

THE EFFECTS OF THE BONUS TAX – WHAT WAS INTENDED AND WHAT WAS ACHIEVED?

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Introduction

One of the main topics that has dominated policy discussions all over Europe during the past months has been the introduction of a bonus tax by the UK and France. Given the widespread opinion that high bonus payouts have fuelled excessive risk taking, governments have tried to find ways of curtailing this kind of incentive compensation. Thus, the British Treasury announced at the beginning of December 2009 that it would impose a one-off ex-post 50 percent levy on any discretionary bonuses exceeding GBP 25,000 (EUR 28,000) awarded to employees of banks for the period 9 December 2009 to 5 April 2010. Alistair Darling, the former British chancellor, defended this measure by arguing that banks should use their profits to strengthen their capital base instead of paying high bonuses. On these grounds, the proceeds from this bonus tax would be spent, according to Darling, to refund taxpayers' money which was used for rescuing banks (Financial Times, 9 December 2009). The French Finance Minister Christine Lagarde also announced that France would levy a tax on bonuses exceeding EUR 27,500 in 2010. Even the Social Democratic Party of Switzerland proposed a bonus tax of 8.5 percent for bonuses exceeding CHF 1 million as a response to excessively high payments, whereas Greece even announced the introduction of a 90 percent bonus tax.

The European Commission's and the US' stance on dealing with excessively high bonuses is to some extent different. The new EU rules to become effective as of 1 January 2011 envisage the deferral of between 40 and 60 percent of bonuses for three to five

years. Moreover, half of the upfront bonus payment has to be paid in shares or in other securities linked to the bank's performance. As a result, the cash portion of variable pay is limited to between 20 and 30 percent (European Parliament 2010). In contrast the US administration proposed the introduction of a cap of USD 500,000 on the salaries and bonuses for executives of institutions that received federal assistance.

Moreover, as recently shown in a survey published by the Institute of International Finance (2010) some financial institutions have even initiated the restriction of this kind of incentive compensation by offering fewer "guaranteed" pay packages or abolishing "multi-year" guarantees which provided bank employees with fixed bonuses irrespective of their own or the firm's performance.

Still, given the lack of consensus on a uniform regulatory framework for dealing with this issue, banks in more regulated countries are concerned that they might suffer a comparative disadvantage relative to their counterparts in less heavily regulated economies.

In general, whenever bonuses are a reasonable proxy for the employee's contribution to firm value, a tax or a cap can reduce incentives and thus profits to the detriment of the shareholders. Sometimes, however, the bonus is based on an imperfect measure of the employee's actual contribution to the firm that does not depend only on effort but also on luck. In firms where the measured performance is more likely to reflect luck, a cap or even a tax might be accordingly appropriate.

Under these circumstances, the question is whether measures such as the bonus tax really achieve their goals. The subsequent analysis shows that assuming managers are highly mobile and have an outside option not subject to a bonus tax, the compensation contracts banks offer have to specify higher amounts of gross effort-based pay. Therefore, it is not surprising to see that the bonus tax has not achieved its goal of altering banks' behaviour and is thus not the appropriate instrument for dealing with this kind of incentive compensation.



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Bonus payments in different sectors and countries during the last decade

To obtain a better idea of the size of bonus payments, the following graphs show the development of bonus payments in different sectors and countries.

Figure 1 depicts the trend in the average bonus paid in different sectors in over 63 countries. As the graph shows, the peak was reached in the sector “IT and Hardware” during the stock market bubble in 2000. During the past years, the highest average bonuses were paid in the sectors “Banks” and “Speciality and Other Finance” (primarily investment banks). Accordingly, in 2007, the mean bonus paid in the sector “Speciality and Other Finance” amounted to around USD 1.5 million and declined to around USD 0.8 million in 2008.

Figures 2 and 3 depict the development of bonus payments in banks and investment banks in selected countries between 1998 and 2008. At first glance, it is noticeable that bonus payments paid by US investment banks were much higher than those paid by other banks or by their counterparts in European countries. The bonus paid by a US investment bank even reached USD 6 million in 1999 or USD 4 million in 2006. The peak in 1999 in the US can be attributed to the stock market bubble. Nevertheless, bonuses paid by banks and investment banks in France and England also display a rising trend. Accordingly, the average bonus paid by an investment bank even tripled from around 300,000 USD to above USD 1 million in England and France between 2002/2003 and 2007/2008.

Figure 1

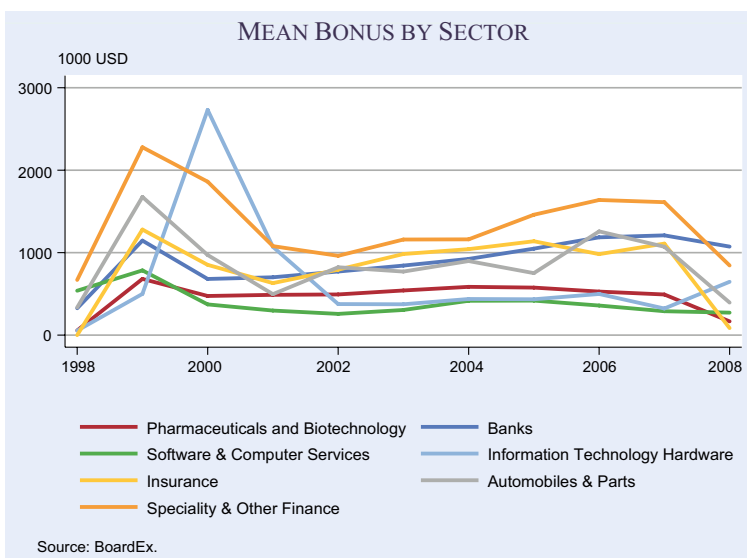


Figure 2

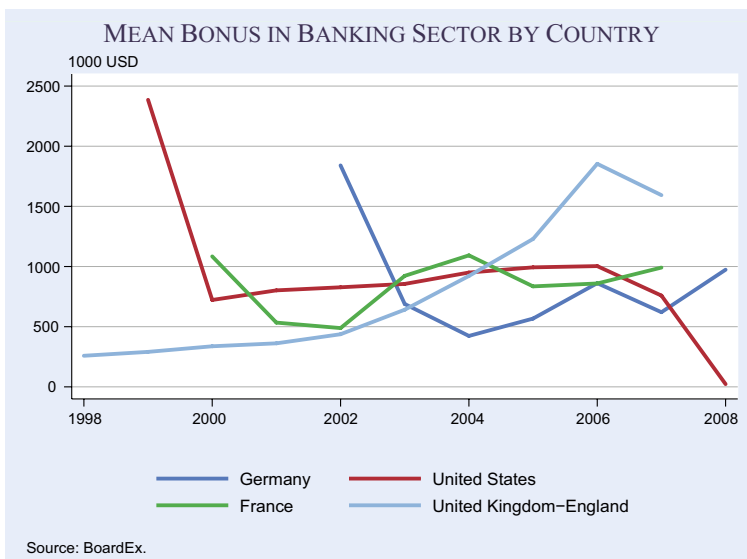
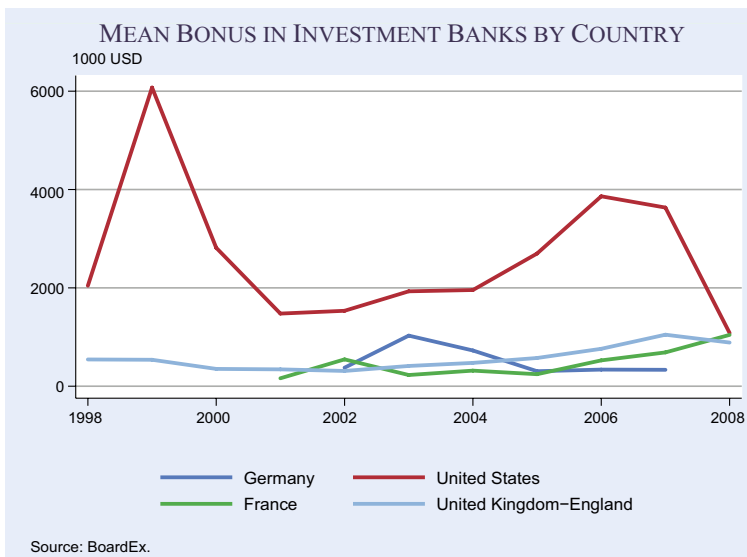


Figure 3



These extremely high incentive payments are mostly linked to current period accounting profits, and the widespread opinion is that high bonus payouts fuelled excessive risk taking in the financial sector. Under these circumstances, we should be interested in considering the possible consequences of measures which aim at restricting the level and structure of these compensation components, especially since top executives have very high incomes. How they respond to changes in taxes may have important efficiency and revenue effects.

Implications of the bonus tax

To analyse the possible implications of a bonus tax, consider the following thought experiment. Suppose a firm operates in two different economies and employs a manager in each of them to run the firm's operations in the respective country. I use the Principal Agent model, which assumes compensation consists of two distinct components: the first one is independent of effort whereas the second one is effort sensitive. Applying such a framework one can compute the optimal compensation components in each of the two countries and then consider the effects of the introduction of a bonus tax in one of the two economies.

Let us assume furthermore that net-of-tax wages have to be equalised between countries and that managers face the same reservation wage (i.e., they have the same outside option). Under these circumstances, net-of-tax effort-based compensation in the country introducing the tax equals the effort-based compensation component in the other country.¹ Thus, given the higher gross effort-based compensation, the optimal contracts are tilted towards more effort-based pay. To put it differently, the bonus tax reduces the risk cost to the manager from any performance-based contract and weakens the effort-inducing incentives of such a contract. The two effects combined encourage the firm to offer stronger effort incentives. A preliminary look at compensation ratios² in the UK confirms this result as these ratios stayed constant or even increased compared to previous periods with no bonus tax. Therefore, the predicted theoretical results

are confirmed by the banks' reaction: They did not reduce the compensation paid to managers but rather increased it. Thus the bonus tax did not achieve its purpose of altering bankers' behaviour.

In addition, the introduction of such a tax reduces firm profits and thus dividends. Why is that so? As the tax negatively affects compensation and thus effort, the firm needs to increase the manager's compensation to induce her to exert more effort. Therefore, firm profits are negatively affected and the tax incidence basically falls upon the firm's shareholders. This result is in line with the intentions of Deutsche Bank or Credit Suisse to lower dividend payouts as a response to the introduction of the UK bonus tax (Frankfurter Allgemeine Zeitung, 19 December 2009).

Let me now turn to the welfare implications of such a policy for the different economies. For this purpose, it is necessary to distinguish between two main scenarios: a first one in which managers cannot be relocated between countries and a second one in which relocation is possible.

No relocation possibility

Let us now pursue our thought experiment further and assume the bank needs to employ a manager at each location and operations cannot be moved to no-tax countries. In this situation, the country that abstains from introducing such a tax might be at a disadvantage, because the dividend income accruing to its residents will decline.

The welfare implications for the country imposing the tax depend on the relationship between the positive tax revenue effect and the negative dividend income effect. Assuming that the so-called home bias holds, the country where the majority of the firm's shareholders reside will be affected most by the reduction in profit distributions.³

Relocation possibilities exist

A different situation arises if it is assumed that the firm has the possibility to relocate managers between coun-

¹ Contrary to the statement of Josef Ackermann (*Frankfurter Allgemeine Zeitung*, 19 December 2009), if the bonus tax is introduced *ex ante*, it is not possible to lower bonus payments in the no-tax economy since the manager's participation constraint would be violated. Such a policy is only viable if the tax is a one time *ex post* levy.

² Compensation ratios are defined as the ratio of total compensation to firm revenues.

³ Assuming for instance Deutsche Bank shares are held primarily by German citizens, German shareholders would lose more than UK counterparts as a result of lower Deutsche Bank profit distributions.

tries as a response to a change in the bonus tax. This assumption is in line with the reaction of the majority of financial institutions – such as Goldman Sachs, Société Générale, BNP Paribas, HCBC or JP Morgan – which threatened to transfer operations out of the UK. In this new scenario, the welfare implications change as compared to the case with no relocation. On the one hand, the country introducing the tax now loses more in welfare terms since the possibility to relocate managers negatively affects both labour income tax revenue and revenue from the bonus tax. On the other hand, the country that abstains from introducing a bonus tax might even gain in welfare terms if the positive labour income tax revenue effect generated by the relocation of managers exceeds the negative dividend income effect.

Additional aspects of the different reform proposals

The new EU rules, as mentioned in the Introduction, provide for half of the upfront bonus payment to be paid in shares or other securities. Keeping in mind that bonuses as incentive compensation depend on accounting profits whereas shares and options as incentive devices are linked to the firm's market valuation, the Commission's proposal *ceteris paribus* overemphasises market valuation as a measure of firm performance. Accordingly, such a measure may induce bank managers to take actions which increase the bank's stock price.

The alternative instrument for dealing with high bonuses which is being discussed in the US – the bonus cap – is similar to a price cap for a monopolist. It requires the government to know the “optimal” size of the bonus and set the cap at this level, an information that is not required for a bonus tax.

Conclusion

The preceding analysis shows that the bonus tax did not really achieve its purpose. If it is assumed that managers in the financial sector are highly mobile and the supply of managers is very elastic, the incidence of the bonus tax falls on the banks' shareholders. It is thus not surprising that the bonus tax did not succeed in changing the banks' behaviour of dealing with excessive bonuses which fuel risk taking. Therefore, the question still remains what can be done to deal with this kind of incentive pay. To induce managers to take a longer term perspective instead of

focusing on short-term risky projects, compensation packages have to be linked to the firm's performance over a multi-year period, as is already the case for options with long vesting periods. In light of these arguments, the new EU proposals are a step forward since under the new rules a fraction of the bonus payout is deferred for several years.

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