



# Strengthening Eurozone Solidarity While Preserving Market Discipline

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## Key Points

- In times of market stress, interest rates for weak eurozone members rise, creating an unexpected fiscal loss, and interest rates for strong members fall, generating an unexpected fiscal gain. When market stability returns, the members' costs of funds reverse direction and return to their structural levels.
- A Eurozone Financing Cost Stabilization Account will reallocate 50 percent of gains of members with temporary decreases in relative financing costs to offset 50 percent of losses of members with temporary increases in relative financing costs.
- This stabilization account will strengthen eurozone solidarity, preserve market discipline, and moderate shocks to member costs of funds, all without mutualization of liability.

In times of market stress, interest rates for weak eurozone members rise, creating an unexpected fiscal loss, and interest rates for strong members fall, generating an unexpected fiscal gain. When market stability returns, the members' costs of funds reverse direction and return to their structural levels. Shocks to financing costs can be measured by the change in the differential of a member's cost of funds relative to the average of the cost of funds of all members, weighted by shares in new bond issuance.

Every loss from an increase in relative financing cost for one eurozone member is matched by a gain from a decrease in relative financing cost for other members. A stabilization account that reallocates 50 percent of gains of members with temporary decreases in relative financing costs to offset 50 percent of losses of members with temporary increases in relative financing costs will achieve the following objectives:

1. Eurozone solidarity will be strengthened.
2. Shocks to government financing costs will be significantly moderated.
3. No mutualization of liability and no transfer of credit risk among eurozone members will occur.
4. Market discipline and stabilizing incentives for governments and investors will be preserved.
5. No change to eurozone treaties will be necessary.
6. The requirements of the German Constitutional Court will be fulfilled.
7. No capital will be required. The stabilization account will be self-funding, with inflows matching outflows at all times. The European Stability Mechanism (ESM) can easily manage the stabilization account.
8. All resource flows will be completely rules based, with no possibility of political influence. Governments pursuing unsustainable policies will not receive funds.

9. Any flow of resources should be temporary and should reverse automatically.
10. The impact on national budgets will be minimal.
11. The European Fiscal Compact will ensure that funds will be returned.
12. The European Central Bank (ECB) can be removed from the fiscal policy sphere.
13. Eurozone central control over national budgets will increase.

A simulation of the operation of the stabilization account over the 2010–15 eurozone crisis cycle showed that the mechanism would have functioned as planned. At the peak of the crisis in 2012, more than €2.5 billion per annum would have flowed from Northern Europe to Italy and Spain to offset one-half of the fiscal shock to their financing costs. By the end of 2015, 90 percent of the flows would have reversed direction and returned to the original contributors. The net contribution of Germany would have been €78 million per annum over the crisis cycle.

### **Solidarity: Moderating Shocks, Not Equalizing Funding Costs**

The eurozone should not seek to equalize member financing costs. However, the eurozone should moderate shocks to member costs of funds.

Solidarity in return for responsibility is a core value of the euro. However, Eurobonds and other forms of mutualization of liability homogenize credit risk and equalize member funding costs. They eliminate incentives that create stability and discipline for both governments and investors. Without central eurozone control over national budgets, common liability is unsustainable. Massive transfers of resources from strong to weak members and the burden of the risk of irresponsible governments on sound member taxpayers are neither economically feasible nor politically acceptable.

In times of market stress, financing costs for weak eurozone members rise, creating an unexpected fiscal loss, and interest rates for strong members fall, creating an unexpected fiscal gain. When market stability returns, the members' costs of funds reverse direction and return to their structural levels.

Under the current euro framework, solidarity should include a cooperative reallocation of temporary shocks

to national financing costs. If a government faces an unexpected increase in its cost of funds, other members should help moderate the increased cost if the government is in compliance with its European Commission fiscal obligations, and resources will be returned when the shock dissipates. Conversely, if a government receives an unexpected decrease in its cost of funds, a portion of the gain should be reallocated to less fortunate members.

### **A Eurozone Benchmark Cost of Funds**

The euro's international value is the average of the currency values of its 19 members, weighted by their competitiveness and importance in the world economy. Similarly, the eurozone cost of government financing is the average of the market interest rates for the 19 national governments, weighted by their shares of the total new bond issuance volume. There is no assumption of common liability. Each member stands on its own credit risk.

A benchmark cost of eurozone government funds ("Eurozone Benchmark") will be established. The Eurozone Benchmark will be the average of the individual member Maastricht criterion 10-year market interest rates, weighted by each member's share of the total eurozone government new fixed-rate bond issuance volume during the year. The market estimate of the relative creditworthiness of each member will be measured by the differential in the member's interest rate compared to the Eurozone Benchmark. (See Table A1.)

### **Unexpected Gains and Losses from Shocks to Member Financing Costs**

Shocks to member financing costs can be determined by comparing the member's current differential relative to the Eurozone Benchmark with its prior differential.

Each year, the average cost of financing on new 10-year, fixed-rate bond issues will be established for each eurozone member. The differential of each government's cost of funds compared to the Eurozone Benchmark will be determined for the year. The current year differential will then be compared to the differential in the government's cost of funds versus the Eurozone Benchmark in the previous year. The change in the differential measures the shock to the government's financing cost.

If a government's current year differential is less than its previous year differential, the member has an unexpected gain from a reduction in relative financing costs. If the current year differential is greater than its previous year differential, the member has an unexpected loss from an increase in relative financing costs.

As the eurozone crisis intensified from 2010 to 2012, Italy's differential over the Eurozone Benchmark rose 1.65 percent per annum, while Spain saw its relative cost of funds rise 2.33 percent per annum. During the same period, the relative cost of funds of Germany and the Netherlands fell 1.26 percent per annum and 1.30 percent per annum, respectively. The cost of funds of Italy and Spain versus Germany rose 2.91 percent per annum and 3.59 percent per annum, respectively. (See Table A2.)

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Every loss from an increase in relative financing cost for one eurozone member is matched by a gain from a decrease in relative financing cost for other members.

The unexpected fiscal impact of a shock to each member's financing cost is determined by multiplying its new fixed-rate bond issuance volume during the year by the difference between its current year differential and its previous year differential. The volume of new bond issuance determines a shock's fiscal impact. The shock does not affect the cost to the government of the outstanding stock of debt.

Every loss from an increase in relative financing cost for one eurozone member is matched by a gain from a decrease in relative financing cost for other members.

At the peak of the eurozone crisis in 2012, the unexpected increase in relative interest rates cost Spain and Italy more than €5 billion per annum combined. Over a seven-year average maturity, the total fiscal impact to Spain and Italy reached more than €35 billion. At the same time, Germany, France, the Netherlands, Austria, and Finland received an unexpected combined annual gain of €5 billion from a reduction in their relative financing costs. After

the return of stability and the end of the crisis cycle in 2015, the cumulative fiscal shock for Spain and Italy had fallen to less than €0.3 billion per annum each. (See Tables A3 and A4.)

## **A Eurozone Financing Cost Stabilization Account**

Eurozone members will agree to reallocate a portion of their collective temporary shocks to moderate unexpected changes in national government financing costs. Members that receive an unexpected decrease in relative financing costs will contribute 50 percent of their gain into a Eurozone Financing Cost Stabilization Account (EFCSA). These funds will then be distributed to members that have had an unexpected increase in relative financing costs to cover 50 percent of their loss. Annual contributions and receipts will continue for a period matching the average life of new eurozone bond issuance.

Members only pay into the EFCSA when they have received an unexpected gain from a fall in their relative cost of funds. Each member is only responsible for its own contribution to the EFCSA and bears no liability for the obligations of other members.

The inflows into the EFCSA will exactly match the outflows at all times because the sum of the relative gains and the sum of the relative losses of the 19 members are equal at all times. All individual member gains and losses are determined in relation to the Eurozone Benchmark. Changes in the level of eurozone interest rates have no effect on EFCSA flows. The flows are based on the differentials to the Eurozone Benchmark, not on the absolute value of the benchmark.

Basing EFCSA contributions and receipts on shares in the total eurozone new bond issuance volume ensures a fair allocation among members. (See Table A5 for an example of EFCSA cash flows.)

**No Mutualization of Liability and No Transfer of Credit Risk.** There is no mutualization of eurozone member liability under the EFCSA structure. The EFCSA does not artificially reduce the cost of funds of members in distress and does not transfer credit risk between members, in contrast to Eurobonds and the ECB Outright Monetary Transactions (OMT) government bond buying program.

**Market Discipline and Stabilizing Incentives Will Be Preserved.** The EFCSA structure will preserve market discipline and stabilizing incentives for both governments and investors. Investors will still retain the full risk of the national government bonds they hold and will still take the full losses from their mistakes. Governments will still pay the cost of bad policy and will still be rewarded for sound decisions.

Flows received from the EFCSA are temporary and amount to only 50 percent of the unexpected increase in financing costs. Recipients will know that funds received must be returned in the near term. Members will pay the price of any policies that lead to structural increases in their cost of funds and benefit from good policies that reduce financing costs.

**No Treaty Change Is Needed.** The EFCSA will not require any change to eurozone treaties. It can be implemented under existing European Union articles or through simple agreements among the eurozone governments.

**German Constitutional Court Requirements Will Be Fulfilled.** The German Constitutional Court requires that the German Parliament has decision-making power over all taxpayer funds. To meet this standard, there will be fixed limits on both the maximum annual EFCSA contribution and the maximum cumulative EFCSA contribution net of reflows received.

The limits on EFCSA contributions will have no effect on the effectiveness of the EFCSA. In contrast to other programs, such as the ESM, the ECB's Securities Markets Program, and the ECB's OMT program, the EFCSA does not need to create market confidence with a commitment of resources that can overwhelm any imaginable crisis. It is a tool to moderate the fiscal impact of actual shocks to member costs of funds.

The limits on EFCSA contributions should be set at reasonable expectations of possible shocks to financing costs. If these limits were ever to be exceeded, the German Parliament would then decide whether to appropriate supplementary funds.

**No Capital Will Be Required.** The EFCSA will require no capital and no active financial management. It will be a simple account in which fund inflows exactly match outflows at all times. Any funds held in the

account before disbursement will be invested in Treasury bills of the contributing member. The ESM can easily manage the EFCSA account in its Treasury operations.

**Resource Flows Will Be Rules Based and Only Members with Sustainable Policies Will Receive Funds.** EFCSA resource flows will be determined entirely by market interest rates and bond issuance volumes in previous years. Neither member governments nor the European Commission will be able to influence the flow or volume of EFCSA funds.

Members that do not fulfill European Commission fiscal obligations will not be eligible to receive EFCSA payments. This prevents funds from being used to finance unsustainable policies and permanent transfers from strong to weak members.

Members receiving assistance under official emergency programs will be temporarily excluded from the EFCSA. Governments in crisis will not participate in the EFCSA because they do not have capital market access and cannot issue bonds. Members will reenter the EFCSA mechanism once their capital market access is restored.

EFCSA payments will be made annually in arrears. This ensures that EFCSA funds are distributed only to members in compliance with their European Commission obligations. The one-year lag in the distribution of funds also ensures that the EFCSA is used only to moderate shocks to financing costs and not when structural reform requires large-scale official assistance. Governments entering emergency assistance programs will not receive EFCSA funds for the previous year.

**Flows of Funds from Temporary Shocks Will Automatically Reverse.** Flows of EFCSA funds from temporary shocks to financing costs will automatically reverse when the shock dissipates. Members that receive EFCSA funds when their financing cost unexpectedly increases will return the funds automatically when their differential versus the Eurozone Benchmark returns to its normal level. Members that paid funds into the EFCSA because their relative cost of funds had fallen unexpectedly will see those funds return when their relative cost rises back to its normal level.

Changes in the level of eurozone interest rates will have no effect on EFCSA flows. The flows are



based on the differentials to the Eurozone Benchmark, not on the absolute value of the benchmark.<sup>1</sup>

Flows of EFCSA funds immediately cease once differentials in financing costs stabilize. However, if structural events lead to permanent changes in member relative costs of funds, the initial flow of funds will not reverse. A permanent rise in the relative cost of funds of one member is counterbalanced by a permanent fall in the relative cost of funds of other members. During the transition to new levels, members will reallocate 50 percent of the gains and losses. Once the new structural levels are reached, EFCSA flows will cease, and gains and losses will accrue entirely to the appropriate individual members.

EFCSA flows from strong to weak members will begin as soon as the relative financing cost of the weak members begins to rise. Similarly, reflows of funds from weak to strong members will begin as soon as the relative financing cost of the weak members begins to fall. If the period of market stress is prolonged, weak members could be obliged to begin to return funds while their cost of financing is still temporarily high. To address this issue, EFCSA reflow payments could be made two years after their calculation date to ensure that market stress and the impact of temporary shocks to financing costs have dissipated and that relative interest rates are at structural levels when reflows begin.<sup>2</sup>

#### **Impact on National Budgets Will Be Minimal.**

The impact of the EFCSA on national budgets will be minimal. EFCSA flows should not count fully as fiscal expenditures or revenues because every EFCSA flow creates an expected offsetting reflow. Only the estimated difference between flows and reflows should enter national and European Commission budget deficit calculations.

The estimated differences between flows and reflows should include a provision for the risk of expected reflows. EFCSA payments will be made in arrears with a one-year lag to allow precise budget accounting. (The last section details a simulation of EFCSA flows over the 2010–16 period.)

#### **Fiscal Compact Ensures Return of EFCSA Flows.**

The European Fiscal Compact will force members that suffer an unexpected increase in relative borrowing costs to implement reforms that return relative borrowing costs to normal levels. This will reverse

previous flows automatically and eliminate the impact of the EFCSA on the budgets of all members.

If a member's relative cost of financing continues to rise, it has not implemented reforms required by the European Commission. No EFCSA funds will be distributed to the member. EFCSA funds will be paid with a one-year lag to ensure that no funds are paid out to a member that is not in compliance with commission decisions. Funds contributed to the EFCSA by other members will then be returned.

**Removing the European Central Bank from the Fiscal Policy Sphere.** The EFCSA will moderate the fiscal impact of unexpected increases in member financing costs. It is a purely fiscal tool with no impact on monetary policy.

Therefore, the ECB will no longer need to play the role of stabilizing government borrowing costs in the face of shocks. The bank's OMT government bond buying program can be eliminated. The ECB can return to its mandate and focus solely on monetary policy. The European Commission and the eurozone governments will be responsible for the fiscal impact of unexpected changes in member financing costs.

The EFCSA will greatly reduce any disruptive impact on the government finances of weak eurozone members from the withdrawal of the ECB's Quantitative Easing Program.

**Eurozone Central Control over National Budgets Will Increase.** Eurozone central control over national budgets will increase under the EFCSA. Only governments in compliance with European Commission budget obligations will be eligible to receive EFCSA funds. EFCSA funds will be paid with a one-year lag to ensure that no funds are paid out to a member that is not in compliance with commission decisions. The commission will not approve the budget of any member that has not paid its past obligations to the EFCSA.

#### **Simulation of the EFCSA over 2010–15 Crisis Cycle**

A simulation of the EFCSA operations over the 2010–15 crisis cycle showed that the structure would have functioned as planned.

As shocks hit the financing costs of members during 2010–12, Germany, France, the Netherlands, Finland, and Austria saw their relative costs of funds

fall and would have contributed funds to the EFCSA. Italy and Spain saw their relative costs of funds rise and would have received funds from the EFCSA. As stability returned in 2013–15, Italy and Spain would have returned funds previously received, and Germany, France, the Netherlands, Finland, and Austria would have received funds.

At the peak of the crisis in 2012, more than €2.5 billion per annum would have been reallocated among eurozone members to offset 50 percent of shocks to financing costs. Germany would have contributed €1.2 billion per annum, France €0.7 billion per annum, and the Netherlands €0.4 billion per annum, while Italy and Spain would have each received €1.3 billion per annum. By the end of 2015, 90 percent of the flows would have reversed direction and returned to the original contributors.

The EFCSA net contribution of the strong eurozone members would have been moderate. Germany's

cumulative net contribution would have been €78 million per annum over the 2010–15 crisis cycle. The Netherlands' cumulative net contribution would have been €92 million per annum, Finland's €25 million per annum, and Austria's €24 million per annum. France would have been a cumulative net recipient of €33 million per annum.

In 2016, political instability and concerns over bank solvency in Italy caused Italian government relative financing costs to rise, creating a fiscal loss of €206 million per annum. Germany, France, and the Netherlands received gains from reduced relative financing costs. The EFCSA would have functioned as planned. Italy would have received €103 million per annum from contributions from members with gains to offset 50 percent of its fiscal shock. (See Tables A6 and A7 for detailed results of the simulation.)

## Appendix

**Table A1. Member Differential Versus Eurozone Benchmark (Percentage per Annum)**

	2009	2010	2011	2012	2013	2014	2015	2016
Eurozone Benchmark*	3.88	3.36	3.89	3.29	2.90	2.01	1.13	0.78
Austria	+0.05	(-0.14)	(-0.57)	(-0.92)	(-0.88)	(-0.52)	(-0.38)	(-0.41)
Belgium	+0.02	+0.10	+0.35	(-0.29)	(-0.49)	(-0.29)	(-0.29)	(-0.31)
Cyprus	+0.72	+1.24	-	-	-	-	-	-
Finland	(-0.15)	(-0.35)	(-0.88)	(-1.41)	(-1.03)	(-0.56)	(-0.41)	(-0.42)
France	(-0.23)	(-0.25)	(-0.57)	(-0.75)	(-0.69)	(-0.34)	(-0.28)	(-0.32)
Germany	(-0.66)	(-0.62)	(-1.28)	(-1.80)	(-1.33)	(-0.84)	(-0.63)	(-0.69)
Greece	-	-	-	-	-	-	-	-
Ireland	+1.34	-	-	-	-	-	-	-
Italy	+0.43	+0.67	+1.54	+2.20	+1.42	+0.89	+0.59	+0.70
Luxembourg	+0.35	(-0.19)	(-0.96)	(-1.47)	(-1.04)	(-0.67)	(-0.76)	(-0.53)
Malta	+0.66	+0.82	+0.60	+0.83	+0.47	+0.61	+0.36	+0.10
Netherlands	(-0.20)	(-0.37)	(-0.90)	(-1.36)	(-0.93)	(-0.55)	(-0.44)	(-0.49)
Portugal	+0.33	-	-	-	-	-	-	-
Slovakia	+0.82	+0.51	+0.56	+1.26	+0.29	+0.07	(-0.24)	(-0.24)
Slovenia	+0.49	+0.47	+1.08	+2.52	+2.92	+1.26	+0.58	+0.37
Spain	+0.09	+0.89	+1.55	+2.56	+1.67	+0.72	+0.61	+0.61

Note: \*The Eurozone Benchmark is the eurozone average 10-year cost of funds, weighted by gross issuance of long-term fixed-rate bonds. This is excluding governments under emergency financing programs: Greece 2010–14, Ireland 2011–13, Portugal 2011–14, and Cyprus 2012–14.

Source: European Central Bank.

**Table A2. Shocks to Member Financing Cost\* (Percentage per Annum)**

	2010	2011	2012	2013	2014	2015	2016	Cumulative Change
Austria	(-0.32)	(-0.41)	(-0.37)	+0.20	+0.42	+0.16	(-0.03)	(-0.35)
Belgium	(-0.05)	+0.27	(-0.65)	(-0.03)	+0.25	+0.03	(-0.02)	(-0.21)
Cyprus	+0.39	-	-	-	-	-	-	-
Finland	(-0.34)	(-0.51)	(-0.54)	+0.54	+0.53	+0.18	(-0.01)	(-0.16)
France	(-0.14)	(-0.30)	(-0.20)	+0.23	+0.40	+0.08	(-0.04)	+0.03
Germany	(-0.09)	(-0.64)	(-0.53)	+0.64	+0.54	+0.24	(-0.07)	+0.08
Greece	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-
Italy	+0.12	+0.88	+0.65	(-0.61)	(-0.48)	(-0.27)	+0.11	+0.39
Luxembourg	(-0.67)	(-0.75)	(-0.52)	+0.59	+0.43	(-0.06)	+0.23	(-0.76)
Malta	+0.04	(-0.20)	+0.22	(-0.20)	+0.19	(-0.22)	(-0.26)	(-0.44)
Netherlands	(-0.31)	(-0.51)	(-0.48)	+0.59	+0.44	+0.14	(-0.06)	(-0.18)
Portugal	-	-	-	-	-	-	-	-
Slovakia	(-0.44)	+0.07	+0.68	(-0.80)	(-0.17)	(-0.28)	0.00	(-0.95)
Slovenia	(-0.15)	+0.63	+1.42	+0.57	(-1.60)	(-0.66)	(-0.22)	(-0.01)
Spain	+0.66	+0.68	+0.99	(-0.72)	(-0.90)	(-0.08)	0.00	+0.63

Note: \*The shock is calculated as the current year differential to the Eurozone Benchmark minus the previous year differential to the Adjusted Eurozone Benchmark. The Adjusted Eurozone Benchmark is determined each year by rebasing the share of each government's bond issuance in total eurozone issuance in the previous year to equal its share in the current year. This chaining eliminates changes in relative financing costs due to changes in shares of issuance volume. The chaining determines how much more or less it costs a government to borrow this year compared to borrowing the same amount last year on a relative basis.

Source: Author's calculations based on European Central Bank data.

**Table A3. New Annual Fiscal Shock: New Increase in Annual Financing Cost (€ Millions)**

	2010	2011	2012	2013	2014	2015	2016
Austria	(-68)	(-75)	(-79)	+50	+93	+31	(-7)
Belgium	(-21)	+118	(-290)	(-12)	+82	+12	(-9)
Cyprus	+8	-	-	-	-	-	-
Finland	(-56)	(-78)	(-74)	+74	+64	+19	(-1)
France	(-297)	(-630)	(-414)	+442	+822	+143	(-60)
Germany	(-191)	(-1,254)	(-1,043)	+1,120	+864	+349	(-99)
Greece	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-
Italy	+210	+1,374	+976	(-948)	(-863)	(-472)	+206
Luxembourg	(-13)	0	(-5)	+18	+1	0	0
Malta	0	(-1)	+2	(-1)	+1	(-1)	(-2)
Netherlands	(-161)	(-271)	(-314)	+274	+224	+62	(-16)
Portugal	-	-	-	-	-	-	-
Slovakia	(-23)	+2	+45	(-55)	(-8)	(-9)	0
Slovenia	(-4)	+19	+25	+34	(-103)	(-21)	(-10)
Spain	+615	+795	+1,172	(-995)	(-1,178)	(-113)	(-1)
Total of New Annual Fiscal Shocks	0	0	0	0	0	0	0

Source: Author's calculations based on European Central Bank data.

**Table A4. Cumulative Fiscal Shock: Cumulative Increase in Annual Financing Cost (€ Millions)**

	2010	2010-11	2010-12	2010-13	2010-14	2010-15	2010-16
Austria	(-68)	(-143)	(-222)	(-172)	(-79)	(-48)	(-55)
Belgium	(-21)	+97	(-192)	(-204)	(-122)	(-110)	(-120)
Cyprus	+8	+8	+8	+8	+8	+8	+8
Finland	(-56)	(-133)	(-207)	(-134)	(-69)	(-50)	(-51)
France	(-297)	(-927)	(-1,341)	(-898)	(-76)	+66	+7
Germany	(-191)	(-1,445)	(-2,488)	(-1,368)	(-504)	(-155)	(-255)
Greece	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-
Italy	+210	+1,584	+2,560	+1,611	+749	+277	+482
Luxembourg	(-13)	(-13)	(-19)	(-1)	+1	+1	+1
Malta	0	(-1)	0	(-1)	0	(-1)	(-3)
Netherlands	(-161)	(-432)	(-746)	(-472)	(-247)	(-185)	(-200)
Portugal	-	-	-	-	-	-	-
Slovakia	(-23)	(-21)	+24	(-32)	(-40)	(-49)	(-49)
Slovenia	(-4)	+16	+40	+75	(-28)	(-49)	(-60)
Spain	+615	+1,410	+2,582	+1,586	+408	+295	+294
Total of Cumulative Fiscal Shocks	0	0	0	0	0	0	0

Source: Author's calculations based on European Central Bank data.



**Table A5. EFCSA Example Flows**

	Year 1	Year 2	Year 3	Year 4
Bond Issuance				
Member A	€100	€100	€100	€100
Member B	€100	€100	€100	€100
Member C	€100	€100	€100	€100
Current Cost of Funds				
Member A	1.00%	0.50%	2.50%	3.00%
Member B	2.00%	2.00%	3.50%	4.00%
Member C	3.00%	6.00%	4.50%	5.00%
Eurozone Benchmark	2.00%	2.83%	3.50%	4.00%
Current Differential to Eurozone Benchmark				
Member A	(–1.00)%	(–2.33)%	(–1.00)%	(–1.00)%
Member B	0.00%	(–0.83)%	0.00%	0.00%
Member C	+1.00%	+3.17%	+1.00%	+1.00%
All Members (Weighted)	0.00%	0.00%	0.00%	0.00%
Current Differential – Previous Differential				
Member A	0.00%	(–1.33)%	+1.33%	0.00%
Member B	0.00%	(–0.83)%	+0.83%	0.00%
Member C	0.00%	+2.17%	(–2.17)%	0.00%
All Members (Weighted)	0.00%	0.00%	0.00%	0.00%
Flows from EFCSA (50 Percent Reallocation)				
Member A	€0.00	(–€0.67)	+€0.67	€0.00
Member B	€0.00	(–€0.42)	+€0.42	€0.00
Member C	€0.00	+€1.09	(–€1.09)	€0.00
All Members	€0.00	€0.00	€0.00	€0.00
Cumulative Flows from EFCSA				
Member A	€0.00	(–€0.67)	€0.00	€0.00
Member B	€0.00	(–€0.42)	€0.00	€0.00
Member C	€0.00	+€1.09	€0.00	€0.00
All Members	€0.00	€0.00	€0.00	€0.00

Source: Author.

**Table A6. EFCSA New Annual Flows (€ Millions)**

	2010	2011	2012	2013	2014	2015	2016
Austria	(-34)	(-37)	(-39)	+25	+46	+16	(-4)
Belgium	(-10)	+59	(-145)	(-6)	+41	+6	(-5)
Cyprus	+4	-	-	-	-	-	-
Finland	(-28)	(-39)	(-37)	+37	+32	+10	(-1)
France	(-148)	(-315)	(-207)	+221	+411	+71	(-30)
Germany	(-95)	(-627)	(-521)	+560	+432	+174	(-50)
Greece	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-
Italy	+105	+687	+488	(-474)	(-431)	(-236)	+103
Luxembourg	(-7)	0	(-3)	+9	+1	0	0
Malta	0	(-1)	+1	(-1)	+1	0	(-1)
Netherlands	(-80)	(-135)	(-157)	+137	+112	+31	(-8)
Portugal	-	-	-	-	-	-	-
Slovakia	(-12)	+1	+22	(-28)	(-4)	(-5)	0
Slovenia	(-2)	+10	+12	+17	(-51)	(-11)	(-5)
Spain	+308	+397	+586	(-498)	(-589)	(-56)	0
Total New Annual Flows	0	0	0	0	0	0	0

Source: Author's calculations based on European Central Bank data.

**Table A7. EFCSA Cumulative Net Annual Flows (€ Millions)**

	2010	2010-11	2010-12	2010-13	2010-14	2010-15	2010-16
Austria	(-34)	(-71)	(-111)	(-86)	(-40)	(-24)	(-28)
Belgium	(-10)	+49	(-96)	(-102)	(-61)	(-55)	(-60)
Cyprus	+4	+4	+4	+4	+4	+4	+4
Finland	(-28)	(-67)	(-104)	(-67)	(-35)	(-25)	(-26)
France	(-148)	(-463)	(-670)	(-449)	(-38)	+33	+3
Germany	(-95)	(-722)	(-1,244)	(-684)	(-252)	(-78)	(-127)
Greece	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-
Italy	+105	+792	+1,280	+806	+374	+138	+241
Luxembourg	(-7)	(-7)	(-9)	0	0	0	0
Malta	0	(-1)	0	0	0	0	(-1)
Netherlands	(-80)	(-216)	(-373)	(-236)	(-124)	(-92)	(-100)
Portugal	-	-	-	-	-	-	-
Slovakia	(-12)	(-11)	+12	(-16)	(-20)	(-24)	(-24)
Slovenia	(-2)	+8	+20	+37	(-14)	(-25)	(-30)
Spain	+308	+705	+1,291	+793	+204	+148	+147
Total Cumulative Net Annual Flows	0	0	0	0	0	0	0

Source: Author's calculations based on European Central Bank data.

## About the Author

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## Notes

1. Although total flows into and out of the EFCSA will balance at all times, there will be small differences between flows and reflows for individual members because new bond issuance volumes change over time. Members' different liability management choices on the maturity structure of debt issuance will cause EFCSA funds received and contributed to differ slightly from the actual national budget impact of changes in relative financing costs.
2. If EFCSA reflow payments are made with a two-year lag while initial flow payments are made without a lag, the sum of all EFCSA payments will not equal zero each year. Over time, the sum of flow and reflow payments will still equal zero. The annual mismatched amounts can be easily managed in the ESM Treasury operations.

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