

Attitude and Potential Behaviour with regard to Whistleblowing: Evidence from Italy

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Abstract

This research investigates individual beliefs and behavioural attitudes towards whistleblowing in Italy. The phenomenon is analysed in every-day situations, trying to get behavioural analogies between people who would make the same choice of reporting / non-reporting. In order to collect data, which constitute the bedrock of this study, a survey was carried out among Italian citizens – aged between 14 and 30 – who voluntarily answered to the query. In particular, two feasible possibilities to encourage people to speak out were tested. The research reveals that reward systems are considered by would-be whistleblowers as a proper balance system of risks and benefits, which may increase the likelihood to make a disclosure; on the contrary, their lack may play a significant role in explaining the reluctance of reporting. Moreover, people's unlikelihood to report is also driven by the fact that no anonymity guarantee is granted them. Introducing anonymity may induce people to modify their previous negative attitudes into a positive choice and, therefore, it may increase people's likelihood to denounce misconducts.

Introduction

There is a community of people, often without a name, who chose to lose their comfort zone and to scream the truth. They decided to get up on the chairs of courage, in spite of becoming visible, thus threatened and judged. They were called charlatans or even traitors, charged of espionage and defamation. Sometimes they have been temporarily protected by the media, other times they won lawsuit after years of harassment, psychological terrorism, trials and discriminations. More often, they did not find any kind of protection rather committed suicide, shadowed by their hierarchy and public authorities.

For each renowned reporting person, there are several we do not know anything about. The plot of their histories may differ but they all have something in common: they are whistleblowers. Whistleblowers are the main characters of this dissertation. They hang over their head their civic duty's burden but they decided not to give up. Civil servants, journalists, bank officers, technicians, doctors and simple citizens have been the main characters of this kind of stories. They decided to speak out on bribery, frauds, financial scams, illegal practices, theft of public funds, dangerous activities, raising their concerns in the public interest.

Making such disclosures can unquestionably carry high risk, from threats to unjustified sanctions, from firing to blacklisting, from isolation to life threatening. In order to face these problems, properly systems of protection for whistleblowers must be ensured to encourage people to take the risk and to grant them full support after the disclosure.

There are so many different understandings and description of the concept behind the term that there is no one prevalent and statutory definition of whistleblowing but its invaluable role in exposing corruption¹ and misconducts is largely recognized. This thesis investigates the phenomenon of whistleblowing, starting from the general recognition of its crucial role in the fight against corruption and moving towards the analysis of adequate systems of legal protection. The question of utmost importance the research raises is "Is it possible to incentivise whistleblowing? How?".

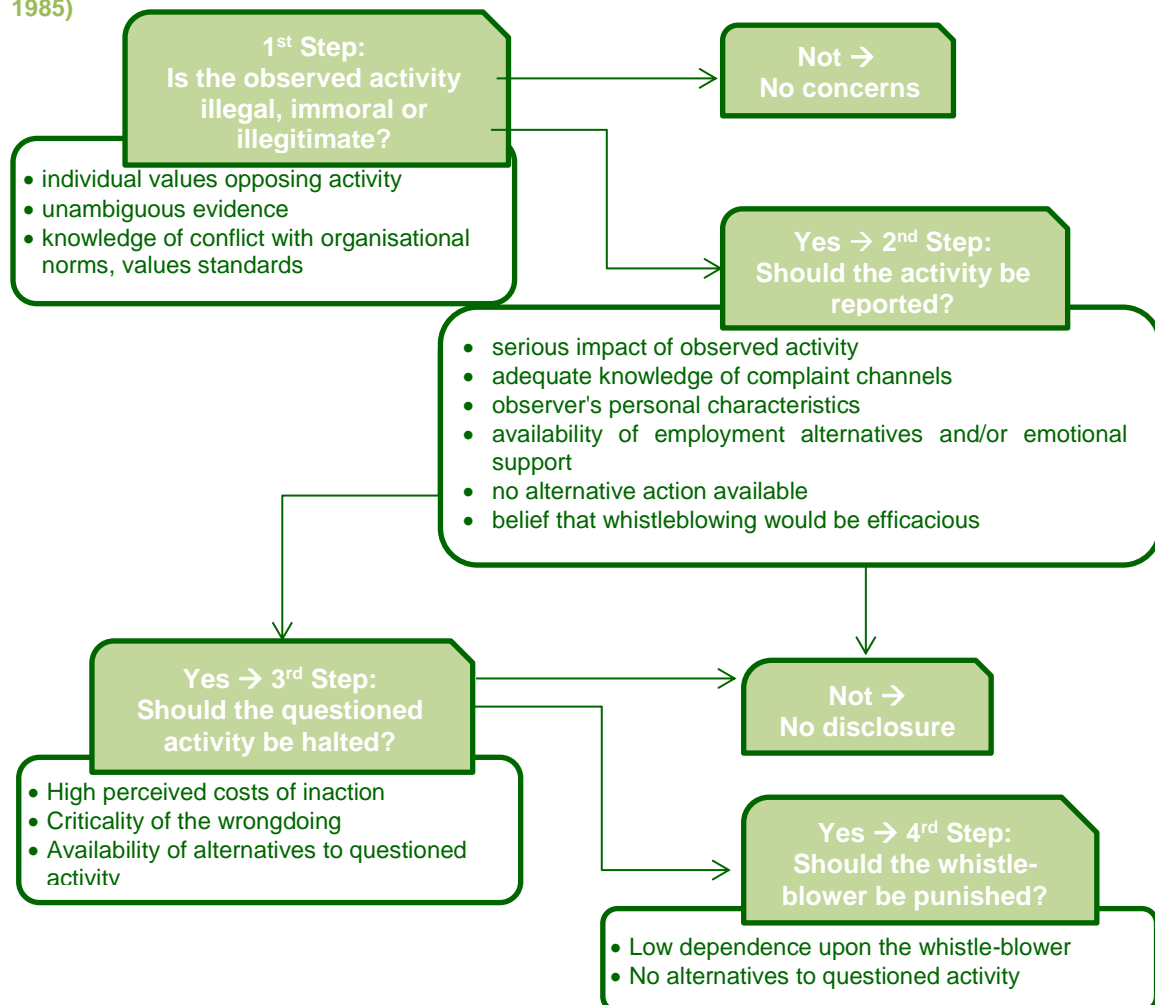
Below, a brief summary of each chapter of the thesis is offered.

¹ The term "corruption" in this thesis has a broad meaning and includes unfair and deviant behaviours.

Chapter 1 – Identifying the need of whistleblowing: definition of the phenomenon and its related cultural and ethical aspects

There are so many different understandings of the concept behind this metaphorical term that there is no one prevalent definition for “whistleblowing”. Its main characteristic is to be a deliberate non-obligatory act of disclosure of info, that others have the interest to keep secret, made by a person who has privileged access to data such as an employee (Jubb, 1999). The employee is, without any doubt, the person who is in the best position to notice and stop misconducts and even reduce their risk in the workplace, raising his personal concerns and doubts. The detection is related to activities perceived as corrupt, illegal or unethical (Rohde-Liebenau for the EU Parliament, 2006), able to threaten the public interest and committed within an organisation, government body or company (Transparency International, 2006).

Figure 1 – Steps in the whistleblowing process (personal data processing based on Near & Miceli, 1985)



In order to better understand what whistleblowing is made up of, it is considered more appropriate to analyse it as a process rather than a singular event (Figure 1). Indeed, the decision-making

process involves a succession of choices related to individual values and corporate culture, perceptions and beliefs, evaluations of risks and possible consequences. Whatever is the choice, it would the result not only of an economic balance of interests but above all of an ethical dilemma: upholding the principles of justice and fairness for the long-term well-being of the organisation or the protection of its current structure? The loyalty towards the organisation and colleagues or the honesty to himself and the public? Being a hero on behalf of public interest or a traitor towards the whole organisation and colleagues?

Moreover, this agonizing decision is also influenced by cross-cultural norms and national cultures, which play a significant role in the perception and judgment of the questionable action and in the consequent choice whether reporting misconducts or not.

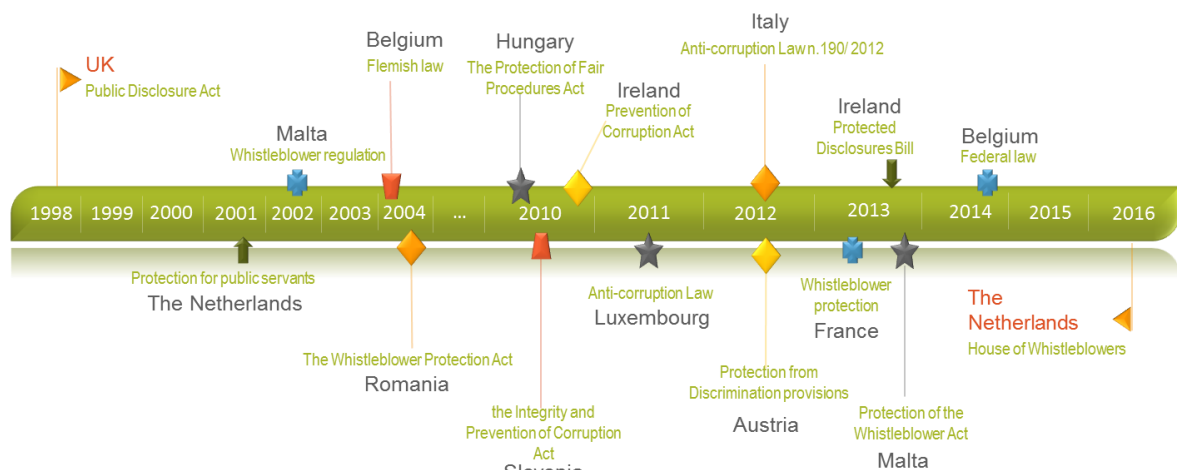
Chapter 2 – The invaluable role of Whistleblowing protection law in the fight against corruption. Leniency policies and rewarding whistleblowing schemes.

The detection and disclosure of bribery, frauds, theft of public funds, illegal or immoral practices and any other socially harmful activity is largely recognized as one of the most powerful tools to tear down the wall of silence behind which corrupt people can hide.

Let's imagine that in the last 30 years – after the introduction of the 1986 False Claims Amendments Act – only with regard to frauds at the expense of the USA government budget, \$70 billion have been recovered (equivalent to a deterrence effect of about \$700 billion saved); between the 80-85% of this amount has been recovered thanks only to whistleblowers' disclosures.

By the way, anticorruption often loses out when the fear of retaliation and inadequate legal protection deter people from reporting workplace misconducts. Indeed, several countries – first of all Anglo-Saxons – already recognized the need of legal frameworks able to foster transparency, promote a culture of accountability and integrity through dedicated whistleblowing protection laws able to encourage people to take the risk to grant them full support after the disclosure.

Figure II – Timeline of the implementation of whistleblowing protection laws in the EU (personal data processing)



Despite the well-documented importance of whistleblowers in preventing and fighting corruption and the international stimulus, this issue is not widespread yet in all Europe. Only few countries have sound legal frameworks for whistleblowing protections while the majority enacted partial provisions and procedures (*Figure II*).

Italy, for instance, represents a controversial case. In 2012, there was the first attempt of the Italian government to include into its Anti-Corruption Law (Law 190/2012 – “*Disposizioni per la prevenzione e la repressione della corruzione e dell’illegalità nella pubblica amministrazione*”) the first-ever provision to legally protect public sector employees who blow the whistle from any kind of retaliation, with the general aim of preventing corruption.

However, the European Commission itself judged the provision too general and not complete. First of all, it covers only government employees (despite of an attempt to extend the protection to the private sector) as long as they do not commit libel or defamation or harm a person’s right to privacy which are criminalized; secondly, the questionable activity reported must be connected with the working relationship and not with the general administrative activity. Moreover, anonymous disclosures are not allowed, even if the identity of the whistleblower is kept secret and protected from the inception².

The Italian delay – in comparison with the Lloyd-La Fallect Act in USA and the Public Interest Disclosure Act in UK – can be related to the political reluctance towards supporting full legal protection to whistleblowers and the non-recognition of the phenomenon from a socio-cultural point of view.

After more than one year by the approval by the Chamber of Deputies of the first comprehensive legislative proposal on whistleblowing at the national level (Disegno di Legge n. 2208, 2016), results have not been achieved yet. This draft legislation is still waiting for the inspection of the Senate, which has not included it yet in its schedule for the works. Extended protection to the private sector, in particular, is a debated issue which meets strong resistance together with a hostile cultural heritage.

The absence of specific attention in the public debate in Italy is also connected to the fact that the phenomenon is so extraneous to the Italian reality that there is not a semantically equivalent word in the Italian vocabulary to identify the Anglo-Saxon whistleblower. Rather, this phenomenon has often been labelled with unflattering nicknames and suspicious and mistrust have surrounded the reporting person: the persistence of stereotypes may clearly weaken the willingness of people to blow the whistle because of the awareness the lack of social support.

² The Anti-Corruption Authority takes into account also anonymous disclosures, but only if adequately circumstantial and detailed (*Linee Guida in materia di Tutela del Dipendente Pubblico che segnala illeciti*, 2015).

Generally speaking, becoming corruption a central political issue in many countries, several researches have focused on how best to fight it. Governments and non-governmental agencies have sponsored numerous anticorruption programs with the purpose to set effective measures to tackle it and, of utmost importance, to sustain a culture of anti-corruption with the broadest involvement possible.

In this context is worth mentioning the key role played during the last twenty years by the “leniency revolution” which has radically changed the way to detect and deter corruptive behaviours. The central feature relies on undermining trust among wrongdoers by shaping incentives to play one party against the other. In fact, generally speaking, corruption is feasible because of a strong cooperation among parties of the illegal agreement that is self-enforcing and takes the form of a long-term relationship. The particularity of this kind of programs is their potential to directly deter corruption in its broader definition by inducing whistleblowing – especially when enforcement agencies or institutions have no information about the wrongdoing – and discouraging deviant behaviours because of the increasing likelihood of reporting (Spagnolo, 2005).

The increasing debate on whistleblowing focuses on how to incentivise their choice to report illegal activities, since it would greatly reduce costs of law enforcement in addition to increasing ex ante deterrence. To reach these effects, policies should not only award leniency but also reward people who spontaneously decide to blow the whistle (Buccirossi & Spagnolo, 2005).

The main reasons why rewarding whistleblowers is usually a debated issue and usually moderate programs are preferred are ethical and political, considering immoral awarding who acted illegally. These programs reduce the pool of individuals to monitor without reducing deterrence, that is reducing law enforcement costs (Kaplow & Shavell, 1994), making the investigation activity redundant and stimulating deterrence on long term illegal relationships due to easier prosecution (Motta & Polo, 2003), increasing the incentives to defect and report and protecting whistleblowers from fines and other agents’ punishment (Spagnolo, 2005a). On the other side, they may have counterproductive side effects on occasional illegal interactions: this kind of agreements clearly cannot rely on explicit contracts enforced by a legal system and thus are exposed to opportunistic behaviours by the involved parties.

More intensive forms of leniency, that offer a reward to wrongdoers which turn their partners in, would remove this counterproductive effect (Spagnolo, 2005a) (Aubert, Kovacic, & Rey, 2005). An optimal policy must grant automatic full amnesty and reward only the first party that blow the whistle, in order to avoid the possibility to be used by the parties as a tool to reduce the expected cost of misbehaviour. This difference between the leniencies obtainable by the first reporter allows to generate “races to report” because of the “fear of arriving second”. In fact, what really makes the leniency program effective is the protection from fines effect that is the possibility to increase the gain by reporting information. Thus, all but one people involved in the illegal activity must pay the

full fine, which sum will be equal to the reward for the first reporting party. Hence, the optimal self-financing reward is increasing in fines since the second finances the first and allows awarding larger rewards, without making the policy exploitable and deterring collusion at no cost. Spagnolo demonstrates that in this way the first best is achieved while moderate leniency policies can only reach a constrained-optimal; according to him, without rewards systems no deterrence effect is really achieved.

Guaranteeing immunity and rewards to whistleblowers has been proposed also with particular referee on bribery and public corruption. In 2011, the current chief economist of the World Bank – Basu – proposed a novel idea of how taking one step towards cutting down the incidence of a specific form of corruption which is bribery, by reinforcing the voice of the bribe-giver and increasing the penalty on the bribe-taker (Basu K. , 2011). In particular, his focus was on “harassment bribes” that people often have to pay to get what they are legally entitled to and which, consequently, determine inefficiency and corrosive effect on the whole society (i.e. extortion). He proposed the following radical policy: declare the act of giving a bribe as legitimate activity, such that the bribe-giver will have full immunity³ from any punitive action by the state, double the fine for bribe-taking and make the bribe-taker pay back the bribe if discovered.

According to Basu, this policy aims not at arresting the bribe-takers but at inducing him not to accept any bribe in the first place. Indeed, under this kind of modified law, the citizen and the bureaucrat are not anymore partners in crime but their interests become divergent: the citizen who paid the bribe would be incentivised to blow the whistle and the probabilities to catch the bureaucrat who received it would increase. Thus, this new legal procedure would act as a disincentive for the would-be bribe-taker to accept the kickback, decreasing the incidence of bribery.

Dufwenberg and Spagnolo (2014) have proposed a slightly modified policy under which participating in bribery is not legal although immunity from fines is assured to whoever first reports the activity. Taking into account some institutional and moral concerns (such as huge litigation and moral costs, possible harassment, etc.) that were not considered by Basu (Drèze, 2011), they proposed amnesty and bribe restitution to the bribe-giver also in other forms of corruption as non-harassment bribes.

In these last cases, bribery may lead to distortionary situations in which illicit licences are awarded. Clearly, this is not acceptable and distortive licences must be revoked but it may discourage the whistleblowing. The authors suggest to modify the incentive scheme, introducing monetary rewards to compensate entrepreneurs for the loss of their illicit licence after reporting having paid a bribe.

³ The act of bribery is still considered illegal and the total punishment is the same but, instead of fining both parties x , only the bribe-taker is fined $2x$ while the bribe-giver 0 .

This kind of rewards must be set only to compensate such loss, thus their value is much less than the social harm produced by the distortionary corruption.

Thus, the main issue concerns not exclusively the change of law but how new policies – like those presented above – can tangibly be supported. First and foremost, reporting costs should be reduced. Since they are also determined by the inefficiency and corruption of institutions (Shleifer & Vishny, 1993), reforms of the public administration should be encouraged. Furthermore, complementary policies should be implemented. As Dufwenberg and Spagnolo suggest, reward systems must be introduced, over and above bribe restitution, to encourage bribe-givers blowing the whistle. This kind of incentive programs are an essential part of policy aimed to increase the efficiency of law enforcement institutions that should be financed by tax-payers.

Chapter 3 – Attitudes and potential behaviour with regard to whistleblowing: evidence from Italy

The focus on Italy continues on the experimental study carried on to scrutinise the attitudes towards deviant behaviours and corruption, of which whistleblowing choice can be considered a subset, and clarify the process behind the reporting choice. The intention is to understand whether exists a coherence between unfair behaviours and the reluctance of reporting misconducts. Then, there is an attempt to shed light on factors that may encourage or discourage the intention to blow the whistle, such as the anonymity prerequisite and the introduction of monetary and non-monetary rewards.

The following analysis are based on data collected thanks to the answers of a survey I designed and distributed among Italian citizens, aged between 14 – 30, through social networks between March and June 2016. The questionnaire was completed by 1658 persons, in anonymous form. In order to analyse the whistleblowing intention, the main focus was not on past experiences but on hypothetical future circumstances.

As will be explained, all the variables have been recorded in a range between a high level of fairness (and a low level of unfairness) and a low level of fairness (and a high level of unfairness): indeed, actions have been categorised depending on the tendency towards improper, unfair and – more in general – “dishonest” behaviours they indicate.

Before moving on the experimental study, some limitations of this research are noted. First, subjects were not perfectly randomly selected because of the restriction of having a Facebook profile (and being a “member” of an university page on Facebook). Moreover, the age cluster was restricted. Thus, it is possible that participants are not representative of the whole people in the country. Further researches may be conducted through different and variegated distribution channels and including a broader range of ages.

Second, the scenario presented may not contain all of the information that might normally be available. There may be problems in generalising from specific cases to the whole area of whistleblowing attitude, as the questioned activities may generate problems in determining whether specific behaviours or characteristics distinguish would-be whistleblowers from would-not-be whistleblowers.

Third, an experimental study does not invoke any kind of real-world pressures that usually the would-be whistleblower faces. The described scenarios are used to identify what individuals would do in a particular situation of their every-day life but there is the awareness that responses may differ from real-life behaviours. Moreover, as with any study on deviant behaviour that uses a self-report questionnaire approach, underreporting due to social desirability is a concern. Social desirability (“halo effect”) bias means that respondents tend to state they would behave more ethically than others.

Attitudes towards illicit, unlawful and unethical behaviours: participation in one deviant behaviour as a reasonable predictor of similar conducts in future settings

Just to give a general overview of the way in which the questionnaire was built up, the first section focuses on daily challenges people may face with ambition to find out how people would behave in circumstances in which “corruption” issues may arise and which are their ethical judgments on these potential behaviours. The proposed questions did not focus necessarily on serious or illegal actions but on situations which may reveal a tendency towards improper and unfair behaviours, like cheating and other forms of academic dishonesty on job search, looking for connections and kickback’s acceptability.

The pairwise correlation matrix revealed significant and positive correlations between the attitudes towards deviant behaviours. This means that who is incline to behave improperly or unfairly in a specific case has a positive predisposition to behave – almost always – improperly. Prior researches demonstrate that constant attitudes towards unfair behaviours over time are strong indicators of the possible connection between past and future conducts. Beck and Ajzen, for instance, affirm that past and future behaviours are correlated in the hypothesis in which the underlying attitudes and perceptions of what is considered wrong are the same (Beck & Ajzen, 1991).

Therefore, for example, cheating may determine personal consequences such as inability to advance academically or even occupational incompetence due to knowledges and skills never learned. Moreover, successful cheats may encourage people to cheat again – even at the highest levels – and it may become a natural routine as time goes by. The fact that everyone else cheats makes it something normal to which students become desensitised and thus, these ethical shortcomings are likely to continue during the adulthood (Harding, Carpenter, Finelli & Possow, 2004; Chance, Norton, Gino & Ariel, 2010). Behaviours that show a low level of academic integrity

may also influence the way in which people look for a job, making more unethical decisions in professional practice.

Even if the study is not able to investigate on the critical factors when considering whether or not act dishonestly, such similarities on attitudes, intentions and perception of what is ethical or not are noticed. Keeping these attitudes constant, participation in one deviant behaviour may be a reasonable predictor of similar conducts in future settings. Hence, the study confirms such a coherence between the attitudes towards deviant and dishonest conducts and it is easy to assume similarities in the decision-making processes.

Whistleblowing choices: positive correlation with the attitude towards unfair behaviours

The second part of the survey aims to shed a light on the intention to blow the whistle by respondents. The whistleblowing choices of respondents have been scrutinized, regardless of adduced motivations. Indeed, the variables on whistleblowing have been transformed in dummy variables were created and they take on the values 0 – in case of positive verdict – and 1 – in case of negative decision (that is the reason of the suffix ny – i.e. no and yes):

1. `wb_school_ny` : likelihood to tell to the teacher whether a classmates cheats during a quiz (0 = Yes; 1 = No, which includes the following original answers a) “I would like to but I will not because I think he will take offence” and b) “No, I think it’s not something serious enough to be reported”).

2. `wb_job_ny` : likelihood to report evidence or suspect of workplace misconducts such as a civil servant who got the job through connections (0 = Yes, which includes the previous a) “Yes, in any case” and b) “Yes, but only if no relatives or friends are involved”; 1 = No, which includes a) “No, due to the fear of possible harassment or of disclosures being ignored” and b) “No, if I could/can I would/will try to find a job through connections, too”).

3. `wb_bribe_ny` : likelihood to denounce someone who offers any kind of kickback (0 = Yes; 1 = No, which includes a) “No, but I would not accept anything” and b) “No, I see no shame in the to-and-for exchange of favours”).

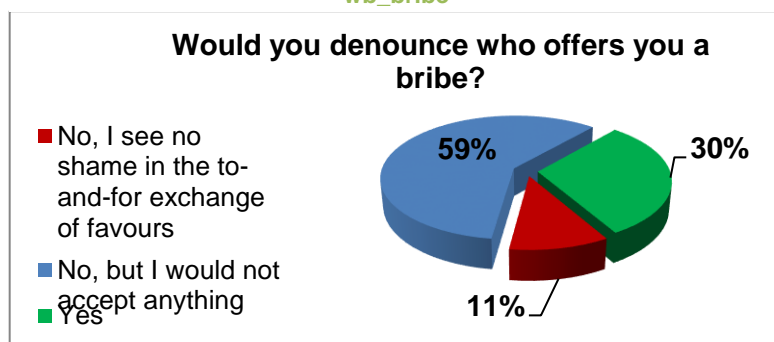
The overall results show a general diffidence or reluctance towards the decision to report, as the higher percentage of respondents expressed in every circumstance designed by the survey its unwillingness to whistleblowing.

More in details, the survey’s results reveals how the reporting choice is influenced not only by individual values but also by the perceived seriousness of the wrongdoing: for example, a low degree of seriousness is associated to cheating at school and this drastically reduces the probability to report. Who is writing is perfectly conscious that school cheating is not a wrongdoing as deplorable as bribing or acting illegally in the strict sense but it is still a deviant behaviour since it varies from the cultural norm of academic integrity (Harding, Carpenter, Finelli, & Possow, 2004).

Unwillingness to report should be examined together with the importance of prosocial behaviours since friendships' expectations and being part of group looks to be able to dishearten the whistleblowing choice: especially during the childhood and adolescence, such as in the case of attending school, people value more loyalty towards friends than fairness of conduct (Smentana, Killen & Turriel, 1991).

However, it is worth considering that people willing to blow the whistle do not constitute an absolute majority since there is a very huge group of respondents (40%) who is afraid of possible harassments and believes their disclosures will be ignored, therefore prefers to not report. These results confirm the literature on whistleblowing choice: the belief that speaking out would be useless and the lack of confidence in whistleblowing protection are the main reasons that usually keep people silent. In the survey, the fear of disclosures being ignored is positive correlated with the decision to not report, as demonstrated by Vroom (1964), thus the prospect no reaction would be triggered and no result would be achieved strongly discourage people. Moreover, this would impact on the power of retaliation, making it stronger (Near & Jensen, 1983; Near, Miceli & Jensen, 1983) and strengthening the fear of incurring on any kind of discrimination which encourages to build the wall of silence. Valid whistleblower protection law has the power to make efficient the denounce and, consequently, potential retaliations irrelevant.

Graph 1
wb_bribe



Focusing on the particular hypothesis of the likelihood to denounce who offers any kind of bribe to obtains something not legitimate or legal (See *Graph 1*), regardless of the adduced motivations, only 20 out 1658 respondents declared to be always willing to blow the whistle.

Attitude towards deviant behaviours and the non-likelihood to blow the whistle

This first investigation aims to assess the correlation between the attitude to behave dishonestly and unethically and the unwillingness to report any kind of misconduct, through three logit regression models.

Moving from the premise that one deviant behaviour is a good predictor of future deviant conducts because of the presence of significant commonalities in the decision-making process when considering whether or not behave dishonestly and unethically, let's focus on a particular deviant behaviour which is not-reporting illegal, illicit or unethical conducts.

Instead of focusing singularly on each circumstance described in the survey, it seems appropriate to consider the unfair behaviours all together as they would be part of a general and unique conduct. Hence, a new proxy variable has been created to include all the hypothesis of behavioural unfairness as an *unicum* in order to test their impact as a whole on the whistleblowing choice (the variable includes the means of all the others):

$$\text{unfairness} = \text{job_past} + \text{job_future} + \text{internship_recommend} + \text{stage_connection} + \text{cheating_school} + \text{cheating_uni} + \text{stealing_test} + \text{attitude_asl} + \text{attitude_parking} + \text{attitude_passport} + \text{attitude_bribe} + \text{gift} + \text{favour} + \text{money}.$$

This new variable has been used as the independent variables of the following logit regression models on whistleblowing choices.

1. DEVIANT BEHAVIOURS AND BLOWING THE WHISTLE ON A PEER CHEATING AT SCHOOL

The following logit model run out points out a significant and positive influence of the variable unfairness on the choice to not charge a peer with cheating at school: the likelihood of behave dishonestly is positively correlated with the attitude to not blow the whistle. In particular, the logit interpretation through predicted probabilities (*Table 1*) shows as increasing the attitude towards unfairness, the probability of not charging a peer cheating at school increases by 14%.

Table 1 – Margins unfairness on wb_school_ny

```
Average marginal effects          Number of obs =      1330
Model VCE      : Robust

Expression   : Pr(wb_school), predict()
dy/dx w.r.t. : unfairness age job_exp north south
```

	Delta-method				
	dy/dx	Std. Err.	z	P> z	[95% Conf. Interval]
unfairness	.1368143	.0353618	3.87	0.000	.0675065 .2061222
age	-.0046013	.0103606	-0.44	0.657	-.0249076 .015705
job_exp	0	(omitted)			
north	.0027753	.0098834	0.28	0.779	-.0165957 .0221464
south	-.0103157	.0082228	-1.25	0.210	-.026432 .0058006

Thus, the coherence between deviant and unfair behaviours is confirmed once again and the two-tail p-value equal to zero ensures the 100% of significance of this model.

Is it possible to encourage the whistleblowing choice? How?

Researches that examines individual and situational predictors of whistleblowing may suggest means by which valid whistleblowing can be encouraged and which may be valid and persuasive incentives to report unlawful activities, illicit actions and unethical behaviours.

Before going ahead with analysing and evaluating encouraging and discouraging factors, it is necessary to introduce a new proxy variables, which constitutes one of the cornerstone of the following regressions:

- `wb_rewards_ny`: Are you willing to change your attitude towards denouncing a bribe giver (see the variable `wb_bribe_ny` before deeply analysed) if monetary incentives or rewards are introduced by legislation in favour of who is reporting? (0 = Yes, so I will report ; 1 = No, I still do not want to report).

This variable has been modified, as well as the others on whistleblowing, in order to assess differences only with regard to the positive or negative verdict. The “Yes” cluster includes people who are willing to change their attitude if the reward is able to compensate the risks they will face because of the disclosure and people who also claim for keeping secret their identity, in addition to the monetary or non-monetary rewards; the “No” cluster instead includes both who is still certain to not reporting because of the fear of reprisals and who prefers going about their own business. This reclassification of the variable excludes those who declared to be willing to blow the whistle in any circumstance, regardless of the existence of rewards. This bunch of people is not considered since the aim is to test how people who declared their reluctance to speak out can be incentivised to change their opinion and modify their choice, blowing the whistle.

As previously discussed, the main challenge does not concern only the introduction of whistleblowing legislations and the way in which they are designed but, first of all, how they can be supported. Indeed, complementary policies – such as reward systems – must be implemented to increase the efficiency of law enforcement by discouraging corrupt behaviours because of the increasing likelihood to blow the whistle (Spagnolo, 2005b; Dufwenberg & Spagnolo, 2014). This research aims exactly to investigate how rewards influence the reporting choice.

The other cornerstone of this experimental research is constituted by the anonymity condition:

- `wb_anonymity`: is anonymity an essential prerequisite for reporting? (0 = No; 1 = Yes).

Anonymous disclosures can be considered themselves a shield for the would-be whistleblower who may feel (and actually is) more protected against any kind of retaliation he may endured as a consequence of his disclosure. Therefore, the possibility to keep identity secret can comfort and encourage people to denounce corruption.

wb_rewards_ny and wb_anonymity constitute the set of independent variables used to estimate the likelihood to blow the whistle (wb_bribe_ny).

REMINDER BOX																			
Below a summary of the responses for each question related to the variables object of study is provided.																			
<table border="1"> <thead> <tr> <th>Would you denounce who offers you a bribe?</th> <th>Respondents (%)</th> </tr> </thead> <tbody> <tr> <td>No, I see no shame in the to-and-for exchange of favours</td> <td>10.43%</td> </tr> <tr> <td>No, but I would not accept anything</td> <td>59.23%</td> </tr> <tr> <td>Yes</td> <td>30.34%</td> </tr> <tr> <td>Total</td> <td>100%</td> </tr> </tbody> </table>	Would you denounce who offers you a bribe?	Respondents (%)	No, I see no shame in the to-and-for exchange of favours	10.43%	No, but I would not accept anything	59.23%	Yes	30.34%	Total	100%	<table border="1"> <thead> <tr> <th>Will you change your previous answer, if you can obtain monetary incentives or rewards by blowing the whistle?</th> <th>Respondents (%)</th> </tr> </thead> <tbody> <tr> <td>Yes, so I will report</td> <td>58.72%</td> </tr> <tr> <td>No, I still do not want to report</td> <td>41.28%</td> </tr> <tr> <td>Total</td> <td>100%</td> </tr> </tbody> </table>	Will you change your previous answer, if you can obtain monetary incentives or rewards by blowing the whistle?	Respondents (%)	Yes, so I will report	58.72%	No, I still do not want to report	41.28%	Total	100%
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Independent t-tests checks ensured the independence of the three variables. This time, the Paired t-test is not based on the complete sample (1279 observations) since it is taken into account a subset which overlooks people who declared to be willing to blow the whistle in any circumstance, regardless of the existence of rewards, category excluded by definition in the wb_rewards_ny variable.

Now, it is possible to proceed to model the logit regressions, due to the dichotomous output variable chosen (wb_bribe_ny is a dummy which takes values 0 or 1): this kind of logistic non-linear regression will force the predicted values to be either 0 or 1, estimating the probability of not blowing the whistle (if $y = 1$). After this first step, the marginal effects of the independent variables will be estimated.

1. Rewards system

The following test aims to scrutinise the influence of the introduction of monetary and non-monetary rewards on whistleblower protection legislation on whistleblowing attitude, with the purpose of understanding whether rewards system can increase the people likelihood of reporting illegal, illicit and unethical conducts.

As anticipated, according to the literature, they have the power to directly deter and prevent corruption by undermining one of its cornerstone, which is the trust among wrongdoers (Spagnolo, 2005b; Buccirossi & Spagnolo, 2005b; Aubert, Kovacic & Rey, 2005). Indeed, well-designed

whistleblower policies are those which guarantee more intensive forms of leniency that offer both full amnesty and reward to the first reporting party: this shapes incentives to play one party against the other, determining a races to report before the others and, over time, directly decreases people involvement on deviant behaviour (Spagnolo, 2005a).

Thus, rewards have been set as the independent variable (X) and the attitude towards blowing the whistle on a bribe giver as the dependent one (Y). The question raised is: “Are rewards systems able to encourage whistleblowing?”

The first step consists on running out the succeeding logit regression:

```
logit wb_bribe_ny wb_rewards_ny age job_exp north south, robust cluster
(area)
```

in which: `wb_bribe_ny` is the Y; `wb_rewards_ny` is the main X and `age`, `job_exp`, `north` and `south` are other independent variables with the main function of control of the robustness of the results and of the p-value. The variable `centre` was not included to avoid collinearity problems.

Table 4 shows the computed logit model:

a) The iteration logs explain how quickly the model converged: moving from Iteration 0 (log

Table 4 – Logit `wb_rewards_ny` on `wb_bribe_ny`

Iteration 0:	log pseudolikelihood = -525.05044	} a
Iteration 1:	log pseudolikelihood = -459.38318	
Iteration 2:	log pseudolikelihood = -450.81275	
Iteration 3:	log pseudolikelihood = -450.76889	
Iteration 4:	log pseudolikelihood = -450.76889	
Logistic regression		
	b Number of obs = 1279	
	c Wald chi2(5) = 232.47	
	Prob > chi2 = 0.0000	
Log pseudolikelihood = -450.76889	Pseudo R2 = 0.1415	
(Std. Err. adjusted for 20 clusters in area)		

likelihood of the null model) to Iteration 4, new predictors are included to maximize the log likelihood – that is why the value increases. The differences between successive iterations is very small, thus the model has converged.

wb_bribe_ny	Robust		z	P> z	[95% Conf. Interval]	
	Coef.	Std. Err.				
wb_rewards_ny	-2.111435	.1809375	-11.67	0.000	-2.466066	-1.756804
age	-.0529673	.1658098	-0.32	0.749	-.3779485	.272014
job_exp	.0716273	.2382256	0.30	0.764	-.3952863	.5385408
north	-.343045	.3026596	-1.13	0.257	-.936247	.250157
south	-.3474601	.1767351	-1.97	0.049	-.6938545	-.0010657
_cons	3.355606	.38545	8.71	0.000	2.600137	4.111074

b) 1279 observations have been used to estimate this regression, which are lower than the original sample size

because the subset of who is willing to blow the whistle in any case was excluded.

c) The χ^2 distribution with five degrees of freedom (232.47) has a p-value equal to 0 which ensures that all the coefficients in this model are different from zero, thus the model as a whole is statistically significant.

d) The selected logit coefficient of `wb_rewards_ny` (X) for predicting `wb_bribe_ny` (Y) is negative and it implies that an “unit” change in the log odds outcome in the predicted variable, with all the others held constant, determines a decrease of 2.11 in the depend variable.

Superficially, the negative coefficient can be translated in the following way: evaluating the rewards system as a factor being able to modify attitudes towards the disclosure (i.e. lower `wb_rewards_ny` → X close to 0 that is “Yes, I change idea and now I will report”) implies an increase of 2.11 in the probability to have declared not to be willing to report a bribe giver, in a previously circumstance in which no rewards were offered (i.e. higher `wb_bribes_ny` → X close to 1 that is “No, I do not report”).

It means that if rewards are believed to be good incentives to change the previous negative attitude towards the disclosure, their introduction can be a positive stimulus for induce respondents to blow the whistle. Indeed, people who declared their reluctance of reporting a bribe giver may have answered in such a way because no reward was offered. Introducing this “balance system of risks / benefits” the likelihood to make a disclosure increases.

By the way, this is just a superficial explanation since his logit coefficient cannot be read as a regular OLS coefficient, apart from the negative sign: thus margins will be calculated in a second step.

e) The standard error associated to the previous logit coefficient is 0.18, with a z-value of -11.67, which points out a significant influence of the questioned X on the Y, and a two-tail p-value equal to zero. Therefore, the prediction is statistically significant.

To overcome the problem underlined in the letter d), predicted probabilities must be calculated. This second step involves the `margins` command which is run out from the previous fit model's prediction: `margins, dydx(wb_rewards_ny age job_exp north south) post`

in which: `dydx` requests that margins report derivatives of the response with respect to the X which is `wb_rewards_ny`; `post` makes margins to behave like a Stata estimation command.

The table 5 confirms the previous supposition: higher the value placed on rewards system, lower the probability that – without this kind of incentive – people are willing to make a disclosure. In particular, when rewards are worth one unit more by people there is a 23% decrease of the probability that they will denounce a bribe giver without any award.

in which: `wb_bribe_ny` is the Y; `wb_anonymity` is the main X and `age`, `job_exp`, `north` and `south` are other independent variables with the main function of control of the robustness of the results and of the p-value. The variable `centre` was not included to avoid collinearity problems.

Table 6 shows the computed logit model:

Table 6 – Logit `wb_anonymity` on `wb_bribe_ny`

Iteration 0:	log pseudolikelihood = -1017.5129	} a				
Iteration 1:	log pseudolikelihood = -1010.7366					
Iteration 2:	log pseudolikelihood = -1010.7261					
Iteration 3:	log pseudolikelihood = -1010.7261					
Logistic regression						
	b Number of obs = 1658					
	c Wald chi2(5) = 13.81					
	Prob > chi2 = 0.0168					
	Pseudo R2 = 0.0067					
Log pseudolikelihood = -1010.7261						
(Std. Err. adjusted for 20 clusters in area)						
<code>wb_bribe_ny</code>	Robust		z	P> z	[95% Conf. Interval]	
	Coef.	Std. Err.				
<code>wb_anonymity</code>	.3463533	.1618398	2.14	0.032	.0291531	.6635535
<code>age</code>	.1003795	.1123129	0.89	0.371	-.1197498	.3205089
<code>job_exp</code>	-.0124551	.1871893	-0.07	0.947	-.3793395	.3544292
<code>north</code>	-.1607331	.1865142	-0.86	0.389	-.5262943	.2048281
<code>south</code>	-.1712124	.1187386	-1.44	0.149	-.4039357	.0615109
<code>_cons</code>	.5218643	.380371	1.37	0.170	-.2236492	1.267378

a) The listing of the log likelihood of each iteration is useful to analyse whether the model has converged: moving from Iteration 0 (log likelihood of the null model) to Iteration 3, new predictors are included to maximize the likelihood – given

the fact that the logit model implies an iterative procedure. The differences between succeeding iterations is very small, thus the model has converged.

- b) The original sample size has been used to estimate this regression, with all the 1658 observations collected through the survey.
- c) The χ^2 distribution with five degrees of freedom (13.82) has a p-value equal to 0.0168 which is small enough to ensure the statistical significance of all the coefficients.
- d) The selected logit coefficient of an (X) for predicting `wb_bribe_ny` (Y) is positive and it implies that an “unit” change in the log odds outcome in the predicted variable, with all the others held constant, determines an increase of 0.35 in the depend variable. Generally speaking, the positive coefficient indicates that appreciating the possibility to keep the identity secret (i.e. higher value `wb_anonymity` → X close to 1, that is “Yes, I believe anonymity an essential prerequisite for reporting”) implies an increase of 0.35 in the probability to have declared not to be willing to blow the whistle on a bribe giver, in a previously circumstance in which this right was not granted (i.e. higher `wb_bribes_ny` → X close to 1 that is “No, I do not report”). In other words, if anonymity is considered an unavoidable element for making a disclosure, its grant may be able to modify previous negative attitudes towards whistleblowing into positive

Conclusions

This dissertation investigates the attitude and potential behaviours of individuals with regard to the phenomenon of whistleblowing, the deliberate non-obligatory act of disclosure in the public interest made by a person who has privileged access to information useful to prevent and detect workplace misconducts. Reporting illegal or illicit activities should be considered as a civic duty before than a right to be protected: according to Transparency International, indeed, it offers an invaluable glimmer in exposing and fighting corruption.

Several countries, first of all Anglo-Saxons, recognize the importance of legal framework able to foster transparency, promote a culture of accountability and integrity, in both private and public sectors, through dedicated whistleblower protection legislation. Despite of the international stimulus and growing public awareness, other countries still do not full recognize the potential power of ordinary people who courageously decide to behave honestly and break the wall of silence behind which corrupt people can hide their misconducts. In Italy, for instance, it is not a common practice yet rather it is often defeated because of the general attitude to label whistleblower with unflattering nicknames such as mole, leaker or spy and, as a consequence, the reporting person is surrounded by suspicious and mistrusts.

Negative perceptions and the persistence of stereotypes clearly prevent would-be whistleblowers from being socially supported and honoured for taking risks in the public interest, weakening the willingness of people to make a disclosure. Indeed, at the base of the requirement to introduce *ad hoc* provisions on whistleblowing, there is the need not only to protect who reports corruption but also to avoid any kind of workplace retaliation, from threats to unjustified sanctions, from firing to blacklisting. This research confirms how the fear of harassment and of disclosures being ignored are the main reasons keeping people silent. In general, in all the hypothesis tested, there is a higher tendency of being diffident and reluctance towards the decision to blow the whistle.

Two are the main findings of this experimental study. First of all, the likelihood to blow the whistle is certainly a cultural issue strongly connected with the culture of corruption. Secondly, encouraging people to report misconduct is a challenge possible by means of adequate legislative provisions.

The general ambition of the study was to find out how people would behave in every-day circumstances in which “corruption” issues may arise and which are their spontaneous attitudes and ethical judgments on these. The analysis reveals that who tends to behave improperly and unfairly in a specific event has a positive attitude towards dishonest behaviours in all the future settings. Even the hypothesis of cheating at school can be a reasonable predictor of similar deviant conducts: if a teenager is used to copy during a class quiz, he may deal with his first university exam with the same predisposition; starting to be a habit, cheating at the university would not be considered too much different from cheating during a public competition and so on. Moving from the presence of significant commonalities in the decision-making process when considering

whether or not behave dishonestly, the study shows positive correlations between the attitude towards deviant behaviours and the non-likelihood to blow the whistle. Higher the attitude towards unfairness, higher the probability of not charging a peer cheating at school (+14%) or a civil servant who got the job through connections (+75%) or a bribe giver (+76%).

Moreover, blowing the whistle is quite a difficult and even agonizing choice. Ensuring legal protection and introducing cohesive provisions play a fundamental role in supporting the would-be reporter and it is necessary that such whistleblowing protection laws are well designed in order to provide valid and persuasive incentives to report unlawful activities, illicit actions and unethical behaviours. This study aimed to shed light on two possible critical factors in the decision-making process: the anonymity prerequisite and the introduction of monetary and non-monetary rewards which influence on whistleblowing attitude has been scrutinised. The research reveals that introducing reward systems the likelihood to make a disclosure increases: they are considered as a proper "balance system of risks and benefits". Indeed, people who declared their reluctance of reporting may have answered in such a way because no reward was offered; in particular, when rewards are worth one unit more by people, there is a 23% decrease of the probability they will denounce without any award.

Moreover, another factor which may encourage whistleblowing is the anonymity prerequisite. Between those who stated their reluctance towards blowing the whistle, there is a statistically significant number of respondents which attributes a high value to keeping identity secret; therefore, it is possible that their unlikelihood is mainly driven by the fact that no anonymity guarantee was granted them. Granting anonymity may induce people to modify their previous negative attitudes into positive choice and, therefore, it may increase people likelihood to denounce misconducts. A one-unit increase in the evaluation of anonymity is demonstrated to determine an increase by 7.3% on the probability that they will not denounce a bribe giver without this guarantee.

There is a community of people, often without a name, who chose to lose their comfort zone and to scream the truth. They decided to get up on the chairs of courage, in spite of becoming visible, thus threatened and judged since making such disclosures can unquestionably carry high risk. In order to face these problems, properly systems of protection for whistleblowers must be ensured to encourage people to take the risk and to grant them full support after the disclosure: reward systems and anonymity are two feasible possibilities. By the way, no proper incentives may really work without an adequate cultural revolution.