

## [Levering Europe: Alternatives for the European Financial Stability Facility](#)

Douglas J. Elliott, The Brookings Institution, October 28, 2011

World markets celebrated a successful summit of European leaders with a substantial rally, particularly in Europe. There is no doubt that European leaders made significant progress on key issues necessary to solve the Euro Crisis. However, they also left us with many intriguing questions, especially how they intend to lever up the European Financial Stability Facility (EFSF), the fund to support governments and financial institutions that suffer problems in accessing financial markets.

The best way to stop a crisis of confidence in the markets is to step in with overwhelming resources, which was the original intent when the EFSF was created. At that time, market fears centered on Greece, Ireland, and Portugal. Eurozone leaders believed that the original effective size<sup>[1]</sup> of nearly 300 billion euros would dramatically demonstrate that the resources would be available to backstop these countries. The problem is that markets became quite worried about Spain and Italy as well, which are much bigger.

Most outside observers believe that Europe needs to demonstrate an intervention capacity of 1-2 trillion euros in order to fully reassure the markets that even problems in Spain and Italy would be manageable for the eurozone as a whole. The problem is that intense resistance from voters makes leaders very hesitant to expand the EFSF beyond the 440 billion euros on which they have already agreed, since they do not want to raise their national commitments. (It takes unanimous action by 17 nations to raise the EFSF's funding; parliamentary approvals were obtained only with real difficulty after leaders agreed in July to raise the total to its current level.) Some of the 440 billion needs to be held aside for existing commitments, such as to Greece, and for potential needs under the bank recapitalization plan. The remaining usable funds would be in the neighborhood of 250 billion euros.

At the end of the day, European leaders want 250 billion euros of usable funds at the EFSF to provide at least 1 trillion euros of support for eurozone debt issuances. As a result, the leaders indicated that "four to five times" leverage will need to be achieved. How can this be done? The leaders have delegated this to their finance ministers and the appropriate European technical experts, so we do not know the ultimate answer yet. However, there are several logical alternatives, of which at least two appear to be under consideration. (One that is not currently under consideration, apparently due to strong opposition by the Germans, is to borrow from the European Central Bank (ECB). The ECB will continue to buy eurozone bonds in the secondary market as it deems necessary, until such time as the EFSF can effectively take over providing support to sovereign debt markets. The ECB could also complement the efforts of the EFSF in the future, if the EFSF needs additional support. However, the plan put forth by the leaders does not assume an ECB role once the EFSF is fully operational in its new levered mode.)

**Provide insurance or a guaranty of a portion of each sovereign bond.** The leaders explicitly indicated that this is one option. The mechanism is fairly straightforward. Buyers of new bonds issued by troubled eurozone countries could purchase protection from the EFSF on the first portion of any losses incurred on those bonds. If the EFSF guarantees losses up to the first 20% of the face value on such bonds, then its resources could support 5 euros of issuance for every 1 euro of risk that it takes. (Whether the protection is provided as insurance or as a credit guaranty is a relatively technical issue that does not affect the basic economics.)

Private sector financial institutions could provide the same protection, but the EFSF has several advantages. First, it will likely be viewed as more creditworthy than all but the top-tier private financial institutions, making its guarantee more secure and therefore more attractive. Second, the EFSF will not be subject to any of the capital, liquidity, and other regulatory requirements that add costs to private banks and insurers. Third, the guarantee fee is likely to carry an implicit subsidy by being set at a rate even lower than would be accounted for by its structural advantages. There is a strong public policy benefit to having this approach work and it would be surprising if that did not encourage the creation of subsidies. Even if the EFSF charged an "actuarially fair" fee this would be substantially lower than a private party would normally charge<sup>[2]</sup>. In practice, there is a strong likelihood that the EFSF would use probability estimates for potential defaults that would be more optimistic than private participants would use, widening the economic subsidy further. This assumes that the EFSF will decide the price of its guaranty, or at least the minimum price. If an auction mechanism is used with no minimum price, then market forces will determine to what extent a subsidy exists.

If markets were perfectly efficient, providing a substantial government subsidy for buying sovereign debt of these troubled countries should produce a high level of demand for bonds eligible for this protection. However, we do

not have normal times nor efficient markets at the moment. It is not clear to what extent investors who were too worried to invest without a guarantee would change their mind if the first 20% of their exposure were covered by a sound guarantee. Many would look at the 50% loss of face value on Greek bonds and not want to take the chance of losing some appreciable portion of their investment in new Italian or Portuguese bonds. Government bond investors are generally quite risk averse. At the individual level, many of the fund managers would be at risk of their jobs if they bought ESFS-backed bonds and then lost money, since it would be easy in retrospect to argue that they were very foolish given the well-known problems in the eurozone.

There is also a kind of moral hazard issue since the powers controlling the EFSF would also have a great deal of say in determining the extent of private sector loss should there be another default in the eurozone. Cynically, one might fear that governments would look for the same level of private sector loss, net of the guarantee, as they would have asked without it. That is, instead of a 30% haircut, they might just go with a 50% one again, figuring that many of the investors were protected on their first 20%. Even if they did not do so directly, the EFSF, backed by the political power of the other eurozone countries, might demand direct or indirect compensation from the restructuring country, pushing that nation to employ a higher haircut in order to achieve the same end result after paying the EFSF.

That all said, there is clearly some level of guarantee that would bring strong demand. At the extreme, a 100% guarantee would be highly attractive, although it would provide no leverage for the EFSF. Presumably a 50% guarantee would be a strong lure as well, since it seems unlikely that the next default, should it occur, would require that large a haircut. In that sense, Greece does appear to be a special case that is unlikely to repeat. On the other hand, a 20% guarantee may not be high enough and therefore it may not be optimal to try for 5:1 leverage.

These examples assume that the EFSF makes guarantees no greater than the funds it can raise. Alternatively, it could choose to operate more like an insurer, providing aggregate guarantees greater than its maximum funds, on the assumption that not all guarantees would be called upon. This approach appears unlikely, though, for several reasons. First, and most basically, there is almost certainly a high correlation between the probability of default of, say, Portugal and Italy. This is different from insuring a large number of houses in different locales which are unlikely to all burn at the same time. Second, the EFSF is currently constructed so that it borrows funds from the market to cover its activities, using the national commitments to reassure investors of its creditworthiness. Thus, taking on risk greater than those commitments could cause a ratings downgrade, raising its costs. Third, the politics of taking on still more risk could be very tricky. The case of the TARP in the U.S. highlights how voters tend to assume that all the funds committed will be lost in these crisis times.

**Non-recourse financing.** Several of the emergency credit programs used in the financial crisis in the U.S. took another approach to luring investors to buy securities that were perceived as high risk<sup>[3]</sup>. They offered cheap non-recourse financing. For example, the Federal Reserve<sup>[4]</sup> offered to loan 90% of the value when certain securities were offered as collateral. This meant that an investor could buy an eligible security for \$100 and quickly get \$90 back, for a net investment of \$10. If the value of the investment dropped below \$90, the investor could choose to simply let the Fed keep the collateral and the investor would walk away with no further obligation, having lost \$10. If instead, the security rose in value to \$110, then the investor could sell, pay back the \$90 from the Fed, and take home a profit of \$10 on their net investment of \$10, for a 100% return. In order to encourage these transactions and help revive those markets, the Fed only charged an interest rate a percentage point or two above Libor, a quite modest amount for the risk it was taking.

This approach would not provide the EFSF with significant leverage. It is best suited to situations where the government has access to large volumes of funds at relatively low rates. Nonetheless, it could still be more attractive for investors than a straight guarantee, if structured appropriately. For example, a Special Purpose Vehicle (SPV) could be established that would be funded 20% by the EFSF and 80% by the investor. The EFSF would buy subordinated debt of the SPV that would take the first loss. This approach would allow investors to have the economic benefit of the guarantee while also reducing their funding costs by the difference between the rate charged by the EFSF on its junior piece and the rate they would normally pay for funding. This becomes relatively more attractive at higher levels of guarantee/funding, but would have value for wholesale investors even at the 20% level.

**Credit default swaps.** The guarantee or insurance approach could be implemented using credit default swaps, but there appears to be no particular advantage to doing so.

## **Design alternatives**

European leaders will have to make some significant choices about how to implement either of the main alternatives.

**Two approaches or one?** Unless they discover technical problems, they will presumably offer both the guaranty and the SPV alternatives.

**Offerings over time?** Presumably the EFSF will not try to use up its total capacity up-front, especially since investors may become more interested in participating after the first offering or two succeeds.

**Nature of the guaranty?** The “voluntary” bond restructuring in Greece raises a very serious question as to how an investor can ensure that they actually receive the protection promised to them. Credit default swaps are supposed to pay for losses from credit events, but the Greek restructuring is being designed so that the CDS will not pay out. This raises two issues. First, what will the legal provisions be to determine when the EFSF guarantee kicks in? Second, how can a buyer of the guarantee be sure that it will be allowed to exercise its rights under the guarantee in practice? For example, if a financial institution potentially subject to moral suasion buys a guarantee from the EFSF, how can it be sure that it will not be strong-armed into “voluntarily” choosing not to exercise it? The guarantee will have to be designed carefully to deal with any such concerns.

**Transferable guarantees?** They will likely want to structure any guarantee to be transferable, since there appears to be little cost or difficulty for the EFSF in doing so and it could prove valuable for an investor. For example, an investor might buy the protection up-front, but be prepared to relinquish it after awhile if the sovereign debt crisis appears to be fading away. However, there will presumably be some market value to the protection, which the investor would like to capture by selling it to another party.

**Multiple levels of protection?** The EFSF may wish to offer different levels of protection at different prices. This would maximize the ability to tap into market segments desiring different levels of protection.

**Diversified fund?** The EFSF might want to structure at least one SPV to invest in debt of multiple eurozone countries. This might be the most attractive approach to bring in Chinese money, for example, by creating a sort of mutual fund with first loss protection. This would provide some additional safety, since there is at least a chance that one or more of the troubled eurozone countries might avoid default or restructuring even if the others do not.

**Eligible investors?** The key question is probably whether individuals will be allowed to participate, either directly or indirectly. If so, there may need to be extra protections to ensure that any buyers fully understand the risks. For example, it is easy to imagine a securities firm setting up a special fund that bundles together retail investor money in order to own sovereign bonds with EFSF protection. Such investors might not fully understand that EFSF protection will not be absolute and they could actually lose money, either because of a default or because bond prices move against them between the date they purchase and the date they sell.

## **Design risks**

**Initial Pricing.** It will not be easy to choose what price to charge for a guarantee. At the most basic level, too high a price will discourage investors while too low a price effectively transfers value from taxpayers to investors. Setting the price also sends a signal about the expected probability of a default, which may have unfortunate political ramifications. Leaders will likely choose to avoid these pricing problems by using an auction mechanism, where a fixed volume of protection is offered. This, though, brings up the potential problem of failed auctions, where there are insufficient bidders for the full volume being offered. There could also be auctions where the price is too low, in which case too high a subsidy may be given to those who do participate. This could be mitigated with a minimum auction price, but that increases the risk of a failed auction. There is also the risk of auctions where the price for protection is excessively high. The latter is not a problem in isolation, since it simply means more money for the EFSF, but it could cause market panic by indicating a reluctance of investors to hold sovereign debt even with guarantees.

**Future pricing.** If the EFSF sets the price for its protection, then it will need to consider carefully how to change prices. If it adjusts too infrequently or by too little, then it could find itself offering protection too cheaply or too expensively at times, in which case it will either be providing excessive subsidies or not finding any takers. Changes in prices would also carry political risks, as it would be interpreted as reflecting changes in the likelihood of default by different countries. An auction mechanism would avoid these problems, but would provide a market reading of default risks, one with the political disadvantage that European leaders would find it difficult to ascribe movements to speculation without also impugning their own chosen financial vehicle.

**Excessive profits for investors.** There are political risks stemming from the fact that the public is likely to judge whether the private sector was given too good a deal by looking back afterwards at how the deal worked out. The big risk would be if there is a future default and the protection being provided becomes very costly for the EFSF and therefore, ultimately, for national taxpayers. A lesser risk, but still a significant one, is if investors find a way to arbitrage the EFSF by buying cheap protection from it and finding a way to sell that protection on for a higher price, either immediately or somewhat later.

**Moral hazard.** There is a real risk that investors, particularly foreign investors, may believe that the level of protection that the EFSF chooses to provide is an unofficial guarantee that restructurings will not be larger than that level. This is not an unreasonable assumption, although it is clearly not the intent and could easily be wrong in practice. Nonetheless, the nations backing the EFSF will likely be in a position to essentially determine whether there is a restructuring and how big a haircut is employed. One can imagine the pressure that the Chinese, for example, might bring to bear if it looked as if a future restructuring were going to produce a haircut exceeding the protection level.

## **Conclusions**

There are several ways in which the EFSF's own funds could be levered through a partnership with external investors, whether from the private sector or official sources. Each of these, however, has potentially serious limitations and risks as compared to the commitment of greater funds by the national governments. It will not be clear for some time as to whether the eurozone will be able to design an approach that is effective and brings in the needed level of external investment.

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## **Footnotes**

[1] The EFSF is designed as a special purpose vehicle which borrows from investors. Its creditworthiness is based on guarantees from the various eurozone nations. Since some or all of these countries could fail to honor their commitments, it can only maintain its targeted Triple-A rating by borrowing less than the aggregate amount of the guarantees. Thus, the effective size is about 60% of the size of the total national guarantees. The original total of commitments was 440 billion euros, which was increased to 780 billion under an agreement reached in July 2011 and fully ratified earlier this month.

[2] An insurance premium or guarantee fee is "actuarially fair" when it equals the expected credit loss on a probability-weighted basis. (In simple terms, if there were a 90% chance of no loss and a 10% chance of a 50% loss, then an actuarially fair premium would be 5%.) It does not include any additional premium to provide an expected profit or to pay the provider for taking on the uncertainty of the result. Financial theory, and practice, dictate that private sector participants charge for taking on risk.

[3] See my book, *Uncle Sam in Pinstripes: Evaluating U.S. Federal Credit Programs*, for more details.

[4] The U.S. Treasury took most of the risk from the Fed, but I do not want to clutter the example.