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**Research Report**

## FIRE for the euro: A strategy for stabilizing government bond markets

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# ZEW policy brief

by Friedrich Heinemann, Centre for European Economic Research (ZEW)

## FIRE for the Euro – A Strategy for Stabilizing Government Bond Markets

### Essential Issues

The aggravating turbulences in the market for euro government bonds have so far precluded any recovery from the debt crisis. The key problem is that structural reforms and consolidation measures have long impact lags and are not able to stop an acute self-fulfilling crisis of confidence. In the discussion on possible solutions for this dilemma, Eurobonds and their numerous variants are prominent.

**Problem: Bond Market Panics**

However, a superior strategy exists which is a much milder remedy without the severe side-effects of mutual guarantees: This superior strategy is fiscal interest rate equalization (FIRE). With FIRE, countries that benefit from very low interest rates as a consequence of market panics would invest some of their savings to subsidize the borrowing of crisis countries within a conditional fiscal scheme. Conditional on reform and consolidation measures, the scheme involves a partial equalization of the fiscal burden from differing government bond yields in the market.

**Superior Option: Fiscal Interest Rate Equalization (FIRE)**

This approach beats other options for a stabilization of government bonds markets since:

- FIRE does not involve any guarantees on the side of the giving countries. Costs would materialize instantaneously and not imply any burden shifting to later generations of voters.
- FIRE has a natural and politically well defensible financing source: the gains from market panics on the side of the creditworthy countries.
- FIRE leaves interest rate differentiation existent. While Euro-bonds with joint and several liability would fully level interest rates, this would not be the case with FIRE.
- FIRE is reversible whereas Eurobonds hardly are. The intensity of FIRE can gradually be reduced. Thus a continuous and cautious phasing-out of FIRE is realistic after structural reforms are starting to pay off.
- FIRE is financially feasible: The debt weighted interest rates of the euro area have not increased over the crisis so that losses and gains are symmetrical. A simulation indicates that a FIRE scheme protecting Spain and Italy against 10 year-yields in excess of 5 percent for one year's new bond issues would be associated with annual costs of about 5.7 billion euros.

### Winners at Euro Government Bond Markets Support Losers

## FIRE – Principles

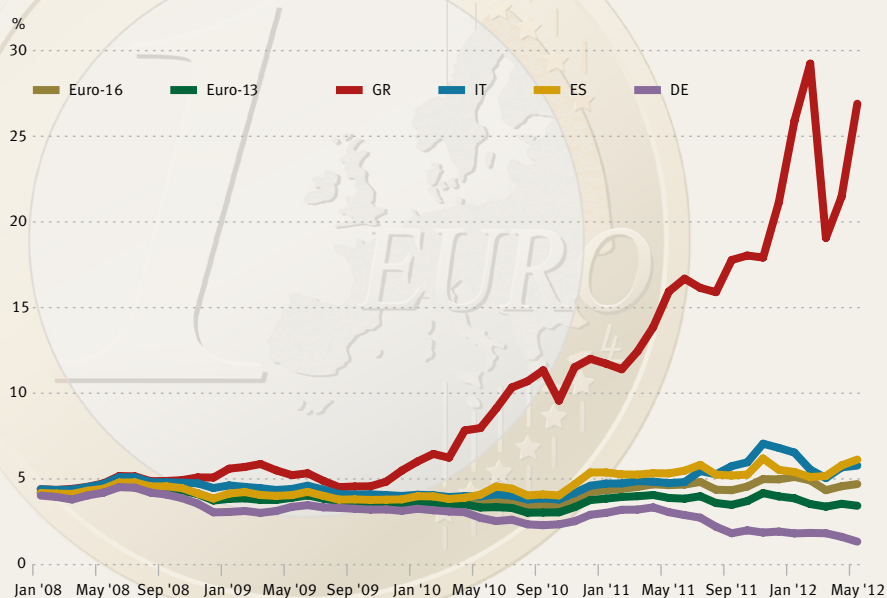
FIRE is based on the insight that market panics in Euro government bond markets create winners and losers. Issuers with a (relatively) high creditworthiness benefit from historically low refinancing conditions whereas issuers with deteriorating market standings can be confronted with an excess risk spread as a consequence of a deteriorating panic. The figure below on debt weighted average bond yields shows that gains and losses are symmetric: While the spread has increased in a dramatic way, the average government bond yield for the euro area has been stable over the years of the crisis.

A straightforward remedy is that winners invest some of their interest rate savings into a fund which subsidizes the refinancing rate of crisis countries. To limit the size of the financing volume

and to keep market discipline active no full compensation for interest rate differentials should be targeted at. Implicitly, interest rate equalization has already been practiced by the European Central Bank (ECB) through its government bond purchasing program. By targeted purchases of bonds from the crisis countries at the secondary market, the ECB has influenced risk spreads and temporarily contributed to slow down self-fulfilling panic developments. However, fiscal interest rate equalization as proposed here is preferable to the ECB's monetary interest rate equalization. The monetary interventions at government bond markets are in conflict with a stability-oriented monetary framework. They imply government financing through the money printing press. Furthermore, this conflict impairs the long-run credibility of equalization. In contrast to the monetary approach, FIRE is more explicit

and credible. It does not stand in contrast to long-run monetary objectives and has a natural financing source: the gains of countries that are the safe havens in a situation of market panics

Ten Year Government Bond Yields



Secondary market yields of government bonds with maturities of close to ten years. Source: ECB  
Euro-16/Euro-13: Debt-weighted yield of euro countries (Euro-16: without Estonia. Euro-13: without Estonia, Greece, Portugal and Ireland), own calculations.  
Source of debt data: European Commission, General Government Data, Spring 2012.

### Creating a Mutual FIRE Fund

## FIRE – Institutional Details

For FIRE's institutional implementation, a solution is desirable which is as transparent as possible. For that purpose, euro area countries should establish a mutual FIRE fund based on a FIRE treaty. The treaty's voting rules must allow for a veto of any financing country. In order to safeguard FIRE's credible availability, provisions should clarify that a veto of single countries would not prevent other countries from participating in the FIRE scheme.

On conditionality, similar general provisions as they are formulated in EFSF/ESM agreements are sufficient. Specific interest rate equalization programs agreed upon under the FIRE treaty should

include the definition of the agreed issuance volume of program countries, the amount available for interest rate equalization per program country and a financing key. In line with the logic of the approach, a financing country's burden would increase with its own volume of issuance and decrease with its own re-financing conditions since both components define a country's crisis related gains.

There is the difficulty that the precise market spread is not predictable for the duration of the program. One pragmatic solution would be to decide on the specific sums involved for a limited period in advance (e.g. six months or one year) based on the currently observable market spreads. After one period this can then be adjusted to the new market conditions.

As long as a crisis country is protected by this support scheme it would not experience a deterioration of its fiscal position caused by an interest rate above FIRE's upper ceiling. Thus, this approach is tailor-made to preclude the panic-driven deterioration of a fiscal position. In this respect, FIRE also offers an improved environment for measuring a country's inherent fiscal progress. With each year a country benefits from FIRE, its fiscal performance is not distorted by abnormal refinancing conditions.

A final institutional question concerns FIRE's interplay with the existing crisis instruments. For countries which are already shielded from the burden of high bond market yields through the existing credit facilities (Greece, Ireland, Portugal) FIRE would not apply. A first obvious activation should target at the protection of Spain and Italy. FIRE would make an extension of credit facilities to these countries redundant. This aspect points to another crucial advantage of FIRE. It could be a substitute for a further massive extension of the loan facilities of EFSF/ESM which would become unavoidable once Italy seeks protection.

FIRE can also be helpful in a later stage of the crisis. A critical phase will come when countries with EFSF/ESM support are close to a return to the bond market. A supporting FIRE program could then serve as a bridge into the market and could speed up the return to the market.

**Interplay with  
Existing Crisis  
Instruments**

## FIRE – Quantification

By construction, FIRE is cheaper than Eurobonds for creditworthy countries. Risk spreads are only partly compensated. Furthermore, low risk countries do not act as a guarantor. Thus, no provisions for losses have to be taken which would be part of the instantaneous full economic costs of Eurobonds. Therefore, if Eurobonds are affordable there cannot be an insurmountable objective financing problem for FIRE since the latter involves substantially less transfers.

A simulation based on the market conditions in May 2012 indicates that the financial amounts are feasible. The assumption is that a FIRE fund is established which compensates Spain and Italy for market rates above 5 percent. Furthermore, it is assumed that high creditworthiness countries are ready to accept a gross interest rate (market rate plus equalization transfer) of 2.5 percent for 10 year maturities.

The table (see page 4) summarizes the costs of a FIRE program which would shield Spain and Italy for one year against long-run interest rates above 5 percent. Given the market conditions of May 2012 and the total issuance needs of both countries the annual interest rate subsidy for the 2012 emissions would amount to approximately 5.7 billion euros.

Only those countries with a market yield below 2.5 percent would contribute to the program's financing. Given the May 2012 market conditions, these countries are: Germany, Finland, Luxembourg, Netherlands and Austria. The financing contribution of Austria and Luxembourg are marginal. Germany would finance 90 percent, the Netherlands 8 percent and Finland 2 percent of the scheme. This result reflects the fact that these three countries benefit most from the safe haven-effect.

**Simulation of Costs  
for the FIRE Scheme**

**Germany Would  
Finance 90 Percent**

**Simulation of FIRE for 2012 (Interest Cap of five Percent for Italy and Spain)**

Receiving countries	Annual amount received in bn. EUR	Financing countries	Annual amount financed in bn. EUR
Italy	3.359	Germany	5.151
Spain	2.395	Finland	0.134
		Luxembourg	0.013
		Netherlands	0.451
		Austria	0.005
Sum	5.754		5.754

**Protection of Spain and Italy is Feasible**

The amount of 5.7 billion euros for the cost of the FIRE scheme refers to the annual interest rate subsidy for the total emissions of Italy and Spain in 2012. This subsidy would have to be paid annually over the whole maturity of 2012 emissions. Thus the initial annual fiscal burden for a country like Germany would amount to approximately 5 billion euros. This annual burden would increase with each year of prolongation of the scheme. This quantification demonstrates that the amounts involved for a protection even of Spain and Italy together are significant but feasible. Europe has realized numerous important steps such as new fiscal rules or liquidity instruments during its fight against the European debt crisis. However, self-fulfilling panics in the euro government bond markets can make these reasonable attempts futile. The current debate centered on Eurobonds variants as an allegedly reliable cure is flawed and does not pay sufficient attention to the dangerous economic and political side effects of that remedy. A much milder treatment is available and has, so far, been neglected. This is a temporal and conditional subsidy on government bond emissions of crisis countries along the lines of the FIRE scheme. European leaders would be well advised to prepare new instruments along this line to have alternative tools in place for the fight against an escalating market situation.

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**Publication**

A long version of the FIRE concept can be downloaded: [www.zew.de/fire2012](http://www.zew.de/fire2012)



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