

# How to save banks without using taxpayers' money

*Theo Vermaelen & Christian Wolff*

In the recent financial crisis, taxpayers in many countries had to pick up the bills that resulted from governments bailing out banks. The idea that the government will save you if you make mistakes encourages excessive risk-taking. Bailouts have created popular resentment against bankers' compensation, which makes it difficult to pay competitive salaries after a bank is rescued. So bailouts, which also add to the government deficits and crowd out other government spending plans, have many undesirable characteristics.

Today, policymakers are searching for alternatives. One alternative is to impose stricter capital requirements. This approach, however, has several problems. Banks can meet additional requirements in two ways: either by raising equity or by selling assets. As recent experience shows, selling assets by bank A may create a fire sale and lead to problems in bank B, if the latter has lent money to A with the asset in question as collateral. So the sale will create problems for the rest of the economy.



Issuing equity may be problematic if equity holders consider the equity infusion as a wealth transfer to bondholders. Moreover, an equity issue will create agency problems if, as a result, the bank ends up with excess cash, which will be used to invest in negative net present value projects. Issuing equity is also tax inefficient to the extent the cost of debt is tax deductible and the cost of equity is not. Finally, an equity issue may also be considered a negative signal, indicating that the bank is in worse trouble than is generally perceived.

We propose an alternative: banks that are considered to be too big to fail will be able to meet capital requirements by issuing mandatory convertible bonds, also called contingent convertibles (CoCo bonds). A mandatory convertible bond is a bond that has to be converted into a share when a certain event happens. The mechanism would work as follows:

- a) The convertible bond will convert into shares of common stock at one euro whenever the value of the equity falls below a level specified in advance. This level will be significantly above one euro, as it should correspond to a capital structure where the probability of financial distress becomes significant. For the sake of discussion, assume this level of equity corresponds to five euro's per share.
- b) After the conversion, the original shareholders will have an option to buy back the converted stock from the convertible holders at the same conversion price (of one euro) during a limited time, say one month.
- c) Shareholders who do not want to exercise their options can sell them to other investors.

The idea of having banks issue CoCo bonds was first proposed by Mark Flannery, visiting scholar at the New York Fed, and is being considered by the Fed.

The logic is to convert debt into equity without costly bankruptcy proceedings and negotiations. However, what is novel in our approach is the combination with an option for the shareholders to buy the shares that result from the conversion at the conversion price of the debt.

Our structure tries to address the main problem with CoCo bonds pointed out by the FT: the presence of such a convertible in the capital structure may create a self-fulfilling death spiral. Investor concern about potential dilution and unjustified concern about the bank's health may generate panic selling. This confidence induced death spiral will lead to unnecessary conversion and dilution of equity holders.

Giving a call option to shareholders solves the death spiral concern. It prevents bondholders from taking the company away from the shareholders when stock prices collapse without fundamental reason as, in this case, bondholders will have to sell their shares obtained through conversion back to shareholders at the conversion price.

Moreover, any panic selling that leads to economically unjustified conversion and dilution can be undone by the stockholders through exercising the call option.

Furthermore, compared to simply increasing capital requirements, the CoCo bond with call option has the following advantages:

- Debt will be converted into equity without providing excess cash to bankers, eliminating the agency problem of free cash flow
- No assets will have to be sold to meet capital requirements, preventing negative spill-over effects from a fire sale
- Because the equity holders have the right to buy back the stock, they don't have to worry that the debt holders (potentially other banks) will use the con-

vertible to take over the company without paying a control premium

- When a company raises equity, typically all risky debt holders benefit, which represents a wealth transfer from shareholders to bondholders. As a result, equity holders refuse to put up money to bail out the bondholders. However, in our case, equity holders have little choice if they want to avoid dilution: our mechanism is essentially a way to reduce the limited liability of equity, which is the source of two big conflicts between bondholders and shareholders: excessive risk-taking and refusal to recapitalize when the firm is in financial distress. In our case, there is no big wealth transfer as the structure provides a guarantee to the debt holders that they will be repaid, if the probability of financial distress becomes significant (which we define as the moment when the stock price hits five euro's).

In addition, our conversion mechanism is automatic and fast, and it avoids lengthy negotiations that are typically observed in debt restructurings. Speed may indeed be important in times of financial crisis.

Finally, because the equity issue and conversion decisions are based on parameters that are specified in advance, neither the conversion nor the equity issue will provide a negative signal in itself. The recapitalisation is forced by a contract, not by the decisions of a regulator, who may be perceived as someone who has superior information about the banks' financial condition.

The convertible solution is, of course, not the only way to avoid government bailouts in the future. Our goal is to propose an alternative instrument in regulators' risk management toolbox.

This article is reproduced courtesy of [FT.com](http://FT.com)



Theo Vermaelen is professor of finance at INSEAD. Christian Wolff is professor of finance at the University of Luxembourg. Both are programme directors at the Amsterdam Institute of Finance.

[theovermaelen@speakersacademy.eu](mailto:theovermaelen@speakersacademy.eu)

[christianwolff@speakersacademy.eu](mailto:christianwolff@speakersacademy.eu)

