RESTORING TRUST IN BANKING

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Trust allows financial transactions to take place when contracts are incomplete and the cost of negotiating too great for the parties involved. Banking covers many different types of transactions in assets with different levels of incomplete contracts. Investment banks have traditionally dealt with assets with incomplete contracts and often traded on informal and opaque markets. The creation of new global banks combined know-how, capital and collateral to generate enormous growth in these markets. While global banks developed trust with counterparties in specific markets, the opacity combined with limited liability structures also created principal-agent problems. The scandals which emerged are a reflection of these agency problems and have left trust in the banks greatly diminished. If levels of trust remain so low, this will be consistent with ongoing bank vulnerability, less lending to finance risky but profitable investment projects, and consequently lower economic activity. Regulation can support private incentives to accept codes of conduct which enhance trust.

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The money changers have fled from their high seats in the temple of our civilization. We may now restore that temple to the ancient truths. The measure of the restoration lies in the extent to which we apply social values more noble than mere monetary profit.

Franklin D. Roosevelt, 1933

Trust is our belief that a counterparty will not take advantage of us in a transaction when we cannot observe their actions. This is fundamental to banking; money is handed over in return for a promise to repay on some agreed terms at a specified date in the future. While it may be possible to conceive of writing a 'complete' contract covering every possible outcome, in an uncertain world this sort of super-rationality is almost always too costly. Instead, we revert to trust based on whether we expect the other party will fulfil their obligation.

Trust is based on codes of conduct which evolve over time to constrain our behaviour and, in turn, influence the efficiency of markets. In this article trust is used, unless otherwise stated, to describe how the world is, rather than what may, or may not, be desirable.[1] Arrow (1972) suggested that "virtually every commercial transaction has within it an element of trust, certainly any transaction conducted over a period of time."[2] Financial intermediaries have long understood the importance of trust for growing their business. Greif (1993) describes how Maghribi traders in the eleventh century successfully operated across borders in the Middle East by nurturing a reputation for trust by forming a coalition of traders which required honesty enforced by the threat of exclusion. The motto of the London Stock Exchange remains 'my word is my bond'.

Since the global financial crisis began there has been one report after another of dishonesty in the banking industry. Extraordinarily large sums of client money have gone missing, some of the most important financial markets have been rigged and transactions aimed at exploiting less informed customers revealed.[3] These offences involve some of the largest frauds in history. Not surprisingly, the public's trust in banks has fallen sharply. For example, Edelman's annual barometer of trust across businesses, government and NGOs around the world shows banking and financial services to be the least trusted.[4] In the UK, a ComRes poll of public opinion taken after the LIBOR scandal found that one in ten members of the public thought bankers told the truth.[5] If levels of trust remain so low, this is likely to be consistent with ongoing bank vulnerability, less lending to finance risky but profitable investment projects and consequently lower economic activity.

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This article looks at the role trust plays in efficient banking intermediation, how different types of banking specialise in assets with inherently different contracting characteristics, evidence on the importance of trust, how trust came to be undermined and some suggestions about what this implies for institutional regulation. It argues that trust is a necessary element of an efficient financial system and therefore full economic recovery. Against some of the most egregious examples of dishonesty the idea of restoring trust in banking may seem far-fetched. Despite scepticism that behaviour can be changed, we also doubt that 'this time is different'. President Roosevelt's Inaugural Speech in 1933, at the depth of the Great Depression, denounced the practices of bankers as "unscrupulous money changers, who stand indicted in the court of public opinion, rejected by the hearts and minds of men." The subsequent reforms led bankers to regain the public's trust and deliver one of the longest periods of economic growth in history.

1. Efficiency case for trust

Hirschman (1997) argued that the success of capitalism arose from the pursuit of self-interest instead of malign ideological passions. This resonates with Friedman's (1970) polemical essay on social responsibility in which a businessman's sole responsibility is to carry out the wishes of shareholders, seen in turn as generally to make as much money as possible within the basic rules of society. This is not argued on a positive or empirical basis, but on normative grounds (i.e. what should be); maximising profits generates the largest total surplus for the economy and therefore maximises the social good. Voluntary exchange in competitive markets leads to an efficient outcome where one person cannot be made better-off without making another worse-off. There is no case for other social responsibilities except that which customers are willing to pay for.[6]

Arrow (1973) provides a majestic critique of this position, noting that the forces of competition may not be sufficiently vigorous to deliver the best social outcome. Monopoly firms do not produce at the lowest cost and, where businesses create externalities which are not compensated for, this will result in either over or under production from a social perspective. Both market failures are likely to be present in banking. The concentration of the banking industry and rewards in excess of performance suggest some monopoly power. Externalities are also present. Well-run banks perform a beneficial service for the economy by strengthening the governance of non-bank companies (Levine, 2004). Badly run banks in contrast can impose an enormous negative externality on an economy through higher net borrowing costs (often in recessions) and may also require extensive publicly-funded support.

A third reason why the forces of competition may not deliver the highest social outcome is the presence of asymmetric information, which is inherent in banking. If depositors and investors could observe the actions of borrowers, and pool their resources together without cost, then banks would be redundant. The fact that they cannot observe these actions is the reason banks exist and brings a myriad of problems. Diamond and Dybvig (1983) show how a bank with depositors repaid on a first-come-first-served basis creates two equilibria; one stable and one a bank run. Stiglitz and Weiss (1981) show that if the creditworthiness of borrowers cannot be observed this can lead to credit rationing where good borrowers are asked to pay too much for credit. Similarly, Mayers and Majluf (1986) show that if firms' financial condition cannot be observed then capital raising will send a perverse signal leading investors to charge too much for capital. Gresham's Law (1519–79), crudely stated, is that bad money drives out good where the true value of monies cannot be distinguished, and has clear application to some AAA rated subprime securities.

These market failures have been well known for decades and have been central to this current crisis. Yet the consequences for policy seem to be poorly understood. The theory of second best states that when at least one of the necessary conditions for a competitive equilibrium is absent (i.e. there is asymmetric information) then there is nothing in economic theory to say that meeting the other conditions (e.g. lowering entry requirements) will lead to a second best outcome relative to the competitive equilibrium. *Ipso facto*, we cannot say whether this will lead to a better or worse outcome. The notion that more deregulation always moves closer to an efficient market has no basis. Indeed, the experience of a *laissez faire* approach to challenger banks over the past two decades (Northern Rock, Icesave and Anglo Irish) makes the point.

2. Trust and regulation

Whether a third party intervention is required to solve a market failure depends on whether the two parties are free to negotiate with each other (Coase, 1960). If they can freely negotiate together then the outcome will always be superior to any third party intervention which must limit the freely available options for the two parties involved (Hart, 2009). In banking the cost of coordinating across many depositors is usually prohibitive or the expected cost of litigation is beyond a household's affordability.[7]

Since negotiation is often prohibitively costly, the standard approach to deal with market failures is by taxation or regulation.[8] Regulations are designed to address a multitude of problems, which often arise from asymmetric information, but also correct for distortions caused by other regulations.[9] While there is no shortage of initiatives there are clearly limits to effectiveness. The information needed to design suitable regulations may simply be unavailable at any reasonable cost (Hayek, 1945). Regulators must calibrate their tools for an activity which is constantly evolving. No sooner is a regulation introduced than it loses some effectiveness as bankers look for ways to circumvent it. Understanding how regulations interact with each other, let alone with banks' behaviour, is complex and leads to unintended consequences.

Arrow (1973) argues that ethics are an alternative constraint on behaviour. These are particularly powerful when there is a large asymmetry of information between buyers and sellers and when it would be prohibitively costly to use any other form of restraint. They are a less costly way of influencing behaviour than ever more detailed regulations. Of course applying ethical codes will only work in some circumstances; first, introducing common standards must be in self-interest, and second, it must be possible to observe the code is met and exclude those who cheat. It is no coincidence that a solution to repeated imperfect information games is found in the Folk Theorem, where informal institutions such as customs and codes of conduct allow for equilibrium outcomes.

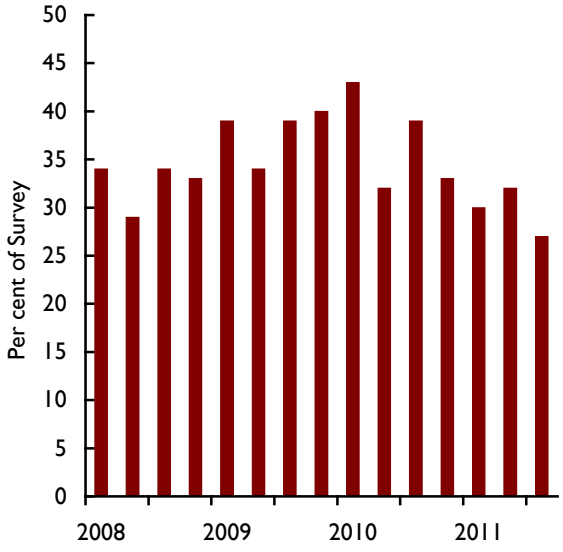
Regulations and trust can be complements as well as substitutes. Atkeson, Hellwig and Ordonez (2012) offer a highly relevant case in point: with asymmetric information, regulation is a complement to reputation enabling a first best outcome. If a regulator can charge a new market entrant an entry fee equal to the benefit of being the marginal producer of high quality output then this would discourage low quality producers from entering (and collapsing) the market, and an incentive to incumbent firms to sustain a high quality and trust equilibrium. The barrier to entry solves a coordination problem to secure an optimal outcome.

There are many examples of where codes of conduct enhance efficiency. Professional bodies often have codes intended to ensure certain standards are upheld even if the buyer is uninformed. Arrow (1973) discusses the medical profession and the Hippocratic Oath, while other professions also have codes defining acceptable behaviuor.[10] In the same year that Roosevelt gave such a damning assessment of bankers, JP Morgan Jr, recognising that bankers had fallen short, declared that a code of conduct existed: "The banker is a member of a profession practised since the middle-ages. There has grown up a code of professional ethics and customs, on the observance of which depends his reputation, his fortune, and his usefulness to the community in which he works. If ... the banker disregards this code – which can never be expressed in terms of legislation, but has a force far greater than in law – he will sacrifice his credit. This credit is his most valuable possession."[11] Only three years ago Goldman Sachs published in their Annual Report that their assets are "people, capital and reputation. If any of these are ever diminished, the last is the most difficult to restore."[12]

3. Evidence on trust

A definition of trust depends on the context. Economists often use a notion of 'calculative trust' to distinguish an agent's rationally (internally consistent) computed but subjective belief about a transaction they face (Williamson, 1993). In making their computation an agent will resort to formal institutions, such as laws and conditions, and also informal institutions, based on customs, codes of conduct, professionalism and the like. Since laws are verifiable by a third party, it is trust which is a function of social customs and codes of conduct that matters in many financial markets.

Figure 1. Financial Trust Index



Source: Chicago Booth and Kellog School.

Survey data confirm that trust in banking has fallen substantially. The Financial Trust index is a quarterly survey of the US public since late 2008. Figure 1 shows trust in banks this year is lower than in the immediate aftermath of the Lehman debacle, which could be expected to mark a time of very low trust.[13] Economists have constructed a comparable index to the General Social Survey which shows that trust in banks is easily the lowest since the survey began in 1975.[14] Guiso (2010) argues the decline in trust is related to the incidence of deception rather than a general loss in confidence showing that areas with a high share of Madoff victims have the lowest trust towards banks. These findings are consistent with investors' perception of banks; the highest rated AA banks are trading at BBB credit levels while equity prices are one half of book value.

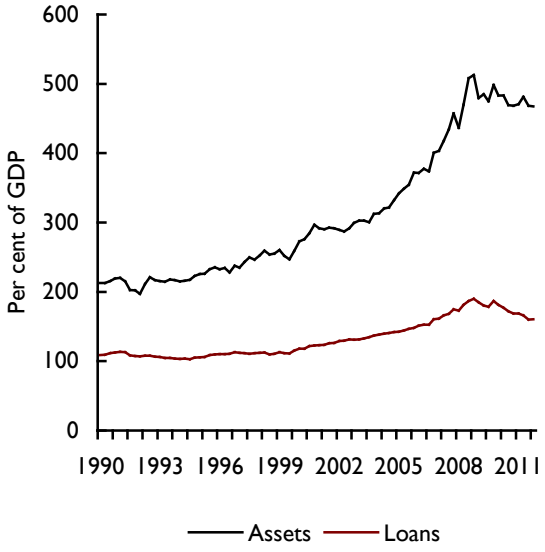
Does a loss of trust really matter for the economy? Several economists have tested the hypothesis that trust lowers transactions costs and therefore leads to more efficient economic outcomes. For example, Knack and Keefer (1997) use responses from the World Values Survey to show a positive correlation with *per capita* income across 29 countries. Zak and Knack (2001) develop this insight with the same data set to show how trust affects the investment to output ratio which then drives economic growth. Controlling for initial conditions, the authors show that a 15 percentage point rise in trust equates to a 1 per cent point increase in GDP growth.

These findings are vulnerable to the problem of reverse causality, with greater prosperity causing more trust. Algan and Cahuc (2010) address this by using the US General Social Survey and exploiting the link between the social attitudes of parents and children to estimate an inherited component of social attitudes of second generation American immigrants by country of origin. They then estimate inherited trust from the parents who migrated at different times. This allows the changes in inherited trust to be regressed on changes in *per capita* income without the possibility of prosperity driving inherited trust. The results show trust is statistically and economically significant. Aghion, Algan, Cahuc and Shleifer (2010) show that government regulation is negatively correlated with trust, suggesting that regulations are a substitute for trust.

4. Changes in banking and trust

While the evidence of lost trust in banking is recent, the change in conduct mostly took place well before the crisis. One explanation of the change in conduct and practice is the incentives created by the merging of businesses which involve inherently different assets and skills. The two decades prior to the crisis was a period of extraordinary growth in the size and profitability of global banking. The growth came from a sharp increase in trading book assets, proxied by total assets less loans to the real economy (see Davis, this issue). This is shown in figure 2 by the growing gap between total assets and loans. This was also a period of consolidation with investment banks, retail banks and mutual societies merging together across borders to create new global banks.

Figure 2. UK bank assets and loans



Source: Bank of England.

Some stylised differences in the types of businesses conducted in the main financial institutions in the UK around 1980 are presented in table 1. Trust and reputation played a fundamental role in investment (merchant) banks. Morrison and Wilhelm (2008) describe how they traded 'information', a valuable asset but one which has poorly defined property rights and where ownership cannot be easily verified by a third party. Bankers depended on their reputation for trust gained over long-term relationships with clients. The skills required were 'tacit' or codes of conduct learned on the job. A partnership is the ideal company structure for an opaque business as it keeps incentives of the partners fully aligned despite asymmetric information. Staff turnover was minimal because skills were specific to the firm and conduct harmful to a partnership could result in exclusion from the industry.

Table 1. Summary of UK banking circa 1980

	Assets	Contracting	Transparency	Clients/transactions	Human skills[a]	Structure
Investment banks	Unsecured	Incomplete	Minimal	Informed and frequent	Tacit	Partnerships
Retail banks	Mostly secured	Mostly complete	Opaque	Mostly uninformed and infrequent	Codified	Public companies
Building societies	Secured	Complete	Full	Uninformed and infrequent	Codified	Mutual

Note: (a) This term is introduced by Morrison and Wilhelm (2008).

Trust and personal reputation played less of a role in retail banks and building societies. The assets were backed by collateral and so had clearer property rights, which were therefore more easily verified by third parties. While loans are heterogeneous, the collateral backing meant they could be traded. The standard characteristics meant they were more transparent and more amenable to near complete contracting; the loan terms could cover most, if not all, possible outcomes. The human skills were codified, which means that the creditworthiness of customers could be determined without forming a close relationship and staff could move across institutions. Retail banks were public companies with limited liability, significant external debt capital while building societies are owned by members with secured mortgages as assets.

Two major events occurred during the 1980s. First, Morrison and Wilhelm (2010) argue that changes in information technology increased the capacity for batch-processing in retail banks as their assets were more conducive to being coded. Global capital markets for syndicated loans, options and swaps and early asset-backed securities markets were dominated by retail banks with large capital bases and expertise in loan evaluation. Second, financial deregulation allowed previously separate financial organisations to merge. Both events triggered a wave of mergers as investment banks secured the large capital base they needed to increase transaction volumes and retail banks and building societies secured the know-how to deploy their existing loan books to create new financial products.[15] The new global banks combined both investment and retail banks to offer for the first time global full service banking.

The new global banks created waves of new assets by financial engineering with existing collateral on loan books of the retail bank, traditional banks encouraged to participate, or assets obtained from other financial intermediaries. These are mostly incomplete contracts in the sense that many embedded features, such as options and trigger points, cannot be valued across all possible outcomes. Important examples are extension risk in some asset-backed securities, support agreements for structured investment vehicles and level 3 assets which do not trade. The new global banks created, made markets and even took proprietary positions in these assets. Asset prices were disclosed on a party-to-party basis, creating an enormously beneficial network of information similar to the old investment banking model. Many of these assets constitute the new shadow banking system. As the counterparties are other financial institutions with whom they trade regularly, a degree of trust is maintained. Even in the depth of the crisis banks honoured informal commitments to shadow banking vehicles without any legal requirement to do so.

The new capital markets had two important differences from the past. First, the assets could be constructed from any third party collateral and were not limited to the corporate client base. Employees were no longer tied to an existing institution but were free to move between banks to extract the maximum amount of rents. Second, the firms were large limited liability and politically important companies rather than partnerships. Incentives of the senior executives of the firm were no longer aligned with the owners of the bank's capital. Aligning the interests of executives with shareholders through share compensation schemes merely added to the incentives to take greater short-term risks. The combination of incomplete contracts traded on informal and opaque markets with a misalignment of incentives created the method and motive for a breakdown in governance. At the end of this period of a *laissez faire* approach to banking, the outcome was business conduct very far from enhancing reputations and trust seen in earlier times, and banks that had become too-big-to-fail.

5. Restoring trust in banks

How we think about financial markets determines how we approach regulating them.[16] This simple observation captures the catch-22 nature of our current approach to reforming the banking system. The paradigm of finance theory is so powerful that our assessment and prognosis are based on the same assumptions which created the current failed system. Despite centuries of evidence on the importance of trust and reputation, neither are mentioned in reform proposals.[17]

The paradox is neatly demonstrated by the debate on the structure of the UK banking system. The Independent Commission on Banking (ICB) argues that a bank holding company structure, under which separately managed retail and investment banks co-exist, leads to more diversified institutions and therefore lower risk. This is the same individual bank approach rather than a system-wide approach to regulation. Applying this logic, it may, or may not, be the case that the holding company is more diversified, but the system overall is exposed to the same systemic risk (which by definition cannot be diversified). The portfolio theory analogy is grossly misleading because most of its assumptions are violated. For example, correlations between businesses are not constant or predictable and the holding company cannot always borrow any amount at the risk-free rate.

The fundamental weakness of this approach is that systemic risk is treated as exogenous rather than arising endogenously as a result of the actions of executives, customers and regulators. The critical issue is whether a financial 'eco-system' of different types of banks can reduce information problems and so improve the management of banks and create a competitive environment which rewards good stewardship rather than moral hazard. In this article it is argued that contracting arrangements are inherently different for different types of banking. Different types of banking are suited to different institutional structures and regulations. For example, for retail banks the entry requirements or a complaints commission can be designed to encourage banks to compete through codes of conduct and reputation to develop trust with customers. These requirements would be unwieldy in the innovative and opaque investment banking market.

Trust also requires that the too-big-to-fail policy is resolved. The difficulty is to credibly signal that the government will not support a bank in future. Since all governments are the insurers of last resort for the public, there is no credible commitment that they will not provide support again. The best which can be achieved is preventing banks exploiting public support in the first place. A holding company may be able to avoid the governance failures of the past, but the lack of transparency inherent in the investment bank and the political imperative to support the retail bank means governments cannot even credibly claim to have removed the too-big-to-fail policy and regain public trust. Living-wills shift the problem to the regulator, who then must convince disbelieving investors and the public that they will work.

Advocates of bank holding companies point out that an artificial boundary between retail and investment banking would be open to gaming.[18] Rather than having an arbitrary boundary, the requirement could simply be to address the underlying market failure. Retail banks are exposed to credit and duration risk on their loans to the real economy. These risks can be managed but not easily reversed. By contrast, an investment bank has far more discretion to reverse its exposure in a short period of time. With the information technology available today, a simple requirement could be that deposit taking institutions are required to post full details on all exposures to the satisfaction of the Financial Conduct Authority on a highly regular basis (e.g. weekly). This would allow investors and customers to judge the riskiness of banks and encourage new forms of competition rather than revert to moral hazard. Some institutions will opt to divest investment banking activities.[19]

For all the efforts of the banking industry to prevent a more diversified banking eco-system, this may ultimately be the best option for the City of London. For centuries the City has thrived on trading assets which have very incomplete contracts under self-governing conduct rules instead of intrusive regulation. Indeed, the regularity of personal engagement in the City which allows self-governing conduct to prevail is an important reason why it remains the centre of financial innovation. The European Markets in Financial Instruments Directive is standardising many over-the-counter products and transferring them onto exchanges. This will challenge the profitability of the investment banking industry. Having separate investment banks with aligned incentives may be more effective than operating in an overly regulated environment.

NOTES

1 See Jensen (2011) for an excellent discussion of integrity as positive concept.
2 Arrow (1972) p. 357.
3 MF Capital, Libor and predatory mortgages and inappropriate swap contracts respectively.
4 http://trust.edelman.com.
5 The poll covered 2013 adults in Great Britain. See http://www.comres.co.uk/poll/694/itv-news-index.htm.
6 Businessmen who undertake 'social responsibilities' are derided as the unwitting puppets of intellectual forces undermining the basis of free society.
7 An interesting counter-case is where lower transactions costs have allowed collective action legal claims by the public against banks for mis-selling products. While this may be conceptually attractive, wealth constraints and significant transaction costs make these the exception not the rule.
8 Many governments have introduced bank levies based on some proxy of risk. The European Commission is weighing up further options intended to dampen speculation and correct the under-taxation of financial transactions.
9 One rationale for capital requirements is to reduce the risk-shifting incentives which arise from deposit insurance.
10 For example, see the American Society of Mechanical Engineers.
11 JP Morgan Jr (1933).
12 Reported in Atkeson, Hellwig and Ordonez (2012).
13 http://www.financialtrutindex.org. This is a telephone survey of 1,000 US households.
14 CES-IFO Annual Report 2010, p. 54.
15 The rise of new global banks was a response to new market opportunities rather than a covert policy to exploit a possible too-big-to-fail policy.
16 Pistor (2012).
17 The words 'trust' and 'bank reputation' do not appear in the UK government's White Paper on Bank Reform (2012).
18 This was certainly the case with the Glass-Steagall Act. Section 16 allowed commercial banks to underwrite bank-eligible securities such as government and agency bonds and section 20 allowed limited underwriting of bank-ineligible securities such as equity and corporate debt.
19 Other measures to align incentives such as double liability for shareholders or retained bonuses of executives as a long-term bond may be necessary.

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