Risk Taking Incentives and the Great Financial Crisis[*]

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Introduction

There is little debate that the main cause of the Great Financial Crisis (GFC) was excessive risk taking by large international financial institutions. Most observers would also agree that much has been accomplished under Basel 3 to address the problem. Banks today are required to have more and better equity capital, they are required to prepare Recovery and Resolution Plans (RRP), and they must finance themselves through debt instruments that are bail-in-able or can be converted into equity (Cocos). Bank owners and their creditors thus have significantly more “skin in the game” than before the GFC. Is it enough to reduce to an acceptable degree the risk of a repeat? I will focus here on a further element of the incentive dimension where I think more remains to be done. My main point is that the combination of very high leverage and limited liability, uniquely typical of modern banking, constitutes a toxic cocktail that continues to be a source of excessive risk taking and needs to be explicitly confronted. That convexity in remuneration patterns encourages risk taking is well-known and for the most part intended. The circumstances and the numbers involved in the financial sector, however, pervert the purpose of limited liability and generate highly problematic incentives that persistently undermine regulatory efforts and endanger financial stability.

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Incentives vs. knowledge and competence

If there is one lesson in economics and finance that has not been invalidated by the financial crisis, it is that incentives matter. The excessive risk-taking that was observed prior to the financial crisis must have been in large part the result of key decision-makers not being provided with the right incentives to carefully analyse and balance the possible consequences of the risks they agreed to take. Decision-makers thus wilfully accepted more risk on behalf of their institutions than would have been privately or socially desirable. And the post-GFC resistance of bankers (often the same individuals it must be said) to regulatory efforts designed at making their institutions more resilient is indicative that distorted incentives are still largely present.

While I will develop this line of argument in this text, it is important to realize that my hypothesis is not exclusive. A misperception of the probabilities and possible consequences of the decisions taken – notably because of an underestimation of the degree of interconnectedness of large financial institutions - was certainly a complementary cause of the excessive risk taking. Indeed, Fahlenbrach and Stulz (2011) have shown that the losses of the banks whose managers' incentives were most closely aligned with the long-term interests of the firm they managed (but not necessarily of society) were at least as large, in the last crisis, as those at the financial institutions where governance was more obviously lacking. Wrong incentives were not the only factor in the behaviour and decisions that led to the crisis. Knowledge and competence were also at play.

Progress towards better incentives …

That incentives are an important component in risk and risk-taking is a well-recognized fact that has guided the post-GFC thinking on the regulatory front. One of the prominent missing incentive element is the consequence of deposit insurance, a system feature that relieves the main group of bank creditors from the need to worry about the amount of risk that the bank in which he or she has deposited his money decides to undertake. A key lesson of the Great Depression, however, was that deposit insurance is a socially justified feature of the banking system. This follows from the fact that, no matter how well managed, banks are vulnerable to runs. The principle of deposit insurance is widely accepted and I will not further question it, although the extent of deposit insurance and the form it takes are questions that deserve further consideration.

Ensuring that the other main group of creditors of a bank are not similarly exempted from their monitoring duties has been an important work area of the post-GFC regulatory process. Bondholders should contribute to a balanced weighting of risk and return in a bank's decisions. Under normal circumstances, discipline arises from the possibility and reality of default and eventually bankruptcy. Bondholders being deprived of the upside potential of the risks taken by the bank while losing part (or all) of their stake in the event of default should be counted on to ensure that the negative consequences of the risky gambles taken by the bank are given proper weight. Indeed, the cost of debt is observed to increase with additional risk-taking, thus reminding managers and shareholders of the downside of the risks they are naturally inclined to take. In reality, this is precisely where the moral hazard issue associated with the implicit guarantee of the 'too big to fail' (TBTF) status enters the picture. By definition, a TBTF financial institution can expect to be rescued before bankruptcy. As a consequence, the bank's bondholders know they will not bear the cost of excessive risk-taking and therefore need not take this cost into account when assessing the risk profile of the institution to which they lend. The recovery and resolution plans imposed by Basel 3 are designed to remedy this problem. Ideally (but we are not there yet), even large and complex financial institutions should be resolvable over the course of a week-end without extreme consequences for the real economy. The ultimate responsibility of the bank creditors would thus be restored, as is the case with industrial firms. The inclusion of large quantities of bail-in-able debt and Cocos in the balance sheet of large banks underlines this responsibility and should in due course alter the landscape most significantly.

At first sight, shareholders, as ultimate owners of the bank, should be counted on to discipline risk-taking by the institution they own. After all, they stand to lose their entire stake if the risks taken lead to bankruptcy. And indeed bank shareholders have severely felt the consequences of the financial crisis. However, the extent to which they can be expected to monitor and discipline a bank's risk taking remains very limited. First, the reality is that individual shareholders are often small and scattered and they have only limited ways of exerting pressure on management, short of disposing of their shares. Equally important, the reality of limited liability seriously biases shareholders' perspective on risk. While shareholders benefit from the upside of risk-taking, they are not symmetrically penalised on the downside. This asymmetry is particularly acute in the case of highly levered institutions.

For these institutions, the return on equity in good times is high, say above 20%. The trade-off between high returns if the risky gamble pays off, and a zero outcome, if it does not, is particularly lopsided. The combination of limited liability and the highly leveraged nature of banking thus come with a natural propensity for high, and most likely socially excessive, risk-taking on the part of banks' owners themselves[1]. Moreover, the external monitoring of complex and often opaque institutions such as large banks, by their shareholders as well as their creditors, is a difficult, if not impossible, challenge. For this reason, the task of properly balancing risks should not be left exclusively to outsiders. It is crucial that proper incentives are set at all levels of an institution.

A critical missing piece!

The 'limited liability cum high leverage' problem, however, arises even more forcefully in the case of bank managers and other internal stakeholders entitled to bonuses, notably traders. As argued by the authors of the Squam Lake Report (SLR, 2010), what is primarily at issue here is less the level than the structure of pay; that is, the link between the remuneration and the medium to long-run performance of the institution. Clearly, a managerial remuneration scheme that depends exclusively on a bank's current performance and traders' bonuses that are related to a single or a few decisions taken over a short horizon constitute inappropriate incentives. While I also agree with the SLR that the level of remuneration should not be directly regulated, I am somewhat less confident that the extreme remuneration levels seen in banking are innocuous or necessarily the result of productivity or skill differences.

Risk is intimately linked with luck. In a risky world, heroes are as likely to be lucky as smart. In asset management, Barras, Scaillet and Wermers (2010) find that around 8% of mutual funds display a significant positive alpha, but of them only about 0.5% deliver a positive alpha that is not driven by luck. I find it presumptuous to assume that the associated statistics are radically different in the population of successful bank managers and traders. Bonus payments could as often be a reward for luck as they are compensation for actual skill or effort. A first lesson is that we need to improve our ability to distinguish between skill and luck and must be prudent before concluding on the former. Simultaneously we need to draw the

[1] For this reason aligning the incentives of managers to those of bank owners is not sufficient.

adequate conclusions from the difficulties that will always exist in signal extraction on this issue. This means, notably, that compensation should be geared to the medium to long term performance of the individual and the institution and not to a single trade or the current financial result.

Limited liability is designed as a way to encourage risk taking in situations where the prospect of moderately positive rewards for the decision maker can be swamped by the possibility of extremely large losses, unlikely to be bearable by a single individual. In this context limited liability is necessary to promote the risk-taking required for a growing economy. Limited liability, however, leads to excessive risk taking and can hardly be socially justified if it means securing - for 'good' - huge personal gains following a successful gamble, even when the risks undertaken increase the probability of large institutional losses in the subsequent accounting periods. There is no social or economic justification either for the asymmetry arising from extremely large compensation when a trader's gamble pays off and a null bonus when it results in large losses for his institution. The practice of risk takers cashing in fully on lucky gambles while bearing very limited negative consequences of the unlucky ones delivers excessive risk taking with no social benefit.

To make matters worse, the sums involved in the financial arena regularly amount to multiples of the lifetime remuneration of individuals contributing to society in a more obvious manner. What restraint in risk taking can one expect from a trader when his gamble (with other people's money) brings him a lifetime level remuneration in the case of success while, at the very worst, a job change in case of a negative outcome? Similarly, it is not irrational for a CEO to initiate large gambles possibly compromising his firm's survival if the odds are not too unfavourable when success would enable him to retire with a comfortable lifetime income while failure is followed by only benign consequences (in particular if the State is expected to come to the rescue).

Deferred compensation as the rule

As articulated by the Squam Lake Report, the partial solution to the outlined problem is deferred compensation; that is, "systematically important financial institutions should withhold a significant share of each senior manager's total annual compensation for several years". Noting that the goal is to align the incentives not to the interests of shareholders but those of society, the Report adds: "the withheld compensation should not take the form of stocks or stock options. Rather, each holdback should be for a fixed dollar amount, and employees would forfeit their holdbacks if their firm goes bankrupt or receives extraordinary government assistance."

A number of comments are in order. First, one observes that, unfortunately, this recommendation has not found its place in explicit regulation (Basel 3) but has remained a recommendation only (endorsed by the FSB). As a result, compliance is not monitored. This is highly regrettable as constructive behaviour from bankers in regulatory matters and, ultimately financial stability, are unlikely to be attained if the deep incentive problems highlighted here are not squarely confronted.

Second, the excess risk taking behaviour engendered by limited liability combined with very high remuneration can be fully corrected only with very long clawback periods that may be hard to implement legally. The SLR suggests a period of 5 years. This has to be viewed as a minimum. As the GFC has shown, the negative consequences of ill-guided risky investments can take many years to unfold, in particular when the sector in its entirety is supported by public policies. The case of zombie-institutions hobbling along 10 years after the start of the crisis provides vivid illustrations. Unless one finds a way to secure long duration clawbacks as a default rule for large remunerations, one should have the courage of questioning the very notion of limited liability itself, at least for compensations exceeding a certain threshold.

Third, the problem does not concern exclusively top managers of a financial institution but all individuals entitled to high level compensation, particularly in the form of bonuses. The many incidents that have occurred in the last ten years, most conspicuously outright frauds on LIBOR and in forex markets, have highlighted the intuitive fact that large and complex institutions cannot be controlled from the top in the absence of a perfect alignment of the incentive structure with the long run interests of the institutions. This requires that all highly paid individuals, notably traders, are subject to very strict and long maturity clawback clauses.

Finally, Iet me conclude on an interesting and positive development, the awarding of bonuses in the form of vested high trigger contingent convertibles (Cocos). As Elliott (2015) notes: "Paying banker bonuses in bonds makes sense. Cash bonuses are hard to claw back, while stock awards have unlimited upside." Thus, UBS announced in January 2015 that 40% of the bonuses of its employees earning more than $300'000 would be deferred and a fraction (40% again) of this deferred bonuses would be paid in Cocos that vest after 5 years and would be wiped out if in the meantime UBS's common equity Tier 1 ratio falls below 7 percent (or 10 percent in the case of executive board members). This innovation goes exactly in the direction advocated in this note. It should be firmly endorsed and promoted by regulators. A universal adoption of similar principles would go a long way in restoring individual incentives conducive to financial stability.

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