, Unpaid Britain: wage default in the British labour market, University of Middlesex, November 2017

comply with, the minimum wage need sharpening. In order to quantify these incentives, we need to first set out the channels through which enforcement actually happens.

Workers can challenge underpaying firms, but the state is much more effective at doing so

While some underpayment is no doubt resolved informally, there are two formal channels through which firms can be brought to book: through an action by a worker who believes they have been underpaid, or through an HMRC investigation.

To begin a challenge, a worker must approach the Advisory, Conciliation and Arbitration Service's (ACAS's) 'early conciliation' system which seeks to find a settlement between the parties.¹⁶ If the worker does not want conciliation, or if conciliation is unsuccessful, they can then make a claim of either unlawful deduction of wages or breach of contract in an employment tribunal (or industrial tribunal in Northern Ireland). Alternatively (but far more rarely), a worker can take their employer to the county court (or the Sheriff Court in Scotland) for breach of contract.

Challenging underpayment as an individual requires knowledge and energy, however, and sometimes financial resource. While workers today do not pay to make a claim to an employment tribunal, between 2013 and 2017 there was a fee of £390 to take a case.¹⁷ Likewise, it costs around 3-6 per cent of the total value of the claim to issue in the county courts. It is small wonder, then, that the types of workers the data suggests are most likely to be underpaid the NMW (younger people or those working in smaller firms, for example) are also some of the least likely to challenge underpayment on their own behalf.¹⁸

As Figure 2 shows, the numbers of claims made using employment tribunals (ETs) is very small compared to the measured rate of underpayment: in 2018-19, only 350 cases were taken to tribunal in relation to NMW underpayment,¹⁹ compared to the 350,000-plus workers aged 25-plus ASHE suggests were underpaid in April 2018.²⁰

¹⁶ It has been mandatory to go through conciliation before making an application to an employment tribunal since 2014. See: ACAS, Conciliation explained, May 2018

¹⁷ These fees were ruled to be unlawful by the Supreme Court in 2017.

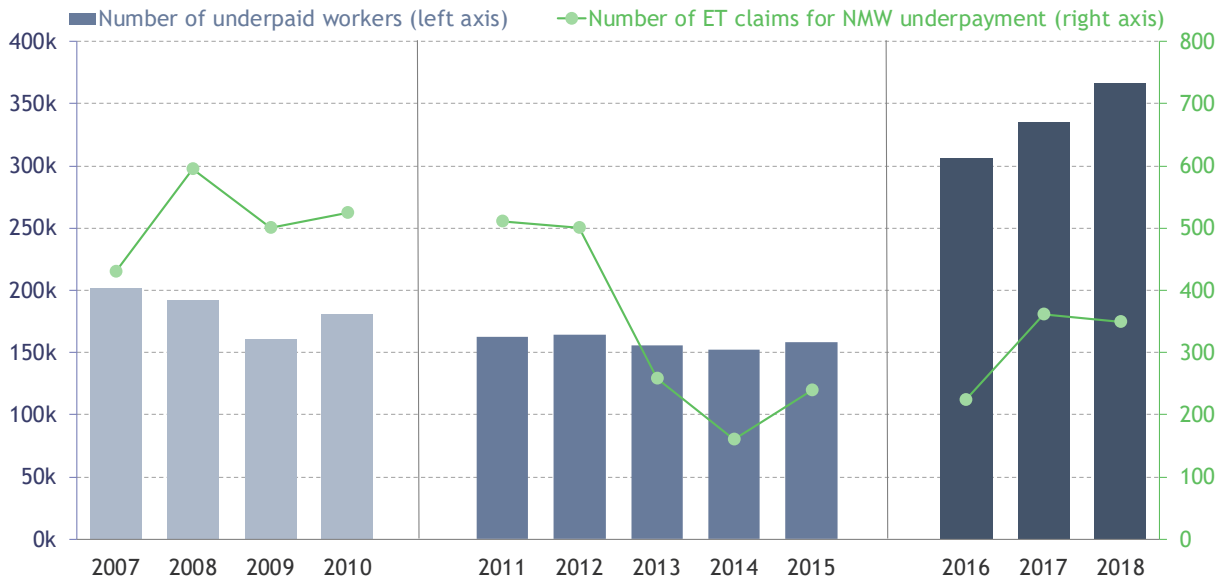
¹⁸ N Cominetti & Judge, *From rights to reality: enforcing labour market laws in the UK*, Resolution Foundation, September 2019

¹⁹ Note that this figure only counts minimum wage underpayment cases brought to employment tribunals under the jurisdiction National Minimum Wage. Cases can also be brought to employment tribunals under the jurisdictions breach of contract or unauthorised deductions. It is not possible to identify from official statistics how many cases under these jurisdictions relate to the minimum wage, but our manual analysis of the employment tribunal database suggests that the total number of minimum-wage-related claims across all jurisdictions is of the same order of magnitude as the number listed under the NMW jurisdiction.

²⁰ It is also worth noting that a finding in an employment tribunal only rectifies the situation for the individual worker that takes the claim, and does not automatically trigger action against the firm on others' behalves.

FIGURE 2: The number of NMW-related ET claims is tiny compared to measured underpayment

Number of workers aged 25-plus paid below the NMW/NLW, and number of ET claims for NMW underpayment: UK/GB, 2007-18



NOTES: See Figure 1; ET data covers Great Britain. See Footnote 19.

SOURCE: Low Pay Commission analysis of ONS, Annual Survey of Hours and Earnings, 1999-2015; RF analysis of ONS, Annual Survey of Hours and Earnings, 2016-2018; HMCTS, Tribunals Quarterly and Annual reconciled returns 2019.

Policy makers are not impervious to this fact, however, and a unit in HMRC is tasked with tackling underpayment. HMRC has considerable powers at its disposal: it can inspect any workplace at any time, either reactively (in response to an employee complaint) or proactively (based on their predicted risk model). In the event that minimum wage underpayment is discovered, it can send a 'nudge letter' to the employer offering the option to self-correct (if arrears or the number of workers affected are small), or it can serve the firm with a Notice of Underpayment. If the employer then fails to pay the arrears HMRC will take them to civil court on behalf of the underpaid workers.²¹

HMRC has ramped up its activities considerably in recent years, not least because it has had a significant increase in resource. In 2017-18, HMRC identified minimum wage arrears for just over 200,000 workers, for example, compared to around 26,000 just 3 years before.²² It seems clear that for reasons of both resource and power, state-led, rather than individual-led, action is far more effective at identifying and challenging underpaying firms.²³

²¹ For further details, see HMRC, National Minimum Wage enforcement manual, 2016

²² Statistics on HMRC's enforcement activity can be found in: Department for Business, Energy & Industrial Strategy, National Living Wage and National Minimum Wage: Government evidence on compliance and enforcement 2017/18, 2018

²³ Since 2016, serious or persistent violators of labour law may also be subject to a Labour Market Enforcement Undertaking or Order designed to implement measures "necessary to prevent further non-compliance".

The financial penalties incurred depend on how underpayment comes to light

Each of the enforcement channels for NMW underpayment comes with a different penalty regime. Firms that underpay the minimum wage but that correct their behaviour in response to informal worker complaints or ACAS conciliated settlements could at most be expected to make good any arrears, but will not be subject to any further financial penalties. If a firm is pursued through an employment tribunal, the county court or HMRC, however, it can incur monetary losses (paid to the state) over and above the repayment of arrears to workers. In Figure 3 we summarise the financial penalties that, in theory at least, could stack up against non-compliant firms if they are challenged through an official route.

FIGURE 3: **Financial penalties depend on which complaint route is used**

Summary of potential financial penalties imposed on firms found to have underpaid the NMW/NLW

	Employment tribunal	County court	HMRC
Arrears?	Calculated at current minimum wage rate	Calculated at current minimum wage rate	Calculated at current minimum wage rate
Penalty?	Only if aggravating circumstances, 50% of arrears, max £20k	No	200% of arrears, max £20k per worker. No penalty if self-correct
Penalty reduced if prompt payment?	25% of arrears if paid within 21 days	N/A	100% of arrears if paid within 14 days
Additional financial liability?	Compensation for any other losses stemming from the breach	Compensation for any other losses stemming from the breach	Potentially unlimited fine in event of criminal prosecution
Award for costs of taking action?	Only if aggravating circumstances	Usually	N/A

SOURCE: National Minimum Wage Act 1998; Employment Tribunals Act 1996; BEIS, National Living Wage and National Minimum Wage: Government evidence on compliance and enforcement 2017/18, 2018; BEIS, National Minimum Wage Law: Enforcement, 2017; HMRC National Minimum Wage Manual, 2016; BEIS, Employment Tribunals Powers: Tribunal user guidance on use and application, 2019; Civil Procedure Rules

As Figure 3 makes clear, if a firm is found to have underpaid the minimum wage by the employment tribunal, it will be ordered to pay arrears to the worker, and compensation may be demanded for any other financial losses that have been sustained as a result of the underpayment.²⁴ However, an employment tribunal cannot impose an additional

²⁴ For example, if the worker had to take out a loan or incur overdraft fees as a result of being underpaid.

financial penalty unless there have been aggravating features in the case.²⁵ If so, the penalty award is 50 per cent of the arrears, capped at a maximum of £20,000 (although if paid within 21 days, the penalty is reduced to 25 per cent of the arrears). Cost orders are not the norm in employment tribunals.²⁶ Similarly, action in the county court can also result in a firm being ordered to pay arrears alongside compensation if the worker has suffered any other financial loss as a result of the breach. In contrast to a tribunal, cost awards are more commonplace in such cases, but there is no provision that allows the court to levy an additional penalty on underpaying firms.

The financial penalties are substantially tougher if a firm is pursued by the state rather than the individual. Since 2016, HMRC requires all non-compliant, non-self-correcting, firms to pay a civil penalty of 200 per cent of the value of any arrears, ranging from a minimum of £100 in total to a maximum of £20,000 per worker.²⁷ There is an incentive to pay promptly, with the penalty reduced to 100 per cent of the arrears if the employer fully complies within 14 days. In the most egregious cases where a firm is found to be persistently non-compliant or uncooperative, it can be subject to criminal investigation (although the decision to bring a criminal action rests not with HMRC but with the Crown Prosecution Service in England and Wales, and its equivalents in Scotland and Northern Ireland), in which case the firm may face a potentially unlimited fine.²⁸

Imagine, then, a hypothetical firm that underpays a worker by £1,000. In Figure 4 we set out its *maximum* financial exposure were the underpayment to be detected. As this makes clear, under three scenarios (ACAS conciliation, employment tribunal action with no aggravating features and HMRC self-correction) there is no net monetary cost of underpayment. If there are aggravating circumstances in a tribunal case, our underpaying firm could be subject to an additional penalty of £250 (if it paid promptly) or £500 (if it paid after 21 days). At the other end of the spectrum, if the firm were subject to the full penalties that can be levied by HMRC, it would be out of pocket by £2,000 (reduced to £1,000 in the event of payment within 14 days).

²⁵ According to BEIS, "The law does not define what constitutes an aggravating feature but if, for example, it was shown that the employer had deliberately breached the law or were motivated by malice in behaving as they did that might be something considered relevant when the tribunal considers the issue". See: Department for Business, Energy & Industrial Strategy, Employment Tribunals Powers: Tribunal user guidance on use and application, 2019

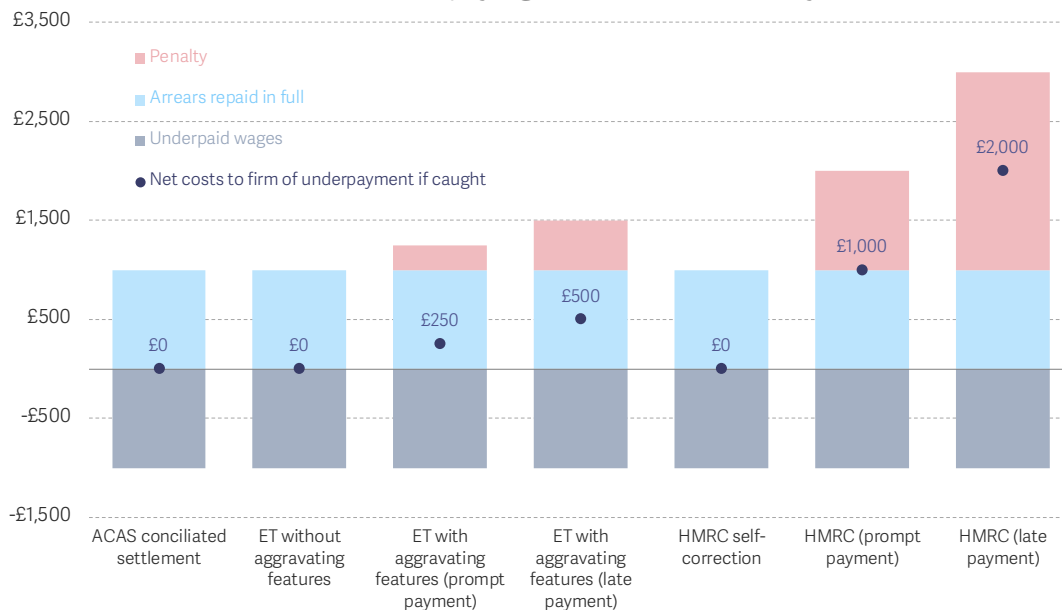
²⁶ Between 2013 and 2017 when claimants paid a fee to access the employment tribunal, cost orders were more common. Under the current regime, however, cost orders can only happen when there has been "vexatious, abusive, disruptive or otherwise unreasonable" conduct, a claimant has brought a case with no reasonable prospect of success, or has breached an order of practice.

²⁷ This penalty applies for any breaches after 1 April 2016. From March 2014 to March 2016, the maximum penalty was 100 per cent of arrears, up to a maximum of £20,000 per worker. Before March 2014, the penalty was 50 per cent of arrears, up to a maximum of £5,000 per employer.

²⁸ In magistrates' courts, the fine was capped at at £5,000 for breaches before 12 March 2015, but is now potentially unlimited.

FIGURE 4: A firm underpaying a worker by £1,000 is exposed to penalties ranging from £0 to £2,000

Potential net costs to a firm underpaying a worker the NMW by £1,000: UK, 2019



SOURCE: RF calculations based on information in Figure 3

In reality, the financial sanctions imposed on firms caught underpaying the NMW are low

In theory, then, firms caught underpaying the NMW are potentially exposed to some non-trivial financial sanctions. In practice, however, the (limited) data suggests that firms often experience little, if any, financial disadvantage as a result of underpayment even if caught. Consider, to begin, the losses that firms may actually incur if challenged by an individual.

Aggregate data on awards issued by employment tribunals in minimum wage cases is unavailable, but analysis of the Ministry of Justice online database, which holds information on all actions taken since February 2017, is revealing.²⁹ This shows that in the vast majority of cases, tribunals awarded arrears only: of the 141 cases in the online database where a firm was found to have underpaid the minimum wage and where information about the arrears or award was provided, only one featured a financial penalty for 'aggravating features',³⁰ five involved a cost award, and seven

²⁹ Analysis of judgments as of 16 August 2019, extracting all cases where the jurisdiction was one or more of NMW, unlawful deduction of wages or breach of contract, or the judgment featured the words "minimum wage", and where minimum wage arrears are listed.

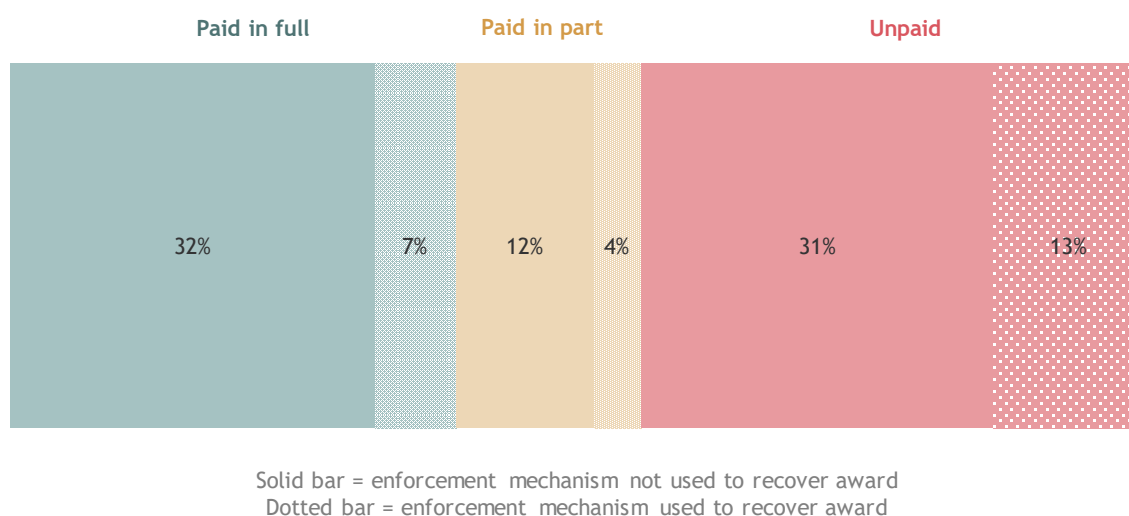
³⁰ The single NMW case featuring a financial penalty for 'aggravating features' involved a litany of labour offences against two workers: unfair and wrongful dismissal, failure to provide statements of employment, failure to pay holiday and notice pay, as well as a total of £34,516.15 underpayment of the minimum wage. For further details, see: ET case numbers 1411564/2015 and 1411565/2015.

featured compensation in relation to the minimum wage offence.³¹ The threshold to find 'aggravating features' – and therefore to levy a penalty – appears to be high for all employment offences, not just minimum wage non-compliance. Since tribunals were given the power to impose such sanctions in 2014, financial penalties for *any* aggravated breach of employment law have been levied in less than 50 of 55,000-plus successful employment tribunal cases.³²

Moreover, while all employers found to have underpaid the minimum wage in an employment tribunal are required to make good on arrears, many simply fail to pay. A 2013 study by the Department for Business, Innovation and Skills showed that in a sample of 1,200 people who had brought successful employment tribunal claims, only half were paid in full, and a third received no money at all.³³

FIGURE 5: Almost half of employment tribunal awards for wage claims go unpaid

Payment of employment tribunal awards for unpaid wages: 2013



SOURCE: BIS, Payment of Tribunal Awards, 2013

Wages claims (which includes minimum wage claims, as well as other cases of unpaid wages) were the least likely of all types of employment tribunal claim to receive the payment owed. Of their 885 interviewees who had brought successful claims for

³¹ A similar analysis of data on NMW claims in the county courts is not possible because records are not publicly available online or in a centralised database. However, the outcomes are likely similar to those in the employment tribunal: on the small claims track (for claims worth less than £10,000), the court may not order costs, fees or expenses, with only a few exceptions.

³² Number of cases inferred from Ministry of Justice Employment Tribunal Statistics, based on number of disposals per year and share of disposals which were either successful at hearing or had a default judgment. Number of penalties for aggravated breach obtained from Freedom of Information request to BEIS, FOI2019/17430, September 2019

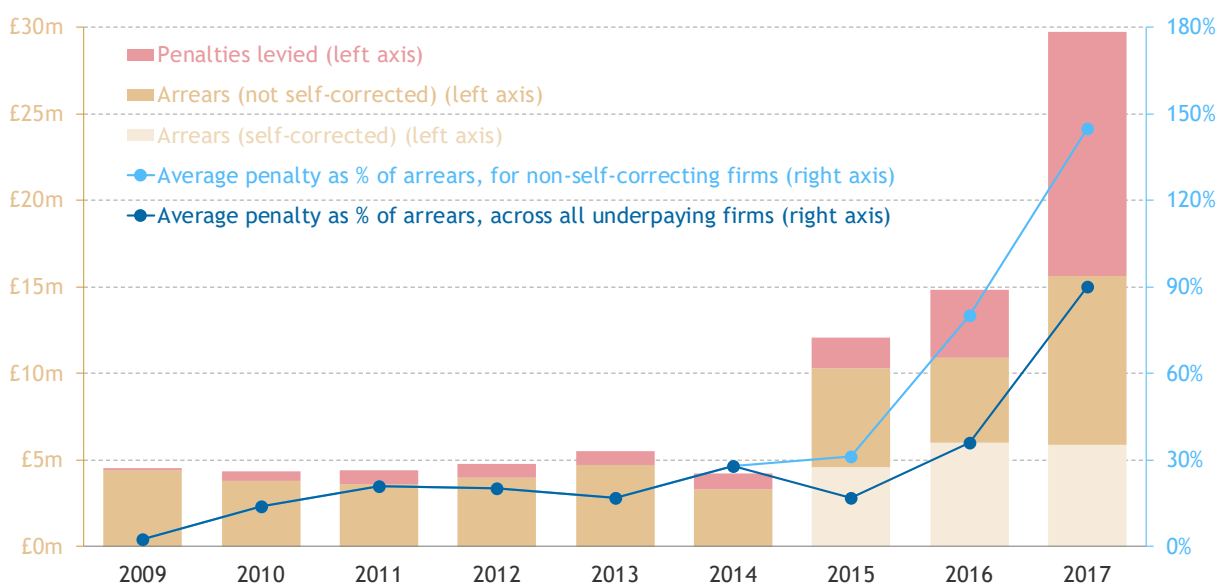
³³ Department for Business, Innovation and Skills, Payment of Tribunal Awards, 2013. A smaller study also found that less than half of people awarded payments by an employment tribunal actually received them. See: M Rose et al., Enforcement of Employment Tribunal Awards, Citizens Advice, 2014

unpaid wages, only 32 per cent received their payment in full without pursuing further enforcement, and almost half (44 per cent) received no payment at all (see Figure 5).³⁴

A firm's potential exposure is far larger, of course, if they are investigated by HMRC. In Figure 6 we show the aggregate amount of arrears recovered by HMRC each year since 2009-10, alongside the total penalties levied. It is clear that penalties have grown substantially in recent years: in 2017-18, for example, HMRC identified £15.6 million of unpaid minimum wages and levied penalties to the value of £14.1 million against firms. As a result, the average minimum wage violation incurred a penalty worth 90 per cent of the value of arrears owed, compared to around 30 per cent in 2014-15.

FIGURE 6: The penalties levied on underpaying firms by HMRC have increased dramatically in recent years, but fall short of the possible upper bound

Financial penalties levied by HMRC on firms underpaying the NMW: UK, 2009-10 to 2017-18



NOTES: Year refers to main year in financial year e.g. 2017 = 2017-18.

SOURCE: RF analysis of Table 4, BEIS, National Living Wage and National Minimum Wage: Government Evidence on Minimum Wage Compliance and Enforcement 2017-18; and Figure 9 of Low Pay Commission, Non-Compliance and Enforcement of the National Minimum Wage, April 2019

The fact that the average penalty remains below the theoretical maximum of 200 per cent of arrears is, in part, because a large share of underpayments attracts no penalty: over one-third of total arrears (£5.9 million) were self-corrected in 2017-18. In addition, of the 710 firms that technically incurred a 200 per cent penalty in 2018-19, 555 (78 per cent) paid within 14 days and therefore reduced their penalty to 100 per cent of arrears.³⁵ As a

³⁴ It is also instructive to compare the payment rate of ET awards with other types of civil penalties. The latest national data on parking penalty charges is 2010, but this suggests a non-payment rate of around 22 per cent for that year. See: Department for Transport, Survey of Local Authorities with Civil Parking Enforcement Powers, January 2011

³⁵ Freedom of Information request to HMRC, FOI2019/02042, September 2019

result, in that year the average penalty imposed on firms not offered (or not exercising) the option to self-correct was equivalent to 145 per cent of arrears. Self-correction speeds recovery and reduces the administrative burden on HMRC. But combined with prompt payment incentives, it means that in practice the majority of underpaying firms incur substantially less than the maximum penalty of 200 per cent that can in theory be issued against them.

With more powers at its disposal, HMRC's recovery rate is far higher than that of awards made by employment tribunals. Most arrears identified by HMRC's investigations are paid in a timely fashion: between April 2015 and March 2019, for example, 93 per cent were paid within one month of the HMRC assessment. Only 1 per cent took longer than one year to pay (although it is worth noting that this constituted over £300,000 of underpaid wages), and 2.6 per cent of arrears were never paid (equal to nearly £850,000 of lost wages).³⁶

Finally, it is worth noting that while grossly non-compliant firms can be charged an unlimited fine if subject to criminal action, since the introduction of the minimum wage in 1999 there have been just 14 prosecutions.³⁷ In six of these cases the fine levied was £1,000 or less, although in the three most recent cases, fines of £5,000, £14,000, and £2,977 were imposed.³⁸ As a result, there has been no significant use of criminal sanctions even for severe minimum wage violations – meaning that criminal sanctions are currently not a meaningful deterrent.

Firms likely face a far lower probability of detection than that required to incentivise compliance with the NMW

Given what we now know about the financial penalties for NMW underpayment – both in theory and in practice - we can think through the cost-benefit analysis that firms might undertake when considering whether or not to comply with minimum wage legislation. Putting aside all the normative reasons why the majority comply with the law, imagine a firm that is making a purely financial profit-maximising decision about the minimum wage. For such a firm, there is an incentive to comply only if the expected costs of non-compliance (calculated by multiplying the financial sanctions by the probability of

³⁶ Freedom of Information requests to HMRC, FOI2019/01655, August 2019 & FOI2019/01849, September 2019

³⁷ According to a Parliamentary Question, there are a further seven cases at various stages of the criminal investigations process. See Parliamentary Written Question 26214, June 2019. The 14 completed prosecutions are detailed in Annex C of: Department for Business, Energy & Industrial Strategy, National Living Wage and National Minimum Wage: Government evidence on compliance and enforcement 2017/18, 2018

³⁸ Since 2009, it has been possible to try a minimum wage case either in the crown court or the magistrates' court. In the crown court, the maximum possible fine is unlimited; in the magistrates' court, the maximum possible fine was £5,000 until March 2015, and is now unlimited

detection) are greater than the expected benefits (the savings the firm makes as a result of underpayment).³⁹

In Figure 7 we calculate the necessary probability of detection required to incentivise compliance, given the financial penalties we know are levied, in five scenarios. To begin, if our theoretical firm only anticipates being pursued by workers themselves through an employment tribunal or county court (Scenario 1), it must be *almost certain* that its NMW underpayment would be detected to have an incentive to comply, because if it is caught the firm will (almost always) only have to repay the unpaid arrears to the worker.

The required likelihood of detection is lower if the firm is also mindful of the risk of being caught by the state. If our hypothetical firm was representative of the average firm detected by HMRC, then it could expect to pay a penalty of 90 per cent of arrears if caught; this means it would need to expect more than a 53 per cent chance of detection in order to have an incentive to comply with the minimum wage (Scenario 2).⁴⁰ Even a firm subject to the maximum possible penalty of 200 per cent (i.e. a firm that receives a penalty and cannot repay within 14 days) would need to expect to be caught at least 33 per cent of the time in order to have a financial incentive to comply with the minimum wage (Scenario 5).

In reality, the probability of detection for most firms is likely much smaller than any of the figures set out in our thought experiment. According to ACAS records, just shy of 4,500 calls relating to non-payment or underpayment of the NMW were received in 2017-18.⁴¹ With the best possible estimates of underpayment from ASHE indicating there were 439,000 workers of all ages underpaid the NMW in April 2018, this suggests a probability of little more than 1 in 100 that a *worker* will even commence a formal minimum wage complaint.⁴²

³⁹ Here we follow the methodology of Y-M Chang & I Ehrlich, 'On the Economics of Compliance with the Minimum Wage Law', *Journal of Political Economy*, 93(1), February 1985, which builds on the approach initially pioneered in O Ashenfelter & R Smith, 'Compliance with the Minimum Wage Law', *Journal of Political Economy*, 87(2), April 1979. The key insight is that the expected probability of detection must be greater than the reciprocal of the amount the firm has to pay if caught (as a multiple of arrears). That is, if the probability of detection is p and the penalty multiplier is M , there is an incentive to comply if $p > 1/(1+M)$.

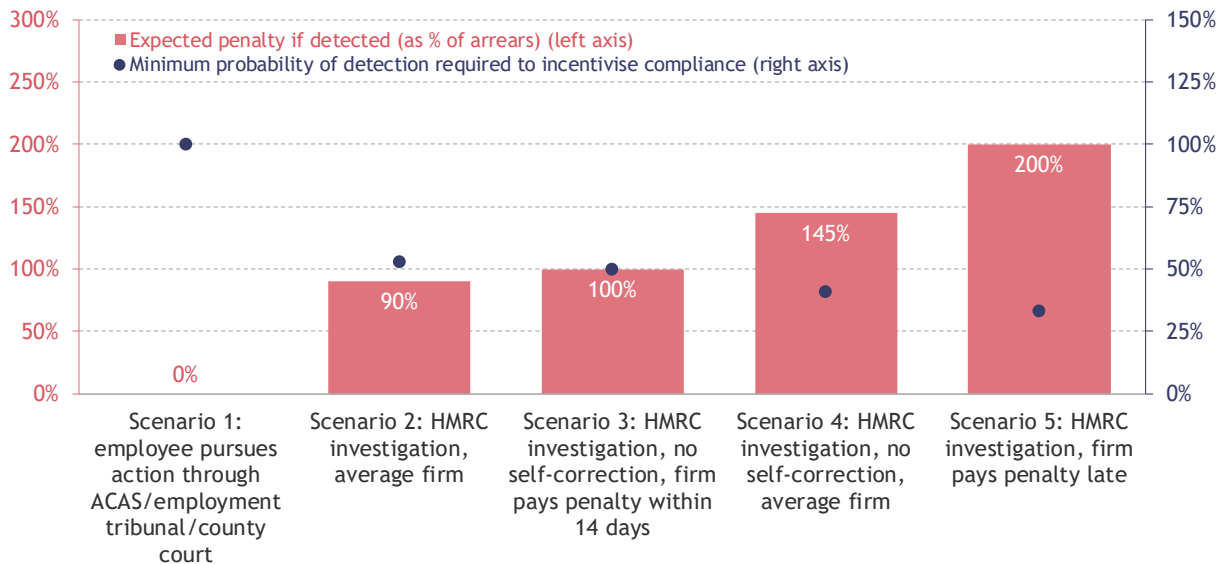
⁴⁰ To illustrate further, imagine the firm is considering underpaying the minimum wage by £1,000. The benefit of underpayment is £1,000 in extra profits. The expected cost of underpayment is the probability of detection, multiplied by £1,900 – because the firm would have to repay £1,000 in wages plus £900 in expected penalties, if caught by HMRC. The minimum probability of detection required to incentivise compliance is therefore $1,000/1,900 = 53$ per cent.

⁴¹ Department for Business, Energy & Industrial Strategy, *National Minimum Wage and National Living Wage: Government evidence on compliance and enforcement 2017/18, 2018 – Table 2*

⁴² Beyond the caveats we discuss earlier when it comes to ASHE estimates of the number of underpaid workers, the 439,000 figure we use as our denominator here is likely to be an under-estimate of the number of workers underpaid across the full year given it is a snapshot from April only.

FIGURE 7: Detection rates need to be very high for the current penalty regime to be an effective deterrent

Incentives to comply with the minimum wage – the trade-off between penalties and the probability of detection in different scenarios



SOURCE: RF calculations based on information in Figure 3; BEIS, National Living Wage and National Minimum Wage: Government evidence on compliance and enforcement 2017/18, 2018; Ministry of Justice Online Employment Tribunal Database

It is even more challenging to bottom out the chance that a firm has of being subject to an HMRC investigation. However, we can make an estimate of the absolute lower bound in 2018 by using the following logic:

- According to the Low Pay Commission's estimates, 86,000 workers in micro-firms (defined as those with nine employees or fewer) experienced measured underpayment in April 2018.⁴³ If these workers were employed in the minimum number of firms possible, 9,556 micro firms would be underpaying their workers;
- 59,000 workers in small firms (defined as having between 10 and 49 employees) were underpaid. Using similarly conservative assumptions, at the very least 1,204 such firms were underpaying their workers;
- There were an estimated 45,000 underpaid workers in medium firms (defined as having between 20-249 employees), meaning at a bare minimum, 181 such firms were underpaying their workers;
- 82,000 workers were underpaid by large firms (defined as having between 250-4,999 workers), meaning there must be at least 17 such firms;

⁴³ See Table 3 in: Low Pay Commission, Non-compliance and enforcement of the National Minimum Wage, April 2019

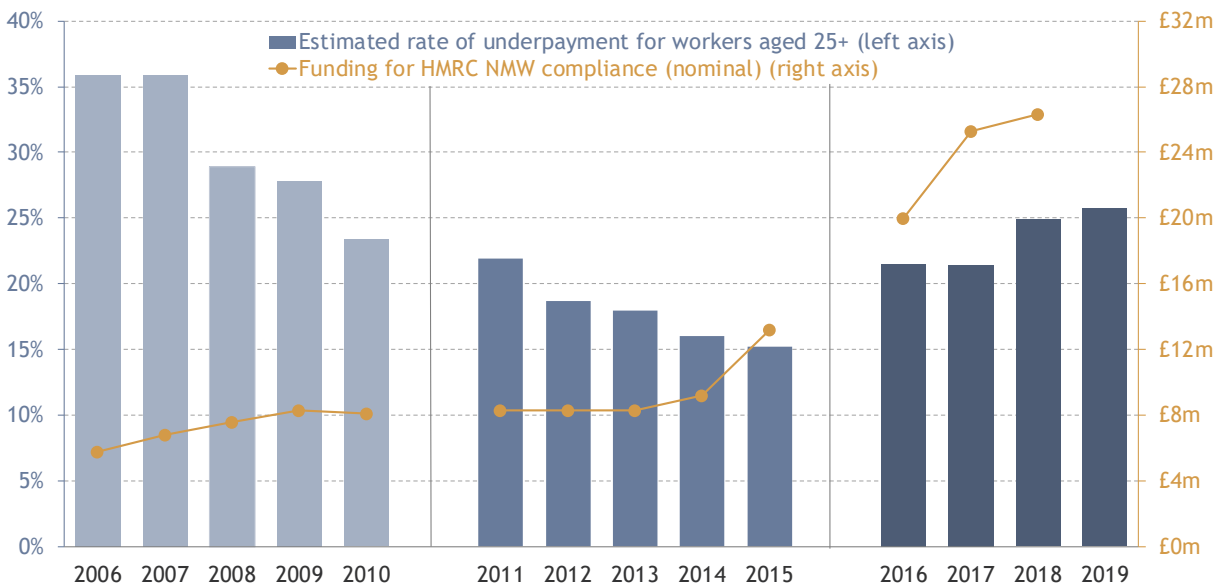
- Finally, there were 57,000 underpaid workers in very large (5,000 employees-plus) firms. We (very implausibly) assume they all work for one firm.

Taken together, these figures suggest that at the very least, around 11,000 firms underpaid their workers in April 2018. With HMRC indicating that they identified 1,456 firms underpaying the minimum wage in 2018-19, this suggests that, at the very most, an average firm's probability of detection was no more than about 13 per cent.⁴⁴ Moreover, given that HMRC has adopted a deliberate strategy of targeting larger firms that they suspect contain many underpaid workers, it is clear that smaller firms are far more likely than the average to slip through the net.

That is not to say that HMRC should not be applauded for its efforts in recent years: additional resource and many more inspectors have clearly boosted the recovery of unpaid wages for workers (with the value of arrears recovered for workers increasing nearly fivefold in the last four years).⁴⁵ However, as Figure 8 suggests, even with a significant increase to its funding, the work of HMRC's minimum wage enforcement unit has not been sufficient to stave off a rise in measured underpayment in recent years.

FIGURE 8: HMRC's enforcement budget has risen considerably in recent years

Estimated rate of underpayment for covered workers (those paid at or below the NMW/NLW-plus-5p) aged 25 and over, and HMRC budget for NMW non-compliance: UK, 1999-2018



NOTES: See Figure 1.

SOURCE: Low Pay Commission analysis of ONS, Annual Survey of Hours and Earnings, 1999-2018; RF analysis of Office for National Statistics (2019) Annual Survey of Hours and Earnings, 1997-2019: Secure Access. [13/12/19]. 15th Edition. UK Data Service. SN: 6689, <http://doi.org/10.5255/UKDA-SN-6689-14>; HMRC; NMW budget compiled by DLME from various sources

⁴⁴ Number of firms identified by HMRC in Freedom of Information Request to HMRC, FOI2019/01761, August 2019

⁴⁵ See Table 4 in: Department for Business, Energy & Industrial Strategy, National Living Wage and National Minimum Wage: Government evidence on compliance and enforcement 2017/18, 2018

Individual officers of companies can in theory be held responsible for underpayment, but this rarely happens

Beyond civil penalties, HMRC can initiate a criminal investigation against an employer if the employer has refused, or wilfully neglected, to pay the minimum wage; failed to keep records or provided false records; or delayed or obstructed a compliance investigation. In addition, under Section 32 of the Minimum Wage Act, individual officers of a company can be liable if the minimum wage offence was committed with their consent or connivance, or if it was attributable to their neglect.⁴⁶ In practice, however, these powers are rarely used. From publicly available information it appears that, since the minimum wage was introduced in 1999, there have only been 14 prosecutions of employers, and no prosecutions of individual officers under Section 32.⁴⁷

Individual company directors can also be disqualified if found to have connived or consented with underpayment, but the publicly available data suggests this has happened in just four individual cases to date.⁴⁸ This suggests that, for all but the smallest handful of cases, the individuals responsible for minimum wage violations do not face any meaningful probability of criminal liability or personal consequences.

It is interesting to contrast this state of affairs with the criminal offence of theft. In its guidelines, the Sentencing Council suggests that theft of property worth between £500 and £10,000, where the offender has 'medium culpability' (meaning that they had a significant role in the offence, that it was somewhat planned, and/or that it involved a breach of responsibility), the range of recommended sentences is between a low-level community order and 36 weeks' custody.⁴⁹ It is worth noting that many cases of NMW underpayment would fit these criteria: using data from HMRC, we show in Figure 9 that two-thirds of the firms sanctioned for underpayment since 2017 owed arrears of more than £500, and not far short of half, on average, owed individual workers more than this amount.

⁴⁶ Minimum Wage Act 1998, Sections 31 and 32.

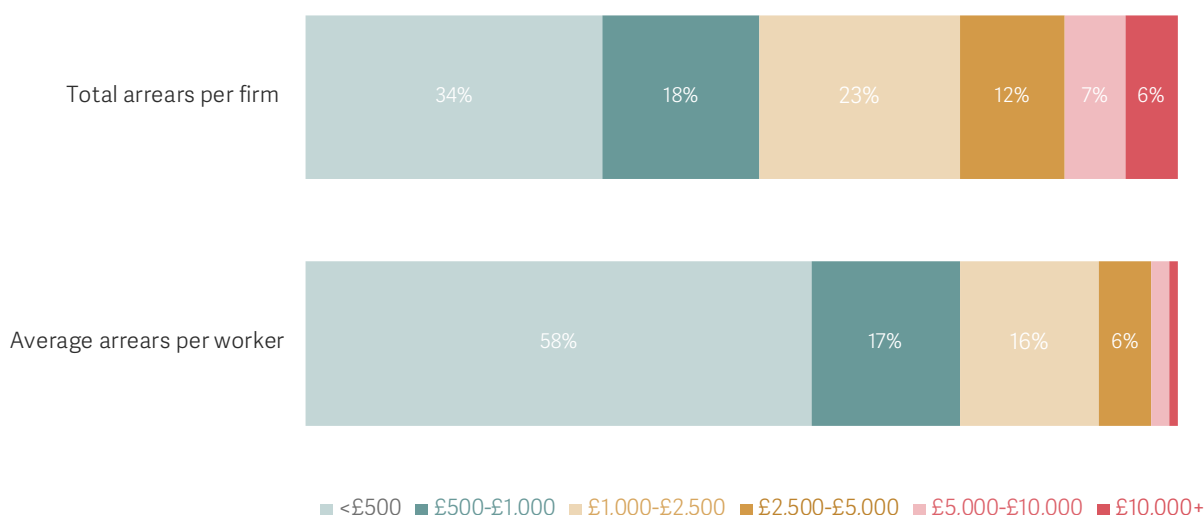
⁴⁷ Based on Annex C of: Department for Business, Energy & Industrial Strategy, National Living Wage and National Minimum Wage: Government evidence on compliance and enforcement 2017/18, 2018

⁴⁸ Since 2016, firms may also be subject to a Labour Market Enforcement Order requiring them to implement measures. A breach of such orders can be subject to criminal investigation.

⁴⁹ The Sentencing Council: Sentencing guidelines for Theft Act 1968

FIGURE 9: A significant share of NMW cases involve high values of underpayment

Total arrears per case and average arrears per worker in NMW cases identified by HMRC: UK, February 2017–July 2018



NOTES: The naming scheme has been suspended since July 2018, making this the most recent data available at the case level. Only cases in which more than £100 of arrears is identified will be named therefore some cases with very low arrears may be excluded from this sample

SOURCE: RF analysis of data from the BEIS Naming Scheme for companies found to have underpaid the NMW, February 2017–July 2018

Reputational concerns should be leveraged more effectively, but cannot be relied on

Of course, in practice, the vast majority of firms do not decide whether or not to pay the NMW only on the basis of the penalties they might incur: reputational concerns and the personal ethics of decision makers also play a role.⁵⁰ Presumably with the intent of tapping into these reputational and ethical concerns, minimum wage violations are consistently portrayed as unethical by government, and since 2011 BEIS has publicly 'named and shamed' underpaying employers. Initially only applied to those firms found to have deliberately underpaid, in recent years the naming policy has been extended to all firms with total arrears of over £100 that have been issued an HMRC Notice of Underpayment. A company's name and address are listed publicly, alongside the total arrears owed and the number of workers affected. However, the naming and shaming policy has been on hold since mid-2018 and is currently under review.⁵¹

The naming policy is valuable both to impose reputational costs on firms which violate the minimum wage, and to inform the public about the nature, scale, and scope of

⁵⁰ The classic study: T Tyler, *Why People Obey the Law*, Yale University Press, 1990, suggests that people obey the law primarily because they believe in respecting legitimate authority rather than because they fear punishment.

⁵¹ See Department for Business, Energy and Industrial Strategy, *National Minimum Wage Law: Enforcement*, November 2017

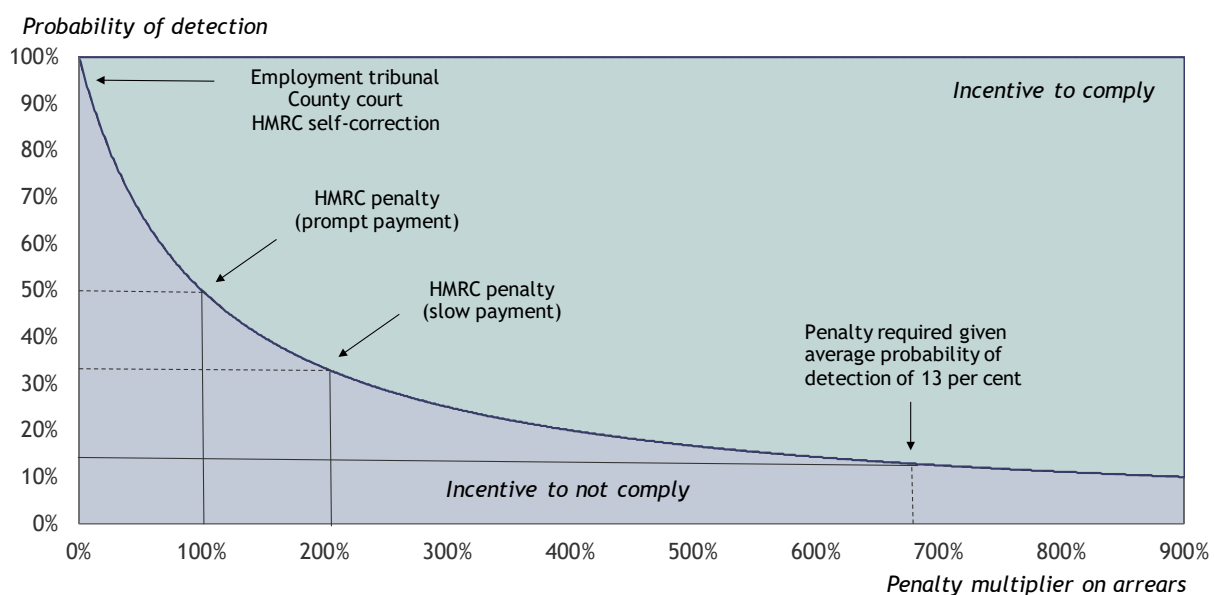
violations. It is worth noting, however, that reputational costs only affect firms if their shareholders, customers and/or workers care enough about minimum wage underpayment to refuse to invest in, buy from or work for the organisation. Likewise, ethical concerns only affect managers if they believe that underpaying the minimum wage is wrong. Neither of these is always the case, meaning successful deterrence cannot rely primarily on firms' reputational or ethical concerns. Furthermore, if even only a small minority of firms or managers are immune to such norms, it can set off a destabilizing race to the bottom as less ethical companies gain competitive advantage over those who do pay the minimum wage.

Policy needs to step up as the risk of underpayment increases

This analysis suggests that many firms have weak incentives to comply with the law – firms that will be under increasing pressure as the NMW rises in coming years. So how should policy respond? Compliance-type interventions that seek to improve knowledge about complex areas of the NMW are likely to be helpful, but our analysis suggests there is also a need to strengthen deterrence. There are essentially three ways policy makers could do this: by raising the probability of detection; increasing the magnitude of the financial penalties levied on firms when caught; and increasing sanctions on the individuals responsible for underpayment of the minimum wage.

FIGURE 10: The trade-off between penalties and the probability of detection is not linear

Required probability of detection, and magnitude of penalties required, to incentivise NMW compliance



SOURCE: RF calculations based on information from Figure 7; Table 3 from Low Pay Commission, Non-compliance and enforcement of the National Minimum Wage, April 2019; Freedom of Information Request to HMRC, FOI2019/01761, August 2019

When designing a penalty and enforcement regime, these first two levers can be traded off against each other: the higher the probability of detection, the lower the penalty required to incentivise compliance, and vice versa. What may be less intuitive is that this trade-off is not linear: when the penalty is small as a percentage of the gains from non-compliance, the probability of detection must be extremely high, and a small increase in the penalty substantially reduces the required probability of detection. In contrast, when the penalty is already high, continuing to increase its magnitude 'buys' less in terms of reducing the required probability of detection to incentivise compliance (see Figure 10).

Figure 10 also makes clear that the current system – with its upper bound average detection rate of 13 per cent, and an upper bound financial penalty of 200 per cent of arrears – falls far short of providing a meaningful economic incentive to firms to pay the minimum wage. If its expected probability of being caught is around 13 per cent, a firm would need to expect a penalty of 670 per cent of the value of arrears to have a purely financial incentive to pay the minimum wage. Setting the optimal combination of penalty and probability of detection rests on a number of considerations: the system needs to be effective but not unfairly punitive to firms who may have failed to comply by mistake, or overly burdensome on firms that are already compliant. But there are a number of actions the government could sensibly consider, as follows:

- While additional resource for HMRC would no doubt ramp up detection, more pooling of information across enforcement bodies could also **increase intelligence-led targeting**. In this respect, the government's commitment in the Queen's Speech in December 2019 to create a single enforcement body is promising;
- There is a strong case for **increasing HMRC's penalty multiplier**, something recommended by the Directorate of Labour Market Enforcement.⁵² While there is clearly a balance to be struck between a penalty set high enough to be an effective deterrent and the risk of being unduly punitive, the framework we present here provides an analytical way to assess the proportionality of any increase;
- Alternatively, **higher penalties could be levied for more severe offences**. This is currently the case in the United States, where higher penalties are levied on wilful or repeat offenders. Any such policy needs careful design: if the multiplier imposed is discretionary, this would involve substantially greater time and effort on the part of HMRC (who would need to decide whether the behaviour is severe enough to warrant such a penalty), might risk regulatory capture, and could be non-transparent to firms. A fruitful approach may be levying higher penalties based on clear criteria for the severity of the offence, such as the arrears per worker (given

⁵² D Metcalf, United Kingdom Labour Market Enforcement Strategy 2019/20, Directorate of Labour Market Enforcement, July 2019

that the higher the degree of underpayment per worker, the greater the harm inflicted on each individual); the total arrears in the case (given that firms with a large number of workers are also those most likely to have a human resources team that should be on top of the law); and when underpayment is a repeat offence (given that it is less plausible in such cases that a firm has simply made a mistake);

- Moreover, there is more that could be done to increase the deterrent effect of enforcement by individual workers. Penalties should be systematically **levied on firms which are found to be non-compliant in employment tribunals or the county court**. The Taylor Review recommended that employment tribunals should routinely apply penalties and award costs in cases of repeat offenses. Indeed, there may be a case to go further and levy a penalty as a matter of course on all firms which are found to be non-compliant with the NMW (as HMRC already does in their minimum wage investigations);
- Finally, thinking beyond financial penalties, **more use could be made of criminal prosecutions and director disqualifications**. From the perspective of deterrence, a small – but higher than present – probability of facing criminal prosecution and/or a directorial disqualification would be a substantial deterrent to serious minimum wage violations at little extra cost to the enforcement system.

Conclusion

Twenty years after its introduction, the government's goal today is to increase the minimum wage to a point where it will "end low pay altogether".⁵³ This cannot happen, however, without ensuring that all those who work at the wage floor are paid their full due.

In this briefing note we have documented the penalties which firms that underpay the minimum wage are subject to, both in theory and in practice; we have calculated that the chance of detection is likely to be very low, especially for smaller firms; and we have shown that the risk of sanctions for the individuals responsible for non-payment of the minimum wage is minimal. While we acknowledge that there have been considerable advances in minimum wage enforcement in recent years, the current level of fines and rate of detection are not sufficient to deter underpayment, which worryingly we note is already on the rise. If the incentives for firms to pay the (rapidly increasing) minimum wage rates are to be strengthened further, action across detection probabilities, the size of penalties and reputational risks is necessary.

⁵³ Speech by Chancellor Sajid Javid at the Conservative Party Conference, September 2019

Finally, our findings in this briefing note are particularly striking given that the minimum wage is one of the employment offences with the most resource allocated to its enforcement, and that attracts the highest penalties when underpayment is discovered. For unpaid overtime or holiday pay, to take two examples, there is far less of an incentive for firms to comply with the law than there is for the minimum wage. It is issues such as these that our three-year programme of research on labour market enforcement will continue to explore.

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