European Stability Mechanism



# Voluntary debt restructuring: the 2017 Greek €29.6 billion bond exchange explained

This paper showcases the Greek 2017 liability management exercise as an example of a successful voluntary debt restructuring by a sovereign with active participation from both public and private sector creditors. The exercise, one of the largest in financial history, saw Greece restructure some €29.6 billion in outstanding debt to the ESM and EFSF using a bond exchange involving the four main Greek banks. The paper describes the exchange structure and the need to respect conflicting public policy objectives. It aims to contribute to the debate about sovereign debt restructuring generated by the IMF's September 2020 discussion paper, *The International Architecture for Resolving Sovereign Debt Involving Private-sector Creditors*. It highlights how useful the ESM approach was in helping overcome financial difficulties by combining capital markets operations with stability support.

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This paper is in honour of Mike Hesketh, who was instrumental in the design, negotiation, and				
execution of the bond exchange.				
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## **Executive summary**

Greece has conducted a number of public debt liability management operations.

Greece received the biggest financial aid package in financial history, exiting its third financial assistance programme with the European Stability Mechanism (ESM) in August 2018, following a 2010 Greek Loan Facility and a 2012 European Financial Stability Facility (EFSF) financial assistance programme. The assistance from European and international rescue loans totalled nearly €290 billion, of which €204 billion flowed from the ESM and the EFSF. Greece leads the sovereign league table for record-breaking public debt liability management operations, and this paper deals with one of them.

This paper contributes to an overarching policy debate on sovereign debt restructuring...

It therefore contributes to a policy debate about sovereign debt restructuring that was stimulated by a September 2020 International Monetary Fund discussion paper entitled *The International Architecture for Resolving Sovereign Debt Involving Private-sector Creditors*.

...by looking at the 2017 Greek liability management exercise...

This paper showcases a liability management exercise by Greece in 2017 to restructure some €29.6 billion of outstanding debt to the ESM and the EFSF using a voluntary bond exchange that involved Greece's four main banks. It describes the exchange structure and how it had to respect conflicting public policy objectives, and offers insights into the ESM's approach to helping overcome financial difficulties by combining capital market operations with stability support.

...which was one of the largest voluntary debt exchanges ever.

During the third financial assistance programme, at a time of historically low euro area capital market interest rates, the Eurogroup mandated the ESM to use its diversified funding strategy to stabilise, and even reduce, interest rate risk for Greece on outstanding ESM and EFSF loans. One consequent ESM-designed interest rate risk-reduction scheme was a voluntary bond exchange between the ESM and the four systemic Greek banks; these were Piraeus Bank, National Bank of Greece, Alpha Bank, and Eurobank. It was one of the largest voluntary debt exchanges ever.

This bond exchange was unique, not only because of its size, at nearly €30 billion, or 16% of Greece's outstanding loans to the ESM and EFSF; it was also special because the ESM designed and implemented a structure that successfully met specific financial goals and reconciled conflicting policy objectives.

It also met specific financial goals and reconciled conflicting policy objectives.

At completion, the bond exchange reduced Greece's debt-togross domestic product (GDP) ratio by an estimated 10% by 2060, substantially contributing to Greece's total debt relief within its European financial assistance programmes. The operation significantly reduced Greece's future debt-to-GDP ratio.

### Introduction

The International Monetary Fund (IMF) published a discussion paper entitled *The International Architecture for Resolving Sovereign Debt Involving Private-sector Creditors*, on 23 September 2020<sup>1</sup> that reviewed developments and suggested reforms to the sovereign debt restructuring approach, given the likely impact of the pandemic crisis on global economies.

The IMF paper referenced several contemporary sovereign debt restructurings, including that of Greek debt in 2012, the so-called Private Sector Involvement (PSI), which triggered claims, litigation, and then academic debate about the use of local-law advantage.

This paper does not cover local-law advantage further, but instead spotlights sovereign debt restructuring based on consent, sometimes described as a liability management exercise (LME) under ESM direction within its stability support programme. The IMF paper describes LMEs for sovereigns as uncommon, given the costs involved,<sup>2</sup> so the 2017 Greek bond exchange is an exception.

Therefore, this ESM Discussion Paper offers an opportune recollection of how the ESM designed a vital operation to support the Greek state debt restructuring, portraying the legal techniques and financial engineering applied to achieve a successful result.

<sup>&</sup>lt;sup>1</sup> IMF Blog of 1 October 2020, *Reform of the International Debt Architecture is Urgently Needed* by Kristalina Georgieva, Ceyla Pazarbasioglu, and Rhoda Weeks-Brown: https://blogs.imf.org/2020/10/01/reform-of-the-international-debt-architecture-is-urgently-needed/.

<sup>&</sup>lt;sup>2</sup> Idem; p. 37.

## 1. Background

Greece officially exited its third financial assistance programme on 20 August 2018 after three consecutive rescue programmes from 8 May 2010. The programmes started in 2010 as the so-called €80 billion Greek Loan Facility, a somewhat complex set of pooled bilateral loans from euro area countries managed by the European Commission, together with a €30 billion IMF Stand-By Arrangement. They eventually amounted to three fully fledged macro-economic adjustment programmes, the last two provided by the ESM/EFSF.

The ESM and the EFSF, individually and combined, have been the largest lenders to Greece by far, having disbursed nearly €204 billion. Greece has repaid €12.9 billion early, leaving the total outstanding at the date of this paper at about €191 billion.<sup>3</sup> The ESM and EFSF are Greece's only long-term lenders, with weighted average maturities up to 42.3 years.<sup>4</sup> They have established a long-term structural relationship with the country to help it return to a sustainable debt path that would ensure a long-term recovery and future prosperity.

During the programmes, the ESM provided Greece with funds to meet fiscal needs, budgetary purposes, arrears clearance, indirect bank recapitalisation requirements, and other uses. It supported Greece with expertise and advice and executed LMEs with the private sector, thereby implementing politically agreed debt relief measures.<sup>5</sup>

When the Eurogroup mandated the ESM to implement interest rate risk reduction measures in 2016 it offered an opportunity to design a LME from scratch.<sup>6</sup> The ESM and EFSF governing bodies completed the approval process for the measures on 23 January 2017,<sup>7</sup> embracing three interest rate risk reduction schemes. One was a voluntary bond exchange between the ESM, Greece, and the four main Greek banks – Piraeus Bank, National Bank of Greece, Alpha Bank, and Eurobank – called the **bond exchange**. This proposed exchanging floating-rate notes (FRNs) held by the four Greek banks after programme recapitalisations for fixed-rate notes, then redeeming the fixed-rate notes with cash funded long-term by the ESM.

The bond exchange approach looked technically feasible but the ESM soon realised several public policy factors would constrain its design. Instead of trying to avoid the constraints, the ESM absorbed them into the strategy and embedded them in the final structure as core bond exchange principles.

#### These principles were:

- to follow Eurogroup guidance that former programme countries should not incur any additional costs when implementing the bond exchange;
- to comply with European Central Bank (ECB) and Eurosystem holding limits for past, and possible future, sales of the ESM/EFSF notes under the ECB's Public Sector Purchase Programme (PSPP);<sup>8</sup> and

<sup>&</sup>lt;sup>3</sup> The ESM website on Greece: https://www.esm.europa.eu/assistance/greece#facts.

<sup>&</sup>lt;sup>4</sup> Ibid. For simplicity, this paper refers to the ESM solely, even where referencing both the ESM and EFSF.

<sup>&</sup>lt;sup>5</sup> A further description of the various LME operations and debt relief measures for Greece, including direct debt-buy backs, can be found in Chapter 33.V.B (*Greece*) by Jasper Aerts and Ulrich Forsthoff, pp. 1010–1015, in Fabian Ambtenbrink and Christoph Herrmann (2020) *The EU Law of Economic and Monetary Union*, Oxford University Press.

<sup>&</sup>lt;sup>6</sup> Eurogroup Statement on Greece, 25 May 2016, https://www.consilium.europa.eu/en/press/press-releases/2016/05/25/eurogroup-statement-greece/, and Eurogroup Statement on Greece, 5 December 2016, https://www.consilium.europa.eu/en/press/press-releases/2016/12/05/eurogroup-statement-greece/.

<sup>&</sup>lt;sup>7</sup> ESM press release dated 23 January 2017, https://www.esm.europa.eu/press-releases/esm-and-efsf-approve-short-term-debt-relief-measures-greece.

<sup>&</sup>lt;sup>8</sup> For more information on the ECB's PSPP: https://www.ecb.europa.eu/mopo/implement/omt/html/pspp.en.html.

The ECB announced on 13 December 2018 that the Eurosystem would stop all Asset Purchase Programme purchases, including PSPP,

• to ensure no bond exchange caused losses for Greek banks.

This paper describes and details the bond exchange structure, and explains how it reconciled these conflicting public policy principles. It offers a short overview of the FRNs held by the Greek banks; then explains how the approach towards debt relief for Greece proved to be rather incompatible with the principles outlined above; and finally describes how the ESM used its internally developed funding strategy, under which the ESM and EFSF make use of pools of short- and long-term funding instruments to fund loans, and its capital markets access to reconcile issues within the bond exchange structure.

after 19 December 2018 but would continue re-investing in maturing bonds under the Asset Purchase Programme: https://www.ecb.europa.eu/press/pr/date/2018/html/ecb.pr181213.en.html.

<sup>&</sup>lt;sup>9</sup> The bond exchange is briefly referenced in the 2017 ESM Annual Report (p. 29): https://www.esm.europa.eu/sites/default/files/short-term\_measures\_for\_greece.pdf.

<sup>&</sup>lt;sup>10</sup> ESM website: https://www.esm.europa.eu/investors/esm/funding-strategy.

2. Floating-rate notes held by the Greek banks

The EFSF and ESM financial assistance programmes provided Greece with loans to recapitalise or resolve certain Greek banks. These dedicated bank recapitalisation and resolution loans were not disbursed as cash, unlike usual disbursements under the programmes, but instead were extended in kind, as EFSF or ESM FRNs. Greece used these notes to recapitalise the four systemic banks – Piraeus Bank, National Bank of Greece, Alpha Bank, and Eurobank – and to resolve or liquidate some non-systemic banks.

In these operations, Greece would transfer the notes to the Hellenic Financial Stability Fund (HFSF), a Greek bank-recapitalisation fund, <sup>11</sup> which would then inject them into a target bank as a capital subscription in exchange for shares and contingent convertible bonds in the bank. Within the subscription agreements executed by banks with the HFSF and the ESM, <sup>12</sup> restrictions limited the use of the notes.

The financial instruments disbursed within the bank recapitalisation loans were FRN at six months Euribor + margin. An ESM pass-through-principle pricing policy meant any loans to Greece then mirrored the floating-rate interest payable on those notes; Greece was liable for interest on the bank recapitalisation loans at the same floating rate applicable to the notes. This exposed Greece not only to uncertainty about the total cost of this part of its loans with the ESM, but also to the risk of increased interest rates. Given the favourable market conditions in 2017 and 2018, Greece might also have missed an opportunity to lock in historically low rates over the long term.

The main bond exchange objective aimed to remove the floating-rate interest on most of Greece's bank recapitalisation loans by exchanging the Greek banks' FRNs for fixed-rate bonds or cash funded at a long-term fixed rate. Negotiations with the Greek banks resulted in a combination (see Sections 3.2 and 4). The FRNs were exchanged for fixed-rate bonds in an exchange (FRBE); these were then redeemed for cash funded by the ESM at long-term fixed rates.

The ESM and EFSF together provided €42.7 billion in FRNs to Greece and the Greek banks for the bank recapitalisation loans with 2017 to 2024 maturity dates – €37.3 billion from the EFSF and €5.4 billion from the ESM. Once all parties had agreed the bond exchange mechanics, €13.1 billion of EFSF notes were sold to the ECB/Eurosystem banks by the Greek banks under the ECB's Public Sector Purchase Programme (PSPP) following an EFSF contractual waiver that cut the total FRNs available for the bond exchange to €29.6 billion.

<sup>&</sup>lt;sup>11</sup> The HFSF; https://www.hfsf.gr/en.

<sup>&</sup>lt;sup>12</sup> Essentially the ESM/EFSF notes could only be used for liquidity operations with the ECB and for repurchase operations (repos) with commercial parties.

# 3. Bond exchange principles

The main principle and purpose of the bond exchange was to lock in low interest rates for Greece on bank recapitalisation loans — even though rates could fall even lower. While conceptually fairly straightforward, the implementation encountered numerous challenges.

The operations exchanged bonds monthly between February and December 2017 and the ESM employed its own debt sustainability analysis (DSA) model, developed in-house, to help in their execution. The ESM ensured that each operation made financial sense, which involved checking that any interest rate on raised funds — to be reflected in Greece's loans — stood below an ESM-calculated break-even rate based on the DSA. If funding did not sit below the break-even rate, then potential cost savings would be small or, worse, actual costs could accumulate. This was crucial for any ESM decision on whether to launch a planned operation, and became a key consideration when instigating any bond exchange operation.

But this was not the sole consideration for a bond exchange launch; the ESM also needed to respect three strict public policy principles:

#### 3.1 Principle 1: Programme countries should incur no additional costs

When the Eurogroup endorsed the bond exchange in principle, it required the ESM to devise a strategy to avoid incurring additional costs to former programme countries. The Eurogroup statement on Greece of 25 May 2016 reads: "For the short-term, the Eurogroup agrees on a first set of measures which will be implemented after the closure of the first review up to the end of the programme and which includes: [...] Use EFSF/ESM diversified funding strategy to reduce interest rate risk without incurring any additional costs for former programme countries".<sup>13</sup>

Usually, funding over the long-term would imply a higher interest cost compared to short-term borrowing. But in ESM/EFSF structures, country loans are drawn from shared cash pools funded by ESM/EFSF bond proceeds, both long- and short-term. By using a blended pools rate, the ESM can offer funding to borrowing countries below the normal capital market rates that would apply to bilateral loans. The extra long-term funding operations needed to finance the €30 billion liability management for Greece could have raised the overall cost for other former programme countries.

To respect the principle that required programme countries not incur additional costs, the ESM established a dedicated internal compartment for Greek funding within its portfolios, meaning it could separate, and isolate, any additional funding costs for Greece from other former programme countries – so the other countries did not incur additional costs.

#### 3.2 Principle 2: Need for compliance with European Central Bank holding limits

In 2017, the ECB could have bought up to 50% of an issue were it to decide such paper was eligible for the PSPP; that 50% threshold for issuer and issue share applied to entities listed as "international or supranational institutions located in the euro area," to which both the ESM and the EFSF belong. At the time of the bond exchange, Greek banks were selling FRNs to the ECB/Eurosystem banks under the PSPP. <sup>14</sup> The ECB had not yet indicated whether or not the FRBE

<sup>&</sup>lt;sup>13</sup> See footnote 4.

<sup>&</sup>lt;sup>14</sup> The PSPP was initially established by Decision (EU) 2015/774 of the European Central Bank of 4 March 2015 on a secondary markets public sector asset purchase programme (ECB/2015/10). For details, see: https://www.ecb.europa.eu/mopo/implement/omt/html/pspp.en.html.

were to be PSPP-eligible, but the ESM took that possibility into account.

ECB purchases of FRBEs could have maximised the bond exchange completion speed, effectively doubling the ESM funding capacity for the exchange, because the FRBEs' long-term instruments were benchmarked against the ESM/EFSF yield curve. The FRBEs carried similar interest rates to other long-term ESM/EFSF bonds at that time so any ESM/EFSF loan to Greece would have borne the FRBE interest rate once disbursed, regardless of whether the bank held the FRBE to maturity, sold it to the ECB under the PSPP, or repo-ed it out.

Any FRBE sold to the ECB ultimately meant the ESM did not need to raise long-term cash funding to redeem the bond before its 30-year maturity. Remaining FRBEs would have to be bought back for cash in the month they were provided. Time was of the essence, because cash to redeem such bonds had to be raised at low interest rates. In addition, Greek banks would have incurred hedging costs had the FRBEs not been redeemed intra-month.

The 50% PSPP threshold also meant the ESM could not cancel FRNs bought back from the Greek banks because that would have resulted in the ECB holding more than 50% of an issuance, which was factored into the bond exchange structure.

The possibility that the ECB could render the FRBEs as PSPP-eligible prompted the ESM to include FRBEs in the exchange structure to enjoy any associated benefits. Otherwise, the structure could have redeemed the FRNs directly in cash, subject to funding capacity. In any event, the structure was designed to operate whether ECB/Eurosystem banks participated or not – and the ECB never did formally commit itself to participating in the bond exchange.

Until the ECB made a decision, the possibility that the FRBEs might be deemed eligible for the PSPP had to be factored in, so the bond exchange established two steps, or legs:

- an exchange of the FRNs held by the banks against FRBEs issued by the ESM; and
- a buyback of bank-held FRBEs for cash raised by the ESM using intra-month longterm instruments.

In the event, the ECB/Eurosystem did not consider the FRBEs eligible for purchase under PSPP. The ESM needed to fund the buyback of all the FRBEs and repurchase the FRBEs. Therefore, the ESM's ability to raise new long-term fixed-rated funds in a short timeframe became the main driver in determining the size and phasing of the bond exchange.

Consistent communication from the ESM Funding team to the capital markets was vital to maintain market access and achieve the lowest funding rates. Substantial extra funding requirements for buying back FRBEs at the long end of the market needed especially careful management to avoid any negative impact on the cost and timing of new issues. For, not only would the ESM be the largest issuer of such long-term bonds in the Euro Sovereigns, Supranational and Agencies market in 2017, it would itself issue more long-dated paper than previously communicated. By raising the ESM's long-term bond issuance, the operation increased the risk to success in raising the required funding amounts, given the long-end bond market is thinner than for shorter maturities and reacts sensitively to negative market news. As it happened, some ESM 2017 funding targets shrank, with Spain making early repayments.

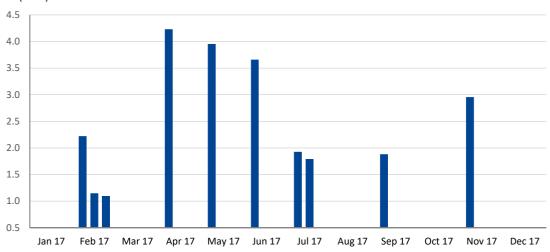
Financial markets were buoyant when the ESM was developing the bond exchange in the autumn of 2016 and this tone persisted until the end of the January 2017. But then, mounting euro market uncertainty emerged in February and lasted into April 2017 as election outcomes in France and the Netherlands appeared increasingly unpredictable. The market became more cautious, shifting away from long duration tenors.

This can be seen in Figure 1, which shows investor orders for EFSF and ESM issues during the

period, with the two issues in mid- and late-February 2017 only covered 1.1 times. The market's buying sentiment, however, improved after the first round of French elections in late April.

Figure 1

Ratio of investor demand to bond issuance face value (in %)



Source: ESM

To cater for market unpredictability, funding flexibility was a design feature of the bond exchange structure, ensuring ESM funds could be raised during the most-attractive market conditions. However, funding issuance shrank when general uncertainty hit euro-market rates between late February and April 2017. That April the ESM Finance Committee decided to fund part of the bond exchange with maturities shorter than 30 years. The Committee opted to change maturities to around 10 years to ensure the bond exchange would continue. The issuances raised €10.5 billion in 10- to 16-year maturities, with the remaining period to year 30 left to be fixed later.

The ESM achieved a consistent funding cost during the bond exchange period, balancing the need to achieve funding with market-variable demand, as seen in Figure 2. The coupon consistency achieved across 11 months reflects the care the ESM Funding team took to raise the necessary bonds despite market uncertainty, large volumes, and maturity lengths — and these funding rates represented considerable savings compared to the DSA rates.

(in %) 2.5 2.0 1.5 1.0 0.5 Mar 17 Apr 17 May 17 Jun 17 Jul 17 Aug 17 Sep 17 Oct 17 Nov 17

Figure 2 Interest coupons of long-term bond issuance for the bond exchange

Source: ESM

Figure 3 identifies the lower funding amounts during the market uncertainty period between late February and end-April 2017. Note that the shorter-term 10- and 16-year maturities totalling €10.5 billion are excluded from the chart, given their interest cost reflects their shorter term. Similarly, €0.7 billion of German registered bonds, or Namenschuldverschreibung (N-Bonds), are excluded.

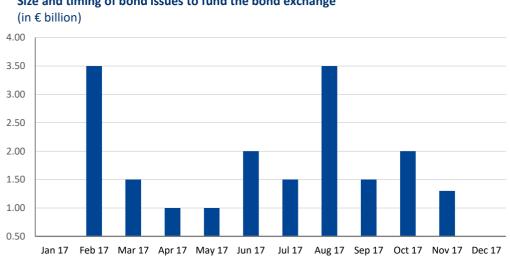


Figure 3 Size and timing of bond issues to fund the bond exchange

Source: ESM

All this effort meant the bond exchange operation ran smoothly to the planned timetable. The structure, including the FRBEs, proved essential for the Greek banks to obtain approvals to enter into the transaction, further detailed in Section 3.3.

#### 3.3 Principle 3: No losses for Greek banks

Greek banks were legally required, as commercial companies, to demonstrate an economic rationale to enter into the transactions and exchange the FRNs with FRBEs and/or cash. And, because the privately held banks were the legal note-owners, they had to agree to voluntarily participate to justify the transactions. The wider benefits from the bond exchange for the Greek State would not have offered sufficient legal grounds for bank governing bodies to approve the transaction, because each was required to act in its own overall commercial corporate interest.

To maximise the banks' transaction acceptance, the participants at least needed to be offered a no-loss position in terms of profitability or capital requirements; at that time, Greek banks could sell the FRNs at market value to the ECB/Eurosystem under the PSPP. This stood above the book value — the accounting value of the FRNs upon receipt by the bank — which in turn was above the FRNs par value.

Thus, the main challenge during negotiations was to convince:

- Greek banks to sell the FRNs to the ESM at book value and forgo expected profits from selling at market prices to the ECB/Eurosystem under the PSPP.
- Greece to top up the difference between the par value and book value, because the ESM could only justify buying back bonds at par value.

The banks were eventually convinced by the proposed ESM package, which combined:

- a top-up amount Greece paid to the banks for each FRN, covering the difference between the FRN par value and book value;
- ESM authorisation for the banks to sell the FRBEs to the ECB under the PSPP if eligible, at a price higher than par value; and
- a small interest sweetener whereby the ESM would pay a little less than one
  month of interest on the FRBEs, coinciding with the month the FRBEs could be sold
  to the ECB.

The cost of the top-up amount and the sweetener were passed on to Greece through the bank recapitalisation loan but the bond exchange cost for Greece rose only marginally – by the coupon paid on the FRBEs. The banks considered this package acceptable to counterbalance forgone profits and it enabled them to enter into the transaction on an at-arm's-length principle satisfactory to their shareholders.

An exchange schedule, agreed with the banks, targeted an exchange of €3 billion per month, with the banks contractually bound to accept up to €4 billion, subject to a consultation mechanism were the operation to no longer make financial sense. The schedule was optimised to help the banks find adequate collateral replacements, to allow them to maintain repo operations, and to ensure the bonds were returned in time to meet the exchange schedule. It also ensured no bank would be worse off than any other should an operation terminate early.

Even after basic questions were settled, remaining operational challenges needed consideration before the banks could return to their governing bodies to seek approvals. The ESM and the banks, for example, had to find a way to replace the FRNs on the day of the exchange because the FRNs and the FRBEs remained blocked until the exchange was settled; and this same issue arose on the day of exchange for FRBEs against cash. Fortunately, the Bank of Greece settlement system (BoGs) helped the banks draw on an intraday line for this purpose.

# 4. Resulting structure

Because the bond exchange design needed to reconcile these conflicting key issues, the ESM had to establish a structure acceptable to key stakeholders quickly, to lock in historically low interest rates – with Greece's acknowledgement that rates might fall even lower. And it had to do so within the ESM funding constraints announced in its 2017 issuance timetable.

Therefore, a simple structure was required to clearly communicate transactions to the array of stakeholders needed to agree the deal. This clarity helped support political and commercial decision-making by the ESM and bank governing bodies and supported ESM operations and logistics during the complex implementation procedures. The structure also had to fit with ESM legal and funding agreements, and internal recording systems that managed the copious steps involved in each exchange.

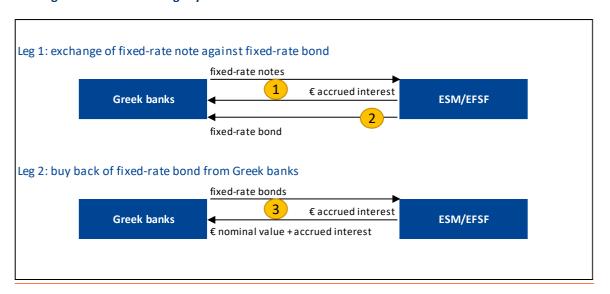
To exchange all the outstanding FRNs into FRBEs and the subsequent redemption into cash intramonth, the bond exchange comprised 11 separate events – called monthly cycles – each consisting of two phases, or legs:

- in the first leg, the ESM would issue a fixed-rate bond that it exchanged for FRNs held by the Greek banks; and
- in the second leg, generally 15 to 20 business days later, the ESM bought back the fixed-rate bond for cash.

Figure 4 illustrates the two cycle legs.

Figure 4

Two legs of the bond exchange cycle



Source: ESM

To accommodate the bond exchange, the ESM had to adapt its standard financial market transaction routine for settlement and accounting purposes.

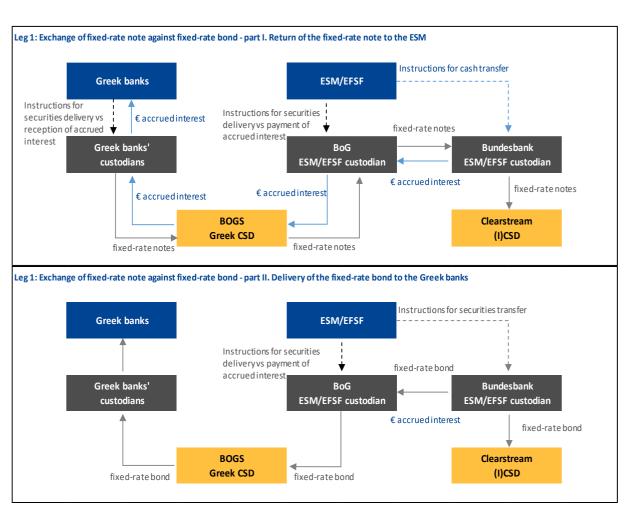
Usually the ESM issues its notes, including the FRNs and FRBEs, through Clearstream Frankfurt. But the relevant FRNs had moved into BoGs when being transferred to the HFSF during the bank-recapitalisation lending to Greece. Now, for any exchange, the FRBEs had to first move into the BoGs, which required a new international securities identification number link to Clearstream and the Greek Central Securities Depository (CSD), a link that would also be used for FRBE

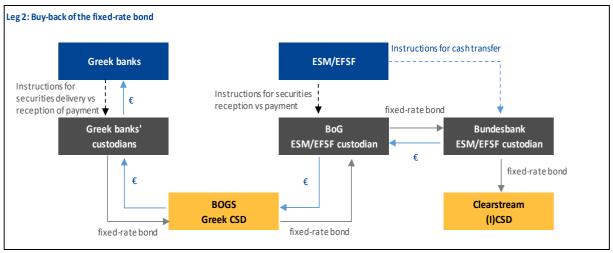
buybacks at the month-end.

Exchanging notes and performing buybacks in the BoGs meant the Bank of Greece could closely watch the status of transaction settlements. The central bank was especially helpful in authorising reduced collateral to support its credit lines over some very short time periods, for example hourly intervals, that elapsed between sending FRNs and receiving FRBEs.

The Bank of Greece thus helped the Greek commercial banks dilute an important liquidity risk when executing the cycles. Settlements within the BoGs and a timely, tailored, and balanced FRN redemption schedule took into consideration unequal distributions across all the banks. The HFSF coordinated the FRN participation of each bank and dispatched information and instructions simultaneously to promote a level playing field in exchange execution. This all helped the ESM assemble the complex settlement chain and account structure needed with the Greek counterparties. Figure 5 shows the flows of funds and securities between the parties involved.

Figure 5
Flows of funds and securities between the different parties





Source: ESM

The figure shows a simplified version of an actual operation. It does not show all the instructions sent and received by the ESM and the Greek parties.

# 5. Legal framework

The bond exchange was a consensual transaction between an international organisation — the ESM — and the Greek parties; these parties were the sovereign entity Greece, an ESM member; the Bank of Greece, a central bank part of the Eurosystem; and Greek commercial entities. It also linked the EFSF, a private Luxembourg-based company, with the Greek parties. Existing legal frameworks applied to the transactions and the Greek state granted no immunities or special privileges for entering into the transactions. The ESM issued no special guidelines or soft recommendations to aid transactions and simply entered into it as a contractual party. This approach allowed ESM and EFSF transactions to be perfectly symmetrical in structure. This meant transactions had to fulfil all the conditions required by appropriate laws — Greek law applied to the consent of the Greek parties; public international law as regards ESM's consent; and Luxembourg law regarding EFSF's consent. Transactions also had to fulfil various at-armslength tests, whereby parties needed to — independently and without influencing one another — ensure credit risk assessments and loan pricing were transparent, objective, and comparable to that which an unrelated third-party lender would have conducted.

Agreements had to take into account mandatory EU law norms because state aid rules required the FRNs be bought back at market value or lower — otherwise banks could have been considered recipients of state aid. The book value at which the ESM/EFSF paid for the notes and passed on to Greece was below the market price at the time.

Attention was paid to the no-bail-out clause, Article 125 of the Treaty on the Functioning of the European Union, which requires transactions to avoid creating new debt or diminishing incentives to conduct sound budgetary policy. Had new financing been provided, or losses been incurred by the ESM, the EFSF, or the another beneficiary Member State, this could have been seen as incompatible with the no-bail-out clause. This was not the case, because the exercise simply optimised the cost of funding of Greek loans, without providing new loans or incurring losses.

The ESM also had to ensure activity did not weaken incentives for Greece to conduct sound budgetary policies. During bond exchange operations, Greece was undergoing a macroeconomic adjustment programme and benefitting from an ESM loan facility.

Quarterly reviews checked the country's compliance with programme conditionality and the ESM took advantage of the fact that the bond exchange was undertaken at the same time as Greece's ongoing programme. Agreements signed with Greece provided for the ESM and EFSF to suspend, or discontinue, the LME if either had reasonable grounds to do so. Only the ESM/EFSF could initiate bond exchange operations at their own discretion; they could also suspend further bond exchanges immediately were Greece not to meet the programme conditions.

Within the contractual framework, the ESM and EFSF entered into two types of agreement:

- LME agreements with the Greek state, HFSF, and the Bank of Greece to pass on costs and provide the framework for the exercise; and
- bond exchange agreements with the Greek banks as well as three Greek entities party to the LME to operationalise the bond exchange.

This dual structure was necessary because the bond exchange was only one of three LMEs undertaken for Greece in 2017, so a separate agreement would have been necessary between Greece and the ESM/EFSF. The LME agreements are financial engineering building blocks on top of existing loans to Greece, because they aim to optimise the cost of funding of existing loans. For this reason, the LME agreement terms stated that the agreements formed part of the main

loan commitment concluded by the ESM/EFSF with Greece.

In contrast, the bond exchange agreements only addressed the bond exchange and were detailed operational documents, all binding upon the Greek banks.

In adopting this approach, the ESM/EFSF stayed true to existing contractual structures for its loans. The ESM/EFSF concluded agreements with a beneficiary Member State to provide loans and also further subscription agreements with any recapitalised banks that might have held ESM/EFSF notes.

Both the LME agreements and the bond exchange agreements were framework agreements, just like International Swaps and Derivatives Association arrangements. From a legal point of view, each operation was a self-standing contract bolted onto the LME and the bond exchange agreement. Further exchanges of letters were needed, and did accompany each operation.

The bond exchange was finalised by the start of 2018, incorporating two LME agreements, two bond exchange agreements, and 66 letters and notifications. Nearly €30 billion of bonds had been swapped, all through at-arms-length consensual transactions and without the need to adopt any special legal provisions in the LME.

## 6. Outcome of the bond exchange

The bond exchange was completed within the original timetable estimate, as shown in the Table. The exchange embraced all the outstanding FRNs held by the four Greek banks, with an estimated reduction of debt-to-GDP of 10% at finalisation of the exchange, from the initially anticipated 7.1%, thanks to savings from exchanging the FRNs at book value rather than market cost assumed in the debt sustainability analysis and lower market refinancing rates for Greece. These more than offset the impact of less debt being exchanged, at €29.6 billion instead of €33 billion, and shorter average maturities. The actual interest rate differential was broadly the same.

Table

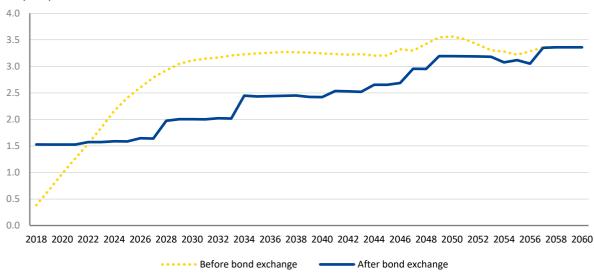
Comparison of the main bond exchange elements between estimation and final outcome

	Estimation	Outcome
Volume	€33 billion	€29.6 billion
Debt to GDP reduction by 2060	7.1%	10%
Timescale	12–20 months	11 months

Source: ESM

Figure 6 shows the bond exchange fixed interest rate cost to Greece in the period to 2060, compared with the pool rate and the cost assumed in the debt sustainability analysis:

Figure 6
Interest cost on €29.6 billion Greek debt before and after the bond exchange (in %)



Source: ESM

## Conclusion

The ESM and the EFSF bond exchange provided an important contribution to the short-term debt relief measures for Greece. At €29.6 billion and representing 16% of the ESM/EFSF's outstanding loans to Greece, the exchange is one of the largest consensual near-par bond exchanges to date and larger than the 2017 Greek government €25.5 billion bond exchange that followed the 86% take-up of €30 billion of outstanding Greek Private Sector Involvement bonds.<sup>15</sup>

The ESM completed the exchange in the shortest time expected, even without the funding leverage that FRBEs sales under the PSPP could have provided, and this timetable minimised the risk of an interest rate rise, with relative market rate stability during 2017 proving helpful. There would have been little benefit in achieving the exchange in an even shorter timescale and that might have caused market saturation of the ESM's bonds – and higher coupons. After this financial arrangement, the Greek Public Debt Management Agency continued to try to lock in the historically low interest rates.<sup>16</sup>

The ESM-designed bond exchange structure met its financial objectives to the full while realising its core public policy objectives. Former programme countries did not incur costs during the LME because the long-term funding costs and any other impacts were isolated, using dedicated ESM/EFSF funding compartments. ECB holding limits were respected, and the possibility of ECB PSPP sales was factored into the bond exchange structure, with all parties respecting ECB independent Asset Purchase Programme decision-making. And the Greek banks did not incur losses from the transactions.

The bond exchange concept was simple, but required complex financial operations to complete. It took advantage of the ESM's diversified funding strategy, together with its market depth and access, but ensured the ESM did not become over-committed when market capacity was limited. Eleven successful bond exchange operations between February 2017 and January 2018 demanded a substantial time commitment each month from all stakeholders, requiring at least 35 individual, sequential, and time-critical steps for each month's exchange to take full effect.

The completion of the bond exchange underlined the ESM's innovation, fundraising, and operational capability and highlighted the close cooperation with the Greek parties, placing this voluntary LME onto international league tables in terms of magnitude, complexity, and successful outcome.

<sup>&</sup>lt;sup>15</sup> For instance, referenced in the Financial Times on 28 November 2017: *Greece completes €30bn debt swap as it eyes a return to bond market*': https://www.ft.com/content/4af8d385-ed6d-3e5c-a242-08e44ab22c18.

<sup>&</sup>lt;sup>16</sup> Article on Risk.net on 27 November 2018: *Sovereign risk manager of the year: Greece's Public Debt Management Agency*:https://www.risk.net/awards/6162181/sovereign-risk-manager-of-the-year-greeces-public-debt-management-agency.

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## **Acronyms**

BoGs Bank of Greece settlement system

DSA Debt sustainability analysis

ECB European Central Bank

EFSF European Financial Stability Facility

ESM European Stability Mechanism

FRBEs Fixed-rate bonds in an exchange

FRNs Floating rate notes

GDP Gross domestic product

HFSF Hellenic Financial Stability Fund

IMF International Monetary Fund

LME Liability management exercise

PSPP Public Sector Purchase Programme