Restoring Trust in Finance: From Principal-Agent to Principled Agent[1]

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Abstract
Bonuses in finance represents a bad equilbrium among multiple equilibria. Motivating agents with bonuses can promote untruthfulness, via motivation crowding out, justifying the decision to pay them bonuses. In the equilibrium that works in other professions, moral norms are upheld enough to not require bonuses. Escaping the bad equilibrium is difficult if banks engage in an 'optimal' amount of deceit (moral optimization). Restoring trust instead requires that untruthfulness be ruled out *a priori* (moral prioritization). Reinstating truth telling in finance must contend with a tendency for ethics to be confined to the private domain and motivation crowding out in finance.

Keywords: Bank Bonuses, Trust, Deregulation

JEL Codes: G21, G28, H12, E52

1 Introduction

Trust and trustworthiness are fundamental to economic welfare. They explain why most people are honest when making social security claims and why restaurants are happy to serve first and charge afterwards (Bacharach et al. 2007). It also explains why unmonitored efforts are rewarded on an hourly basis in so many workplaces, when neoclassical economic theory might suggest otherwise (Jensen and Meckling 1976). Furthermore, professionals of all kinds are sought out not just for their expertise, but for an assumed trustworthiness with respect to their clients (Downie 1990).

Banking is one industry where trust and trustworthiness are particularly important.[2] Banks collect detailed information on contracts and products as they interact with savers, debtors, investors and companies. Due to their expertise and access to private information, bank managers have power over shareholders and customers, and therefore a social responsibility to

[1] The authors thank without implication the Oxford Martin School and the Political Economy of Financial Markets (PEFM) group at St Antony's College, Oxford. Gordon Menzies acknowledges the financial support of both institutions to support his sabbatical visit to Oxford. We also thank without implication Peter Anstey, Adam Bennett, Peter Docherty, Peter Eckley, Charles Enoch (and other PEFM seminar participants), Sam Filby, Natalie Gold, Ian Goldin, Colin Mayer, Nick Morris, Avner Offer, Paul Oslington, H Peyton Young and Carl Rhodes. All correspondence received by gordon.menzies@uts.edu.au at UTS, PO Box 123, Broadway, Sydney.
[2] In this article 'banking' covers the activities of all kinds of financial intermediaries and 'manager' stands for an individual or group in charge of a financial intermediary.

be trustworthy. As an indication of the centrality of trust to banking, the origin of the word ‘credit’ is the Latin *credere*: to believe, to trust.

Yet recent perceptions have not aligned with this ideal. In Australia, the 2017/18 Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry has been a veritable treasure-trove for those who wish to criticize bankers. One testimony relates how a client had paid substantial fees to construct a financial plan based around living in an investment property, although this is not permissible under Australian law:

> ‘I just feel now after all the time after all the fees and insurances … that all along they were just aiming for us to take out an investment property that you can’t live in. I just felt after that, [pause] that we had been led up the garden path and had been lied to.’
>
> Jacqueline McDowall (quoted in Danckert 2018)

A similar theme had also emerged a decade earlier in a US Senate Inquiry into the 2008/9 Global Financial Crisis, with criticisms levelled against Goldman Sachs.

> ‘You are taking a position against the very security that you are selling and you are not troubled? … And you want people to trust you? Why would people trust you?’
>
> Senator Carl Levin, to Goldman Sachs CEO (quoted in US Senate 2010)

This paper explores an explanation for untrustworthiness in finance based on the incentives and ‘money primed’ environment of banking. Financial incentives are widely applied in banking, and research on motivation crowding out raises the question of whether these could endanger the prevalence of trust and trustworthiness. The literature on motivation crowding out due to financial incentives shows that ethical behaviour is easily eroded by using money as an incentive (Bowles and Polania-Reyes 2012). A classic example is the study of six day-care centres in Haifa (Gneezy and Rustichini 2000). On the introduction of a fine for parents who were late in picking up their children, the surprising result was that lateness increased, more than doubling. Financial incentives had the apparent effect of transforming late-arrival from one kind of moral entity to another – from a morally bad violation of a principle to a decision problem to be solved with cost-benefit analysis.

A nascent literature in psychology even suggests that motivation crowding out might occur when money is not an incentive. In ‘money priming’ studies money is viewed or touched prior to completing an unrelated task. Yet in spite of the fact that money is not an incentive, Vohs (2015) argues that money priming generates ‘… undesirable effects on interpersonal warmth.

People reminded of money, compared to other concepts, are unhelpful, stingy, and disinterested in social contact. They fail to put themselves in others' shoes. They are not compassionate or empathetic' (op. cit. pg. 2).[3] If this is correct, the crowding out of good motives where money is an incentive might be reinforced in an environment, like the finance industry, where the content of the work and the goals of the organization are money-primed.

Motivation crowding out is an under-appreciated consequence of financial deregulation. If market discipline is ineffective in an industry, and motivation crowding out occurs as a result of increased financial incentivation, the main impact of deregulation might be an increased prevalence of anti-social behaviour. This is especially damaging if anti-social behaviour takes the form of untrustworthiness. The option of trusting employees in the workplace then vanishes, leaving the world of Jensen and Meckling's (1976) Principal-Agent problem, where the presumption is that agents cannot be relied upon to tell the truth about their efforts.[4] Paying bonuses in finance may then usher in a bad equilibrium among multiple equilibria. Motivating agents with bonuses makes them untruthful, via motivation crowding out, justifying the decision to pay them bonuses. We call this a bad equilibrium because within the Jensen and Meckling world the first best solution where action is observable is, of course, identical to one where actions are hidden, but agents reliably tell the truth about them.[5]

We claim in this article that it is difficult to break out of this bad equilibrium if people think about ethics in the way that is most natural to economists. Applying cost benefit analysis to all moral decisions – what we call *moral optimization* – will prescribe an optimal amount of bad behaviour, such as the 'optimal' amount of untruthful communication with clients and shareholders. With this mindset in place, the optimal amount of untruthful communication will be lower to the extent that bankers care about their clients and shareholders, but it will not be zero. We argue that sometimes it is better if a worthwhile principle such as 'tell the truth to clients and shareholders' overrides utility- or profit-maximization (Sen 1977). Only then –

[3] Money priming experiments have been embroiled in the current controversy about replicability in psychological experiments, as Vohs (2015) acknowledges. She cites failures in replications Klein et al. (2014) and Roher et al. (2015) in her review, but documents a large number of studies finding money priming. Subsequently, Vadillo et al. (2016) build a good case that money priming may have been overstated within Voh's discussed studies drawing, among other things, on an astute forensic analysis of p-values.

[4] As will be discussed, Jensen and Meckling's presumption that hidden action is undiscoverable is equivalent to ruling out truthful communication, since the latter is able to make hidden action discoverable.

[5] For an illustration of a first-best equilibrium (either observable action or equivalently reliable truth-telling about action), and, the second-best hidden-action equilibrium, see Milgrom and Roberts's (1992) appendix to chapter 6: *Moral Hazard and Performance Incentives*.

when bankers exhibit what we call *moral prioritization* – will they be able to join other professionals outside of the Jensen and Meckling world.

Since ours is a general argument, its validity could be probed in a number of times and places. We have settled on the experience of The City (of London) over the late twentieth century. We find this particularly instructive since The City has been a world-leading financial centre over many years, and part of the vanguard of both the wave of deregulation to sweep over the developed world in the 1980s, and the catastrophic 2008 financial crisis. Prior to deregulation, however, it had a well-documented reputation for probity and truthfulness which sits somewhat uncomfortably with the egotistic assumptions of neoclassical economics.[6]

The argument proceeds as follows: In section 2 we report the results of an experiment which suggests a relative lack of trustworthiness in finance. When primed to think about work, bankers cheat at an experimental task more often than do other professions. The experiment does not explain the lack of truth-telling – but it raises the question of whether this has always been the case and, if not, what might have caused the change. Our answer relies on the well-accepted narrative of the transformation of The City (of London) financial centre, over a few short decades, from a service-orientated profession to a workplace for egoistic profit maximizers. History teaches us that incentive contracts can erode trustworthiness in finance, through the process of motivation crowding out.

In section 3, which can be skipped without losing the thread of the argument, we take a detour to counter an argument which is commonly made against the necessity of taking trust and trustworthiness seriously in finance. The assertion is that competition can 'economize on virtue' so that even a relatively small amount of participant trustworthiness will secure the system. The section is important because it discounts the possibility that the arguments made in section 2 with reference to the UK are historically contingent on deregulation 'done badly'. Instead, we show that replacing integrity with competition in finance fails to serve society because the task of promoting competition is relatively difficult in that industry.

In section 4 we criticize the inadequate treatment of trust and trustworthiness in the economics literature. We define moral optimization and moral prioritization, and argue that the latter has special appeal for the task of dealing with deceit in finance. Moral prioritization has the

[6] It is especially valuable to listen to the 'insiders' when monitoring a change in culture in an industry. The scholarly output of the Political Economy of Financial Markets Group, St Antony's college Oxford (Jaffer et al. 2014 and Morris and Vines 2014) has been helpful to us in this regard. Personal communication with the members of this group, many of whom worked in The City, informs our section 2 (ii).

potential to break out of a bad equilibrium. Moral optimization is not sufficient because it prescribes an ‘optimal amount of deceit’.

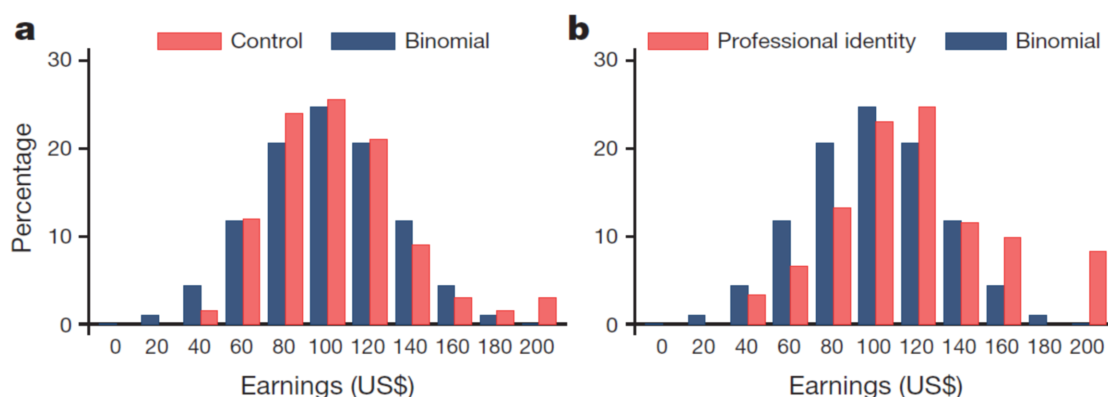
In section 5 we canvass a number of possibilities for restoring trust in finance. Reinstating truth telling in finance must contend with a tendency for ethics to be confined to the private domain and motivation crowding out in finance.

2 Why are Bankers Untrustworthy?

2(i) Contemporary bankers are untrustworthy

Despite the importance of trust and trustworthiness in banking, a recent experiment indicates that bankers take a permissive view of truth-telling. Cohn et al. (2014) gave a coin flipping task to 128 bank employees from a large, international bank, who were rewarded for the outcomes they reported. Subjects were given $20 for each ‘correct’ toss out of ten tosses, giving a range of payoffs from zero (no correct tosses) to $200 (ten correct tosses). The subjects knew which tosses would be deemed correct in advance. As in a classic Principal-Agent setup (Jensen and Meckling 1976) there is hidden action. The experimental subjects flip the coin out of sight. No individual deceit can be detected, but group cheating can be revealed when the results are compared with the binomial distribution of payoffs which could be expected with truthful disclosure (Figure 1).

Figure 1: The untrustworthiness of bankers



Prior to the coin task, the control group of bankers was asked about the use of their leisure time and their hobbies, priming them to think in terms of their domestic identity. The treatment group of bankers was asked about their work life, priming them with their professional identity. In figure 1, ‘a’ is the control group and ‘b’ is the treatment group. The dark binomial distribution bars represent the expected frequencies of payoffs if all tosses are reported truthfully, and the light bars are the findings. When primed to think of their professional

identity, the bankers as a group reported on average too many financially rewarding tosses. But they were generally honest when focused on their domestic identity.[7] The experiment was repeated with other employment categories, including manufacturing, pharmaceuticals, telecommunications and information technology. No significant increase in dishonesty in the professional identity treatment was identified for these categories.

2(ii) Bankers have not always been untrustworthy

This experiment does not explain the lack of truth-telling by bankers – it only establishes its existence and correlates it with their workplace. But the natural question which arises is whether this has always been the case and, if not, what might have caused the change. Our answer is that the untrustworthiness observed in Cohn et al. (2014) is contingent and recent. In coming to this view, we rely on the well-documented narrative of the transformation of The City (of London) financial centre from a service-orientated profession to a workplace for egoistic profit maximizers.[8]

For most of the 20th Century British banking was not marked by adventurous attitudes to risk and truthfulness. During the post-war construction of the British welfare state, financial markets were strictly regulated and international movements of financial capital were limited. The financial sector was highly fragmented, with participants being vetted to ensure they were deemed ‘fit and proper’ to carry out their functions. Individuals, firms, and partnerships not so deemed were dealt with by their peers and in extreme cases were excluded from the markets and from the social and professional networks of The City. This is the origin of the term ‘gentlemen bankers’, collectively referred to as the ‘Club’.

The banking community at the time operated largely by self-regulatory agreement, with some legal underpinning. The only institutions which engaged in complex or risky transactions were the merchant/investment banks and other specialist brokers and traders. They too were careful as, given the partnership arrangements, they were taking risks mostly with their own funds. Investment bankers depended very much on their reputation, which had developed through long-term relationships with clients and other counterparties within The City. Most banks had centralized, and demanding, inspection regimes which ensured that rules and procedures were strictly followed and clients were served well.

[7] The experiment implies a moral boundary between work and home, a theme explored within the Ethics of Care literature (Tronto 2013).

[8] Our historical analysis draws extensively from Jaffer et al. (2014). See also Martin (2016) and Offer (2014).

Growth and consolidation in British banking occurred over the latter half of the twentieth century spurred by general financial deregulation. At the so-called 'Big Bang' in 1986, fixed commission charges were abolished and the Stock Exchange changed from open outcry to electronic trading. Previously separate financial organisations began to merge, and capital markets became dominated by global investment banks with large capital bases. Bankers struck profit-sharing bargains with their new shareholders, and a bonus-pay culture took hold.

The arrival of overseas banks transformed and globalized the culture of The City. At least by 2008, this global culture was not known for its truthfulness. US issuers and underwriters of mortgage-backed securities (MBSs), in a flagrant violation of fiduciary duties to both shareholders and customers, lied to shareholders about their own MBS holdings and bet against these assets even as they sold them to trusted clients. Most of the largest mortgage originators and mortgage-backed securities issuers and underwriters have been involved in regulatory settlements, and have paid multibillion-dollar penalties (Fligstein and Roehrkasse 2016). UK court cases since 2008 are testimony to the global contagion that was underway. Barclays and four former executives have recently been charged with fraud in 2008 (The Economist 2017) and Payment Protection Insurance (PPI) mis-selling was a growing problem from the mid-1990s.[9] A very large number of those policies were sold to clients who did not ask for them, did not understand them, or did not know that they would be unable to claim against them. By the time the fraud was uncovered, and the High Court ruled against the practice in 2011, it had become 'systemic' in the financial system (HoLC 2013).

The globalization of banking culture in The City was often accompanied by the formation of a 'markets division', managed by people who began their careers as traders. These individuals came to dominate the boards, management committees and culture of their banks. Their high levels of pay led to a corresponding surge in the pay of other bank board members, which could be justified only by raising shareholder expectations of returns. Higher returns were achieved by increasing the levels of leverage and risk (Jaffer et al. 2014). Even those who did not receive bonus-based pay packages began to inhabit a banking culture generated by those who did.

Bankers have two key relationships – with shareholders and customers – and the unfolding events can be usefully analysed within the Principal-Agent framework (Jensen and Meckling 1976). A principal wants an agent to act on their behalf, and the agent's actions are unobservable, so the framework provides a way of designing incentive schemes to help the

[9] PPI is an insurance facility that Banks and Building Societies sell to borrowers to protect them against the possibility that they might be unable to cover future repayments.

principal motivate the agent, instead of relying on the agent to fulfil a fiduciary duty. We can identify two Principal-Agent relationships, both of which cast the ‘bank manager’ in the role of an agent.

The fiduciary relationship is a concept of legal theory. The fiduciary is a person who holds a legal or ethical relationship of trust with one or more other parties (person or group of persons). A core legal duty that arises from the fiduciary relationship is the duty of loyalty (Gold and Miller 2016). The fiduciary has to be trusted because they have greater expertise, or have special powers to act on behalf of the person who trusts them. In the case of banking, ordinary customers or shareholders are generally unable to understand the complexity of the financial system, so managers often have more expertise and are given more powers to act, making them fiduciaries. But managers actions are arguably ‘hidden’ by this complexity too, making them ‘agents’ in the Principal-Agent framework. This identification makes it clear that the requirements of trustworthiness are met in legal theory by enjoining responsibility (buttressed by legal penalties) whereas economics relies on financial incentives.

In the Banker/Shareholder relationship, a bank manager is an agent for shareholders, and has a fiduciary duty to truthfully report management actions and risks taken to the shareholders. In the Banker/Customer relationship, a bank manager is an agent for customers, and has a fiduciary duty to describe products truthfully and not to take advantage of the client, who generally does not understand these products as well as the banker.

The ethical crisis that preceded the 2008 financial crisis in the UK, and other locations, was essentially a breaking down of a sense of fiduciary duty with respect to both shareholders and customers, coinciding with an increased use of financial incentives.

With respect to shareholders, our conjecture is that the bonus-based pay culture that emerged in The City led to motivation crowding out. It transformed deceit from one kind of moral entity to another – from a morally bad violation of a principle to a decision problem to be solved with cost-benefit analysis. This parallels the imposition of fines in Gneezy and Rustichini (2000), but perhaps with extra force in finance – a highly money-primed environment. In such an environment, calls to fulfil fiduciary duties in an un-incentivized way (Downie 1990) began to look ridiculous. This increased the reliance on financial incentives to fulfil the purposes of the shareholders, which increased motivation crowding out, and so on.

We have thus far described the breakdown of fiduciary duty within the Banker/Shareholder relationship, but the general erosion of trustworthiness had implications for the

Banker/Customer relationship too. The bonus-based pay culture dovetailed with the adoption of shareholder value – the notion that managers should only care about maximizing profits (Mayer 2013). Financially-motivated bank managers thus faced heightened incentives to gain the most financial advantage from customers, in order to gain the most financial advantage from shareholders (via bonuses).

Naturally, we recognize that this is exactly the purpose of incentive contracts. However, the incentives operated in an unintentionally destructive way when combined with the global banking culture's disregard for truthfulness. That is, the stronger incentives arising from the shareholder value framework led them to *mislead* clients in order to maximize profits. Again, lying was no longer seen as a morally bad setting aside of truth-telling, but increasingly became an implicit search for 'the optimal amount of deceit' discoverable by cost-benefit analysis. Difficulties in making competition work in finance (discussed in the next section) meant that misbehaving bankers were not driven out of the market. Rather, they began to drive its values, treating customers in ways that would have been unacceptable during the era of the Club.

Financial products were increasingly sold on a *caveat emptor* (let the buyer beware) basis, and bankers maximized rents arising from market power and informational asymmetries (Woolley 2010). The simplest way to exploit the latter is by not disclosing low probability but damaging ('tail') risks. Arguably, *caveat emptor* is simply inappropriate for products that cannot be widely understood, and many sophisticated financial products fell into this category.

It is apparent from the historical record that conservative virtues of probity and truthfulness that had characterised banking culture were increasingly replaced by the pursuit of personal gain. The Club had been based on delivering a service, but the hallmark of the new bad equilibrium was that bankers trained themselves to mislead shareholders and customers. As they say, the rest is history: Turner (2010) and Kolb (2010) catalogues the well-known unravelling of the system in 2008.

2(iii) A plausible explanation for the pattern of UK deregulation

The increasingly unrestrained behaviour of bankers in UK history is consistent with the effects observed in economic experiments on motivation crowding out arising from financial incentives.[10] Frey (1997) defines motivation crowding out as the process whereby external (extrinsic) stimuli remove good internal (intrinsic) motivations. It is common to use motivation

[10] See Titmuss (1970) for an early contribution. Bowles (2016) is an accessible, book-length survey, and Bowles and Polania-Reyes (2012) is a comprehensive literature review.

crowding out to explain how financial incentives affect work effort. Here the focus is on how the external stimuli of financial incentives and economics training affect the intrinsic desire to tell the truth.

Motivation crowding out arising from financial incentives provides an explanation of why bankers at work show a permissive attitude to moral requirements like telling the truth. Bonus-based pay culture has arguably undermined bankers' moral motivations, leading them to act on the basis of material self-interest, constrained at best by the letter of the law. Bonuses frame banking as conducted only for money. They signal to bankers that their job is to maximize profit. Moral considerations on how to act, notably around obligations to tell the truth to clients and shareholders, are implicitly downgraded.

While bonuses are one extrinsic stimulus that can cause motivation crowding out, another is the kind of economics training received. Deregulation in the latter decades of the twentieth century did not occur in a cultural vacuum. It was driven in part by the cultural tides that reached their high-water mark during the Reagan/Thatcher era. Their conception of economics placed a good deal of reliance on Adam Smith's 'invisible hand' metaphor, reiterated and developed by Arrow and Debreu (1954) and Hayek (1945) and popularized by Milton Friedman. Extreme reliance on the metaphor, mediated through an increasingly insular economics training,[11] provided some with a rationalization – a strategy for reducing cognitive dissonance by adapting belief to desire (Elster (1983: 123, 156)) – for a particularly selfish vision of economic man.

This became a moral norm with a weak sense of social responsibility, sometimes even lacking a conception of society itself.[12] It involved agents maximizing their financial wealth (Mill 1974/1843) or happiness (Bentham 1948/1789) and the paramount importance of 'preference satisfaction'. As we will discuss in section 4, the latter conflated orderings, self-interest and welfare (Sen 1977) creating significant problems for the discussion of ethics within economics.[13] On a practical level, the upshot of this kind of economics training favored a

[11] There is some evidence that economists are less likely to cite outside their field compared with other scholars. Fully 81% of economists' citations are drawn from within their discipline, as against 52% for sociology, 53% for anthropology, and 59% for political science (Fourcade et al. 2015).

[12] Lydenberg (2014) contrasts the 'rational person' of economics (economic man), whom he says pursues his own personal ends, with the 'reasonable person' of tort law who is defined 'in terms of the interests of oneself in relationship to society's interests and the interests of others in that society' (op cit., pg. 288). Mrs Thatcher is famously quoted as saying '… who is society? There is no such thing! There are individual men and women…' (Woman's Own 1987), although in fairness she claims that life is 'reciprocal' soon after in the same interview.

[13]The same lack of clarity affects the term 'utilitarianism' which was the historical precursor to preference satisfaction. As discussed in Collard (1978) Mill – the creator of economic man –recognized that utilitarianism was both used as an explanation for the behaviour of essentially selfish individuals, or as a moral vision which

pragmatic approach to ethical challenges, seeing them as problems to be solved with cost-benefit analysis, implicitly leading to an 'optimal amount' of wrong-doing.

The classic discussion of motivation crowding out from economics training is Frank et al. (1993). They survey a series of experiments with economics and non-economics undergraduates: a public goods game; prisoners' dilemma; Ultimatum game, and an honesty test. On each, economists are less likely than a general sample to interact cooperatively. Corroborating studies include Frank and Schulze (2000) and Frey and Meier (2003). The finding is sufficiently robust that a subordinate literature addresses the question of the causal direction of the correlation: does economics training make people selfish, or do selfish people choose to train in economics? The verdict is: both (see Cipriani et al 2009, Bauman and Rose 2011).

History shows how lucrative incentive contracts and a very particular economics training coincided with the demise of The City. Motivation crowding out provides a well-documented and evidence-based explanation for the decline in trustworthiness of UK banking over the latter decades of the twentieth century. Furthermore, once a non-trustworthy equilibrium was locked in, it became self-reinforcing – everyone expected, and received, untrustworthiness as the default moral norm.

3 Competition in Finance is Unlikely to Guarantee Ethical Behaviour

3(i) Motivation crowding out and deregulation

We recognize the dangers of depending too much on historical narrative. A critic might argue that given a different path of deregulation and competition policy than the one pursued in the UK, market forces would have delivered benefits that far exceeded the costs of motivation crowding out. Applied to finance, the much touted ability of markets to 'economize on virtue' implies that whatever depleted virtue remains after financial deregulation, with the appropriate incentives, is enough to secure an improved system. We respond with three general claims.

3 (ii) Claim One: There are impediments to the elimination of poorly performing financial firms

Financial institutions, and the contracts they write, generate very special risks for the economy (Turner 2010). As was amply demonstrated in 2008, these risks are so large that the authorities cannot afford to let some poorly performing firms go bankrupt. In the 2008 crisis not only did

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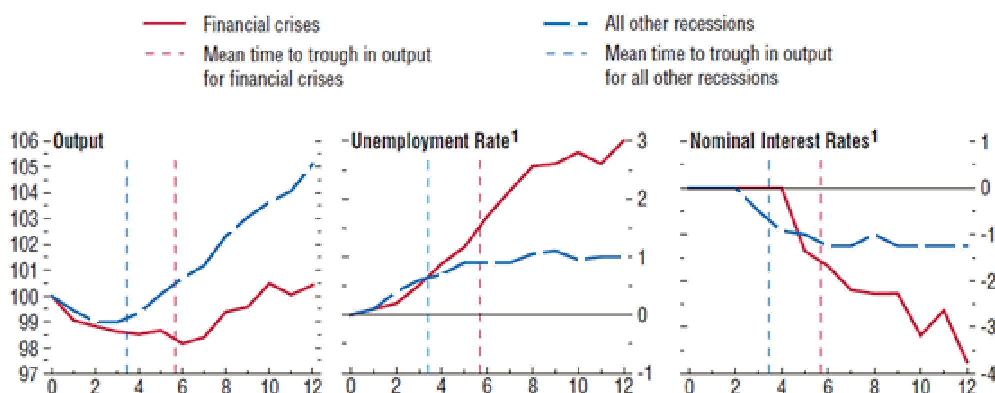
enjoins impartiality. Collard suggests that Mill believed, in a vague way, that education and social progress would close the gap between the two usages (Collard 1978, pg. 58). One hundred and fifty years hence, the gap remains, with the same word 'utilitarianism' uncomfortably stretched across it.

some bailed-out institutions access public money, but some managers exited with substantial bonuses, leaving them free to mismanage again.

There has been an international regulatory response, not least in the form of Basel III. It has sought to strengthen incentives for good behaviour, protect depositors by increasing the quantity and quality of capital, enhance liquidity provision and introduce macroprudential policy. In the UK, 'ring-fencing' and 'bailing in' are discussed in the Vickers Report on the UK banking system (Edmonds 2013), and the intention of both is to hold high risk takers to account.

Nevertheless, there is compelling evidence that recessions compounded by financial sector crises are deeper and longer than other recessions (IMF 2009). Figure 2 (IMF 2009) shows these features averaged over worldwide financial sector recessions, and we note particularly that easier monetary policy is generally pursued. This means that even in scenarios where some errant banks fail without endangering the public purse, the likely easing of monetary policy during a financial crisis will protect some other errant banks. This undermines the invisible hand and implies that misbehaving firms will be overrepresented in the finance industry.

Figure 2: Financial Sector Recessions are More Severe
(IMF calculations, quarters since peak in real output)



(IMF 2009, Figure 3.8, pg. 118)

3 (iii) Claim Two: There are fundamental difficulties for shareholders and customers in monitoring banks and their managers

It is relatively difficult to understand and monitor the financial system. The fundamental problem here is conceptual. Whatever accounting conventions are used, there is uncertainty about the measurement of risk, and accounting profits cannot be effectively adjusted for risk.

Haldane et al. (2011) propose that this should be a priority in any reform of the accounting measurement regime, but the disentangling of risk from return may simply not be feasible.

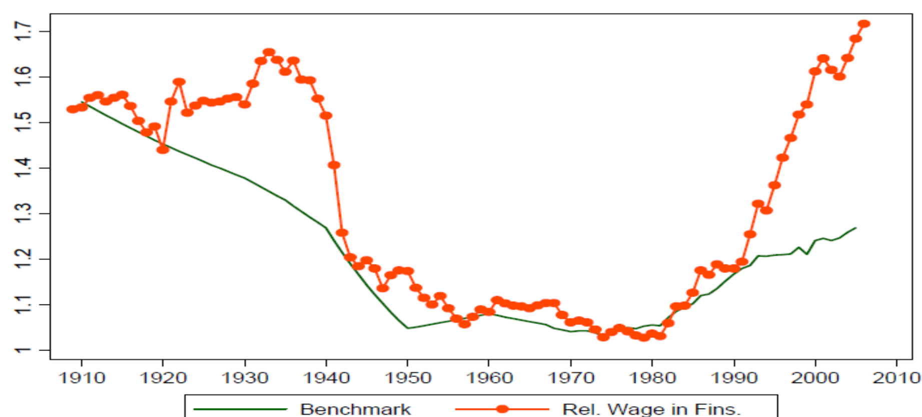
> 'As it is rudimentary to its activities, finding a more sophisticated approach to measuring risk, as well as return, within the financial sector would seem to be a priority. The conflation of the two can lead to an overstatement of banks' contribution to the economy and an understatement of the true risk facing banks and the economy at large.' (Op. cit. pg. 106)

Financial firms are in a position to conduct trades with a zero, or even negative, expected return which are nonetheless extremely profitable in the short term (Wolf 2010). They may undertake large-volume trades each with a high probability of a small gain and a small probability of a huge loss. The dangers are illustrated by Noe and Peyton Young (2014). They show how a manager can use derivatives to increase returns by generating extreme tail risk for the client. In normal times the client makes a good return and the manager gets a good bonus. However, during a tail event the investor loses everything, but the fund manager merely fails to get his or her bonus.

The conflation of risk and return in measurement allow bankers to lie to ill-informed shareholders and customers about the risks of particular strategies. Furthermore, these measurement problems may paint a picture of an institution able to withstand the inevitable 'bad draws' of risk-taking, when in fact the institution is not sufficiently fortified.

There have been a number of suggestions that this opaque environment has allowed bankers to mislead shareholders and customers about the worth of their management services. In figure 3, from Philippon and Resheff (2009), we have evidence of extraordinary departures from a benchmark finance wage in the US. The (solid line) benchmark takes into account the higher education of finance workers and the risks of unemployment, relative to average wages (unity) but it comes nowhere near the actual wages paid for decades on end. How much of this extraordinary premium was based on deception is hard to know, but given the practices that came to light after 2008 we can at least say there was a discrepancy between banker wages and the worth of their management services.

Figure 3: Inexplicable Wages in the financial sector



The upshot of all these information problems is that there is a significant degree of unquantifiable risk built into the financial system, which allows bank managers to lie to shareholders and customers should they wish to do so. It remains to be seen if advances in measurement, such as those sought by Haldane et al. (2011), will solve these problems. In the meantime, some look to competition policy.

3 (iv) Claim Three: Competition policy may make risky and deceitful behaviour more likely

Competition policy has three main concerns in dealing with oligopolistic industries: reducing market power by restructuring leading firms; preventing the formation of explicit or implicit cartels; and reducing barriers to new entrants. In services, a further concern is the inability of consumers to understand financial products due to the complexity of the service provision and/or the pricing of alternatives, creating an environment conducive to deception.

The most direct way to reduce market power is to encourage new entrants. Yet Berger et al. (2009) suggest this is more likely to result in 'competition fragility' than it is to reap the benefits of the invisible hand. Competition fragility is the scenario where compressed bank margins tempt banks to pursue zero or negative expected excess return strategies, which none the less look very profitable in the short run. That is, strategies like Noe and Peyton Young (2014) become *even more likely* in competitive environments. As we just noted, these strategies are poorly understood, affording many opportunities for deception.

4 Moral Prioritization of Truth-telling Needs to be Recovered in Finance

4(i) Moral optimization vs moral prioritization

In this section we focus on the nature of trustworthiness required to restore finance. Central to the idea of trustworthiness is the notion that someone's commitment can be relied upon, even

if it ceases to be in their interests, or the interests of those they care about. We need a model of trustworthiness that might enjoin parties to act well, even against personal interests.

With this in mind we create a distinction between what we call moral optimization and moral prioritization. Moral optimization is the modelling of ethical behaviour using standard preference-satisfaction techniques, where the content of preferences includes a regard for others (Collard 1978, Becker 1981, Hausman 2012). In contrast, moral prioritization rejects the framework of preference satisfaction when modelling some ethical acts, allowing profit- and utility-maximizing to be overridden (Williams 1973, Sen 1977). The essence of moral optimization is balancing one's own interests against another's using cost benefit analysis.[14] The essence of moral prioritization is over-riding this balancing of interests.

Trustworthiness involves many things: competence, reliability, promise keeping and truth-telling, to name a few. Clearly a lapse in any of these are significant, but two very direct economic effects can be discerned from the abandonment of truth-telling. A lack of it exposes customer to fraud by bankers who understand financial products better than their customers, and it forces shareholders to relate to managers according to the Principal-Agent model, so that socially inefficient incentive contracts must be offered to bank managers who cannot be trusted to give a reliable account of their activities.

So, to follow through with the example of truth-telling, a cost benefit analysis (moral optimization) recommends an optimal amount of deceit, if the benefits to me, or those I love, are high enough. But decisions about lying need not be made in this manner. Individuals might act according to the principle: 'You should not lie!' For such individuals the principle trumps evaluation of costs and benefits. The fact that some people do not act according to the moral principle does not count against the phenomenon that many do. Moral prioritization is a principled eschewing of cost benefit analysis, even when its components include shared interests and empathy. It is more reassuring to receive an answer to a question that really matters from someone who acts according to moral prioritization than from someone who practices optimal deceit.

A key theme of this article is that truth-telling motivated by moral prioritization has the potential to make some incentive contracts redundant by solving the Principal-Agent problem

[14] Optimization can be described as a cost benefit analysis. Any stable neoclassical optimum equates two terms at the margin, so a perturbation away from equilibrium incurs a cost greater than the benefit, by the definition of an optimum. Thus any approach to equilibrium from disequilibrium obeys the dictates of cost-benefit analysis—that one ought to adjust the two quantities while ever the benefits of any adjustment exceed the cost.

(Jensen and Meckling 1976). In that model, the principal seeks the help of the agent, whose unobservable effort (known as 'hidden action') is essential to the firm. There is an implicit assumption that hidden action equates to undiscoverable action so that an agent cannot be held accountable for their actions and requires a performance-related incentive contract.[15]

But the core assumption – that what is unobservable is undiscoverable – is undercut by everyday experience. In human communities ordinary truth-telling means that people know far more than their direct observations could tell them. Truth-telling involves the transfer of knowledge from one party who knows something to another party who does not. We usually rely on truthfulness when we ask our doctor a question (Downie 1990). The relevant norm of truthfulness here is of moral prioritization rather than moral optimization. We would be unwise to consult a doctor who practiced optimal deceit, however other-regarding she might be. In the same way, the principal in the Principal-Agent problem cannot rely on an agent telling them about hidden action in a workplace if the agent practices optimal deceit. Unless the principal knows the agent practices moral prioritization with respect to truth telling, there is no escape from Jensen and Meckling's (1976) inefficient incentive contracts.

4(ii) Moral prioritization is controversial within economics

Sen's (1977) suggestion that preference satisfaction is not the only way of understanding ethical behaviour has been surprisingly controversial. Hausman (2012) defends the standard economic view, even though he recognizes useful instances of moral prioritization in standard models. He gives the example of maximizing utility with a fixed amount of money, noting that the budget constraint cannot be expanded by stealing irrespective of how much it might satisfy preferences. Stealing is ruled out by moral prioritization in every single formulation of a budget constraint, without considering whether such a ruling out is optimal.

Anderson (2001) defends Sen against the mainstream, making the methodological point that whilst it may be *possible* to describe ethics in terms of preference satisfaction, it may not be the *best* procedure. In her view, the generation of other competing analytic tools is a way of gauging the adequacy of preference satisfaction. In view of the unresolved debate on this matter,[16] we follow her approach by arguing for the validity of *both* moral optimization and moral prioritization.

[15] As noted before, this solution is socially inefficient because risk-averse agents are exposed to volatile performance-related pay.

[16] Some features of the debate can be summarized briefly: Hausman (2012) assumes that all ethical behaviour can be modelled by manipulating preferences (by including regard for others in the 'utility function') or by manipulating constraints, which he takes to be Sen's approach. Hausman himself opts for the former, and

Mainstream economic modelling regards moral optimization as a useful tool, and it does have experimental warrant. We earlier mentioned money priming, and Vohs (2015) finds that the presence of money (what is called its 'salience' in experiments) encourages an exchange mentality, whereby people consider what they are giving up for what they will get in return. An economist immediately recognizes this as a cost-benefit analysis, and since finance is a social environment where money and money-making are highly salient, it would be surprising if at least some ethical deliberation did not proceed as a cost benefit analysis. Furthermore, as Becker (1981) showed, moral optimization is easy to append to standard economic models, and this goes some way to explaining its popularity.[17] Typically, the welfare of others is added into preferences (or a 'utility function') as just another 'good' and standard analysis then proceeds.

Moral prioritization is a deeper challenge to economic theory, but it too has experimental warrant. Erat and Gneezy (2010) provide a clean test for 'lie aversion', which is identical to our concept of the moral prioritization of truth telling. Their experiment is noteworthy because they allowed subjects to improve everyone's financial payoff by telling an untruth, which they called a Pareto White Lie.[18] The mainstream economic solution is straightforwardly determined in this situation because (2010, pg. 724): 'The utilitarian approach [moral optimization] … argues that one should lie in such situations. … a person should weight benefits against harm and happiness against unhappiness. The act of lying in itself carries no bad consequences.' Yet subject behaviour displayed moral prioritization alongside moral optimization. Around one third (36/102) of subjects refrained from lying when given the opportunity to pull off a substantially- and mutually-rewarding Pareto White Lie.

With regard to making room for moral prioritization in economic theory, we find Sen's critique of moral optimization in 'Rational Fools' (1977) persuasive. He first criticizes the way in which economists use the word 'preference' by considering the statement, 'Jill prefers not to torture'. Jill's preference not to torture could mean two completely different things. It could be akin to

therefore believes that ethical behavior currently modelled in constraints should instead be modelled in preferences. For example, absolute prohibitions should be modelled as the satisfaction of lexicographic preferences (vertical or horizontal indifference curves). In contrast to Hausman, Williams (1973) proposes that 'the unthinkable' is itself a moral category, thus denying that all morality can be built into preferences or constraints in a rational choice model. 'Entertaining certain alternatives, regarding them indeed as *alternatives,* is itself something that [the moral individual] regards as dishonourable or morally absurd' (Williams 1973, pg. 92). In de-emphasizing rational choice, Williams affirms emotion as part of the analysis of ethics (Augustine 426, Haidt 2013) in contrast to Kant's (1785) highly influential rejection of emotion.

[17] He has his critics within that literature. For example, Menzies and Hay (2008) note that the use of other-regarding preferences as a modelling device has increasingly been abandoned in favour of egoism. They think this is an example of motivation crowding out operating within the economics literature – academics ceasing to 'see' possibilities in marriage after they have been exposed to economic discourse.

[18] A Pareto improvement sees at least one person benefit without making anyone worse off.

her desire to avoid strenuous exercise; call this a *sentiment*. Or it could mark a principled refusal to do so; call this a *commitment*. He then argues that sentiments and commitments are distinct, and a counterfactual test distinguishes them. What if torturing now gave Jill pleasure? Her preference not to torture is a mere sentiment if, now, she would torture; it is a commitment if she would not. Sen's claim is that preference satisfaction is stretched across too many meanings to be sensible:

> 'A person is given *one* preference ordering, and as and when the need arises this is supposed to reflect his interests, represent his welfare, summarize his idea of what should be done, and describe his actual choices and behaviour. Can one preference ordering do all these things? A person thus described may be "rational" in the limited sense of revealing no inconsistencies in his choice behaviour, but if he has no use for these distinctions between quite different concepts, he must be a bit of a fool.'
> (Sen 1977, pp. 335-336, original italics)

4(iii) Moral optimization implies optimal deceit

We will now show in a stylized model why we are cautious about the benefits of moral optimization in finance, and instead are attracted to moral prioritization, because the former leads to an optimal amount of deceit.

Such a modelling exercise is not common in economics, which underscores Hausman's (2012) observation that moral prioritization is an unacknowledged practice in mainstream theory. That is, discussions of markets generally rule out a strategy of lying to create new sales, and they also fail to calculate the optimal degree of lying. A fully optimal solution, such as the one we are about to give, would not be squeamish about doing so.

To that end, suppose a bank is marketing a dubious security, such as a MBS. It earns a fixed fee on every unit sold, which we will call p for price. The bank lies about the properties of the MBS in order to sell them, with the extent of deceit measured by θ. The quantity demanded x increases in θ but at a decreasing rate. The reasoning is that it is relatively easy to fool naïve customers, but more lies are required to attract more sceptical purchasers when one 'runs out' of naïve customers. Thus the revenue $R = p.x(\theta)$, and has $R' > 0$ and $R'' < 0$. Deceit itself is actually costless (for example, the suppression of information) but more deceit increases the probability of the bank being discovered, and any fine will be proportional to the extent of deceit, namely θ, since courts and adversely affected parties will take a sterner view of the behaviour the greater the deception.

Thus expected profits from the dubious MBS business are a function of Revenue (*R(θ)*, the probability of detection (*Pr(θ)*) and the fine on discovery (*f(θ)*). The optimal level of deceit occurs when marginal revenue equals marginal cost. Or, to put this in cost-benefit language: every change in the extent of lying θ that moves towards the optimal θ has benefits that exceed the costs, and therefore passes on a cost-benefit-analysis criterion.

$$\pi = R(\theta) - \Pr(\theta) . f(\theta) \qquad (1)$$

$$\frac{\partial \pi}{\partial \theta} = 0 => \ R' = \frac{\partial \,\mathrm{Pr.f}}{\partial \theta} \qquad (2)$$

$$MR = MC$$

Small lies often have the double characteristic that 1) there is little chance of detection and 2) even if they are detected the perpetrator will not be treated too harshly, because the extent of deceit was not large.

In the language of (2), we assume the probability of detection and the resultant fines from detection are low and stable for small values of θ. That is, *Pr, f, Pr'* and *f'* are all close to zero when θ is small, implying that MC is too. It is natural to assume that marginal cost is increasing from zero, which implies that each extra lie increases the danger to the bank in a more-than-linear way. Thus marginal revenue is decreasing (since *R''* is negative) and marginal cost is increasing, guaranteeing a positive optimal θ.

There are probably many contexts where analyzing deceit through the lens of cost benefit analysis prescribes an optimal level of deceit. In banking, moral optimization implies deceitful customer service. If deceit is inflicted on shareholders there is no escape from Jensen and Meckling's (1976) inefficient incentive contracts.

This section has shown that a greater willingness to avoid moral optimization and embrace moral prioritization is called for. But how might that be encouraged?

5 How to Recover Moral Prioritization of Truth-telling

5(i) General moral principles

We earlier noted the work on lying aversion by Erat and Gneezy (2010), which saw fully one third of subjects decline to tell a Pareto White Lie. This may go some way to explaining why many professions generally practice truth-telling, and do not rely on Jensen and Meckling contracts to the same extent as finance does. It also lends plausibility to the hope that finance might be expected to rise to the standards of these other professions.

Indeed, there is a strongly held view outside of the discipline of economics that moral obligations exist, and that people quite often act upon them. Earlier economic thinkers, in contrast to the flow of the mainstream more recently, held this view. Adam Smith (1759) believed that moral obligations arise out of a fellow feeling for the community in which one lives; his 'impartial spectator' was devised as an attempt to show how an individual comes to understand what these obligations might be, and might change his or her actions as a result (Wight 2015). Smith's interest in the possible conflict between moral obligations and economic motivation was typical of his time, as was his wide-ranging consideration of the relevant issues (Oslington 2012). As discussed by Collard (1978, pg. 51 ff.) foundational modern thinkers such as Butler, Hume, Mill and Edgeworth all recognized a tendency not to count others' welfare as much as one ought to for the flourishing of society, except in enlightened moments of 'conscience', 'calm judgement' or 'calm moments'.

For those who desire to recover this tradition, the most straightforward interpretation of moral prioritization is deontological ethical theory. Deontology seeks good rules of action, such as the Kantian Categorical Imperative to 'act only in accordance with that maxim through which you can at the same time will that it become a universal law', or its corollary that people should never be treated merely as a means to an end (Kant 1785). Bowie (2017) pursues the argument that a consistent and generalized application of Kantian principles in Business could constitute a form of trustworthiness.

5(ii) Professional rules and professionalism

Alongside Kant's search for universal principles, there may be a need for more 'local' rules that do not have to meet Kant's requirement of being applicable everywhere. In a work context, such local rules often constitute professional codes of conduct, though professionalism is about more than rules. Positively, the professional is enjoined to exhibit what Downie calls beneficence, which includes truth-telling and loyalty (Downie 1990, Gold and Miller 2016).

Professionalization has arisen in occupations where there is reliance on judgment, which in the short term can be opportunistically exploited by a professional with detection by the non-professional difficult; and where what is offered in the transaction has a critical practical value, not being easily replaceable. In law, what is of critical practical value is one's freedom; at school, education; in medicine, health. As the examples show, there are numerous other workplaces that maintain standards of professionalism, and where practitioners are not expected to exploit informational or monopoly power at the cost of those whom they serve.

On a practical level there are a number of ways that professionalization functions. The most obvious is through a professional body's self-certification of its members. Professionalization in finance would also involve reform of pay structures, insofar as performance-related pay has been a key contributor to the crowding out of moral motivations in finance. It may also seek to downplay the salience of money in banking culture, perhaps by encouraging corporate philanthropy.

5(iii) Barriers to change

The foregoing suggestions are not radical, but neither are they straightforward to implement. Restoring trust and trustworthiness cannot be achieved by institutional reforms unless they are accompanied by a change in outlook. In particular, the keeping of rules – either general Kantian rules or professional codes of conduct – will safeguard the system only to the extent that bankers desire to be ethical.

There are at least two barriers that stand in the way of this change in outlook.

First, we noted that there was an apparent 'moral boundary' between work and home in Cohn et al. (2014). The bankers who lied did so when primed to think about work, but not about home. This discrepancy is a pivotal interest for the Ethics of Care research program (Tronto 2013), which wants to 'deconstruct' the moral boundary between home and work, allowing care (defined in some detail by Tronto (2013)) to cross over from the former to the latter. Walzer (1983) explores the meanings of care that should apply to home and to the workplace.

The second barrier standing in the way of a changed outlook is a possible under-estimation of the morally corrosive motivational power of money. There are a number of inter-related research programs connecting framing, reasons, motivation crowding and incentives in sociology, psychology, and philosophy, which are part of an interdisciplinary investigation that economics could draw on.[19] Taking the example of sociology, Durkheim's (1915) notion of 'sacred' is applied to money by Belk and Wallendorf (1990). They claim that money in contemporary society is (pg. 36) 'revered, feared, worshipped, and treated with the highest respect'.

[19] However, as noted earlier, economists can be reluctant to draw on other disciplines. The reference list in an extensive review of motivation crowding out arising from money-as-incentive (Bowles and Polania-Reyes's 2012) does not contain a single article from the best review of money priming (Vohs 2015) which has its home in psychology and marketing. The lack of cross-fertilization runs both ways; the latter returns the compliment by citing nothing in the former review. Bowles (2016) fares better having one common reference (on young children exposed to money, in the *Journal of Economic Psychology*) with Vohs (2015).

This 'sacred' meaning attached to money in sociology echoes a pre-modern tradition which cautions against the motivational dangers of money (Heilbroner 2000). The influential example of Augustine (426) is analysed by Cameron (2011). Augustine's model of ethics asserts the interplay of emotions and intellect. He conjectured that our understanding of the world is determined by our 'loves', which can include things as well as people. In the absence of a correct 'ordering of loves' a person can be obsessed by something so that 'it fills the horizon and the desire for it displaces other desires worth having. Instead of abundance, all we see is scarcity' (Cameron 2011, pg. 53). Augustine sees money as having a personality, which can be served and loved. [20] Within this worldview, restoring trust in finance is as much about 'ordering of loves' as it is about good rules. As Welby (2013) puts it, rules in finance have limited usefulness if people do not desire the social goods that the rules are designed to foster.

5(iv) Replacing invisible hands with visible responsibilities

To conclude, our analysis has highlighted how finance has fallen into a poor equilibrium; excessive reliance on financial incentives promotes untrustworthiness, and then this untrustworthiness confirms the need for financial incentives, as in Jensen and Meckling (1976). It is difficult to break out of this equilibrium if people think about ethics in the way that is most natural to economists. Applying cost benefit analysis to all moral decisions – *moral optimization* – will prescribe an optimal amount of deceit. We argued that sometimes it is better if a worthwhile principle overrides utility- or profit-maximization. We called this *moral prioritization* and discussed how re-instating it in finance has to contend with a tendency for ethics to be confined to the private domain and motivation crowding out in finance.

While it is easy to make claims with hindsight, it appears that the intellectual foundations of financial deregulation were simultaneously too optimistic about Adam Smith's invisible hand – ignoring the ways that liberalization plays out in financial markets – and too reluctant to ask financial market participants to tell the truth with the same frequency as other professions. Society can and should expect more principled behaviour from more principled agents.

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[20] Augustine draws on the New Testament, which is responsible for the famous saying 'For the love of money is a root of all kinds of evil' (Paul, in Timothy 6:10). This is often misquoted as the less defensible 'money is the root of all evil' most famously by Ayn Rand in her defence of neoliberalism (*Atlas Shrugged* (1957).

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