European SSAs – Explorer

European Agency & Supranational Strategy

Research Analysts

Michelle Bradley
Director
+44 20 7888 5468
michelle.bradley@credit-suisse.com

Sabine Winkler
Director
+44 20 7883 9398
sabine.winkler.2@credit-suisse.com

Florian Weber
Associate
+44 20 7888 3779
florian.weber@credit-suisse.com

Helen Haworth
Director
+44 20 7888 0757
helen.haworth@credit-suisse.com

ESM: An in-depth analysis

The European Stability Mechanism (ESM) is a stronger structure than the EFSF by virtue of its paid-in capital. It is also a permanent and less complicated structure in our view. However, the fundamental issue remains – the times when the ESM will need to come to market will be the times when market conditions are most volatile.

- We view the key strengths as the following:
  - Paid-in capital.
  - Less complex structure than the EFSF.
  - Permanent mechanism.
- We see the key weaknesses as the following:
  - Correlation and reliance on the capital markets.
  - Still bound by national parliament approval for some decisions.
  - Voting groups can be created to block votes.
  - Conditionality of the programme defined on a case-by-case basis in the MoU.
  - Enforceability of capital calls.
- There are also issues that remain unanswered which may impact the operation of the ESM. These are as follows:
  - Pricing – we expect the ESM to trade at a premium to the EFSF.
  - The ESM will not have a banking licence or be a repo counterparty with the ECB for now.
  - Direct bank recapitalisation.
  - Paid-in share capital should be positive for the SSA market.
  - We expect the ESM to evolve as market conditions change.
  - There is still a legal challenge with the European Court of Justice outstanding.
- We provide a detailed explanation of the structure of the ESM going through the capital structure, the voting procedure, the support programmes available as well as its lending capacity, funding profile, status, accounting and rating agency treatment.
- Finally we compare the ESM and the EFSF.

Table of contents

ESM: An in-depth analysis 3

Strengths and Weaknesses 3

ESM's impact on the market 5

ESM Structure 8

Comparison to the EFSF 17

Appendix I 18

ESM: An in-depth analysis

The ESM is a stronger structure than the EFSF by virtue of its paid-in capital. It is also a permanent and less complicated structure, in our view. However, the fundamental issue remains – the times when the ESM will need to come to market will be the times when market conditions are most volatile.

In times of market stability the ESM's issuance needs will be limited and so bonds may have scarcity value. When an ESM member needs support the credit profile of the ESM becomes more risky and so investors are harder to find. The risk-on and risk-off phases in the market are therefore magnified through the ESM.

Strengths and Weaknesses

Strengths

Paid-in capital buffer

The paid-in capital does offer the ESM a buffer in the case of an imminent payment and this removes some of the pressure on the ESM to access the market. However this capital cannot be used for loans or for primary or secondary market purchases and so market access remains necessary for the ESM to provide support programmes to a country via loans or bond purchases.

Less complex structure than the EFSF

We think the credit structure of the ESM will make it more appealing to the investors base. The structure of the ESM is more straightforward than the EFSF in our view. Although the ESM's support programmes may be more involved and complex in terms of the options available, we think investors will find the share-capital structure easier to comprehend.

One aspect of the EFSF which proved quite complicated was the stepping-out factor, which means that different bonds have slightly different guarantee structures. In the case of the ESM all bonds will have the same structure as there is no stepping-out mechanism. In addition for the ESM all funding will be pooled and allocated as necessary. This should make it easier to create a liquid curve and tap issues if necessary.

Weaknesses

Correlation/reliance on the capital markets

One of the key problems we found with the construction of the EFSF was that when the EFSF was most required was likely to be a time of stress in the market – and therefore also a time of stress for the EFSF. We do not believe the ESM has resolved this issue. The paid-in share capital does provide a buffer but this capital cannot be used for loans or to purchase securities under an ESM programme for example. When a country requires support, the ESM would be required to access the market for funding and in certain circumstances individual countries may be required to make additional capital contributions.

As there is no stepping-out mechanism for the ESM, it is possible to create a scenario where a country has to receive a loan in order to pay the capital contribution to the ESM. In the EFSF when a country goes into a programme it becomes a stepping-out member and therefore does not continue to provide guarantees. In the case of the ESM even if a country goes into a programme it is still expected to make its capital contribution. This creates a circularity and reduces the credibility of the ESM's capital in our view.

ESM is not exempt from national parliamentary decisions

The ESM will continue to be bound by individual states' legal frameworks and parliaments. Exhibit 1 below shows the decisions and countries that require additional parliamentary approval. The most publicised legal decision so far is that of the German constitutional court, which ratified the ESM Treaty in September 2012 but stipulated that any increase of Germany's liability beyond €190 billion would need to be ratified by the German parliament.

This reduces the flexibility of the ESM especially in times of crisis where action may be curtailed – even if just from a timing perspective.

Exhibit 1: ESM capital share and parliament approval required for new aid programme

Country	% of Capital Share	Approval for new aid programmes
Germany	27.15	Simple Majority in the Bundestag
France	20.39	Only report to parliament
Italy	17.91	Government by decree. Requires approval by both chambers after 60 days
Spain	11.90	None
Netherlands	5.72	Only report to parliament
Belgium	3.48	Only report to parliament
Greece	2.82	Simple Majority
Portugal	2.78	Simple Majority
Finland	2.51	Absolute Majority in parliament
Ireland	1.80	Only report to parliament
Slovakia	1.59	Only report to parliament
Slovenia	0.82	Simple Majority
Luxembourg	0.43	Notification to budget committee
Cyprus	0.25	None
Estonia	0.19	Absolute Majority in parliament
Malta	0.07	Case by case

Source: Credit Suisse, ESM

Voting tactics – Germany, Netherlands and Finland can block any vote

The only option open to the smaller countries to block a vote is if they create a group of six. The ESM voting procedure can be blocked by any six members if they abstain from the meeting, based on the rule that a quorum of 2/3 of members is required. The second stipulation for a valid vote is that 2/3 of all voting rights must be present. This means, a group of countries whose share capital totals greater than 34% would be enough to block a vote. For example Germany, Netherlands and Finland would have enough voting rights or France and Italy together can block a voting procedure if they abstain.

If a decision by mutual agreement cannot be reached, an emergency voting procedure could be employed where the EC and the ECB decide that such a decision is of systemic importance. An emergency procedure requires an 85% majority vote – the quorum rules apply to all votes. Germany, France and Italy could individually block an 85% majority vote. As Germany requires parliamentary approval its threshold is higher, in our view.

Germany or France individually could block a decision by qualified majority (80%).

Flexibility in regard to conditionality of programmes

The conditionality of the ESM programmes will be done on a case-by-case basis dependent on the level of support required. We know the greater the need for support the greater the conditionality, but there are few specific guidelines as to the conditionality of the PCCL vs. ECCL vs. macro-economic adjustment programme.

This gives the ESM a significant amount of flexibility which may be a positive for ESM members and we imagine it was designed thus. However from an investor perspective is does create a certain lack of transparency and can create difficulty in comparing programmes to different countries.

Enforcing payments of capital calls

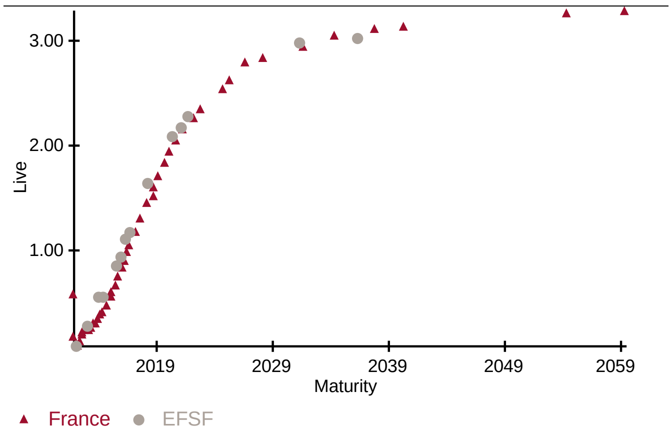
Should the ESM need to make a capital call, countries have committed to make these payments. The sanction for non-payment is that a country loses its voting rights. In the event where a country is considering non-payment of capital, we do not think that it would be unduly concerned about its voting rights. Of course the political fallout from such a decision would be significantly higher and we think this is likely to be a bigger deterrent to ESM members

ESM's impact on the market

ESM will trade tighter to the EFSF, but just

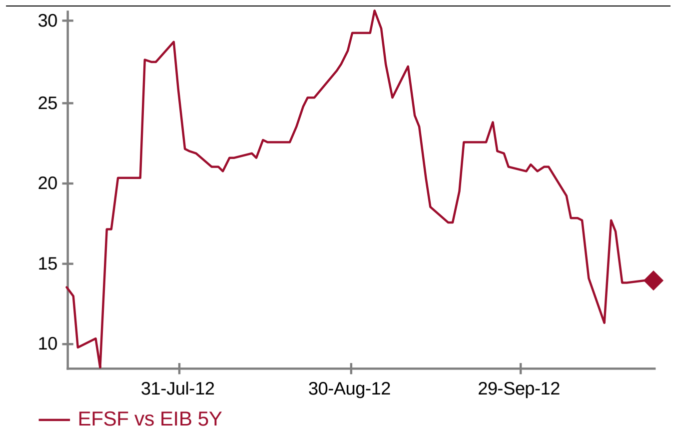
We see two factors driving pricing, which means the ESM should trade tighter than the EFSF – the paid-in capital creates an immediate buffer of €80 billion and the less complex structure of the ESM is easier for investors to understand, we believe. But we do not expect the ESM to have a significant funding advantage over the EFSF.

Exhibit 2: EFSF and France curves



Source: Credit Suisse Locus

Exhibit 3: EFSF versus EIB



Source: Credit Suisse Locus

The ESM's ability to fund will depend on market conditions, and the more the ESM has to fund, the greater the likelihood the market is in a risk-off phase. Now that the ESM is inaugurated, we expect any further lending programmes to go via the ESM rather than EFSF. Should Ireland, Portugal or Greece need additional lending, we expect that would also be channeled through the ESM. Therefore we think the lending commitments of the EFSF are effectively capped, which is not the case for the ESM. The issuance schedule of the EFSF will then be refinancing until the loans are repaid.

Exhibit 2 shows the EFSF and the French curves. The EFSF trades at a discount to France but only by a couple of basis points along the curve. As we expect the ESM to trade at a premium to the EFSF, we think the ESM will trade flat and potentially through the French curve.

Exhibit 3 shows the spread between the EFSF and the EIB in the 5-year point of the curve. We would expect the ESM to trade at a discount to the EIB but would expect this discount to be less than the EFSF. Effectively we would expect the ESM to trade between the EIB and the EFSF. The ESM and the EIB are both based on a capital structure, although the EIB has capital from the 27 members and provides project financing. The EIB is also a liquid and established issuer; therefore, we would expect the ESM to trade at a discount to it.

Repo counterparty – with banks but not with the ECB

The ESM is not eligible as a repo counterparty with the ECB but it can repo with private banks or with other market participants. At the August 2012 ECB press conference Draghi pointed to the ECB's legal opinion which states that the ESM would not be a suitable counterparty at the ECB. He has not deviated from this stand since.

Even with a banking licence the ESM would not be considered an eligible counterparty. A banking licence is different from being an ECB repo counterparty and it needs to be granted by governments. The ESM is not considered an eligible counterparty as this would violate the prohibition regarding monetary financing.

The ESM can initiate primary and secondary market purchase programmes but in order to do this will need to raise cash in the market. The inability to repo at the ECB means more pressure on the ESM to raise funds. This exposes the ESM to the volatility in the new issue market. Should the ESM have to raise significant amounts to fund secondary or primary market purchases, it is possible that this is a scenario in which there is significant volatility in the market and therefore capital market access may not be so easy. There is first-hand evidence of this from the EFSF, which at times has had difficulty tapping the market. We believe the ESM will face similar challenges.

Direct bank recapitalisation- in theory but not yet in practice

Direct bank recapitalisation can help break the link between a country's banking sector and the sovereign, but the ESM is not there yet. The market is likely to consider direct bank recapitalisation as positive for the sovereign whose banks are recapitalised – the liability is with the ESM and not on the sovereign's balance sheet. However, we think the actual implementation may not happen until 2014 and the debate about the issues in the intervening months may cause market volatility.

Direct bank recapitalisation means that the liability would not go via the sovereign's balance sheet but the liability would be shared among the ESM member states via the capital contribution key. This was first announced at the June 2012 summit and was a follow up to the announcement that Spain was applying for a bailout for its banking sector and to the market reacting negatively due to the impact on the Spanish sovereign's balance sheet.

In theory an ESM direct bank recapitalisation plan should be positive for the sovereign balance sheets of Spain and Ireland – Ireland was specifically referred to in the June statement. But there are some outstanding issues.

- An effective single supervisory mechanism (SSM) needs to be in place before the ESM can directly recapitalise individual banks.
- Germany, the Netherlands and Finland have expressed opposition to providing a direct recapitalisation to "legacy assets".
- How the bank resolution regime will be applied to bank recapitalisation from the ESM.

The framework for the SSM is being put in place. The ECB will be in a position to start this in January 2013, but Draghi has made clear that it will take a year before the ECB is up and running. We think that timeframe is ambitious, but assuming it is achieved, it still means that the direct bank recapitalisation will not affect Spain or Ireland's balance sheets till 2014.

The other question is what will be included in the bank recapitalisation programme and the debate regarding legacy assets is already ongoing. We find it difficult to see that other countries will be happy to accept liabilities of the Spanish or Irish banking sector. Germany, Netherlands and Finland have already made their feelings clear. The bank recapitalisation loans are available to facilitate "schemes to support asset separation and disposal". This makes the legacy asset issue more contentious, in our view. It is one thing to ask other countries to support loans to recapitalise a going concern but quite another to support a bad bank in run-off.

The third factor is how the direct bank recapitalisation programmes will work with bank resolution regimes. Recent discussions suggest that subordinated debt holders may be forced to take losses if a bank has to take capital from the ESM. This adds another layer of complexity to a programme going forward, but it's also not clear how or if this could be implemented retroactively for legacy assets.

All of these complexities also raise the issue of ultimately how successful the bank recapitalisation plan will eventually be in breaking the loop between sovereign and bank. We would caution the market is pricing in too much optimism at this stage.

Paid-in share capital positive for SSAs

The ESM will have €80 billion of paid-in capital that it will need to invest. The paid-in share capital will be invested in high quality assets and the ESM has already stated this would be mainly in the euro-denominated SSA (Supra, Sovereign and Agency) market. This should be positive for this asset class particularly for the new issue market. With another €34 billion of paid-in capital due in 2013, this buying is a longer term support to the SSAs, in our view.

It seems the investment will be divided into two tranches – a money market tranche and a medium- to long-term tranche. The ESM has started buying in the market but at the time of writing (24 October) has been investing in paper up to three years in maturity. Given the permanent nature of the ESM, we would expect that it will invest in longer-dated bonds as time passes. We also suspect that the ESM will not be able to invest its €32 billion immediately in the SSA market and so the funds could be supportive for the European government market in the short term.

Evolution – precedent suggests it will adapt to suit the environment

The ESM is the third step in the journey toward a permanent bailout mechanism for Europe. The first Europe being bi-lateral loans to Greece and the second the creation of the EFSF as the temporary bailout mechanism of the euro area.

This has not been a two-step process. The EFSF was seen as an improvement on direct loans as it allowed Europe to benefit from its combined creditor strength and issuance was moved to a joint platform. However, the EFSF has also had to adapt to the market environment and whereas it initially only provided loans the structure today provides for credit lines, primary and secondary market intervention as well as partial protection and co-investment funds.

We think the same is possible for the ESM. The direct bank recapitalisation programme is just one example of how the ESM is already evolving. We think as market conditions change, the ESM will also be forced to adapt to suit the needs of its members.

Legal challenge still outstanding

The ESM passed the legal challenge of the German constitutional court but faces a further challenge in the EU Court of Justice – the highest court of the European Union. The challenge is brought by Thomas Pringle, an independent member of the Irish Parliament who claims that the ESM violates EU law, in particular the no-bailout provision and that is also interferes too much in a sovereign's economic and monetary policy.

The EU court has decided to hear the case under an accelerated procedure and a ruling is expected by the end of the year. We are not European law experts, but the fact that the ESM passed the scrutiny of the German Constitutional Court is a good sign for the impending judgment, in our view.

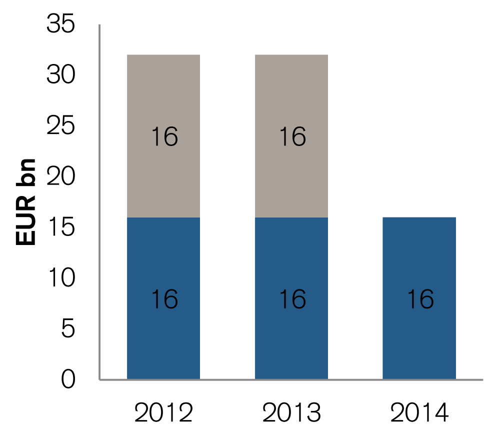
ESM Structure

Capital – paid-in and callable

The ESM has €700 billion of authorised capital stock, which is divided into seven million shares each with a face value of €100,000. There are 17 shareholders – the 17 member states of the euro area (from now referred to as ESM members). Of this capital €80 billion is paid-in capital and the remaining €620 billion is callable capital. Capital will be paid in by member states in five installments over the next three years. Two installments of €16 billion will be paid in 2012, two in 2013 and one in 2014. The first two installments were due within 15 days of the inauguration of the ESM and the ESM has confirmed they are now in place.

The ESM commits to keep in place a ratio of 15% between the paid-in capital and the outstanding amount of ESM issuance. Given the current paid-in capital of €32 billion, this implies an issuance threshold of €212 billion. To put this in context the EFSF is planning to issue €40.5 billion of bonds in 2012, having issued €16 billion in 2011. Should the ESM have additional issuance needs before the €80 billion of paid-in capital is deposited with the ESM the member states have agreed to accelerate the paid-in capital payments. Once all the paid-in capital has been paid up the ESM will have a maximum issuance capacity of €533 billion.

Exhibit 4: Paid-in share capital



Source: Credit Suisse, ESM

The ESM members agree to "irrevocably and unconditionally" commit to contributing the authorised capital on a timely basis. Should a member state apply for financial assistance from the ESM it still has an obligation to pay its authorised share capital contribution. Should a country fail to pay capital due, then its voting rights are suspended until the capital due is paid.

The liability of an ESM member is limited, in all circumstances to the amount of authorised capital that it subscribes to, at issue price.

Capital call for authorised unpaid capital

- If the amount of paid-in capital is reduced through absorption of losses, then an additional capital call is made. This may also be necessary to maintain the 15% ratio of paid-in capital to issuance. The Board of Directors may call authorised unpaid capital via a simple majority decision.
- To prevent insolvency of the ESM, the Managing Director has the authority to call authorised unpaid capital in order to ensure that the ESM has sufficient funds to meet any creditor payments. In such a scenario the ESM members have "irrevocably and unconditionally" committed to paying in their contribution within a period of seven days but a country is limited to the total amount of authorised share capital that it holds.
- The Board of Governors of the ESM may call authorised unpaid capital at any time and set the payment timeframe. This decision must be voted on by mutual agreement of the members.

Increase in the authorised capital stock

- The Board of Governors regularly reviews the authorised capital with regard to the issuance and lending needs of the ESM and the quality of the capital stock. Based on this review it might decide to change the authorised capital stock. Any decision to increase the authorised capital stock may have to be approved by national parliaments.
- If a new country joins the euro area it will automatically become part of the ESM. In such a scenario the capital stock of the ESM will be adjusted to reflect the capital weighting of the new country. The current contribution key is in Appendix 1.

The paid-in share capital of the ESM is loss-absorbing capital only. Importantly the paid-in capital of the ESM is not allowed to be used to purchase bonds (in either the primary or the secondary market) and/or available to lend out. It will be used to buy highly rated liquid assets for investment purposes only.

The ESM will also have a reserve fund. Any net income generated by the ESM through its operations (funding differential and income on paid-in capital) and the proceeds of any financial sanctions on ESM members under surveillance will be paid into the reserve fund.

The waterfall structure of the ESM is such that losses are first charged against the reserve fund, second against the paid-in capital and then against the callable capital.

Governance Structure

The ESM has a Managing Director (Klaus Regling), a Board of Governors and a Board of Directors. The composition of both boards is shown in Exhibit 5

Exhibit 5: Board structure of the ESM

	Board of Governors	Board of Directors
Voting members	Finance Minister from each euro area member state and one alternate	One Director and one alternate director from each country
Observers	European Commissioner for Economic and Monetary Affairs	European Commission may appoint a non-voting observer
	ECB president	ECB may appoint a non-voting observer
	President of the Euro Group	
	Non-euro area members participating on an ad-hoc basis in a stability support operation when said is discussed	Non-euro area members participating on an ad-hoc basis in a stability support operation when said is discussed
		Other persons or representatives of institutions or organisations as invited
Voting	Mutual agreement	Qualified majority
	Qualified majority	Simple majority
Chairperson	President of the Euro Group or Chairperson elected from the Board of Governors members	

Source: ESM, Credit Suisse

Voting Arrangements

For all decisions a quorum of 2/3 of the ESM members and voting rights representing at least 2/3 of the voting rights (based on share allocation) must be present.

Voting decisions of the ESM can be taken on the basis of mutual agreement, qualified majority or simple majority. If an ESM member does not pay its required capital contribution (either paid-in or callable) then it is not able to exercise any of its voting rights and the voting thresholds will be adjusted to reflect the reduction in votes.

One other type of vote is an emergency procedure. This is a decision regarding ESM stability support that needs to be taken to preserve economic and financial stability where both the EC and the ECB conclude that failure to do so would create systemic risk. Under an emergency procedure a qualified majority of 85% of the votes cast is required.

Mutual agreement is the unanimity of the members that participate in a vote. Importantly if a country abstains, this does not prevent a vote being passed by mutual consent (assuming the quorum conditions are met). The Board of Governors makes the following decisions by mutual agreement.

- Make capital calls and set the timeframe for payment. The exception to this is when the level of paid-in capital falls due to the absorption of losses. In this case the Board of Directors may call in authorised capital by a simple majority decision.
- Change in the authorised capital stock.
- Adapt maximum lending volume of the ESM.
- Grant stability support to an ESM member, as well as the nature and the amount of support.
- Bestow mandate on the EU and the ECB to negotiate terms and conditions of a support programme.
- Change pricing policy and pricing guidelines of financial support.
- Agree changes in the capital key.
- Change the list of financial assistance instruments that the ESM can grant.
- Decide on the transfer method between the EFSF and the ESM.
- Approve the application of new members to the ESM.
- Make adaptions to the ESM Treaty that may arise from a new member joining.
- Delegate tasks to the Board of Directors.
- Cancel or transfer contents of the emergency reserve fund and/or paid-in capital.
- Issuance of new shares not at par.

Qualified majority requires the necessary quorum and 80% of the votes cast. The Board of Governors makes decisions other than the ones mentioned above on the basis of a qualified majority. The Board of Directors makes its decisions on a qualified majority basis. In the case where the Board of Governors delegates a decision to the Board of Directors the voting rule of the Board of Governors will be applied.

Simple majority requires the necessary quorum and a majority of the votes cast. If the Board of Directors calls in authorised unpaid capital this is done via a simple majority decision.

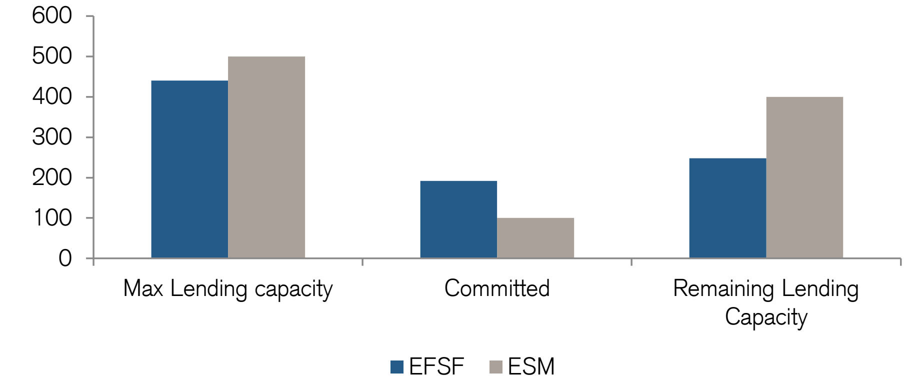
Lending capacity

The ESM has a lending capacity of €500 billion. The combined lending capacity of the EFSF and the ESM is capped at €700 billion.

Currently the EFSF has committed €192 billion in lending to Ireland, Portugal and Greece and up to €100 billion to Spain for the bank recapitalisation programme. The lending capacity of the EFSF is €440 billion, so there is €148 billion still available that could be used up to July 2013. The €100 billion of bank recapitalisation is to be transferred from the EFSF to the ESM. In Exhibit 6 we have shown this as an ESM commitment.

The EFSF will continue to finance its current lending commitments to Ireland, Portugal and Greece, until the loans mature, but after July 2013 will not take on any additional lending. Any further lending would be via the ESM. The EFSF bonds will continue to exist and will not be funged into ESM bonds.

Exhibit 6: Lending commitments of EFSF and ESM



Source: Credit Suisse, EFSF, ESM

How the ESM operates

There is a basic framework for all support applications: a country submits a request (becoming a beneficiary member), an assessment is made, the request considered, if agreed to, the conditionality is set and the aid granted.

In summary the process is as follows

- Application – a member state makes a request for aid to the Board of Governors.
- Assessment – the ECB and the European Commission (EC) carry out a risk assessment as to the financial stability of the euro area as whole, the sustainability of public debt of the beneficiary member and the financing needs.
- Proposal – a proposal for financial assistance is submitted to the Board of Governors by the Managing Director.
- Approval – Once the Memorandum of Understanding (MoU) has been agreed with the beneficiary member the support programme can be appoved by the ESM.
- Granting of support – support is made available to the beneficiary member. For loans that may be in the form of a single or multiple tranches.
- Monitoring – once support has been granted, the EC in liaison with the ECB and the ESA (European Supervisory Agency), where necessary, shall monitor conditionality with the MoU. The ESM also puts in place a warning system to ensure timely payments.

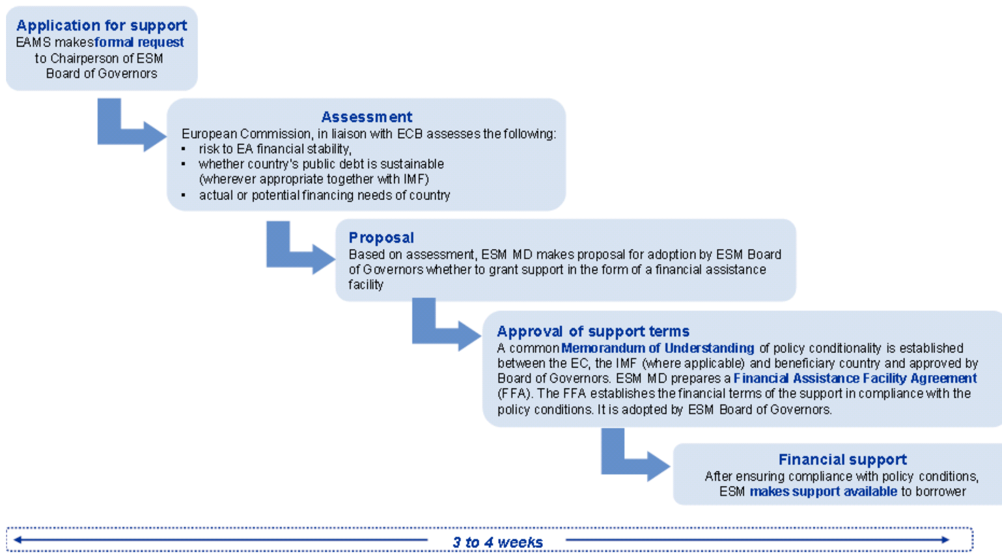
The conditionality relating to a stability support programme will be set out in the MoU. This will be done on a case-by-case basis and the conditions in the MoU will reflect the type of assistance that is to be granted. The MoU shall, however, be consistent with other measures of economy policy co-ordination that are already in place under other treaties of the EU.

For all programmes the EC, in liaison with the ECB and the relevant SSA, will be responsible for monitoring that the beneficiary ESM member is complying with the conditions of the MoU. This will involve regular reporting back to the Board of Directors of the ESM. If a country is not found to be compliant with the conditions of the MoU, the ESM may withhold any further disbursement of support.

In all programmes the ESM shall also establish a warning system to ensure that payments due to the ESM are received in a timely manner.

Exhibit 7: ESM process for granting support

ESM Investors Presentation



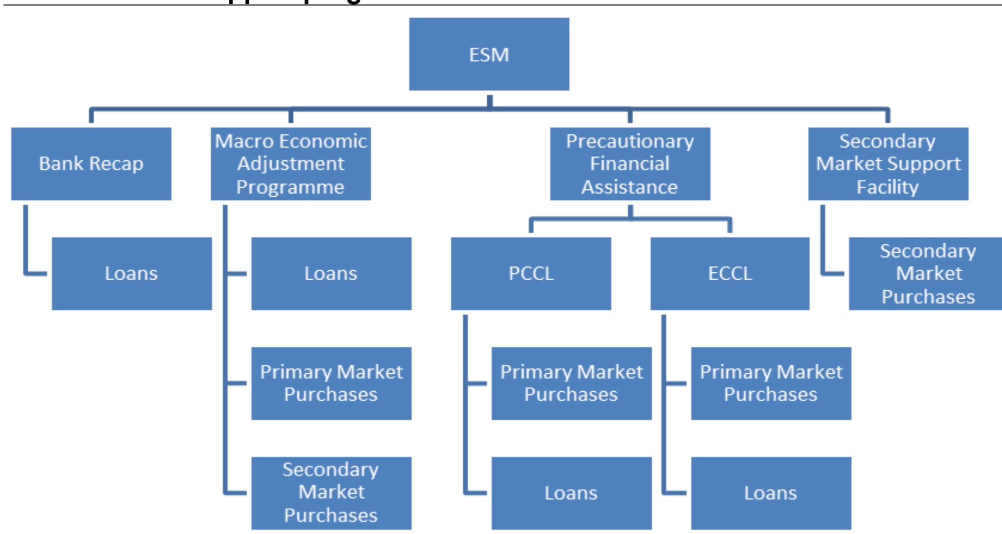
Source: ESM

ESM lending programmes

An ESM member can apply to the ESM for various different support programmes ranging from a full macro adjustment programme to a Secondary Market Support Facility. Within each of these support packages there are a number of different tools that can be used. In Exhibit 8 we show the four ESM programmes and highlight the tools that can be used under each programme. The four programmes are:

- Bank recapitalisation.
- Precautionary financial assistance programme (PFA).
- Macro-economic adjustment programme.
- Secondary market support facility (SMPF).

Exhibit 8: ESM support programmes and tools available under each



Source: Credit Suisse, ESM

- **Bank recapitalisation:** The ESM may provide loans to an ESM member state to recapitalise financial institutions in that member state. This support programme only offers a loan, which would be channeled to the financial institution or institutions via the beneficiary ESM member state. Assistance can be provided to a member state for bank recapitalisation outside the confines of a macro adjustment programme. A MoU will be in place that defines the conditionality attached to the loan.

  In order to be eligible for a loan to recapitalise a bank or banks, the member state needs to adhere to the following criteria

  - The financial institution in question is unable to raise capital from the private sector.
  - The financial institution in question is systemically important and its collapse could prove a threat to the member state itself or the euro area as a whole.
  - The ESM member taking the loan has the ability to repay it and is able to demonstrate a stable fiscal and macroeconomic policy record. The size of the loan should not affect the sustainability of the ESM member requesting the loan.

  An issue still to be resolved is whether the ESM will have the ability to recapitalise banks directly. The statement following the euro area summit on 29 June 2012 laid down the framework for the ESM to have the potential to recapitalise directly as long as an effective single supervisory mechanism (SSM) is in place. A subsequent joint statement from Germany, the Netherlands and Finland in September raised some doubt over those countries' willingness to support legacy assets of banks in Ireland and Spain. This is one stumbling block but the greater hurdle may be the implementation of the single supervisor for European banks. The ECB will be the single supervisor effective 1 January 2013 but the ECB has stated that it could take up to a year to be up and running. Therefore we do not expect the ESM to be in a position to provide direct recapitalisation for the banking sector until 2014.

  The EC, in liaison with the ECB and the ESA shall monitor compliance with the MoU for the programme. The ESA will have the right to conduct on-site inspections of financial institutions that benefit from any support and if necessary bring in other experts such as the external auditors. There will also be a review of the supervisory practices employed by the beneficiary ESM member.

- **Precautionary financial assistance programme (PFA)**: assistance through this programme can be provided through a Precautionary Conditioned Credit Line (PCCL) or an Enhanced Conditions Credit Line (ECCL). Both of these programmes can be drawn down by either a loan or primary market purchases. The credit lines are both available for a period of one year and are renewable twice for six months each time. So in effect the credit line can have a lifeline of 24 months. A PCCL is appropriate when a country is still fundamentally sound and qualifies under the following criteria.

  - Adherence to the commitments under the stability and growth pact.
  - Sustainable general government debt.
  - Adherence to the conditions of an excessive imbalance procedure (EIP).
  - Track record of access to capital markets.
  - A sustainable external position.
  - No bank solvency problems that might pose systemic risk.

  In the case where a member state does not comply with all of the criteria above but where the financial situation is sound, then an ECCL is appropriate. We expect Spain to be considered eligible for an ECCL rather than a PCCL.

Once a credit line has been activated, the member state can draw down funds at any time during the timeline of the credit line but must give the ESM one-week notice. The tranche size of the loan or the primary market purchases limit is set out when the decision to grant a credit line is made. If a credit line is not drawn down, the ESM may, through review of the surveillance reports, decide to withdraw the credit line. If a country does not comply with the policy conditions, then the credit line may be closed and the country may have to ask for a full macroeconomic adjustment programme.

If a PFA is drawn down, the ESM member is subject to Enhanced Surveillance. This means that the ESM member will be subject to regular reviews carried out by the EC in liaison with the ECB and the ESA where appropriate. The EC presents quarterly reports to the Board of Directors.

- **Macro adjustment programme:** The macro adjustment programme is the most comprehensive programme that an ESM member state can request. A macro-economic adjustment programme is relevant for an ESM member that has essentially lost market access either through the lack of demand or the cost of funding. Although a loan may be the most obvious form of assistance it is also possible that a country under a macro-economic adjustment programme can receive aid partly or entirely though primary market purchases. In the case where an ESM loan has been granted and as long as the ESM member state is continuing to comply with the MoU, it may also have access to a secondary market support facility. In the operation of the primary and secondary market purchases, the following have been stipulated.
  - Primary market purchases are to be conducted at market prices and are limited to 50% of the final issued amount.
  - For secondary market purchases the Board of Directors will establish a pro-tempore intervention cap. A technical sub-committee shall be established to decide on the implementation of the purchases.

  Once purchases have begun, the management of the portfolio is the same for both primary market purchases and secondary market purchases.
  - Bonds can be sold if the beneficiary ESM member has stabilised and regained market access and the selling of the stock would not cause market disruption.
  - Bonds can be held to maturity.
  - Bonds can be sold back to the ESM member that issued them.
  - Bonds can used for repos to support the liquidity management of the ESM.

  The EC together with the ECB and the IMF (if involved) shall be responsible for the compliance with the MoU. In that regard the ESM beneficiary member is obliged to give the EC its full co-operation in regard to information required to assess compliance with the MoU

- **Secondary Market Support Facility (SMPF).** This facility is open to countries that are already under a macro-economic adjustment programme, where a loan from the ESM has been granted, or to countries that are not in a programme but are experiencing financial market disruption. The conditions for the secondary market support facility are similar to the precautionary financial assistance programme whereby the country must have sustainable general government debt and a sustainable external position. Also important is that the country does not pose a systemic threat to the euro area through its financial institutions. Countries must also respect the commitments of the Stability and Growth pact as well as the EIP in order to be eligible.

A country that is not under a macro-economic adjustment programme must also sign a MoU which details the conditions attached to the SMPF. In order to implement the programme the Board of Directors shall apply temporary intervention caps. A technical sub-committee is set up to decide on the actual procedure and how the purchases will be carried out. The sub-committee's proposal shall be approved by the Board of Directors. In order to stop the programme the beneficiary member must request that it is terminated.

Diversified funding strategy

The ESM will apply a "diversified funding strategy" and will have short- and long-term funding programmes. The funding instruments are listed in Exhibit 9. The ESM will focus on building a euro-denominated benchmark curve. However, it can also issue in other currencies. Any non-euro issuance would be swapped back to euros.

Exhibit 9: Funding instruments

T-bills	Capital Markets
Unsecured money market transactions	Benchmark bonds (1-30Y)
Commercial paper	Promissory notes
Money market promissory notes	Registered notes
Repo transactions	

Source: Credit Suisse

The maturity of loans granted by the ESM is decided on a case-by-case basis and therefore the funding decisions will be made accordingly and are also a function of market demand. Recently the EFSF has issued a 10-year bond (28 August 2012), which was undersubscribed but a more recent 5-year bond (15 October 2012) was oversubscribed. Indicating again the reliance on the vagaries of the capital markets.

We believe the ESM will be in position to come to the market by the beginning of 2013 if not before. And we would expect it to initially look at the 3Y, 5Y, 7Y and 10Y benchmark points given the aim of creating euro benchmark curves. In regard to accessing the market that is essentially dependent on requests for support. The ESM was inaugurated on October 8 and will need some time to carry out investor roadshows and also to allow investors to do their credit work.. The ESM has stated that pre-funding in regard to secondary market purchases is not yet under consideration. In regard to the bank recapitalisation programme for Spain, that will be done via bonds issued directly to the FROB and therefore will not require issuance in the market.

In the FAQs it is stated that the ESM's funding portfolio will be liquid instruments with a "simple, plain vanilla structure". However, one thing that has still not been decided is whether the ESM will be able to provide partial risk protection certificates or co-investment funds. Both of these products were incorporated into the EFSF's armoury. This issue is still under debate for the ESM. We did not view the partial risk protection certificates as a positive development for the EFSF on the basis that at the times it would need to be redeemed are likely to be the times it is least able to be redeemed due to correlation and contagion. We believe the same fundamental issue applies to ESM.

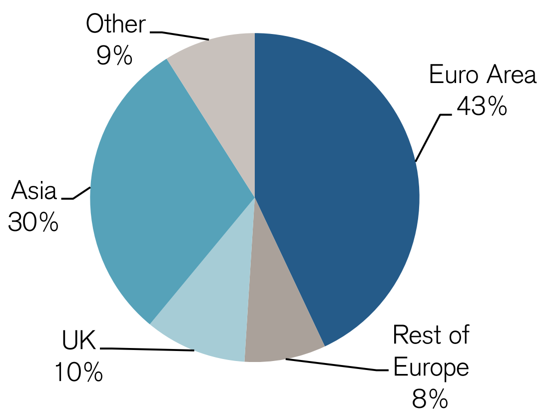
The German Debt Management Agency has acted as the issuance agency for the EFSF and will continue to do so for the ESM. Issuance can be done via syndications, auctions, private placements and new lines.

Investor base

The ESM will be categorised as an SSA and is one of the issuers included in the Credit Suisse EASI (Agency and Supranational) index. We expect investors that have bought EFSF bonds will also buy ESM bonds. The bonds will be an integral part of the SSA universe and will also be used by investors who are looking for a pick-up to European governments. We believe this is particularly true in a "grab for yield" environment where there is a shortage of triple-A-rated assets.

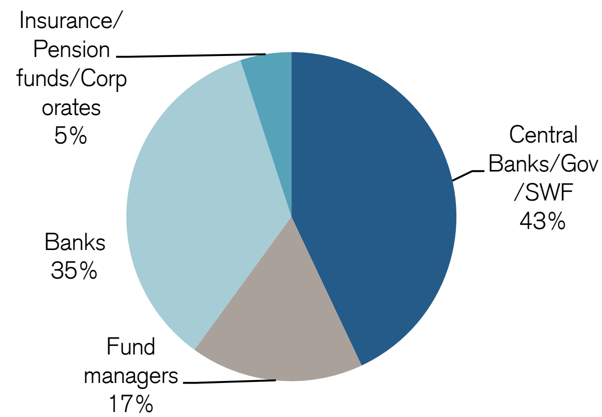
The geographic and investor-type breakdowns for the EFSF's most recent issue (1.125% October 2017) are shown in Exhibit 10 and Exhibit 11. We would expect to see a similar breakdown for the EFSF.

Exhibit 10: EFSF October 2017 geographic breakdown of investor base



Source: EFSF

Exhibit 11: EFSF October 2017 breakdown by investor type



Source: EFSF

Status

The ESM is an intergovernmental organisation under public international law.

The ESM will have preferred creditor status – similar to the IMF, however, the ESM has accepted junior creditor status to the IMF. Other states that provide bilateral loans to an ESM member under support in co-operation with the ESM shall also be supported in a claim for preferred creditor status.

An exception to the preferred credit status is the loan to Spain for the bank recapitalisation programme. As this was granted from the EFSF and was originally pari passu it shall retain this status even when transferred to the ESM. A further exception to this is a financial assistance programme that is outstanding when the ESM Treaty was signed. We understand this to mean that should Ireland, Portugal or Greece receive assistance from the ESM under their current programmes the ESM would be pari passu. Should these countries need a second (or third in the case of Greece) programme, this would come from the ESM, in our view, and a new MoU would need to be signed.

One question in regard to the preferred creditor status is the potential this may have to create legal subordination for other creditors. By virtue of the fact that the preferred creditor state is written in the ESM Treaty that may create a different status to the IMF, for example, where the preferred creditor status is implicit rather than explicit.

Accounting treatment and risk weighting

Loans granted by the ESM will not increase the government debt of an ESM member state. This is in contrast to the EFSF where the guarantee structure means that when disbursements are made they are considered contingent liabilities of the lending member state and so are consolidated on the government balance sheet and increase government debt.

Eurostat has made a provisional ruling on the ESM and has deemed it to be a European international institution which means that "debt incurred by the ESM on the markets will be recorded as ESM debt". In addition, for a country that borrows from the ESM, the debt will be recorded as "debt due to the ESM and not to other EAMS".

The paid-in capital is considered an increase in equity for the participating Member State and the callable capital is considered a contingent liability of the government and so has no impact on government accounts. If capital is called to cover ESM losses in the case where a beneficiary ESM member does not repay its debt Eurostat would consider that as a capital transfer and therefore an expenditure of government.

The ESM will have a 0% risk weighting.

Rating agency views

Moody's and Fitch both rate the ESM with a triple-A rating. Moody's has a negative outlook, while Fitch has a stable outlook. S&P has not published a rating view on the ESM.

For both rating agencies the lower leverage and high capitalisation of the ESM contribute to the high rating. This is relevant in the decision regarding the banking licence of the ESM but also of the coinsurance certificate. Any widening of the current mandate of the ESM that would materially change its credit profile may also have an impact on its rating.

Comparison to the EFSF

Exhibit 12: ESM and EFSF compared

	EFSF	ESM
Differences	Temporary mechanism due to end in July 2013	Permanent bailout mechanism of the EFSF
	Guarantee structure	Share capital
	Members step out if they are under a programme	No stepping out of programme country members
	Pari passu with other senior creditors	Preferred creditor status junior to the IMF
	Loans are consolidated on the lender's balance sheet	Loans do not appear on the lender member's balance sheet
	Private company under Luxembourg law	Inter-governmental institution under international law
	Voting by mutual agreement	Voting decision by mutual agreement, qualified majority or simple majority depending on the decision
Similarities	Provide support programmes under strict conditionality	Provide support programmes under strict conditionality
	Shareholders are the 17 Euro area member states	Shareholders are the 17 Euro area member states

Source: Credit Suisse

Appendix I

Exhibit 13: ESM contribution key and subscriptions to the authorised capital stock

	ESM key (%)	Number of Shares	Capital Subscription (EUR bn)	Paid-in Capital (EUR bn)	Paid-in Capital due per tranche (EUR Bn)
Kingdom of Belgium	3.4771	243,397	24.34	2.78	0.56
Federal Republic of Germany	27.1464	1,900,248	190.02	21.72	4.34
Republic of Estonia	0.186	13,020	1.30	0.15	0.03
Ireland	1.5922	111,454	11.15	1.27	0.25
Hellenic Republic	2.8167	197,169	19.72	2.25	0.45
Kingdom of Spain	11.9037	833,259	83.33	9.52	1.90
French Republic	20.3859	1,427,013	142.70	16.31	3.26
Italian Republic	17.9137	1,253,959	125.40	14.33	2.87
Republic of Cyprus	0.1962	13,734	1.37	0.16	0.03
Grand Duchy of Luxembourg	0.2504	17,528	1.75	0.20	0.04
Malta	0.0731	5,117	0.51	0.06	0.01
Kingdom of the Netherlands	5.717	400,190	40.02	4.57	0.91
Republic of Austria	2.7834	194,838	19.48	2.23	0.45
Portuguese Republic	2.5092	175,644	17.56	2.01	0.40
Republic of Slovenia	0.4276	29,932	2.99	0.34	0.07
Slovak Republic	0.824	57,680	5.77	0.66	0.13
Republic of Finland	1.7974	125,818	12.58	1.44	0.29
	100	**7,000,000**	**700.00**	**80.00**	**16.00**

Source: ESM, Credit Suisse

CREDIT SUISSE

INTEREST RATE STRATEGY

Eric Miller, Managing Director
Global Head of Fixed Income and Economic Research
+1 212 538 6480
eric.miller.3@credit-suisse.com

US RATES

Carl Lantz, Director
US Head
+1 212 538 5081
carl.lantz@credit-suisse.com

Ira Jersey, Director
+1 212 325 4674
ira.jersey@credit-suisse.com

Scott Sherman, Vice President
+1 212 325 3586
scott.sherman@credit-suisse.com

Michael Chang, Vice President
+1 212 325 1962
michael.chang.2@credit-suisse.com

Carlos Pro, Associate
+1 212 538 1863
carlos.pro@credit-suisse.com

William Marshall, Analyst
+1 212 325 5584
william.marshall@credit-suisse.com

EUROPEAN RATES

Helen Haworth, CFA, Director
European Head
+44 20 7888 0757
helen.haworth@credit-suisse.com

Michelle Bradley, Director
+44 20 7888 5468
michelle.bradley@credit-suisse.com

Sabine Winkler, Director
+44 20 7883 9398
sabine.winkler.2@credit-suisse.com

Panos Giannopoulos, Director
+44 20 7883 6947
panos.giannopoulos@credit-suisse.com

Thushka Maharaj, Vice President
+44 20 7883 0211
thushka.maharaj@credit-suisse.com

Florian Weber, Associate
+44 20 7888 3779
florian.weber@credit-suisse.com

Marion Pelata, Analyst
+44 20 7883 1333
marion.pelata @credit-suisse.com

US DERIVATIVES

George Oomman, Managing Director
Derivatives Head
+1 212 325 7361
george.oomman@credit-suisse.com

TECHNICAL ANALYSIS

David Sneddon, Managing Director
+44 20 7888 7173
david.sneddon@credit-suisse.com

Christopher Hine, Vice President
+1 212 538 5727
christopher.hine@credit-suisse.com

Pamela McCloskey, Vice President
+44 20 7888 7175
pamela.mccloskey@credit-suisse.com

Cilline Bain, Associate
+44 20 7888 7174
cilline.bain@credit-suisse.com

David Robertson, Analyst
+44 20 7888 7172
david.robertson@credit-suisse.com

PARIS

Giovanni Zanni, Director
European Economics – Paris
+33 1 70 39 0132
giovanni.zanni@credit-suisse.com

SINGAPORE

Jarrod Kerr, Director
+65 6212 2078
jarrod.kerr@credit-suisse.com

TOKYO

Tomohiro Miyasaka, Director
Japan Head
+ 81 3 4550 7171
tomohiro.miyasaka@credit-suisse.com

Shinji Ebihara, Vice President
+81 3 4550 9619
shinji.ebihara@credit-suisse.com

CREDIT SUISSE

Disclosure Appendix

Analyst Certification

The analysts identified in this report each certify, with respect to the companies or securities that the individual analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

Important Disclosures

Credit Suisse's policy is only to publish investment research that is impartial, independent, clear, fair and not misleading. For more detail, please refer to Credit Suisse's Policies for Managing Conflicts of Interest in connection with Investment Research: http://www.csfb.com/research-and-analytics/disclaimer/managing_conflicts_disclaimer.html

Credit Suisse's policy is to publish research reports as it deems appropriate, based on developments with the subject issuer, the sector or the market that may have a material impact on the research views or opinions stated herein.

The analyst(s) involved in the preparation of this research report received compensation that is based upon various factors, including Credit Suisse's total revenues, a portion of which are generated by Credit Suisse's Investment Banking and Fixed Income Divisions.

Credit Suisse may trade as principal in the securities or derivatives of the issuers that are the subject of this report.

At any point in time, Credit Suisse is likely to have significant holdings in the securities mentioned in this report.

As at the date of this report, Credit Suisse acts as a market maker or liquidity provider in the debt securities of the subject issuer(s) mentioned in this report.

For important disclosure information on securities recommended in this report, please visit the website at https://firesearchdisclosure.credit-suisse.com or call +1-212-538-7625.

For the history of any relative value trade ideas suggested by the Fixed Income research department as well as fundamental recommendations provided by the Emerging Markets Sovereign Strategy Group over the previous 12 months, please view the document at http://research-and-analytics.csfb.com/docpopup.asp?ctbdocid=330703_1_en. Credit Suisse clients with access to the Locus website may refer to http://www.credit-suisse.com/locus.

For the history of recommendations provided by Technical Analysis, please visit the website at http://www.credit-suisse.com/techanalysis.

Credit Suisse does not provide any tax advice. Any statement herein regarding any US federal tax is not intended or written to be used, and cannot be used, by any taxpayer for the purposes of avoiding any penalties.

Emerging Markets Bond Recommendation Definitions

Buy: Indicates a recommended buy on our expectation that the issue will deliver a return higher than the risk-free rate.

Sell: Indicates a recommended sell on our expectation that the issue will deliver a return lower than the risk-free rate.

Corporate Bond Fundamental Recommendation Definitions

Buy: Indicates a recommended buy on our expectation that the issue will be a top performer in its sector.

Outperform: Indicates an above-average total return performer within its sector. Bonds in this category have stable or improving credit profiles and are undervalued, or they may be weaker credits that, we believe, are cheap relative to the sector and are expected to outperform on a total-return basis. These bonds may possess price risk in a volatile environment.

Market Perform: Indicates a bond that is expected to return average performance in its sector.

Underperform: Indicates a below-average total-return performer within its sector. Bonds in this category have weak or worsening credit trends, or they may be stable credits that, we believe, are overvalued or rich relative to the sector.

Sell: Indicates a recommended sell on the expectation that the issue will be among the poor performers in its sector.

Restricted: In certain circumstances, Credit Suisse policy and/or applicable law and regulations preclude certain types of communications, including an investment recommendation, during the course of Credit Suisse's engagement in an investment banking transaction and in certain other circumstances.

Not Rated: Credit Suisse Global Credit Research or Global Leveraged Finance Research covers the issuer but currently does not offer an investment view on the subject issue.

Not Covered: Neither Credit Suisse Global Credit Research nor Global Leveraged Finance Research covers the issuer or offers an investment view on the issuer or any securities related to it. Any communication from Research on securities or companies that Credit Suisse does not cover is factual or a reasonable, non-material deduction based on an analysis of publicly available information.

Corporate Bond Risk Category Definitions

In addition to the recommendation, each issue may have a risk category indicating that it is an appropriate holding for an "average" high yield investor, designated as **Market**, or that it has a higher or lower risk profile, designated as **Speculative** and **Conservative**, respectively.

Credit Suisse Credit Rating Definitions

Credit Suisse may assign rating opinions to investment-grade and crossover issuers. Ratings are based on our assessment of a company's creditworthiness and are not recommendations to buy or sell a security. The ratings scale (AAA, AA, A, BBB, BB, B) is dependent on our assessment of an issuer's ability to meet its financial commitments in a timely manner. Within each category, creditworthiness is further detailed with a scale of High, Mid, or Low – with High being the strongest sub-category rating: **High AAA, Mid AAA, Low AAA** – obligor's capacity to meet its financial commitments is extremely strong; **High AA, Mid AA, Low AA** – obligor's capacity to meet its financial commitments is very strong; **High A, Mid A, Low A** – obligor's capacity to meet its financial commitments is strong; **High BBB, Mid BBB, Low BBB** – obligor's capacity to meet its financial commitments is adequate, but adverse economic/operating/financial circumstances are more likely to lead to a weakened capacity to meet its obligations; **High BB, Mid BB, Low BB** – obligations have speculative characteristics and are subject to substantial credit risk; **High B, Mid B, Low B** – obligor's capacity to meet its financial commitments is very weak and highly vulnerable to adverse economic, operating, and financial circumstances; **High CCC, Mid CCC, Low CCC** – obligor's capacity to meet its financial commitments is extremely weak and is dependent on favorable economic, operating, and financial circumstances. Credit Suisse's rating opinions do not necessarily correlate with those of the rating agencies.

References in this report to Credit Suisse include all of the subsidiaries and affiliates of Credit Suisse operating under its investment banking division. For more information on our structure, please use the following link: https://www.credit-suisse.com/who_we_are/en/. This report may contain material that is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Credit Suisse AG or its affiliates ("CS") to any registration or licensing requirement within such jurisdiction. All material presented in this report, unless specifically indicated otherwise, is under copyright to CS. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of CS. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of CS or its affiliates. The information, tools and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. CS may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. CS will not treat recipients of this report as its customers by virtue of their receiving this report. The investments and services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. CS does not advise on the tax consequences of investments and you are advised to contact an independent tax adviser. Please note in particular that the bases and levels of taxation may change. Information and opinions presented in this report have been obtained or derived from sources believed by CS to be reliable, but CS makes no representation as to their accuracy or completeness. CS accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that such liability arises under specific statutes or regulations applicable to CS. This report is not to be relied upon in substitution for the exercise of independent judgment. CS may have issued, and may in the future issue, other communications that are inconsistent with, and reach different conclusions from, the information presented in this report. Those communications reflect the different assumptions, views and analytical methods of the analysts who prepared them and CS is under no obligation to ensure that such other communications are brought to the attention of any recipient of this report. CS may, to the extent permitted by law, participate or invest in financing transactions with the issuer(s) of the securities referred to in this report, perform services for or solicit business from such issuers, and/or have a position or holding, or other material interest, or effect transactions, in such securities or options thereon, or other investments related thereto. In addition, it may make markets in the securities mentioned in the material presented in this report. CS may have, within the last three years, served as manager or co-manager of a public offering of securities for, or currently may make a primary market in issues of, any or all of the entities mentioned in this report or may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investment concerned or a related investment. Additional information is, subject to duties of confidentiality, available on request. Some investments referred to in this report will be offered solely by a single entity and in the case of some investments solely by CS, or an associate of CS or CS may be the only market maker in such investments. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at its original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. Investors in securities such as ADR's, the values of which are influenced by currency volatility, effectively assume this risk. Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved. The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility, and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct their own investigation and analysis of the product and consult with their own professional advisers as to the risks involved in making such a purchase. Some investments discussed in this report may have a high level of volatility. High volatility investments may experience sudden and large falls in their value causing losses when that investment is realised. Those losses may equal your original investment. Indeed, in the case of some investments the potential losses may exceed the amount of initial investment and, in such circumstances, you may be required to pay more money to support those losses. Income yields from investments may fluctuate and, in consequence, initial capital paid to make the investment may be used as part of that income yield. Some investments may not be readily realisable and it may be difficult to sell or realise those investments, similarly it may prove difficult for you to obtain reliable information about the value, or risks, to which such an investment is exposed. This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed any such site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of any such website does not in any way form part of this document. Accessing such website or following such link through this report or CS's website shall be at your own risk. This report is issued and distributed in Europe (except Switzerland) by Credit Suisse Securities (Europe) Limited, One Cabot Square, London E14 4QJ, England, which is regulated in the United Kingdom by The Financial Services Authority ("FSA"). This report is being distributed in Germany by Credit Suisse Securities (Europe) Limited Niederlassung Frankfurt am Main regulated by the Bundesanstalt fuer Finanzdienstleistungsaufsicht ("BaFin"). This report is being distributed in the United States and Canada by Credit Suisse Securities (USA) LLC; in Switzerland by Credit Suisse AG; in Brazil by Banco de Investimentos Credit Suisse (Brasil) S.A or its affiliates; in Mexico by Banco Credit Suisse (México), S.A. (transactions related to the securities mentioned in this report will only be effected in compliance with applicable regulation); in Japan by Credit Suisse Securities (Japan) Limited, Financial Instruments Firm, Director-General of Kanto Local Finance Bureau (*Kinsho*) No. 66, a member of Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Investment Advisers Association, Type II Financial Instruments Firms Association; elsewhere in Asia/ Pacific by whichever of the following is the appropriately authorised entity in the relevant jurisdiction: Credit Suisse (Hong Kong) Limited, Credit Suisse Equities (Australia) Limited, Credit Suisse Securities (Thailand) Limited, Credit Suisse Securities (Malaysia) Sdn Bhd, Credit Suisse AG, Singapore Branch, Credit Suisse Securities (India) Private Limited regulated by the Securities and Exchange Board of India (registration Nos. INB230970637; INF230970637; INB010970631; INF010970631), having registered address at 9th Floor, Ceejay House,Dr.A.B. Road, Worli, Mumbai - 18, India, T- +91-22 6777 3777, Credit Suisse Securities (Europe) Limited, Seoul Branch, Credit Suisse AG, Taipei Securities Branch, PT Credit Suisse Securities Indonesia, Credit Suisse Securities (Philippines) Inc., and elsewhere in the world by the relevant authorised affiliate of the above. Research on Taiwanese securities produced by Credit Suisse AG, Taipei Securities Branch has been prepared by a registered Senior Business Person. Research provided to residents of Malaysia is authorised by the Head of Research for Credit Suisse Securities (Malaysia) Sdn Bhd, to whom they should direct any queries on +603 2723 2020. This research may not conform to Canadian disclosure requirements. In jurisdictions where CS is not already registered or licensed to trade in securities, transactions will only be effected in accordance with applicable securities legislation, which will vary from jurisdiction to jurisdiction and may require that the trade be made in accordance with applicable exemptions from registration or licensing requirements. Non-U.S. customers wishing to effect a transaction should contact a CS entity in their local jurisdiction unless governing law permits otherwise. U.S. customers wishing to effect a transaction should do so only by contacting a representative at Credit Suisse Securities (USA) LLC in the U.S. Please note that this research was originally prepared and issued by CS for distribution to their market professional and institutional investor customers. Recipients who are not market professional or institutional investor customers of CS should seek the advice of their independent financial advisor prior to taking any investment decision based on this report or for any necessary explanation of its contents. This research may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA or in respect of which the protections of the FSA for private customers and/or the UK compensation scheme may not be available, and further details as to where this may be the case are available upon request in respect of this report. CS may provide various services to US municipal entities or obligated persons ("municipalities"), including suggesting individual transactions or trades and entering into such transactions. Any services CS provides to municipalities are not viewed as "advice" within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. CS is providing any such services and related information solely on an arm's length basis and not as an advisor or fiduciary to the municipality. In connection with the provision of the any such services, there is no agreement, direct or indirect, between any municipality (including the officials, management, employees or agents thereof) and CS for CS to provide advice to the municipality. Municipalities should consult with their financial, accounting and legal advisors regarding any such services provided by CS. In addition, CS is not acting for direct or indirect compensation to solicit the municipality on behalf of an unaffiliated broker, dealer, municipal securities dealer, municipal advisor, or investment adviser for the purpose of obtaining or retaining an engagement by the municipality for or in connection with Municipal Financial Products, the issuance of municipal securities, or of an investment adviser to provide investment advisory services to or on behalf of the municipality. If this report is being distributed by a financial institution other than Credit Suisse AG, or its affiliates, that financial institution is solely responsible for distribution. Clients of that institution should contact that institution to effect a transaction in the securities mentioned in this report or require further information. This report does not constitute investment advice by Credit Suisse to the clients of the distributing financial institution, and neither Credit Suisse AG, its affiliates, and their respective officers, directors and employees accept any liability whatsoever for any direct or consequential loss arising from their use of this report or its content. Principal is not guaranteed. Commission is the commission rate or the amount agreed with a customer when setting up an account or at any time after that.

Investment principal on bonds can be eroded depending on sale price or market price. In addition, there are bonds on which investment principal can be eroded due to changes in redemption amounts. Care is required when investing in such instruments.

When you purchase non-listed Japanese fixed income securities (Japanese government bonds, Japanese municipal bonds, Japanese government guaranteed bonds, Japanese corporate bonds) from CS as a seller, you will be requested to pay the purchase price only.