

Crowding Theory and Executive Compensation

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Payment for performance is widely embraced as a key component of any well-designed executive compensation package. There is a price to be paid, however, for the heavy reliance on incentives as a way of controlling agent behavior. In particular, evidence exists demonstrating that incentives can crowd out an agent's social preferences towards her principal. Social preferences are pro-social tendencies of people to do things for others for reasons such as fairness, reciprocity, altruism, and ethical or moral beliefs. The use of incentives in compensation can result in self-interested agents. When crowding out occurs, in order to elicit the desired level of performance, principals may need to increase the level of incentive employed. Crowding out therefore provides an additional account for rising levels of executive compensation. In addition, crowding theory can provide a helpful explanation for the tension around the U.S. government's reaction to preexisting banker incentive contracts during the 2008 financial crisis.

INTRODUCTION

Incentives work. There is a large literature in economics, both theoretical and empirical, documenting the effectiveness of incentives in changing target subjects' behavior.¹ As a consequence, corporate law theorists concerned with agency costs have focused on the way incentives can best be utilized. Pay for

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1 For comprehensive surveys of the economic literature on agency costs, see Robert Gibbons, *Incentives in Organizations*, 12 J. ECON. PERSP. 115 (1998); Canice

performance, stock options, bonuses, retention contracts and corporate law sanctions are all designed to elicit certain behavior from corporate executives — namely to induce self-interested managers to act in the best interests of the corporation.

The heavy reliance on incentives as a way of controlling agent behavior may, however, come at a price. Evidence exists demonstrating that incentives can change agents' relationship with their principals. In particular, incentives can have negative impacts on agents' pro-social feelings about their principals. These social preferences reflect agents' sense of fairness, the importance of acting reciprocally, or simply the holding of ethical or moral beliefs. For example, frequently agents will work harder than is justified by their compensation. Agents may be willing to voluntarily contribute their labor in this way because they believe that working hard is fair or warranted or simply the right thing to do. Without pro-social feelings about their principals, agents would be purely self-interested, only doing things that ultimately are of benefit to themselves.

Traditional economic models assume that agents either don't have social preferences towards their principals or, if they do, are unaffected by incentives. By contrast, recent theoretical models and experiments in both economics and psychology (discussed further below) confirm that social preferences can and do in fact change following the imposition of an external incentive designed to elicit certain behavior.² "Crowding out" of social preferences occurs when incentives substitute for social preferences — that is, once an incentive contract is introduced, an agent's social preferences towards the principal declines, and the agent is less likely to voluntarily contribute effort benefiting the principal. "Crowding in" of social preferences can also occur, although far less commonly than crowding out. Crowding in of social preferences takes place when an incentive complements the preexisting social preference, amplifying an agent's tendency to act in a certain pro-social way.³

Prendergrast, *The Provision of Incentives in Firms*, 37 J. ECON. LITERATURE 7 (1999).

2 See Oren Bar-Gill & Chaim Fershtman, *The Limit of Public Policy: Endogenous Preferences*, 7 J. PUB. ECON. 841 (2005); Samuel Bowles & Sung-Ha S. Hwang, *Social Preferences and Public Economics: Mechanism Design When Preferences Depend on Incentives*, 92 J. PUB. ECON. 1811 (2008) [hereinafter Bowles & Hwang, *Social Preferences*]; Sung-Ha S. Hwang & Samuel Bowles, *Are Incentives Overused in Cases Where They Crowd Out Pro-Social Motivations* (Working Paper, 2010), available at <http://tuvalu.santafe.edu/~bowles/IncentivesOverused.pdf> [hereinafter Hwang & Bowles, *Are Incentives Overused*].

3 Deborah Rupp & Cynthia Williams, *The Efficacy of Regulation as a Function of Psychological Fit: Reexamining the Hard Law/Soft Law Continuum*, 12 THEORETICAL INQUIRIES L. 581 (2011).

In this Article, I consider how the use of incentives might impact the social preferences of corporate actors, and how large executive compensation packages, far from being a product of self-dealing behavior, might be explained by crowding theory. I argue that the widespread use of incentives appealing to an individual's self-interest has created self-interested individuals. New incentives must be designed with these changes in the attitude of agents towards principals in mind. In particular, incentives must take into account the diminished concern agents have for their principals. This means that incentives may need to be more high-powered in the presence of crowding out than if social preferences were unaffected by the presence of the incentive (as is usually assumed).

Crowding theory has implications for contracts written with corporate actors. If crowding out has taken place — more likely in firms that rely significantly on incentive contracts — firms may need to increase the amount of the incentive in order to elicit the desired level of effort. Pay packages will of necessity be bigger when crowding out has taken place. Self-interested employees will need additional inducements to continue working in their jobs effectively relative to those employees who have social preferences towards their employers. Principals will be willing to grant large incentives because they understand that the previous use of incentives has severely dampened feelings such as loyalty, fairness, and reciprocity.

Because crowding out implies an increase in agent incentives, while crowding in reduces the need for monetary incentives, governments that act as principals (as occurred recently when the United States government assumed equity positions in many financial services companies to stave off liquidation during the financial crisis) may face considerable political tension in deciding how to remunerate the remaining employees. The reason is that governments care about the public good, which is more than a simple maximization of investment returns. The public good includes an effort to limit taxpayer losses from investment, as well as concerns about inequality, fairness and stability within a community. On the one hand, concern over gaining an investment return in the short term (or at least, minimizing losses to taxpayers) would push the government-principal to increase incentives to necessary levels to ensure that agents respond appropriately. Longer-term considerations over the levels of executive pay might, however, lead a government-principal to prefer other strategies, such as shaming.

The different strategies of amplifying monetary incentives and using shaming may each lead to the same level of employee effort and output, but come at considerably different societal costs. Employing bigger incentives to spur employee effort may increase crowding out of agents' social preferences, increase inequality and lead to a sense of unfairness amongst the general

population, even as the firm's employees work to improve its performance. Public shaming of employees in firms requiring government assistance will satisfy a public sense of fairness, and may be effective in changing a culture of entitlement to large pay packages, but can be risky in the short term if employees prefer to resign, leaving already troubled firms further exposed and without the necessary level of expertise to remedy the situation.

The Article proceeds as follows. In Part I, I discuss the mainstream economic literature on how and why incentives work. Part II then reviews the less mainstream and more recent theories and experiments in behavioral economics demonstrating that external incentives can change underlying social preferences and other-regarding behavior in the context of a principal-agent relationship. In Part III, I discuss how crowding theory can provide an additional explanation for the rise in executive compensation over the past few decades. Part IV provides an application of this analysis to the recent financial crisis: I examine how crowding theory can explain the government's disjointed and often contradictory reaction to banker incentives during the financial crisis, specifically, the highly controversial retention bonuses granted to employees of A.I.G.'s Financial Products Division. The last Part concludes.

I. AGENCY THEORY

Economists have long recognized the potential for agency costs in principal-agent relationships, and have made ingenious suggestions about ways to minimize these costs. Agency costs arise when principals and agents have divergent interests and agents, in pursuit of their interests, act in ways detrimental to principals. When agents bear only a portion of the cost but receive all of the benefit from self-serving behavior, it is thought that agents will prefer to engage in this behavior in spite of the ensuing harm to the principal.⁴ One solution to this problem is to increase agents' ownership stake in the final output in order to ensure that they bear more of the costs of their activities. Another solution is for the principals to more intensely monitor agents to ensure that they behave appropriately.

Agency theory, then, takes as its starting point an assumption that individuals will act opportunistically, regardless of the harm caused to others. In summarizing the contributions of agency theory, Eugene Fama writes:

The striking insight of Alchian and Demsetz (1972) and Jensen and Meckling (1976) is in viewing the firm as a set of contracts among

4 Michael Jensen & William Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J.FIN. ECON. 305 (1976).

factors of production. In effect, the firm is viewed as a team *whose members act from self-interest* but realize that their destinies depend to some extent on the survival of the team in its competition with other teams.⁵

It is from this view of agents as primarily self-serving individuals who wish to maximize their wealth that explicit economic incentives derive their appeal. Economic incentives work by either increasing the financial benefit to an agent from acting in a certain way (for example, by awarding a monetary bonus to the agent), or by increasing the financial costs of acting in ways detrimental to the principal's interests (for example, the imposition of a fine). It is thought that through the adjustment of cost-benefit levels, principals can change the behavior of agents.

The theory of incentives is quite simple in its most basic form, and is appealing because of its promise of an easy solution to principal-agent problems.⁶ As a result, incentives are widely embraced both as a theoretical proposition within academia, and as a practical tool outside of academia. Incentive contracts in firms are widespread. Pay for performance is viewed as a critical component in almost all executive compensation packages, and criticisms of compensation packages tend to be focused on the existence of badly designed incentives that award windfall gains to executives rather than on the fact that pay is contingent on performance.⁷

5 Eugene Fama, *Agency Problems and the Theory of the Firm*, 88 J. POL. ECON. 288, 289 (1980) (emphasis added).

6 Although the theory itself is simple, the crafting of incentives has proven to be anything but. Difficulties in designing incentives derive from a well-known trade-off between risk-bearing and incentives when agents are risk-averse; the use of objective measures of performance to determine compensation which may lead workers to neglect other unobservable but important parts of their job, see George Baker, *Incentive Contracts and Performance Measurement*, 100 J. POL. ECON. 613 (1992); Bengt Holmström & Paul Milgrom, *Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership and Job Design*, 7 J.L. ECON. & ORG. 24 (1991); and the use of strong incentives which encourage destructive and counterproductive behavior: for example, in tournament models of employment, sabotage of other employees can be as effective as increased effort, see Edward Lazear, *Pay Equality and Industrial Politics*, 97 J. POL. ECON. 561 (1989).

7 See, e.g., LUCIAN BEBCHUK & JESSE FRIED, PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION (2004); Lucian Bebchuk & Jesse Fried, *Executive Compensation as an Agency Problem*, 17 J. ECON. PERSP. 71 (2003).

The effectiveness of incentives is generally taken as a given, and there is much evidence to suggest that incentives do work in some circumstances as conventional agency theory predicts. For example, researchers have found increased performance among Tunisian sharecroppers when their share of output was higher,⁸ and increased output among American windshield installers and Canadian tree planters when paid by piece rate rather than a fixed salary.⁹ Experiments have also confirmed that the use of incentives can increase output in a monotonic way. For example, Josef Falkinger et al. found that when bonuses are used, bigger bonuses lead to better performance.¹⁰

In spite of the widespread theoretical acceptance of the importance of incentives, among firms, and even within firms, there is significant diversity in the utilization of incentives to compensate employees. Some firms make use of explicit contracts that link compensation of workers to an observable measure of performance. For example, salespeople tend to get paid on a commission basis. However, there are many compensation arrangements that make little or, even more surprising, no use whatsoever of incentive schemes. George Baker, Michael Jensen and Kevin Murphy noted that practical anomalies largely unexplained by economic theory include

pay systems that are largely independent of performance, the overwhelming use of promotion-based incentive systems, egalitarian pay systems apparently motivated by horizontal equity considerations, the asymmetric effects of rewards and punishments, tenure and up-or-out promotion systems, survey-based and seniority-based pay systems, profit sharing, holiday bonuses, the generally rare observation of bonding and up-front entry fees for jobs, “efficiency wages”, and the general reluctance of employers to fire, penalize, or give poor performance evaluations to employees.¹¹

8 Jean-Jacques Laffont & Mohamed Matoussi, *Moral Hazard, Financial Constraints and Share Cropping in El Oulja*, 62 REV. ECON. STUD. 381 (1995).

9 Edward Lazear, *Performance Pay and Productivity*, 90 AM. ECON. REV. 1346 (2000); Harry Paarsch & Bruce Shearer, *Piece Rates, Fixed Wages, and Incentive Effects: Statistical Evidence from Payroll Records*, 41 INT’L ECON. REV. 59 (2000).

10 Josef Falkinger, Ernst Fehr, Simon Gächter & Rudolf Winter-Ebmer, *A Simple Mechanism for the Efficient Provision of Public Goods: Experimental Evidence*, 90 AM. ECON. REV. 247 (2000).

11 George Baker, Michael Jensen & Kevin Murphy, *Compensation and Incentives: Practices vs. Theory*, 43 J. FIN. 593 (1988).

II. CROWDING THEORY

The fact that firms choose not to reward employees using traditional monetary incentives should alert us to the possibility that doing so may incur some costs. Experiments carried out in the field and in university laboratories have shown that, indeed, there can be a price to be paid for the use of incentives. Researchers have demonstrated the general ineffectiveness of incentives in several different contexts. For example, paying students for matriculating or for test performance does not lead to improved results;¹² fines imposed on hospital administrators that were designed to reduce the length of time patients stayed in hospitals had the opposite of their intended effect;¹³ and more parents were late picking up their children from a daycare facility once monetary penalties were introduced.¹⁴

This observed phenomenon — namely, that incentives can have counterproductive effects — is known generally as “crowding out.” Crowding out theory takes as its basis the idea that in the absence of incentives, individuals are not purely self-interested beings. Rather, in addition to concern about their own wellbeing, individuals have social preferences leading them to care about other parties and how they are treated by those parties. Examples of social preferences include motives such as altruism, reciprocity, intrinsic pleasure in performing a task or in helping another, maintaining ethical commitments and holding moral concerns.¹⁵

There is much evidence that social preferences play an important role in people’s behavior.¹⁶ For example, it has been amply demonstrated that

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- 12 Joshua Angrist & Victor Lavy, *The Effects of High Stakes High School Achievement Rewards: Evidence from a Randomized Trial*, 99 AM. ECON. REV. 1384 (2009); Roland Fryer, *Financial Incentives and Student Achievement: Evidence from Randomized Trials* (NBER, Working Paper No. 15898, 2010).
 - 13 Tor Helge Holmås, Egil Kjerstad, Hilde Lurås & Odd Rune Straume, *Does Monetary Punishment Crowd Out Pro-Social Motivation? A Natural Experiment on Hospital Length of Stay*, 75 J. ECON. BEHAV. & ORG. 261 (2010).
 - 14 Uri Gneezy & Aldo Rustichini, *A Fine Is a Price*, 29 J. LEGAL STUD. 1 (2000).
 - 15 Samuel Bowles & Sandra Polania, *Economic Incentives and Social Preferences as Complements or Substitutes* (U. Degli Studi di Siena, Working Paper No. 617, 2010), available at <http://www.econ-pol.unisi.it/quaderni/617.pdf>.
 - 16 TRUMAN BEWLEY, WHY WAGES DON’T FALL DURING A RECESSION (1999); Colin Camerer & Ernst Fehr, *Measuring Social Norms and Preferences Using Experimental Games: A Guide for Social Scientists*, in FOUNDATIONS OF HUMAN SOCIALITY: ECONOMIC EXPERIMENTS AND ETHNOGRAPHIC EVIDENCE FROM FIFTEEN SMALL SCALE SOCIETIES 55 (Joseph Henrich et al. eds., 2004); Ernst Fehr & Armin Falk, *Psychological Foundations of Incentives*, 46 EUR. ECON. REV. 687

experimental subjects in an ultimatum game rarely behave as economic theory would predict. In an ultimatum game, one player, designated the proposer, has the opportunity to propose a division of a sum of money between herself and another player, designated as the responder. If the responder accepts the proposed division, the sum is divided and distributed between the players. If the responder rejects the proposal, neither player receives anything. Traditional economic theory predicts that the proposer will propose a division giving the responder a token amount and keeping the rest for herself. The responder will accept this proposal because receiving a small amount is better than receiving nothing — the result if he rejects. Unfortunately for game theory, this result almost never materializes in the laboratory.¹⁷ Proposers rarely make token offers, and if they do, the proposals are usually rejected by responders. The most frequent proposal is one where the money is divided in half, and the responder accepts the equal split. Fairness, rather than self-interest, seems to be more important to both proposers and responders in guiding their actions.

Agency theory accepts that individuals may have social preferences; however, it makes a key assumption that these social preferences will be unaffected by the imposition of an incentive. Technically, it assumes that the effect of incentives is strictly an additive to underlying social preferences: put differently, that individuals will respond to incentives in a rational and self-interested way, *leaving preexisting social preferences intact*. The following simple example illustrates how the assumption operates: Suppose that an individual is willing to work for an hour a week volunteering at a homeless shelter due to her concern for the homeless (this is an example of altruistic social preferences). If the homeless shelter were to receive a grant allowing it to pay the individual an hourly wage, she would still be willing to work an hour a week for free, even though she may be incentivized to work for more hours per week for pay.

Crowding out theory poses a direct challenge to the assumption that incentives are simply layered onto social preferences. Instead of assuming that incentives leave underlying preferences unchanged, it argues that incentives can and frequently do substitute for social preferences. Substitution means that the introduction of the incentive diminishes the individual's preexisting social preferences. In the example above, if crowding out exists once the

(2002); Ernst Fehr & Simon Gächter, *Cooperation and Punishment in Public Goods Experiments*, 90 AM. ECON. REV. 980 (2000); Ernst Fehr, Alexander Klein & Klaus Schmidt, *Fairness and Contract Design*, 75 ECONOMETRICA 121 (2007).

17 Colin Camerer & Richard Thaler, *Ultimatums, Dictators and Manners*, 9 J. ECON. PERSP. 209 (1995).

hourly wage is introduced, the individual will only work if paid, or will work less than an hour for free.

Richard Titmuss in his book, *The Gift Relationship*,¹⁸ was the first to raise the theoretical possibility of crowding out. He argued that blood donors might be less willing to donate blood if they were paid rather than deciding to do it voluntarily. Titmuss's claim at that time was a mere conjecture, and many economists were puzzled by the notion that incentives could have counterproductive effects.¹⁹ However, since Titmuss's conjecture, a small (but growing) group of economists have become intrigued by the idea that incentives could have counterproductive effects, or would not work exactly as predicted by theory. A significant body of scholarship now exists demonstrating the unexpected impacts of the introduction of an incentive on social preferences in principal-agent settings, confirming the existence of crowding out. Experiments have demonstrated that the introduction of incentives can actually reduce an agent's effort levels.²⁰ The changes in social preferences towards the principal can persist once the incentive is removed.²¹

18 RICHARD TITMUSS, *THE GIFT RELATIONSHIP: FROM HUMAN BLOOD TO SOCIAL POLICY* (1971).

19 Kenneth Arrow, *Gifts and Exchanges*, 1 PHIL. & PUB. AFF. 343 (1972); Christopher Bliss, *Review of R.M. Titmuss, The Gift Relationship: From Human Blood to Social Policy*, 1 J. PUB. ECON. 99 (1972); Robert Solow, *Blood and Thunder: Review of the Gift Relationship: From Human Blood to Social Policy by Richard M. Titmuss*, 80 YALE L.J. 1696 (1971). Note that it has been pointed out that incentives can have counterproductive effects for reasons other than non-separability from preferences. For example, very high levels of compensation can lead to worse performance due to an increased likelihood of choking, see Dan Ariely, Uri Gneezy, George Loewenstein & Nina Mazar, *Large Stakes and Big Mistakes*, 76 REV. ECON. STUD. 451 (2009). For subjects with an earnings target, higher compensation can lead to less hours worked, see Colin Camerer, Linda Babcock, George Loewenstein & Richard Thaler, *Labor Supply of New York City Cab Drivers: One Day at a Time*, 112 Q.J. ECON. 407 (1997).

20 Ernst Fehr & Bettina Rockenbach, *Detrimental Effects of Sanctions on Human Altruism*, 422 NATURE 137 (2003); Ernst Fehr & Simon Gächter, *Do Incentive Contracts Crowd Out Voluntary Cooperation?* (Ctr. for Econ. Pol'y Res., Discussion Paper No. 3017, 2001), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=289680; Bernd Irlenbusch & Dirk Sliwka, *Incentives, Decision Frames and Motivation Crowding Out: An Experimental Investigation* (IZA, Discussion Paper No. 1758, 2005).

21 Falkinger, Fehr, Gächter & Winter-Ebmer, *supra* note 10; Gneezy & Rustichini, *supra* note 14; Stephan Meier, *Do Subsidies Increase Charitable Giving in the Long Run? Matching Donations in a Field Experiment*, 5 J. EUR. ECON. ASS'N 1203 (2007); Andrew Reeson & John Tisdell, *Institutions, Motivations*

Incentives can also change social preferences in environments outside the context of the incentive.²²

In contrast to crowding-out effects, some incentives can enhance preexisting social preferences. For example, hospital stays in England dropped dramatically following the introduction of a policy designed to evoke shame and pride in hospital administrators.²³ Incentives that increase an individual's willingness to do something voluntarily are said to "crowd in" social preferences. The incentive is thus a complement to preexisting social preferences. Again, using the simple example above of the volunteer in the homeless shelter, crowding in occurs if, after the introduction of paid work, the individual would be willing to volunteer on an unpaid basis for more than one hour per week.

Crowding-in effects seem to be much less common than crowding out, and tend to be associated with incentives that invite moral approval or disapprobation from a subject's peers. Incentives designed to shame or publicize an individual's self-interested behavior can be quite effective (although quite tricky to carry off) in changing behavior in the desired direction. For example, Ernst Fehr and Armin Gächter ran a public goods experiment where one subject could fine another for their failure to contribute to a public good.²⁴ They found that a fine leveled on a subject by an altruistic peer increased that subject's contributions in subsequent rounds of play. Their explanation for the increase is that the fine activates a sense of shame or embarrassment in the subject. Shaming does not require that a financial incentive even be present. Purely verbal messages of disapproval can also lead to pro-social changes in behavior.²⁵ Some have suggested that shaming or signals of disapproval can work as an incentive because they activate the

and Public Goods: An Experimental Test of Motivational Crowding, 68 J. ECON. BEHAV. & ORG. 273 (2008); Simon Gächter, Esther Kessler & Manfred Konigstein, *Performance Incentives and the Dynamics of Voluntary Cooperation* (U. Nottingham, U.K., Working Paper, 2009).

22 Stephen Burks, Jeffrey Carpenter & Lorenz Goette, *Performance Pay and Worker Cooperation: Evidence from an Artefactual Field Experiment*, 70 J. ECON. BEHAV. & ORG. 458 (2009).

23 Timothy Besley, Gwen Bevan & Konrad Burchandi, *Naming and Shaming: The Impacts of Different Regimes on Hospital Waiting Times in England and Wales* (Ctr. for Econ. Pol'y Res., Discussion Paper No. 7306, 2009).

24 Fehr & Gächter, *supra* note 16.

25 David Masclet, Charles Noussair, Steven Tucker & Marie-Claire Villeval, *Monetary and Non-Monetary Punishment in the Voluntary Contributions Mechanism*, 93 AM. ECON. REV. 366 (2003); Abigail Barr, *Social Dilemmas, Shame Based Sanctions and Shamelessness: Experimental Results from Rural*

sense of what kind of a person one wishes to be, or how that person wants to be perceived by others.²⁶ In general, people want to be viewed in a positive light by others, rather than as selfish or ungenerous.

Why does crowding occur? While many experiments have documented the existence of incentives crowding out social preferences with fewer cases of crowding in, developing an understanding of the causes of crowding has proven more challenging. In a recent paper, Samuel Bowles and Sandra Polania suggest four main reasons why incentives may be inseparable from social preferences.²⁷ First, incentives convey information either about the principal, or what the principal thinks of the agent, or the nature of the task to be carried out.²⁸ If the incentive indicates that the principal does not trust the agent, then the agent may reciprocate by acting in a self-interested way. Second, incentives may give cues or provide framing around how agents should act.²⁹ For example, labeling an incentive a bonus leads to different actions by agents than labeling an incentive a fine, even though the payoffs under each are identical.³⁰ The third posited cause, much discussed in the psychology literature, is the idea that incentives can “overjustify” an activity,³¹ crowding out an agent’s intrinsic motivation to complete that task. When an action is pleasurable, or would be undertaken in the absence of external incentives, introducing an incentive can diminish one’s sense of self-determination, in turn leading to lower performance levels. The action is overjustified because the agent would have completed the task even if no external incentive were

Zimbabwe (Oxford Univ., Ctr. for the Stud. of Afr. Econ., Working Paper No. WPS/2001.11, 2001).

- 26 GEORGE AKERLOF & RACHEL KRANTON, *IDENTITY ECONOMICS: HOW OUR IDENTITIES SHAPE OUR WORK, WAGES AND WELL BEING* (2010); Bowles & Polania, *supra* note 15.
- 27 Bowles & Polania, *supra* note 15.
- 28 Roland Benabou & Jean Tirole, *Intrinsic and Extrinsic Motivation*, 70 *REV. ECON. STUD.* 489 (2003); Fehr & Rockenbach, *supra* note 20.
- 29 Elizabeth Hoffman, Kevin McCabe, Keith Shachat & Vernon Smith, *Preferences, Property Rights and Anonymity in Bargaining Games*, 7 *GAMES & ECON. BEHAV.* 346 (1994); Andrew Schotter, Avi Weiss & Inigo Zapater, *Fairness and Survival in Ultimatum and Dictatorship Games*, 31 *J. ECON. BEHAV. & ORG.* 37 (1996).
- 30 *E.g.*, Fehr & Gächter, *supra* note 20.
- 31 EDWARD DECI & RICHARD RYAN, *INTRINSIC MOTIVATION AND SELF-DETERMINATION IN HUMAN BEHAVIOR* (1985); Edward Deci, Richard Koestner & Richard Ryan, *A Meta-Analytic Review of Experiments Analyzing the Effects of Extrinsic Reward on Intrinsic Motivation*, 125 *PSYCHOL. BULL.* 627 (1999); Bruno Frey & Reto Jegan, *Motivation Crowding Theory: A Survey of Empirical Evidence*, 15 *J. ECON. SURV.* 598 (2001).

available. Finally, incentives can change preferences by altering the very environment in which preferences are acquired. That is, the imposition of incentives can lead to enduring preference change that lasts beyond the life of the incentive. Through exposure to the incentive (and perhaps limited exposure to alternative viewpoints), subjects learn how to behave and which strategies will lead to success. The incentive environment changes long-term preferences due to continued exposure through parenting, education, and cultural norms.³²

Part of the difficulty in parsing out these different causes is that although a single cause may be explanatory, more likely multiple causes are at work. For example, an incentive may provide information that the principal does not trust the agent, at the same time as it frames the context in addition to altering the environment in which social preferences are learned, resulting in long-term preference change. Disentangling these explanations may well be impossible.

An acceptance that crowding out and crowding in exist should not lead one to conclude that incentives are useless. Rather, crowding theory simply challenges the assumption that incentives are strictly separable from preexisting social preferences. Bowles and Polania make a useful distinction between incentives with categorical effects and incentives with marginal effects.³³ An incentive has a categorical effect when the mere presence of the incentive, regardless of the size, changes behavior. On the other hand, an incentive has a marginal effect when the incentive is simply less effective than predicted under an assumption of additive effect. With marginal crowding out, the incentive may still have a positive linear relationship with performance, although the slope will be lower than initially predicted if preferences were assumed to be strictly exogenous. Finally, it is possible for both categorical and marginal crowding effects to take hold.³⁴

Strong crowding out occurs when the incentive has a counterproductive effect: Its use leads to worse outcomes than in the absence of the incentive. There is strong crowding out in many of the experiments described above. If the cause is marginal crowding out, the relationship between the incentive and performance is negative. If categorical crowding out is the cause, then

32 Samuel Bowles, *Endogenous Preferences: The Cultural Consequences of Markets and Other Institutions*, 36 J. ECON. LITERATURE 75 (1998); Joseph Heinrich et al., *Economic Man in Cross-Cultural Perspective: Behavioral Experiments in 15 Small Scale Societies*, 28 BEHAV. & BRAIN SCI. 795 (2005).

33 Bowles & Polania, *supra* note 15.

34 See, e.g., Bernd Irlenbusch & Gabriele Ruchala, *Relative Rewards Within Team-Based Compensation*, 15 LAB. ECON. 141 (2008).

the change in behavior due to the reduction in social preferences outweighs the positive effect of the incentive. It is important to recognize, however, that incentives need not have counterproductive effects for crowding out to exist. Crowding out occurs whenever the incentive has a negative impact on a subject's social preferences. Depending on its size, the incentive can still be effective even though there is a substitution effect between the incentive and social preferences.³⁵

Crowding theory raises several issues for designers of incentives: whether to use an incentive at all and, if so, how to properly design it. While one might be concerned about the negative effects on behavior from the introduction of an incentive (as would be the case with categorical crowding out), it is also important to consider the type of incentive to use (for example, a bonus or a fine, approval or shame) and the size of the incentive. As soon as one recognizes that preferences can be affected by the existence, type and size of incentive, the design of incentives becomes complicated: One needs not only consider the impact of the incentive on ultimate performance, but also its impact on preexisting social preferences, and then tailor the incentive accordingly.

If there is crowding out that is either categorical or marginal, an incentive that treats preferences as additive could be either *too high or too low* relative to the optimal level.³⁶ Incentives will be overused when their effect is to diminish social preferences to the point that outcomes are worse than if no incentive was used. On the other hand, incentives will be underused when crowding out exists, a given level of performance is desired, the preexisting

35 The fact that incentives can have positive effects even in the presence of crowding out poses a problem for those seeking to identify the existence of crowding effects. One would be wrong to assume that there is no crowding out if performance improves upon the introduction of an incentive. In order to identify the existence and extent of crowding out, one must first establish a baseline result (behavior in the absence of the incentive), calculate the predicted impact of the incentive under an assumption of additive effect, and then observe the actual behavior in the presence of the incentive. The difference between the calculated impact of the incentive and the observed performance is the extent of crowding out. If this difference is negative (the expected performance is higher than the observed performance) then crowding out exists. If the difference is positive, then crowding in is taking place. If there is no difference, then the additive effect holds. See Bowles & Polania, *supra* note 15, for a discussion of this important but frequently overlooked point.

36 Bowles & Hwang, *Social Preferences*, *supra* note 2; Hwang & Bowles, *Are Incentives Overused*, *supra* note 2.

social preferences are inadequate to attain that level of performance and the marginal effects of the incentive are still positive.

III. EXECUTIVE COMPENSATION AND CROWDING OUT

One of the most studied types of incentives is that of compensation in general and executive compensation in particular. Much attention has been paid by scholars and the media to executive compensation due to its exponential growth rate over the past few decades.³⁷ Several theories have been put forth to explain this increase.

Traditional agency theorists argue that the increase in compensation is warranted if pay is truly for performance. If principals want agents to act in the interests of principals, then agents should be compensated for performance, mainly in stock and stock options. As stock prices rose in the 1990s and 2000s because of better performance by managers, so too then did managers' wealth.³⁸ Furthermore, as incentive contracts have become dominant, executives have assumed more risk in their compensation packages. If executives are risk-averse, they need to be compensated for this additional risk. The assumption of risk in the presence of risk-aversion means that incentive contracts will have a higher expected value than will guaranteed payments.

A separate theory argues that compensation rises as managerial talent becomes scarce.³⁹ As companies compete for managerial talent, salaries for talented managers will start to rise. In particular, managerial talent will be most scarce in large complex companies that are difficult to manage.⁴⁰ Since companies have grown significantly in both size and scope over the past few decades, the demand for managerial talent has risen more than the supply of talented managers. Compensation of these talented managers has therefore increased because of larger companies competing for their services.

In contrast to economists who mainly assume that the increase in executive compensation is efficient, legal scholars have proposed a theory claiming that

37 Carola Frydman & Raven Saks, *Executive Compensation: A New View from a Long-Run Perspective, 1936-2005*, 23 REV. FIN. STUD. 2099 (2010); Kevin Murphy, *Executive Compensation*, in 3B HANDBOOK OF LABOR ECONOMICS ch. 38 (Orley Ashenfelter & David Card eds., 1999).

38 Murphy, *supra* note 37.

39 Sherwin Rosen, *The Economics of Superstars*, 71 AM. ECON. REV. 845 (1981); Marko Tervio, *The Difference That CEOs Make: An Assignment Model Approach*, 98 AM. ECON. 642 (2008).

40 Xavier Gabaix & Augustin Landier, *Why Has CEO Pay Increased So Much?*, 123 Q.J. ECON. 49 (2008).

executive compensation is in fact excessive because managers have a strong incentive to control how their own pay is set.⁴¹ Excessive managerial power (through effective control of the board of directors) has led to rent-seeking behavior by managers in their negotiations with a captured board, resulting in non-optimal levels of executive compensation. Advocates of the managerial power hypothesis agree, though, with agency theorists that incentives work because they appeal to agents' self-serving characters. In fact, it is precisely because agents are self-interested that they have the incentive to distort their incentives in the first place!

I believe that crowding out theory provides an additional explanation for the high levels of executive pay we see in the United States. This explanation does not rule out any of the theories above and, in fact, is complementary to both agency theory and managerial power theory. By highlighting the existence of crowding out, I am merely pointing to a different dimension of the contracting problem that has thus far been neglected by scholars working in this area.

The explanation for high levels of executive compensation under a theory of crowding out is straightforward. In the absence of explicit incentive contracts (where the agent is paid a fixed wage), agents will usually exert an effort level greater than that predicted under an assumption of pure rationality. Experiments have shown that agents are willing to put in more effort than is rational under a fixed but generous wage. This could be because of feelings of reciprocity: The principal trusts the agent to do a good job (trust arises since the wage is not conditioned on output), and so the agent responds in kind. As Fehr and Gächter comment, "[f]air wages are rewarded with fair effort levels."⁴² The agent might also cooperate with the principal voluntarily because of their intrinsic enjoyment of their job.⁴³

Once an incentive is introduced, for example pay for performance, the agent's relationship to the principal or perhaps to the task at hand changes. Experimental evidence demonstrates that at this point crowding out can occur.

41 BEBCHUK & FRIED, *supra* note 7; Bebchuk & Fried, *supra* note 7.

42 Fehr & Gächter, *supra* note 20. For experimental evidence on the propensity of agents to voluntarily cooperate in the absence of external incentives, see also Armin Falk & Michael Kosfeld, *The Hidden Costs of Control*, 96 AM. ECON. REV. 1611 (2006); Ernst Fehr, Simon Gächter & Georg Kirchsteiger, *Reciprocity as a Contract Enforcement Device: Experimental Evidence*, 65 ECONOMETRICA, 833 (1997); Ernst Fehr, Georg Kirchsteiger & Amo Riedl, *Does Fairness Prevent Market Clearing? An Experimental Investigation*, 108 Q.J. ECON. 437 (1993); Irlenbusch & Sliwka, *supra* note 20.

43 Margit Osterloh & Bruno Frey, *Motivation, Knowledge Transfer and Organizational Forms*, 11 ORG. SCI. 538 (2000).

Crowding out could be due to a number of reasons: The incentive contract might be interpreted by the agent as a signal of distrust by the principal;⁴⁴ the incentive contract might crowd out an agent's intrinsic motivation to complete a task;⁴⁵ or the incentive contract might provide information to the agent about how she is supposed to behave.⁴⁶

This altered relationship between the agent and the principal or the task makes the design of an incentive tricky. In some circumstances, the principal might be better off not having the incentive at all. For example, Fehr and Gächter conducted an experiment where voluntary cooperation almost completely disappeared when principals were able to fine agents. They found that contracts that did not offer incentives were more efficient than those that did.⁴⁷

However, in other situations it may simply be necessary for the principal to amplify the incentive, either by increasing the reward to the agent from acting in the desired manner (bigger bonus) or by increasing the punishment from not so acting (bigger fine). For example, a field experiment demonstrated that while the performance of schoolchildren given monetary compensation for collecting donations, which they had previously done on a voluntary basis, suffered under low levels of compensation relative to the no-incentive treatment, once the incentive payment became large enough, the amount of money collected increased.⁴⁸ The problem of diminished performance due to crowding out, then, may not be because the incentive is counterproductive per se. It is not necessary to assume that the incentive is the cause of the problem; it may simply be that the incentive is not high-powered enough.

Uri Gneezy makes this argument elegantly in his description of the expected and unexpected ways in which incentives can operate:

[O]nce external incentives are present, people react to them in a monotone way: higher incentives result in more effort. However, in some cases, this reaction is not monotonic: when moving from no incentives to small incentives, performance goes down, and only when incentives are increased, does it go up (in some cases we observe discontinuity at zero: the mere introduction of extrinsic incentives destroys the intrinsic motivation). While small incentives are not necessarily better than no incentives, once the extrinsic motivation is

44 Falk & Kosfeld, *supra* note 42.

45 Osterloh & Frey, *supra* note 43.

46 Bowles & Polania, *supra* note 15.

47 Fehr & Gächter, *supra* note 20.

48 Uri Gneezy & Aldo Rustichini, *Pay Enough or Don't Pay at All*, 115 Q.J. ECON. 791 (2000).

large enough, it results in a better performance than the no-incentive case.⁴⁹

The non-monotonic effect of incentives provides an additional explanation for the large size of executive compensation contracts that make strong use of performance-based incentives, such as stock, stock options and bonuses. Corporations choose to utilize incentives because voluntary cooperation under a fixed (albeit perhaps generous) salary is inadequate to attain the level of performance desired. In order to ensure higher levels of performance than would be expected under conditions of voluntary cooperation, the corporation introduces an incentive contract under which the executive is paid for performance. The increased emphasis on incentive-based compensation has the effect of simultaneously activating an executive's self-interest and diminishing an executive's social preferences towards the corporation. So in addition to the decision to use an incentive-based compensation scheme, the company must then design the incentive to account for the lower levels of voluntary contribution that arise due to the presence of the incentive. The result is that the executive must be paid *more* in the presence of crowding out than she/he would if incentives were an additive to preexisting preferences.⁵⁰

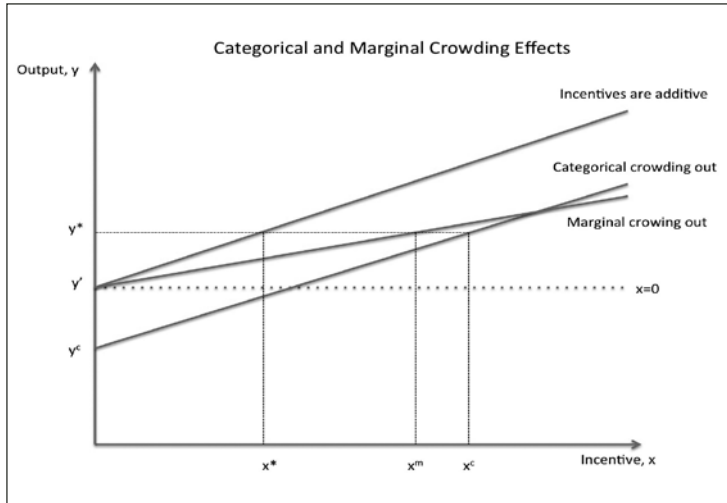
The figure below illustrates the operation of categorical and marginal crowding effects, and how incentives must be increased in the presence of crowding out to attain a given level of output. In the absence of the incentive (when $x = 0$), the agent exerts effort level y' . Assume that $y^* > y'$ is the desired level of output and so there is a need for the principal to make use of incentives. If incentives were separable from preferences, then no crowding would occur. The incentive x^* would achieve the desired output. If there is crowding out, however, it is simple to see that x^* will be too small. For categorical crowding out, the mere presence of the incentive lowers the output levels relative to the case where there is no incentive. In order to achieve y^* , the principal needs to employ an incentive the size of x^c which is strictly greater than x^* . Similarly, when there is marginal crowding out, the incentive is simply less effective and so more needs to be used (here, x^m) to achieve

49 Uri Gneezy, *The W effect of incentives* 3 (Oct. 13, 2003) (unpublished manuscript) (citations omitted), available at <http://onemvweb.com/sources/sources/w-effect-of-incentives.pdf>.

50 Others have noted that higher levels of incentives can generate desired behavior, see Iris Bohnet, Bruno Frey & Steffen Huck, *More Order with Less Law: On Contractual Enforcement, Trust and Crowding*, 95 AM. POL. SCI. REV. 131 (2001); Bowles & Hwang, *Social Preferences*, *supra* note 2; Hwang & Bowles, *Are Incentives Overused*, *supra* note 2.

y^* . Obviously when there is both marginal and categorical crowding out, an even greater level of the incentive needs to be employed.

Categorical and Marginal Crowding Effects



If social preferences diminish according to the level of incentive employed, the interaction between crowding out and compensation will be dynamic and self-fulfilling. The more the executive's social preferences towards the corporation are crowded out because of the incentive contracts, the more the company must pay to generate the desired level of performance. As the company pays the executive more for performance, self-interest is further pushed to the fore. Eventually the process will reach a limit where crowding out is complete and the executive is solely self-interested. At that point, compensation packages will clearly be bigger than they would be under an assumption that social preferences are exogenous and unchanged by incentives. In the process of writing contracts that appeal to an individual's self-interest, we create self-interested individuals. Those contracts, then, must take into account the diminution of social preferences towards the principal.

This distortion of other-regarding preferences may not be confined to the contract and principal at hand. That is to say, in the context of executive compensation, it is reasonable to assume that the change in preferences induced by the incentive is permanent, rather than state-dependent. When an incentive contract is replaced with a contract that makes no use of incentives, it is extremely unlikely that the agent will revert back to her preexisting feelings of goodwill towards a principal. Rather, the change in social preferences caused by the presence and size of the incentives is likely to endure. Through the

use of incentive contracts, agent performance improves, but the improvement comes at a cost: Incentives teach agents to behave in self-interested ways.

Consider, for instance, the introduction and repeal of fines for picking up children late from a daycare center in Israel.⁵¹ The introduction of the fine (perhaps because it was too small to change behavior) led to an increase in parents being late to pick up their children. But when the fine was removed, the rate of latecomers did not drop back down to the pre-fine state. In another example, Stephan Meier examined the impact of a matching mechanism on the rate and size of charitable contributions. He found that even though a matching mechanism had the effect of increasing donations during the period it was available, in subsequent periods when matching was no longer available, donors overcompensated with a drop in their donations, which declined by more than the additional amount they contributed during the life of the matching mechanism.⁵² In a principal-agent context, Bernd Irlenbusch and Dirk Sliwka found that effort declined after the introduction of a piece rate relative to a fixed wage, and that switching from a piece rate regime to a fixed rate regime resulted in even worse performance.⁵³ Finally, Simon Gächter, Esther Kessler, and Manfred Königstein examined whether firms can revert back to trust and reciprocity after practicing pay for performance. They found that the voluntary cooperation of agents was much smaller after experiencing incentive pay (although the effect was stronger for fines than for bonuses).⁵⁴

Why is it that preference change may be enduring in the context of executive compensation? The main cause, in my view, is the sheer success of agency theory in permeating business norms. The underlying assumption in agency theory that managers will act in a self-interested way has resulted in self-interested managers. Contracts written between corporations and executives are designed to harness executive self-interest, if not in actual practice, then certainly in best practice. The fact that pay for performance is so widely accepted among investors and policymakers as best practice, and the fact that there is only a relatively small set of compensation consultants, means that there is little diversity and therefore little exposure of executives to alternative models of preferences and contracts. The lack of exposure is reinforced by competitive markets: Because incentives work as predicted when high-powered enough, all firms will adopt incentive contracts or risk being left behind in terms of performance measures important to investors.

51 Gneezy & Rustichini, *supra* note 14.

52 Meier, *supra* note 21.

53 Irlenbusch & Sliwka, *supra* note 20.

54 Gächter, Kessler & Königstein, *supra* note 21.

Even prior to any signing of — or real exposure to — an actual incentive contract, ambitious would-be executives are taught in business schools, economics departments and law schools that managers cannot be trusted unless they are given the appropriate incentives.⁵⁵ When we teach students that executives will behave opportunistically, and that such opportunistic behavior is a rational response to the rules of the game as written, is it any surprise that those students learn to disregard the impact of their self-serving actions on others? When we teach students that behavior that at first glance seems motivated by other-regarding preferences, such as reciprocity or fairness, can actually be explained by self-interest (for example, reputational concerns), we convey the message that actions benefiting others are only permissible if they are instrumental — not done for their own sake, but for the sake of ourselves. Market, legal, cultural, educational and social forces over the past few decades have inexorably resulted in the assumption of self-interest embedded in agency theory becoming a truism. In an environment where self-interest prevails over other-regarding norms, incentives assume even greater importance.

The crowding out of social preferences and concomitant increase in self-interest provide an additional account to explain growing compensation packages. This explanation is complementary to and can enrich existing theories of executive compensation. Crowding out is an enrichment of agency theory because it argues that in order for incentives to be effective, they need to take into account the diminished concern the agent will feel for the wellbeing of the principal. High-powered incentives can help to overcome agency problems if employed by a sophisticated planner. These high-powered incentives are necessary either because they need to make up for the downward shift in performance due to the presence of the incentives (categorical crowding out) or because of their reduced marginal effectiveness (marginal crowding out). With respect to the managerial power theory, crowding out suggests a reason why managers would choose to exercise influence over their compensation packages to ensure that they are paid more than is optimal: the preexistence of incentive contracts (perhaps properly designed) that appeal to self-interest dilute managers' feelings of fairness or goodwill towards their principal. Managers have learned to place their own interests ahead of the principal.

55 Robert Frank, Thomas Gilovich & Dennis Regan, *Does Studying Economics Inhibit Cooperation?*, 7 J. ECON. PERSP. 159 (1993); Sumantra Ghoshal, *Bad Management Theories Are Destroying Good Management Practices*, 4 ACAD. MGMT. LEARNING & EDUC. 75 (2005).

IV. AN APPLICATION: RETENTION BONUSES AND THE U.S. GOVERNMENT

Nowhere is the issue of incentives and large compensation packages more salient than in the financial sector. Within the financial industry, incentive contracts have become the norm. In investment banks, commercial banks and other financial institutions, salaries tend to be relatively low compared to bonuses received at year's end, which can reach into the millions of dollars. Bonuses depend on the performance of the individual and the firm, and can consist of cash, stock and stock options. Compensation in hedge funds and private equity firms is even more explicitly performance-based, with the bulk of compensation coming from profits shared with investors, in addition to management fees earned on assets under management.⁵⁶ Over the past few decades, compensation levels in the financial sector have grown significantly. Hedge fund and private equity managers can earn hundreds of millions of dollars each year. In an effort to compete for talent with these funds, larger financial institutions such as investment banks have increased the pay of their employees. These firms pay out a significant portion of revenues in compensation. For example, in 2007, Goldman Sachs paid out a total of \$20,200,000,000 in total compensation to employees, with about sixty percent of that (\$12,100,000,000) accounting for the bonus pool. Average compensation per employee was \$661,490.⁵⁷

Following the near-implosion of the financial system in 2008, there has been an outpouring of criticism regarding how bankers were compensated, and how their incentives led them to favor short-term profits over long-term stability,⁵⁸ or to disproportionately favor the interests of shareholders over other corporate constituents such as bondholders, depositors and taxpayers.⁵⁹ Criticism of bankers' pay has tended to focus on how the incentives of banking

56 While agreements can vary, the industry norm has the private equity/hedge fund partners earning two percent of total assets under management each year in fees, and a twenty percent carry on any profits earned for their investors. In addition, partners in private equity and hedge funds frequently invest their own money into the fund, creating an even tighter relationship between pay and performance.

57 Christine Harper, *Goldman's Bonus Pool Jumps 23% to Record \$12 Billion*, BLOOMBERG (Dec. 18, 2007), <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aUHCJ33.KB.Q&refer=us>.

58 See, e.g., Sanjai Baghat & Roberta Romano, *Reforming Executive Compensation: Simplicity, Transparency and Committing to the Long-Term*, 26 YALE J. REG. 359 (2009).

59 Lucian Bebchuk & Holger Spamann, *Regulating Bankers' Pay*, 98 GEO. L.J. 247 (2010).

employees were perversely designed to jeopardize the firms these employees worked for. Although these ultimately self-destructive pay practices were widespread amongst financial firms, no firm garnered more negative attention for its incentive contracts than the insurance giant A.I.G. and its Financial Products Division.

In the beginning of 2008, as losses within A.I.G. Financial Products Division (A.I.G.-FP) began to mount, the board of A.I.G. approved a bonus plan designed to keep the division intact and to prevent employees from leaving the company. The bonuses, guaranteed for the years 2008 and 2009, were calculated at a hundred percent of total 2007 compensation for all employees except senior management who received seventy-five percent of 2007 compensation. Each employee received one dollar in salary. The bonus was payable unless the employee was fired with good cause, resigned without good reason or failed to meet performance standards. The stated objectives of the contract, titled 2008 Employee Retention Plan, included “[t]o provide incentives for A.I.G.-FP’s employees and consultants to continue developing, promoting and executing A.I.G.-FP’s business;” and “[t]o ensure that A.I.G.-FP’s and its employees’ and consultants’ interests continue to be aligned with those of A.I.G. and A.I.G.’s shareholders.” The total amount of money to be paid out to employees under the terms of the contract was around \$450,000,000.

Subsequent to the signing of the A.I.G. retention contracts, massive losses within A.I.G. became apparent during the financial crisis in 2008, leading to the injection by the U.S. government of over \$180,000,000,000 into the corporation to ensure its solvency. These losses were caused mainly by securities created in the Financial Products Division. Taxpayers were now essentially the residual claimants on any profits from A.I.G.’s continuing operations.

The retention contracts were written to give the A.I.G.-FP employees an incentive to continue working for A.I.G. The assumption underlying the retention contracts was that, given the precarious condition of A.I.G., only if rewarded in this way would a self-interested employee bother to come to work. In essence, then, the retention contract was designed to appeal solely to an employee’s self-interest: Its message was that only because of self-interest would an employee show up to work in the first place.

This contract may have merely recognized the reality of the situation — the history of the relationship between A.I.G.-FP and its employees may have already changed employee preferences towards A.I.G. so as to have completely crowded out any concern for A.I.G.’s condition as a going concern. On the other hand, the retention contract itself may have crowded out an employee’s sense of obligation to come to work without being paid a bonus

to do so. In the absence of this kind of incentive, it might be thought that an employee would show up to work because of social preferences towards the employer (a desire to save the company), or towards the public (a desire to recompense taxpayers). Once a principal informs an agent that they will receive a bonus for turning up to work, then it is unlikely that an agent will agree to turn up to work otherwise. In any event, by the time the government had rescued A.I.G., the retention contract was already in place, and under a theory of crowding, preference change diminishing employee concerns about the wellbeing of A.I.G. (either because of crowding out from previous incentives or crowding out from the current incentive) had already occurred.

Early in 2009, after the U.S. government became the largest investor in A.I.G., the 2008 Employee Retention Plan came to the government's attention.⁶⁰ The Obama Administration initially expressed some discomfort with the contracts when their existence first came to light. President Obama said, "This isn't just a matter of dollars and cents. It's about our fundamental values."⁶¹ The Administration later backed away from such unambiguous critiques, arguing that although distasteful, the contracts could and should not be legally overturned. Larry Summers, then Director of the White House's National Economic Council, made a statement that although the contracts were outrageous the importance of upholding the rule of law outweighed the benefits of abrogation.⁶²

In addition to the legal argument around the importance of honoring contracts, economic arguments were made as to why the bonuses should be paid out as agreed.⁶³ Bonuses were necessary to ensure that taxpayers received

60 There is some dispute over when the government found out about the existence of the retention contracts. U.S. Representative Elijah Cummings of Maryland was seeking information regarding the contracts in December of 2008, while the Treasury claims that it did not appreciate the significance of the contracts until February of 2009, see Edmund Andrews & Jackie Calmes, *Many in Government Knew Weeks Ago About Huge A.I.G. Bonus Program*, N.Y. TIMES, Mar. 20, 2009, at A20, available at <http://www.nytimes.com/2009/03/20/business/20bonus.html>.

61 Andrew Ross Sorkin, *The Case for Bonuses at A.I.G.*, N.Y. TIMES, Mar. 17, 2009, at B1, available at <http://www.nytimes.com/2009/03/17/business/17sorkin.html>.

62 *This Week with George Stephanopoulos* (ABC television broadcast, Mar. 15, 2009).

63 See Letter from Edward Liddy, CEO, A.I.G., to Timothy F. Geithner, U.S. Sec'y of the Treasury (Mar. 14, 2009), available at http://static1.firedoglake.com/1/files/2009/03/edliddy03_14_09_letter.pdf; Andrew Ross Sorkin, *The Case for Bonuses at A.I.G.*, N.Y. TIMES, Mar. 17, 2009, at B1, available at <http://www.nytimes.com/2009/03/17/business/17sorkin.html>.

some money back from the government's investment of billions of dollars in A.I.G. The securities created by the A.I.G.-FP division were so complex that the same people who created them were needed to unwind A.I.G.'s positions in them. If these employees were to leave A.I.G., taxpayers would then be unequivocally worse off. The retention contracts were necessary to provide sufficient incentives for these employees to remain at A.I.G. for the duration of the time it would take to fix A.I.G. Rahm Emanuel, President Obama's then Chief of Staff, reiterated this view, saying that "[Obama's] main priority is to get the financial system stabilized, and he believes this is a big distraction from this effort."⁶⁴

Unsurprisingly, the Administration's support of the retention contracts did not sit very well with the taxpaying public, having just suffered huge financial losses from the financial crisis. The retention contracts were almost unanimously condemned as unfair and there was widespread demand for their repeal. Public reaction was swift, violent and vociferous. Outraged citizens picketed the houses of those employees identified as working at A.I.G.-FP.⁶⁵ Calls were made to publicly disclose the names of all A.I.G. employees who received the bonuses.⁶⁶ Public comments during this time included death threats and statements indicating a wish that A.I.G. employees would be strung up with piano wire.⁶⁷ The intensely negative public reaction demonstrated the near-universal disgust with the fact that A.I.G. employees who had assisted in causing the financial crisis were now being given large bonuses, funded by taxpayers, merely for showing up to work, while foreclosure and unemployment rates were rapidly rising for the rest of the country.

64 Jackie Calmes & Louise Story, *418 Got A.I.G. Bonuses; Outcry Grows in Capital*, N.Y. TIMES, Mar. 18, 2009, at A1, available at <http://www.nytimes.com/2009/03/18/business/18bailout.html>.

65 Manny Fernandez, *On the Elite Streets of Fairfield, a Drive-By Protest*, N.Y. TIMES, Mar. 22, 2009, at A17, available at <http://www.nytimes.com/2009/03/22/nyregion/22working.html>.

66 Andrew Cuomo, then New York's Attorney General, called for the public disclosure of the names of all AIG-FP employees who received the bonuses. Later he backed off on that demand due to security concerns of those employees. Louise Story, *Cuomo Wins Ruling to Name Merrill Bonus Recipients*, N.Y. TIMES, Mar. 19, 2009, at B1, available at <http://www.nytimes.com/2009/03/19/business/19cuomo.html>.

67 American International Group's Impact on the Global Economy: Before, During, and After Federal Intervention, 111-15, *Hearing Before the H. Comm. on Financial Services*, 111th Cong. (Mar. 18, 2009) (statement of Edward M. Libby, CEO, A.I.G.).

The reaction of Congress to the contracts closely mirrored that of the public. Congress conducted hearings, calling in executives from A.I.G. and the Administration to answer questions about when and how the contracts were signed, what the Treasury knew about the contracts at the time it rescued A.I.G., and why they were not overturned once the government did in fact take note of their existence.⁶⁸ In response to the pressure from the public and Congress, Edward Liddy, the Chief Executive of A.I.G., told a congressional oversight committee that while he could not legally do anything about the contracts, he had asked employees “to do the right thing” and give back half of their bonuses.⁶⁹ Fifteen of the top twenty bonus recipients promised to give back all of their bonuses.

In addition to committee hearings, Congress tried to deal with the situation by writing legislation condemning the bonuses. The House passed a bill taxing bonuses of those employees in companies receiving TARP money at a rate of ninety percent.⁷⁰ The bill languished in the Senate after the Obama Administration registered its lack of support for such a measure. Furthermore, congressional efforts to restrain the payment of bonuses to banking executives were hampered by the last-minute insertion of a clause in a section of the stimulus package (designed to rein in executive compensation), allowing certain bonuses to be paid that were contained in employment agreements agreed to before February 11, 2009. The exemption was included at the behest of Senator Christopher Dodd, then the chairman of the Senate Banking Committee. Later he made statements indicating that it was actually the Treasury Department that had requested the change, and that Treasury staff had drafted the requisite language permitting the bonuses to go ahead as planned.⁷¹

While Congress and taxpayers were calling for the repeal of the retention contracts and the return of the bonuses, the Obama Administration was

68 Oversight of the Federal Government’s Intervention at American International Group, 111-20, *Hearing Before the H. Comm. on Financial Services*, 111th Cong. (Mar. 18, 2009); *Hearing Before the H. Comm. on Financial Services*, 111th Cong. (Mar. 24, 2009).

69 *Hearing Before the H. Comm. on Financial Services* (Mar. 18, 2009) (statement of Edward M. Libby, CEO, A.I.G.).

70 Carl Hultz & David Herszenhorn, *House Approves 90% Tax on Bonuses After Bailouts: A.I.G. and Wall St. Confront Upsurge of Populist Fury*, N.Y. TIMES, Mar. 20, 2009, at A1, available at <http://www.nytimes.com/2009/03/20/business/20bailout.html?pagewanted=all>.

71 Mary Williams Walsh & David M. Herszenhorn, *A.I.G. Seeking Return of Half of Its Bonuses*, N.Y. TIMES, Mar. 19, 2009, at A1, available at <http://www.nytimes.com/2009/03/19/business/19bailout.html>.

actively working to ensure that the bonuses could be paid in full. What can account for such different reactions within government? It is my argument that each set of players intuitively incorporated an understanding of crowding theory in their responses. The Administration recognized that crowding out of A.I.G.-FP employees' concern about the condition of A.I.G. had already occurred, while Congress and the public were attempting to crowd back in employee pro-social preferences towards A.I.G., its success at that point being enmeshed with the public good.

The Obama Administration, in upholding the retention contracts and arguing for their necessity, appreciated that at that point, employees were unlikely to be overly concerned with the ongoing performance of A.I.G., and that it was unlikely that employee preferences would ever revert back to a norm of caring. Being concerned to resolve the financial crisis and obtain a return on its investment, the Administration viewed the retention contracts, while distasteful, as providing necessarily strong incentives for A.I.G. employees to remain and do their jobs. As discussed above, once crowding out has taken place, in order to achieve the desired level of performance, increasing incentives may be the only option. Allowing the extremely generous A.I.G. contracts to proceed (aside from whatever legal arguments there were for their repeal) may have been a very good option for the government concerned with limiting its losses from its investment in A.I.G.

The reaction of the public and of Congress, with their calls for repeal of the contracts and voluntary return of the bonuses, can also be explained by crowding theory. Far from tapping into an irrational thirst for fairness and revenge that would have inevitably backfired, I believe that the extremely hostile reaction represented an effort to crowd in social preferences. Viewed from this angle, public and congressional actions and statements condemning the bonuses were a form of incentive in and of itself. The goal of members of Congress, the public and the media was to shame A.I.G. executives specifically into returning the bonus money and working diligently to remedy the dire situation A.I.G. found itself in. It makes sense that the public and Congress would feel a need to convey this sense of shame, since the government directly and taxpayers indirectly were now the beneficiaries of employee efforts. These condemning statements were verbal messages of disapproval meant to appeal to a sense of moral or ethical obligation in A.I.G. employees in particular, and financial sector employees in general.

Unfortunately, these efforts to crowd in pro-social concerns were largely unsuccessful. In spite of the promises made by A.I.G. executives to return the bonuses, of the fifty million dollars that was promised, only nineteen million

dollars was ever returned to A.I.G.⁷² Many A.I.G.-FP executives strongly resented the negative reaction to the bonuses. Some employees resigned; some were defiant, comparing the public outrage and pressure to fascist tactics in Europe during the 1940s.⁷³ Jake DeSantis, an executive Vice President at A.I.G.-FP, received a standing ovation from A.I.G. employees⁷⁴ following the publication of his resignation letter in the *New York Times* arguing that A.I.G. employees had been “unfairly persecuted.”⁷⁵

Ultimately it was the Administration’s position that prevailed. Rather than feeling shamed, A.I.G.-FP employees felt resentful and unjustly maligned by the public outrage over the retention contracts. Perhaps the reason why shaming failed as a strategy to crowd in moral and ethical concerns is because the norm of self-interest has become so completely embedded in the culture of the financial sector. If an offender feels no guilt for their behavior, then shaming will be unsuccessful as a strategy to change behavior. The Obama Administration in its refusal to try to overturn the retention bonuses may have recognized this and, acting as a principal, felt the best course of action was to move forward taking existing preferences as given.

CONCLUSION

Crowding theory has implications for corporate governance and the evaluation of contracts. Incentives can diminish or amplify an employee’s feelings of goodwill towards their employer. Understanding how an incentive is likely to affect social preferences is important because incentives could be too large or too small as a result. When crowding out of social preferences takes place, and those changes are enduring, then incentives will need to be larger to account for this diminution in voluntary contribution by an agent. When crowding in of social preferences takes place, agents are likely to work harder than they would otherwise.

72 Mary Williams Walsh, *A.I.G. May Cut a Bonus Pool by About 30%*, N.Y. TIMES, Mar. 15, 2010, at B8, available at <http://www.nytimes.com/2010/03/15/business/15aig.html>.

73 Liz Rappaport & Liam Pleven, *A.I.G. Employees Will Return About \$50 Million of Bonuses*, WALL ST. J., Mar. 24, 2009, at C1, available at <http://online.wsj.com/article/SB123784730479718425.html>.

74 Randall Smith, Jonathan Weisman & Liam Pleven, *Some at A.I.G. Buck Efforts to Give Back Bonus Pay*, WALL ST. J., Mar. 26, 2009, at C1, available at <http://online.wsj.com/article/SB123802760897542981.html>.

75 Jake DeSantis, *Dear A.I.G., I Quit!*, Mar. 24, 2009, at A29, available at <http://www.nytimes.com/2009/03/25/opinion/25desantis.html?pagewanted=all>.

In the corporate arena, and certainly in the financial sector, we have seen significant changes in pay practices over the last few decades and, concomitantly, in the development of pay for performance as the norm. This norm — that individuals are self-interested, and will only act if incentivized properly to do so — is reinforced through the educational and cultural transmission of ideas. The fact that individuals are more self-interested than previously means that crowding out has occurred.

In response to this recognition that incentives can cause problems, some have called for the rollback of pay for performance.⁷⁶ However, it is unlikely that we can return to the world that existed prior to the introduction of incentive contracts, and we would not necessarily want to. The use of incentives has resulted in better performance by employees — but at the cost of creating self-interested employees. In particular, the previous use of financial incentives that have crowded out social preferences means that those designing current and future incentives need to take the fact of crowding out into account. Retention bonuses — however distasteful — may be the only way corporations can induce employees to remain in their jobs. Large (well-designed) compensation packages may be the most effective way for principals to align agent's interests with their own.

76 See, e.g., Osterloh & Frey, *supra* note 43.