

A FRESH LOOK AT WHISTLEBLOWER REWARDS

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Abstract

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Research on whistleblowing has increased significantly in the last decades, and so has the number of laws governing whistleblowing. Whereas the EU recently enacted a Directive (Directive 2019/1937) protecting whistleblowers, the US has gone one step further long ago, not only protecting them but also offering substantial monetary rewards for their information. More countries are now adopting reward programs, while numerous recent instances of corporate wrongdoing suggest that the central promise of these programs: increasing detection and deterrence of wrongdoing, is highly needed not only in the US. These developments warrant a review on the optimal design of these programs, based on experience and available evidence, to obtain optimal deterrence and avoid policy mistakes. In this paper, we review the evidence for the effectiveness of the US whistleblower reward programs and consider some recent novelties. We also consider objections against these programs and local factors in the US that likely contribute to their success. Finally, we voice some concerns over the EU Directive's ability to achieve its policy objective of enhancing enforcement of Union law. We find that the evidence for the effectiveness of reward programs is significant, and that common concerns about these programs have not materialized. Whereas much of the prior literature has focused on their viability and effectiveness, further research would do well in focusing on how to effectively design these programs, what has driven their success, and what local national characteristics could hamper their effectiveness outside the US.

Keywords: Whistleblowers, Whistleblower Rewards, Corporate Wrongdoing

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1. INTRODUCTION

In June 2020, the stock of the German DAX30 listed company Wirecard dropped from €104 to below €2 in the span of nine days after the firm admitted it

could not locate \$2 billion that was missing from its accounts. The firm has been accused of money laundering, corruption, and fraudulent inflation of profits and sales, with some allegations going back a decade, yet they only admitted guilt in 2020, causing substantial losses for investors. McCrum

and Palma (2019) point out that “accusations of suspect accounting were leveled in 2008, 2015 and 2016. Each time Wirecard has alleged market manipulation, sparking investigations by the German market regulator, BaFin”. The German financial regulator, instead of investigating Wirecard, went after those who alleged fraud for “market manipulation”.

Wirecard appears an excellent case of the harm, in this case mostly to investors that poor laws and attitudes toward whistleblowers can cause. Germany is unfortunately infamous for having some of the worst whistleblower protections in Europe, and a culture that has been actively discouraging whistleblowing (Worth, 2020; Nyrreröd & Spagnolo 2021a, 2021b). Germany is also a country hosting firms that have, in the last two decades, been involved in serious and prolonged wrongdoing such as Siemens’s worldwide corruption, Volkswagen’s emissions tests cheating, and Deutsche bank’s perpetual fines for a variety of wrongdoing.

The US has taken the opposite approach to whistleblowers and offer them substantial monetary rewards, often millions of dollars, for their information on wrongdoing. Whistleblower reward programs have been used for a long time in the US in a wide variety of regulatory areas such as procurement fraud, tax evasion, securities fraud, and ocean pollution. In the last years, several changes to reward programs have been debated or implemented in the US, and they have recently expanded to anti-money laundering (AML) violations.

Whistleblower reward programs are not only proliferating in the US. Internationally, they have been growing in popularity with dozens of countries introducing reward programs in the last decades¹. These developments warrant a review of the new and increasingly available evidence on the effectiveness of financial rewards for whistleblowers.

In this article, we provide an up-to-date review of what we know about whistleblower reward programs, their effectiveness, and how objections against them have fared. We also reflect on important design features and aspects of the US programs that have contributed to their success. In Section 2, we briefly review some salient literature on whistleblowing. In Section 3.1, we review how whistleblower reward programs have expanded in the US in recent years. In Section 3.2, we assess the evidence on the reward program’s ability to detect and deter wrongdoing, the costs of maintaining these programs, and testimonies of those managing them. In Section 3.3, we consider two main objections against these programs: they undermine internal problem solving within the organization and may crowd out intrinsic moral motivation. In Section 3.4, we consider some design features of these programs, highlight their importance, and raise some concerns about the ability of some reward and protection regime’s ability to enhance enforcement to a significant degree. In Section 4, we conclude.

¹ Including Brazil, Canada, Peru, Hungary, Lithuania, Montenegro, Slovakia, Ukraine, the UK, Kenya, Malaysia, Republic of Korea, Pakistan, Philippines, Taiwan, and Vietnam. For brief overviews of these programs, see Center for Whistleblower Rigts & Rewards (n.d.).

2. LITERATURE REVIEW

Research on whistleblowing has become increasingly prevalent and available in the last decades, particularly since the 1980s. One primary objective has been to identify the situational and circumstantial factors that affect whistleblowing intention (Sims & Keenan, 1998; Miceli & Near, 2005; Feldman & Lobel, 2010), and disciplines as diverse as economics, law, organizational studies, anthropology, philosophy, all have growing sub-field dedicated to the study of whistleblowing. The topic has been approached with a variety of methodologies such as regression analysis², field and lab experiments³, case law reviews⁴, surveys⁵, economic theory⁶, and more a priori approaches.⁷ Most of these studies aim at improving our knowledge of current laws, the psychology of whistleblowers, and situational determinants of whistleblowing, usually with the aim to provide feedback to policymakers on how whistleblower laws can be improved.

The most common whistleblower laws offer them protection from employment-related retaliation, allow them to raise concerns anonymously, and offer them reinstatement and compensation when they are retaliated against. Yet, even under whistleblower protection laws, many whistleblowers still face significant retaliation (Kenny, Fotaki, & Scriver, 2019; Park, Björkelo, & Blenkinsopp, 2020). A complementary approach to protections has been to not only protect whistleblowers but also offer them substantial monetary incentives (often millions of dollars) for their information. These programs have predominantly been used in the US where they have been expanded to several regulatory areas. More and more countries are also adopting these programs, and scholars have been interested in assessing their effectiveness and whether they are cost-beneficial (Engstrom, 2018; Nyrreröd & Spagnolo, 2021a; Leder-Luis, 2020; Meyer, 2013; Carson, Verdu, & Wokutch, 2008). Much of whistleblowing research has been limited to the intentions of participants in experimental studies, primarily for pragmatic reasons, such as the difficulty of locating whistleblowers beyond those involved in publicized scandals (Oelrich, 2021). New empirical evidence that has emerged in the last two years is, therefore, of significant importance, as these studies overcome this inherent limitation.

Theoretically, the first formal economic analyses of reward programs are those on

² Economists have empirically studied the effects of whistleblower laws in various ways (Dyck, Morse, & Zingales, 2010; Wiedman & Zhu, 2018; Leder-Luis, 2020; Raleigh, 2020).

³ Experimental studies have been an incredibly popular approach in assessing various whistleblower laws. For some prominent lab experiments, see Feldman and Lobel (2010), Butler, Serra, and Spagnolo (2020). More recent works include Masclot, Montmarquette, and Viennot-Briot (2019) and Bazart, Beaud, and Dubois (2020). Field experiments are less common, but not unheard of (Fiorin, 2019).

⁴ See, e.g., Earle and Madek (2007), Moberly (2007), Modesitt (2013).

⁵ One of the earliest and most cited surveys is Rothschild and Miethé (1999).

⁶ For early theory on the subject, see Spagnolo (2004). More recent works includes Givati (2016).

⁷ In philosophy and business ethics, there is growing literature on the ethics of whistleblowing discussing the conditions under which it is morally permissible or obligatory to blow the whistle. Seminal work in this vein is De George’s theory from 1995 (De George, 2006), whose criteria for permissible whistleblowing have been widely accepted (Lindblom 2007, p. 415), to the point of being called the “standard theory” (Davis, 1996).

accomplice-witness whistleblowers. Spagnolo (2004) analyzes these programs within a dynamic model of collusion that captures the strategic features of any illegal relationship with hold-up problems within the criminal team. It is shown that offering a reward to the first self-reporting party financed by the fines paid by the remaining parties generates additional deterrence effects through “distrust” and — with finite fines — can lead to the first best of full deterrence (with zero probability of inspection from law enforcers).

Aubert, Rey, and Kovacic (2006) extend the study of rewards to whistleblowers in collusion cases by focusing on firms’ internal organization and rewards for individual employees blowing the whistle on their firm’s misbehavior. They emphasize the significant additional deterrence effects these schemes may bring about, arguing strongly for their introduction, but also highlight their possible adverse effects on firm’s behavior, in particular, on turnover, the incentives to innovate and to cooperate, and how to minimize them.

Friebel and Guriev (2012) consider rewards for innocent/bystanders whistleblowers focusing on accounting management (e.g., overstatement of financial results). They show that besides deterring such unlawful behavior by making it more costly for the management, rewards may also have negative effects on firm’s productive efficiency by limiting their ability to give managers high incentives. Felli and Hortala-Vallve (2016) show how rewarding whistleblowing can be used as a tool to prevent opportunistic behavior in the form of collusion or blackmail on the part of members of a hierarchical structure. Piccolo and Immordino (2017) study leniency programs against organized crime and suggest that when a boss can design complex internal rules that reward his agents based on the quality of the information they can disclose, the legislator must rely on rewards to induce agents to report information.

A more recent theoretical analysis is Givati (2016). This paper studies the optimal size of whistleblower rewards in a model where whistleblowers bear a personal cost, and where a reward may encourage false reports. He finds a non-monotonic relationship between the personal cost to whistleblowers and the optimal reward. A similar relationship is uncovered between the risk of a false report and the optimal reward. He also shows that when the risk of a false report is sufficiently small, whistleblowing dominates policing as a law enforcement strategy.

Our contribution is a review of the most recent literature, arguments, and administrative testimonies on these programs, in an effort to move the conversation in a direction that is supported by the most recent evidence on how to effectively incentivize whistleblowers to come forward.

3. REWARD PROGRAMS

By “reward program” we refer to programs implemented in the US with specific design characteristics. Our limited focus is motivated by the circumstance that the US programs are unified by a set of design dimensions that other programs significantly diverge from.

Three well-known reward programs in the US is with respect to tax evasion (managed by the Internal Revenue Service (IRS)), securities fraud (managed by the Securities and Exchange Commission (SEC)), and fraud against the federal government (*qui tam* provisions of the False Claims Act (FCA)). We review these programs in more detail in Nyrröd and Spagnolo (2021a), in this paper, we focus on novelties, evidence for their effectiveness, and objections against them.

In Section 3.1, we consider some recent developments with respect to these programs. In Section 3.2, we review their effectiveness and in Section 3.3, we consider two common objections to them. Finally, in Section 3.4, we consider the importance of reward size and other local factors in the US that have likely contributed to the success of these programs, and the prospects of the EU whistleblower protection Directive achieving its policy objective.

3.1. Novelties in the US

Reward programs are expanding rapidly and there is an ongoing discussion on how to most effectively design and adjust current programs. The SEC, for example, recently considered changes and made amendments to this program (SEC, 2020a). Among those accepted was a rule that whistleblowers should be paid the maximum amount (30% of the collected proceeds in an enforcement action), when the potential award amount is less than \$5 million and where there are no negative factors, such as delayed reporting or culpability. Historically, around 75% of rewards have been \$5 million or less. Further changes include that retaliation protection only applies in cases where the individual reported to the SEC “in writing”.

The SEC also considered but rejected a “cap” on rewards that exceeded \$30 million in cases where the whistleblower’s information aided the SEC in issuing sanctions over \$100 million. This highlights the importance attached to substantial monetary compensation, which many other international reward programs do not offer.

In another novelty, the US recently enacted a new AML program (31 U.S.C. § 5323), with respect to Bank Secrecy Act Title II and III violations, included as a substantial section in the National Defense Authorization Act of 2020/2021 (NDAA)⁸. This new program differs in some fundamental respects from the previously outlined programs. A fundamental difference is that whereas programs such as the SEC’s pay whistleblowers directly from the sanctions obtained from wrongdoers, the AML program requires congress to make annual appropriations to pay whistleblowers — and that whistleblower compensation was not included in the bill (Kostyack, 2021).

It also differs in other crucial respects. The upper limit of a reward is up to 30% of the sanctions obtained by the US government, but there is no lower bound as in the other US programs, and, therefore, no obligation to pay whistleblowers a minimum such as 10%, even if they were crucial to the success of the enforcement action. The choice to

⁸ Another section of the NDAA is the Kleptocracy Asset Recovery Rewards Act, a three-year pilot program aimed at detaining stolen assets, which awards whistleblowers up to \$5 million.

not mandate rewards may reduce the effectiveness of the program substantially. Some suggest that since AML violations usually imply other crimes such as securities fraud, tax evasion, or foreign corruption, cases where the SEC and IRS can intervene, whistleblowers should utilize these programs instead for protection and possibly a reward (Kostyack, 2021). Like the other programs, the monetary sanctions must exceed \$1 million for a reward to be considered.

The new law also differs from Dodd-Frank in that the anti-retaliation protections under this act extends to those who report internally to the employer, whereas under Dodd-Frank to qualify for retaliation protection the whistleblower must report to the SEC directly⁹. Another anomaly with this act is that compliance officers and auditors appear to be eligible for rewards, whereas under Dodd-Frank these occupational roles face restrictions on their eligibility.

In other developments, US Senators recently introduced a bill that would allow whistleblowers to be rewarded for reporting on antitrust violations (SIL21191 6C1¹⁰). The US considered introducing a reward program in antitrust a decade ago (GAO, 2011). Back then, enforcement agencies did not support the proposal, though it is not clear whether they considered rewards for innocent witnesses, for accomplice-witnesses, or both (GAO, 2011, pp. 36-50). The main concern voiced in this report appeared to be about the possibility that monetary rewards could diminish the credibility of whistleblowers as witnesses. However, if many firms and individuals are involved in a crime, as is typically the case for cartels, this concern could be easily remedied by rewarding the first reporting firm/individual that reports the cartel, provide only leniency/immunity to a second firm/individual that collaborates, and then have this second firm/individual that did not receive financial rewards testify in court.

The same report also voiced other concerns, noting that antitrust rewards would undermine internal reporting, generate claims without merit, and require additional resources. All these concerns have been brought up before against whistleblower rewards, and the available evidence suggests that they have been overstated (Nyreröd & Spagnolo, 2021a).

3.2. Assessing effectiveness

In this section we assess the effectiveness of the US whistleblower reward programs, considering empirical and experimental evidence (Section 3.2.1), the cost of obtaining the enforcement benefits (Section 3.2.2), and briefly consider practitioners' evaluations of these programs (Section 3.2.3).

3.2.1. Evidence on detection and deterrence

Perhaps the most desirable policy objective with respect to incentivizing whistleblowers is for those incentives to have a deterrent effect on those who

are inclined to commit crimes. Inducing deterrence is far less costly than dealing with crime post hoc, in terms of enforcement, imprisonment, and court costs. The deterrence effects of various kinds of sanctions for crimes, as well as the deterrence effects of more severe criminal sanctions, have been surprisingly hard to document (Chalfin & McCrary, 2017). In the whistleblower reward case, the "holy grail" of evidence of deterrence has been obtained by several recent studies.

Empirically, Amir, Lazar, and Levi (2018) find a deterrence effect of a whistleblower reward program in the tax area in Israel, and Wiedman and Zhu (2018) find that Dodd-Frank's whistleblower program had a deterrent effect on aggressive financial reporting in the US firms.

Experimentally, Abbink and Wu (2017) find that rewards strongly deter illegal transactions in a one-shot setting, but with limited effects in repeated interactions. Bigoni, Fridolfsson, Le Coq, and Spagnolo (2012) find evidence that rewards significantly deter cartel formation. Breuer (2013) finds that monetary rewards lead to increases in the reporting of tax evasion. Also in the tax area, Masclet et al. (2019) and Bazart et al. (2020) while not considering rewards, highlight how they can increase tax compliance in comparison to mere audit-based schemes.

Other studies, that did not consider rewards, also highlight the significance of whistleblower information. Wilde (2017) finds that firms subject to whistleblower allegations exhibited reduced financial misreporting and tax aggressiveness. The deterrent effect persists for at least two years after the allegations. Johannesen and Stolper (2017) also show that whistleblowing appears to have had a deterrent effect in the offshore banking sector by inducing a shock to the perceived risk that tax evasion will be detected. We review these studies in more detail in Nyreröd and Spagnolo (2021a).

More recently, two empirical papers have also found the deterrence effects of reward laws. One of the most impressive and rigorous studies on the topic is Leder-Luis (2020), who empirically measures the costs and benefits of private enforcement under the FCA. He models the decision of the whistleblower to litigate as compared to socially optimal behavior and discusses the key magnitudes needed to understand efficiency.

The empirical analysis pairs a novel dataset on whistleblower filings and their allegations with large samples of Medicare claims data from 1999-2016, which allows him to measure the benefits of whistleblowing, the deterrence effects of select whistleblower cases, the public costs of whistleblowing, and its effects on patient health outcomes.

He further conducts several case studies of large, settled whistleblower lawsuits and analyzes their effects on Medicare claims and spending. To estimate counterfactuals in the absence of whistleblowing, he applies a synthetic control methodology to the case studies and then compares spending on types of medical care subjected to whistleblowing against the synthetic control group constructed of similar types of care not subject to whistleblowing.

The results suggest that the deterrence value of whistleblower cases is high, with deterrence

⁹ That retaliation protections only extend to those reporting directly to the SEC was decided in a 2018 ruling by the Supreme Court in *Digital Realty Trust Inc v. Somers* (2018).

¹⁰ https://www.klobuchar.senate.gov/public/_cache/files/e/1/e171ac94-edaf-42bc-95ba-85c985a89200/375AF2AE4F2AF97FB96DBC6A2A839F9.sil21191.pdf

exceeding \$18 billion in the first 5 years for the 4 case studies considered, and on average 6.7 times the settlement value of the cases. Further, he only considers only specific deterrence effects and not general ones. General deterrence is when whistleblowing on a particular kind of fraudulent behavior leads to subsequent deterrence of other unrelated kinds of frauds due to a fear of being caught. This, therefore, constitutes a lower bound of the total deterrence effects of the cases he considers.

In another recent study, Raleigh (2020) tests the effectiveness of Dodd-Frank's whistleblower provision on reducing insider trading by corporate insiders — a form of violation widely regarded to be more difficult to detect than corporate-level fraud. He finds that for a sample of firms that lobbied against Dodd-Frank's whistleblower provisions, the profitability of insider purchases significantly reduced post Dodd-Frank relative to the profitability of other insiders. Similar results are obtained for insiders within firms with weak internal whistleblower programs, who are more likely to be sensitive to the new regulation, and for other analyses of insider transactions. The broader finding is that whistleblowers are effective deterrents of insider trading and a valuable resource for uncovering this hard-to-detect illegal activity.

3.2.2. Detects and deters, but at what cost?

The evidence indicates that reward programs are effective at detecting and deterring infringements. But these outcomes may be obtained at a high price: it may be that while reward programs increase the rate of detected wrongdoing, it also significantly increases the rate of false, frivolous, or random reports to the enforcement authorities, which increases administrative costs.

Some observers have expressed concerns over the administration costs of reward programs (Ebersole, 2011; Financial Conduct Authority, 2014). It may be that the administrative costs outweigh the benefits received in terms of information on wrongdoing. There are few rigorous cost-benefit analyses of whistleblower reward programs, but from what we know these programs appear cost-effective.

Leder-Luis (2020) considers costs, such as expenditures by federal agencies overseeing and contributing to litigation, and private costs of attorneys, by using federal budget data reports. He estimates that total public spending was at around \$108.5 million in 2018, compared to the significant benefits in terms of deterrence effects outlined in the last section. This indicates that whistleblowing has an incredibly high return on investment, and that privatization is a promising way to proceed with antitrust enforcement. Carson et al. (2008) estimate the benefits to costs of FCA's *qui tam* provision between the years 1997–2001 to be between 14/1 to 52/1, Meyer (2013) finds that the cost-benefit ratio of the FCA is 20:1.

A thorough cost-benefit analysis is a complicated task, and many previous assessments have fallen short. Consider, for example, Filler and Markham's (2018, pp. 335–336) attempt to put the alleged success of the SEC's whistleblower program into perspective, arguing that between

2012 and 2016 recoveries linked to whistleblowers are only about 5% of the overall recoveries from the SEC's enforcement program. However, they do not weigh these recoveries with the resources required to generate them. The SEC whistleblower office has around 30 employees, which compared to the rest of the SEC (in 2015 the SEC had a total of 4301 employees (SEC, 2017, p. 14)) is a meagre 0.83% of SEC's employees.

Another important aspect disregarded by Filler and Markham (2018) is that enforcement actions often take a significant amount of time, and The Wall Street Journal reports that the time it takes to receive a reward has been between two and four years at the SEC (Michaels, 2018). In 2020, the average time from the start of the investigation to the end of it was 24.1 months (SEC, 2020b). In effect, this means that a significant number of the whistleblower claims submitted in 2014, 2015, and 2016 will only materialize in successful enforcement actions in the period after 2016, making the 2012–2016 timeframe unsuitable for assessing the program.

There is a range of aspects to consider when conducting a cost-benefit analysis of these programs. A serious evaluation would require an analysis of personal costs and benefits to whistleblowers, deterrence effects, costs to firms, as well as other costs and benefits. A less demanding, but significantly riskier and more unreliable estimate, can be made based on an estimation of only administrative costs and benefits, to shed some light on the claim that these programs may be costly to administer. In Spagnolo and Nyrreröd (2021) we conduct a very rough back-of-the-envelope calculation based on the number of claims received by agencies and the amount paid out to whistleblowers. We estimate that the average whistleblower complaint at the IRS generates around \$30,664 in tax revenues, and costs \$590 to process and that the average claim at the SEC is worth around \$60,498 in sanctions and costs around \$2,263 to process.

This very rough back-of-the-envelope calculation does not take deterrence effects into account, nor the fact that although we have the number of claims submitted in recent years, it often takes several years until a reward is paid out. This means that while we have the total number of claims submitted to the IRS and SEC, we do not yet have the total number of rewards paid out due to these claims.

3.2.3. Agency experience

Another way to gauge the effectiveness of these programs is to consider agencies' and prosecutors' assessments of them. While these assessments are not independent, as agencies may be reluctant to negatively assess their own programs, in the case of reward programs their assessments have been unanimously positive across regulatory areas. An Associate Attorney General said of the False Claims Act in 2014 that "[Whistleblower reward laws are] the most powerful tool the American people have to protect the government from fraud" (U.S. Department of Justice, 2014), and more recently affirmed in 2020 by the Assistant Attorney General writing that "whistleblowers continue to

play a critical role in identifying new and evolving fraud schemes that might otherwise remain undetected" (U.S. Department of Justice, 2020).

The SEC's Office of Inspector General, an independent office within SEC that has the task of overseeing its programs to detect fraud, waste, and promote integrity and efficiency, praised the SEC's whistleblower program in a 2013 evaluation (Westbrook, 2018, p. 1159). This program has similarly been praised by many prominent figures in enforcement.

The former Chair of the SEC, Mary Jo White, has said of the program that "it has rapidly become a tremendously effective force-multiplier, generating high-quality tips and, in some cases, virtual blueprints laying out an entire enterprise, directing us to the heart of an alleged fraud" (White, 2013) and that "as the program has grown, not only have we received more tips, but we also continue to receive higher quality tips that are of tremendous help to the Commission in stopping ongoing and imminent fraud, and lead to significant enforcement actions on a much faster timetable than we would be able to achieve without the information and assistance from the whistleblower" (White, 2015). Jane Norberg, former Chief at the SEC's Office of the Whistleblower, wrote that "the total award amount demonstrates the invaluable information and assistance whistleblowers have provided to the agency and underscores the program's extraordinary impact on the agency's enforcement initiatives" (SEC, 2016, p. 1).

Dodd-Frank was controversial and opposed by republicans and, in particular, the rule implementing the whistleblower provision which passed narrowly with three SEC commissioners voting in favor and two against. However, the program has been such a success that the current SEC commissioners, appointed by Trump, have all spoken favorably of the program in public comments from September 2020. Chairman Jay Clayton stated that the program "has been a critical component of the Commission's efforts to detect wrongdoing and protect investors in the marketplace" (Clayton, 2020). The commissioners had similar positive assessments, and had the following to say of the program:

- Hester M. Peirce: "[the whistleblower program has] become an integral part of our enforcement program";
- Elad L. Roisman: "to call this program a success is an understatement";
- Allison Herren Lee: "the Commission's whistleblower program has enabled us to identify and pursue fraudulent conduct, ongoing regulatory violations, and other wrongdoing that would otherwise have gone undetected";
- Caroline A. Crenshaw: "whistleblowers are of tremendous value to the agency. They are a critical part of our enforcement program" (Kohn & Wilmoth, 2020).

3.3. Objections to reward programs

In this section, we focus on objections to reward programs. In Section 3.3.1 we consider whether reward programs undermine internal reporting and internal compliance efforts. In Section 3.3.2 we consider the argument that rewards may "crowd out" intrinsic moral motivation.

3.3.1. Undermines internal reporting

The perhaps most common objection to reward programs is that they undermine firms' compliance efforts. Firms often spend a lot of resources on internal controls and whistleblower reward programs, it has been argued, encourages employees to bypass these controls and go directly to the enforcement agencies instead of raising their concerns internally at first. More specifically, some argue that employees will not report wrongdoing internally until it becomes severe enough to pass the threshold (e.g., \$1 million) to then report the violation externally and be eligible for a reward.

As for this more specific objection, this is "mitigated by a priority race, in which the first-to-file whistleblower generally receives the bulk of the compensation" (Leder-Luis, 2020, p. 10), meaning that there is substantial risk in waiting, as another employee may report it before you. In practice, this also appears to have been less of a concern: 83% of whistleblowers report internally before going to the SEC (Westbrook, 2018, p. 1165). A review of *qui tam* cases under the False Claims Act found that 90% (113 out of 126) of those who filed *qui tam* had first contacted a supervisor with little effect, before contacting the government (National Whistleblower Center, 2011). The SEC also considers delayed reporting a negative on the part of whistleblowers and reduces the reward if the whistleblower engaged in unreasonably delayed reporting. Delayed reporting may be a concern, but in contrast to the baseline case of no rewards and protections, whistleblowers may not come forward at all — which has been a central issue with European corporate wrongdoing.

As for the more general argument that reward programs undermine internal compliance efforts, it assumes that when internal channels are utilized, they are effective and not used to identify and either punish or provide positive incentives to the whistleblower to not report externally. This assumption is questionable, and many consider reward programs response to corporations' inability to self-regulate through internal controls.

During many of the largest corporate scandals of the last two decades, company codes of conduct that disallowed wrongdoing, as well as internal channels existed (at least on paper). In Nyneröd and Spagnolo (2021b) we review instances of prolonged corporate doing and find that several firms had codes of conduct that prohibited/discouraged illegal or unethical conduct, or encouraged internal whistleblowing, during the time of the firm's wrongdoing.

On other occasions, whistleblower complaints are ignored. Consider the Wells Fargo debacle over the false account scandal. In an assessment of the Wells accounts scandal, the US Office of the Comptroller of the Currency (OCC) (OCC, 2017) concluded that untimely and ineffective supervision of complaints and whistleblower cases was one of the main issues: it turned out that Wells Fargo had received a staggering 700 whistleblower complaints related to the gaming of incentive plans. By ignoring these complaints, the OCC concluded, the bank missed several opportunities to perform comprehensive analysis and take more timely action, beginning in 2010, whereas the fraud became widely known only in late 2016 (OCC, 2017, p. 5). Wells was

also ordered by the U.S. Department of Labor to pay \$575,000 and reinstate a whistleblower who had complained about the accounts.

Furthermore, the Sarbanes-Oxley Act (SOX) of 2002 establishes internal controls and offers whistleblower protection for employees at publicly traded companies yet was not effective at preventing the financial disaster of 2008. Congress enacted Dodd-Frank, with a whistleblower reward program, as a response to that crisis.

There are also design dimensions of these programs that incentivize internal reporting first, such as a threshold of \$1 million for claims to be considered, and a reduction of the reward if the person did not use internal channels if that was appropriate. If this conflict between external rewards and internal compliance channels materializes, thresholds can be raised or further specifications be made to encourage the submission of information of value to enforcement agencies, and not information on issues that can be more appropriately remedied internally within the organization.

3.3.2. Moral crowding out

One often-heard argument is that whistleblower rewards may crowd out intrinsic moral motivation. Some studies have documented this, but to our knowledge only for smaller monetary rewards, significantly less than those awarded in the US model. Many overstate the problem to such an extent that it has become a common feature in the debate on whistleblower reward programs, without deserving that prominence. Sometimes, the conclusions of a study such as Feldman and Lobel (2010) are overgeneralized and extended significantly beyond what the authors find:

“Where potential informants lack a moral imperative to report, our findings further indicate that offering low rewards is the worst mechanism that regulators can offer, as it neither motivates high levels of reporting nor is perceived by most individuals as constituting good citizenship behavior. In fact, offering low rewards triggers less reporting than merely offering protection or establishing a duty” (Feldman & Lobel, 2010, p. 1155).

Their findings are that a reward of \$1000 slightly reduces reporting, yet in the treatment with a \$1 million reward reporting is increased, while some authors have overgeneralized their conclusions to all cases of monetary rewards. Bear in mind that the theoretical lowest reward under the US programs is around \$100,000, in the case of a \$1 million fine and a 10% reward size.

Fiorin (2019) conducted a field experiment and finds that rewards do have a crowding-out effect, but this is for rewards as low as \$1.3 for teachers reporting *co-workers* in Afghanistan. It is highly unclear how these results can be generalized to apply to the US programs, which often involve low-level employees reporting their bosses, expecting their career to end, or being fired and blacklisted by future employers.

Other experimental studies use a points-based system that corresponds to actual payouts for participants. Schmolke and Utikal (2018) do not find a strong crowding-out effect of low rewards, where a low reward corresponds to 10 points and a high

reward of 50 points: both increase the likelihood of potential informants to blow the whistle. In another study where participants are rewarded points corresponding to euro pay-outs, Butler et al. (2020) find no crowd-out effect. Farrar, Hausserman, and Rennie (2019) find that rewards do increase the intention to blow the whistle to a relevant external authority, using \$56,000 rewards in the tax area.

While there is some experimental evidence that rewards at or below \$1000 can reduce moral motivation to report, all the experimental evidence for rewards in the range of the US programs, and points-based experimental studies, concludes that rewards strongly increase reporting.

Beyond the lack of evidence for crowd out with respect to the US-style reward programs we consider, there is another reason to be cautious about overstressing the crowding out of moral motivation in this context. Rewards are merely an *option*; they are not *forced* upon whistleblowers. If a whistleblower wants to follow or signal his or her moral motivations, it is easy to do so by not applying for a reward. This appears to have happened in one SEC case involving a Deutsche bank employee who was eligible for a large reward but turned it down (Kasperkevic, 2016).

3.4. Design dimensions and drivers of success

In this section, we consider some design and circumstantial features of the US programs. We emphasize the importance of substantial rewards (Section 3.4.1) and other local factors in the US that may have contributed to the success of these programs (Section 3.4.2). Finally, we consider the new EU Directive on whistleblower protection and argue that it will likely not achieve its objective of “enhancing enforcement of Union law” to a desirable degree (Section 3.4.3).

3.4.1. The significance of reward size

A notable difference between the US programs and other international programs is that they offer significantly lower rewards (Brazil 5% program in corruption, Ontario 5–15% in securities violations, and antitrust reward programs in Hungary, Slovakia, Peru, and the UK offer capped rewards at around \$100,000). Are there reasons to think that lower rewards will generate suboptimal enforcement benefits or not achieve the same deterrence effects as the US programs? This section reviews some concerns in this regard.

The one country that has the most longstanding reward program in antitrust is South Korea. What is salient about their experience is that they successively increased the reward size, starting with \$19,000 in 2002, to then be increased to \$94,000 in November 2003 because the level of reporting did not meet expectations (KFTC, 2010). The program was still not considered successful, which was partially attributed to the low reward size. The Korean Fair-Trade Commission then modified the program again in 2005, increasing the reward to approximately \$1 million (Sullivan, Ball, & Klebolt, 2011). Finally, the Commission increased the reward cap again in 2012 from \$1 million to \$2.8 million (Stephan, 2014). This suggests that they believed more and/or better

information could be solicited by increasing the cap of their reward program.

There is little empirical evidence to our knowledge on the success of lower-range reward programs. A cause of concern about lower, discretionary rewards is that they exist in one form or the other but are rarely heard of or touted for generating substantial enforcement benefits. The Bank Secrecy Act in the US previously had a \$150,000 discretionary reward provision for decades, yet we do not know of any whistleblower who received a \$150,000 reward under the act, nor was this provision widely discussed or recognized. The Chair of the UK Competition and Markets Authority, responsible for the UK's antitrust whistleblower reward program, argued that "the £100,000 limit that it has set on such payments is far too low", and "should be commensurate with the financial impact, the loss of career prospects, and the distress that whistleblowers may encounter" (CMA, 2019).

It is well known that the repercussions for blowing the whistle are often substantial. While rewards in the range of \$10 million may seem excessive to many, they may not be so in the context of the person who reports on wrongdoing. Those with the best actionable information are often the higher-ups in the organization with higher wages, and with the most to lose in the case of blowing the whistle (Engstrom, 2018). Moreover, there are sometimes positive incentives to keep quiet, that are either offered at the outset or as a response to internal whistleblowing. Call, Kedia, and Rajgopal (2016), for example, find that firms grant more rank-and-file employee stock options when involved in financial reporting violations, which may act as an incentive to discourage employee whistleblowing. It was perhaps for reasons like these that the SEC in 2020 decided to not put a soft cap on rewards at \$30 million.

The issue of managing to incentivize those with quality information to come forward is likely compounded by the second feature of discretionary, low reward, flat-cap antitrust programs. These programs do not proportion the willingness to report in relation to the severity of the wrongdoing, whereas under the 10-30% programs the more egregious the wrongdoing, the higher the fine/recoveries, the higher the reward. From the point of view of the wrongdoer: the more egregious the wrongdoing, the higher the incentive to bribe internal troublemakers, and if that does not work the threat of retaliation needs to be made more salient to dissuade potential whistleblowers. Low reward programs may, therefore, encourage those with poor information but a low cost of reporting to come forward, while not managing to persuade those with good information but a high cost of coming forward. Further, if there is any support for the "moral crowding out" argument we discussed in Section 3.3.2, it is with respect to lower (or very low) reward sizes.

Why have some policymakers gone for lower reward sizes internationally, and not the 10-30% regimes with documented successful experience and evidence of their success? One argument for lower rewards has been that large rewards will incentivize persons to create false reports in the hope of

substantial pay-outs. Yet, there is little to no evidence that the fabrication of evidence or false reports is a prevalent issue (National Whistleblower Center, 2014). Moreover, fabrication of evidence and knowingly untrue assertions can be penalized and are illegal under perjury laws or invites defamation suits.

The False Claims Act, for example, contains safeguards against fabricated claims and wrongdoers who apply for rewards. It states that when the whistleblower initiated or planned the wrongdoing, courts can reduce the reward below 15 per cent as they see fit (False Claims Act, 31 U.S.C. §3730 (d) (3)). Should the whistleblower lie to the court, the person risks felony charges punishable by up to five years in jail for perjury and the possibility of being convicted of other crimes related to lying under oath. Further, the False Claims Act has a reverse fee-shift for obviously frivolous claims (Engstrom, 2018, p. 344). Alternatively, penalties for frivolous claims can be written into the whistleblower law.

3.4.2. Attorney interest and agency discretion

Another frequently overlooked feature of the US programs is the attorney interest they generate. Currently, in the US, the decentralized enforcement approach has attracted a lot of law firms, who often work for a "contingency" fee, taking around 30% if the whistleblower wins. This has led several law firms in the US to focus specifically on whistleblower representation under the SEC program and the False Claims Act, and they encourage whistleblowers to come forward to them. Educational and informational media has been created by several law firms appealing to potential whistleblowers, often followed by encouragement to contact them if one is looking for representation. The discretionary, low reward, flat-cap-programs are unlikely to generate anything comparable in terms of an army of lawyers actively pursuing these claims, which also functions as a screening stage to assess the likelihood of the whistleblower succeeding, as lawyers are unlikely to represent whistleblowers who they believe would not get a reward. This externality of the 10-30% model may be a central driver of the success of these programs, and any country looking to implement a reward program, in the absence of a civil litigation culture like in the US, should take this into account.

Other design features may also be central to the success of the US programs. Whereas a no-reward decision in the US can be appealed in tax court for the IRS program, or a relator can choose to bring the claim even if the Department of Justice does not decide to join in a False Claims Act suit, similar recourses are not available under other programs, where the decision to reward and to what extent is entirely at the discretion of the agency, although they follow certain guidelines. Potential whistleblowers may not want to bet their financial security on the good mood of a bureaucrat, without legal recourse if they feel they have been wronged. Similarly, lawyers may be less likely to represent whistleblowers if the reward is entirely at the agency's discretion, without the possibility of appeal.

3.4.3. Protection versus rewards and the EU Directive

By the end of 2021, all European member states should have transposed the new EU Directive on whistleblowers (Directive 2019/1937), which mandates that countries enact laws protecting whistleblowers from retaliation. This gives whistleblowers that are fired or subjected to other adverse employment actions the option to turn to a court or tribunal and argue that they were retaliated against for blowing the whistle. In the best case, courts determine that the whistleblower is correct and orders the employer to pay back the costs incurred due to the retaliatory actions and sometimes to reinstate the whistleblower (e.g., Public Interest Disclosure Act (PIDA) in the UK and the Sarbanes-Oxley Act in the US).

The EU whistleblower Directive follows the spirit of prior whistleblower protection laws. But there is little evidence that these protection laws have been effective at making blowing the whistle a zero-sum action (no benefits or cost incurred for the whistleblower). Instead, experience with previous whistleblower protection laws suggests that whistleblowers are often worse off than if they had kept silent.

For the UK's Public Interest Disclosure Act, whistleblowers rarely win and are often not fully remedied (Lewis, 2008; Thomas Reuter Foundation & Blueprint for Free Speech, 2016; All Party Parliamentary Group for Whistleblowing, 2020). Under SOX whistleblowers rarely win (U.S. Department of Labor, 2017), and are often worse off when they win (Earle & Madek, 2007), and arguably significantly under incentivized (Rapp, 2007)¹¹. The EU Directive shares fundamental similarities with these protection laws, and member states will likely run into similar problems after transposing the Directive¹². Most whistleblowers are, therefore, still forced to be saints acting in the public good, a sacrifice few may be willing to make considering the substantial and hard-to-remedy damages that whistleblowing often entails.

There is surprisingly little empirical evidence to our knowledge on the added enforcement benefits of whistleblower protections. While this may be due to a lack of adequate data on the use of these programs, a recent review of whistleblower laws in 37 countries paints a discouraging picture: "Eighty-nine per cent of countries had fewer than 15 publicly reported whistleblower retaliation cases (33 out of the 37 countries in this study). Fifty-nine per cent had *no* reported whistleblower decisions at all (22 out of 37)" (International Bar Association, 2021). Moreover, even in the few cases where whistleblowers file retaliation complaints, they only succeed in 21 per cent of cases (80 merits wins out of 378 merits decisions) (International Bar Association, 2021, p. 10).

As such, the European Directive may not fulfill its promise of enhancing enforcement of Union law

to a desirable degree¹³. This is unfortunate, as robust whistleblower incentives with proven enforcement benefits appear highly needed in Europe considering the corporate wrongdoing uncovered in the last decades, including the Siemens bribery scandal, Dieselgate, the Danske Bank scandal, and the recent Wirecard debacle.

While protecting whistleblowers is of utmost importance, it is unlikely to be the game-changer when it comes to combating corruption, money laundering, procurement fraud, and securities violations. There is an apparent mismatch between what European lawmakers expect in terms of enhanced enforcement of laws due to the new whistleblowing Directive, and the historical track record such laws have when it comes to enhancing enforcement. That said, the new Directive is incredibly broad — and including rewards in the Directive may not be prudent due to the discrepancies between different regulatory areas, national differences, political controversies, and some countries' historical associations between whistleblowers and "informers" under authoritarian regimes.

There are, however, other options for implementing reward programs in the EU that do not require each member state to draft legislation and provide their respective competent authorities with a mandate to provide whistleblowers with rewards. Centralization of supervision and enforcement at the EU level has been suggested recently with respect to securities fraud (ESMA, 2021) and AML violations (Unger, 2020; Kirschenbaum & Véron, 2020). The recently established European Public Prosecutor's office, intended to investigate and prosecute fraud against the EU budget, is another institution that may be suitable for a reward program with respect to public spending and VAT fraud. Reward programs can be tailored to specific issues and regulatory contexts, where improved enforcement is urgently needed, and be designed in accordance with best practices for specific regulatory areas and types of violations.

4. CONCLUSION

Legislation governing, protecting, and rewarding whistleblowers is growing rapidly internationally and with respect to a wide range of regulatory areas. In this paper, we reviewed some novelties with respect to these programs — both in terms of new laws enacted, but also recent empirical and experimental evidence. Increased adoption warrants a better understanding of how to appropriately design these programs, and which objections against them should be given consideration to avoid negative externalities and optimize enforcement benefits.

In reviewing the evidence, we find that there is now an abundance of empirical and experimental evidence that reward programs are effective at increasing detection and deterrence of wrongdoing, and many objections against these programs have been overstated. However, the success of these programs in the United States does not necessarily translate into success elsewhere. One concern is that

¹¹ For more specific reasons why whistleblowers have had a hard time under SOX see Moberly (2007) and relatedly Modesitt (2013), which contain useful reflections on issues that will likely become an issue with more recent protection laws.

¹² To preempt some of these issues, consider Kohn (2020).

¹³ The central objective of the directive is "to strengthen enforcement in certain policy areas and acts where breaches of Union law can cause serious harm to the public interest". See also paragraphs 9, 11, 44, 85 in the Recital.

reward programs outside the US have not been modelled on the US programs. They typically offer lower, discretionary rewards, which makes it uncertain whether they will obtain similar enforcement benefits as in the US.

We conclude that rewarding whistleblowers is a promising tool to use in regulatory areas where non-compliance is prevalent, severe, supervision costly, and enforcement difficult — of which there seems to be plenty in Europe, such as anti-money laundering, procurement fraud, and securities fraud. Surprisingly perhaps, reward programs are almost unheard of in the EU, yet the robust evidence in their favor implies that they are presently underutilized as a cost-effective way to enhance enforcement.

Countries that have instituted reward programs or are considering doing so should pay attention to how the US programs are designed to increase the probability of achieving similar enforcement

benefits that numerous studies have documented under the US programs.

In this paper, we do not assess how reward programs could be implemented in different legal contexts, where local factors could hamper their success. A further limitation of this paper is that rigorous research has only been conducted on some of the US reward programs, and it is difficult to assess the effectiveness of programs with different design, including the more recent US programs, as we still know little about what precise design characteristics have been driving their success. Further research, instead of focusing on whether these programs are effective in general, could focus more on the design dimensions of reward programs, what has been driving their effectiveness, and their possible limitations given differing legal systems and national characteristics.

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