Life after Debt

The Greek PSI and its aftermath

Miranda Xafa

Key points

- Debt exchange and buyback operations concluded in 2012 (PSI) reduced Greece's debt burden by 31% of GDP in net terms, demonstrating that it is possible to have an orderly debt restructuring in the euro area.
- Concluding the debt exchange earlier would not have made the debt burden sustainable, given Greece's huge official financing needs.
- The debt buyback made efficient use of creditor funds by retiring three euros of debt per euro of official financing.
- Markets remain fearful of the potential for further debt restructuring, which will likely involve the official sector.

Introduction

The Greek debt exchange (PSI) that took place in March 2012 was unprecedented in two ways: it was the biggest sovereign default ever and the first within the euro area. This paper examines the debt exchange and the subsequent debt buyback with a view to drawing lessons for policy-makers and market participants. It discusses the interaction between the political dimension and the market perception, including areas of actual or

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potential conflicts between the two. The paper does not address Greece's longer-term prospects for debt sustainability or euro area membership, but instead focuses narrowly on an assessment of the debt exchange and its aftermath, taking into account its impact on the broader euro area crisis.

The paper is organised as follows: the first two main sections briefly review the history and decisions that led to the Greek debt exchange, seen from the perspective of the developing euro area crisis. After that, the debt exchange and its impact on the debt burden are discussed, following which the debt buyback that took place in December 2012 is reviewed. The final section draws some policy conclusions.

The July 21 EU Summit decisions

Having lost access to capital markets, in May 2010 Greece formally agreed to implement a three-year economic adjustment programme co-financed by the European Union, the International Monetary Fund and the European Central Bank (the 'troika' of official creditors) with the unprecedented amount of €110 billion (48% of GDP). After an impressive start, reform efforts slowed and market sentiment deteriorated, fuelled by credit downgrades, deposit outflows and expectations that Greece's debt would be restructured. The fourth review of the programme in July 2011 recognised that the original assumption of market re-access by mid-2012 would not materialise and that some form of private-sector involvement (PSI) would be necessary to restore debt sustainability. The IMF's debt sustainability analysis (DSA) thus assumed voluntary rollovers/maturity extensions by bondholders and additional official support of €71 billion through mid-2014. Under the baseline scenario, the public debt ratio would peak at 172% of GDP in 2012, and gradually decline to 130% by 2020. Even so, the DSA stated that 'public and external debt sustainability hinges critically on full and timely implementation of fiscal, privatization, and structural reforms macroeconomic developments in line with program projections, and the restoration of market access at reasonable terms in the post-program period' (IMF 2011b, p. 66).

The EU Summit of 21 July 2011 recognised that private-sector involvement (PSI) was needed to minimise further taxpayer funding of the bail-out. It therefore agreed in principle, in consultation with bondholders, to a 21% net present value (NPV) reduction, to be achieved through a menu of options involving a debt exchange for par or for discount bonds. The July summit also provided a commitment to support Greece financially for 'as long as it takes' at triple-A interest rates, provided the country persevered with adjustment efforts. However, the proposed deal did not involve a debt write-down, just a lengthening of maturities and lower coupons; as such, it would have increased instead of reduced Greece's debt burden.

In late October 2011, a revised DSA issued by the IMF as a strictly confidential document appeared in the press, just ahead of the 26–27 October EU Summit. Noting that the situation in Greece had taken a turn for the worse, with the economy adjusting downwards through recession rather than upwards through growth-enhancing structural reforms, the IMF's debt sustainability analysis projected a slower recovery, lower privatisation proceeds, and delayed access to market financing compared to the fourth review of the Stand-By Agreement (SBA) completed in July of that year. Under these assumptions, Greece's debt ratio would peak at 186% of GDP in 2013 and decline only gradually to a still-high 152% of GDP by the end of the decade. The projections implied that the PSI parameters needed to be adjusted to provide far more comprehensive debt relief.

The 26–27 October EU Summit and its aftermath

In emerging markets, external indebtedness typically consists of claims denominated in a currency other than the currency of the issuing country. In Greece, this was the case before the country joined the euro area in 2001; after that date, however, the 'lawful currency' ceased to be the drachma and became the euro instead. The share of euro-denominated debt rose steadily, reaching 98% of total public debt by the end of the decade. Greece was thus in an unusual position by virtue of its membership in the euro area: the country was bankrupt in its own currency but was unable to inflate its debts away. On the positive side, domestic currency debt has few creditor rights. The vast majority of Greek debt was issued in euros under Greek law. This debt did not include Collective Action Clauses (CACs), which permit a majority of bondholders to impose on the minority a change in payment terms to facilitate a debt restructuring, as was the norm in debt issued by emerging markets but not by euro

Greece was bankrupt in its own currency but was unable to inflate its debts away.

area countries. As noted by Buchheit and Gulati (2010): 'No other debtor country in modern history has been in a position significantly to affect the outcome of a sovereign debt restructuring by changing some feature of the law by which the vast majority of the instruments are governed.'

A key issue of contention was whether a large haircut on the Greek debt could be agreed to be 'voluntary', thereby avoiding a credit event that would trigger the Credit Default Swaps (CDS) contracts. Euro area officials insisted on a voluntary workout to avoid an event of default that a coercive restructuring would imply. Their insistence had more to do with the stigma of failure and their abhorrence of rewarding CDS 'speculators' rather than any economic or financial rationale. Moreover, the ECB was adamant that it could not accept as collateral sovereign bonds of a country in default, and thus was strongly opposed to a forced restructuring.[1] The ECB also argued that its €40–50 billion of Greek bond holdings, purchased in the secondary market under its Securities Markets Programme (SMP)[2] in a futile attempt to stabilise the market, should be excluded from the debt exchange based on the argument that the PSI concerned private bondholders only. However, this view overlooked the legal complications that would arise if the same bond were treated differently depending on the holder. Press reports suggested that ECB-held bonds might be included but at a lower haircut of 20–30% – the average discount at which the ECB acquired the bonds – so as to avoid a capital loss for the central bank. In the end, however, it was agreed that the ECB would be repaid at full face value. Litigation from private bondholders would be avoided by changing the International Security Identification Numbers (ISINs) on the bonds held by the ECB to turn them into a different security.

Market participants at the time feared that Greece would introduce compulsory Collective Action Clauses (CACs) in domestic law bonds to forcibly cram in holdouts, thereby triggering sovereign CDS while resulting in a 100% take-up. They noted that a Greek default would have a big impact on investor appetite for Italian and Spanish debt. If Greece unilaterally crammed in foreigner investors through a domestic

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1 The ECB eased significantly its rules on collateral accepted at the discount window, which originally required an A– minimum rating, in several steps starting with the downgrade of Greece below investment grade the week before a Greek rescue package was announced in May 2010.

2 In May 2010, the European Central Bank announced the Securities Markets Programme (SMP), which involved buying Eurozone sovereign bonds in secondary markets.

law change that triggered an involuntary exchange, risk managers would no longer be seen as prudent to accept holdings of Italy or Spain at any realistic yield.

The *Daily Comment* for 31 October 2011 of the Institute for International Finance (IIF), a global association of financial institutions, noted the following:

> Euro Area tensions remain front and center. Most concerning, Spanish and Italian bond yields have spiked this morning, suggesting that market participants are far from reassured by the outcome of last week's Summit. Both Italian and Spanish 10s are up 10bp this AM, while German are down by a similar amount. Italian 10s are at 6.1%, while Spanish are at 5.6%. All key 2yr spreads are higher than they were a week ago, with the exception of France, which has tightened. Portuguese spreads remain at distressed levels; markets do not believe the argument that Greece will be the only country to get a haircut.
>
> Weakness in Spanish and Italian debt markets is not just the result of problems in those countries, or concerns about the workings of the EFSF.[3] It mainly reflects (in my view) the persistent pressures to de-lever that will only be intensified by the EBA-led[4] charge to raise capital ratios. The German authorities seem committed to picking up their campaign for tougher regulation of the financial industry (see Minister Schäuble's interview in the FT today). This will only make things worse. Two firm-specific cases to highlight today: in the US, MF Global has been pushed to the edge by the collapse in the value of its Euro Area debt holdings;[5] in the UK, Barclays announced that it had cut its sovereign debt holdings in Spain, Italy, Portugal, Ireland and Greece by 31% in the last 3 months (Italy down 24%).

The turmoil in the euro area sovereign debt market in late 2011 was thus fuelled by three distinct but related concerns:

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[3] The European Financial Stability Facility (EFSF) was created following the decisions taken on 9 May 2010 by the Ecofin Council of the member states of the euro area. The EFSF's mandate is to safeguard financial stability in Europe by providing financial assistance to euro area member states within the framework of a macro-economic adjustment programme.

[4] The European Banking Authority (EBA) was established by Regulation (EC) no. 1093/2010 of the European Parliament and of the Council of 24 November 2010.

[5] MF Global Holdings listed total debt of $39.7 billion and assets of $41 billion in Chapter 11 papers filed in US Bankruptcy Court on 31 October 2011. Its shares declined 67% in the previous week and its bonds traded at distressed levels following the disclosure of its exposure to European sovereign debt. MF Global was the second victim of the European debt crisis that broke out in Greece in May 2010, following in the footsteps of French–Belgian lender Dexia SA, which was broken up after it lost access to short-term funding. The next victim would be Bankia, Spain's largest holder of real estate assets at €38 billion, which was recapitalised by the government in May 2012 and is set to receive more aid via an EU-funded restructuring programme.

1. the concern that Greece's debt restructuring would be followed by similar restructurings in other euro area countries, and the associated concern that CACs would be retrofitted in domestic law bonds to force bondholder participation
2. the failure of the euro area to build an effective firewall by leveraging the EFSF
3. persistent pressures on banks to deleverage that were intensified by the EBA-led initiative to raise capital ratios.

The combination of these concerns gave rise to a negative feedback loop between sovereign debt and bank stress, as losses incurred by banks from sovereign risk exposures and weak euro area growth gave rise to deleveraging pressures that led to further spread widening. These pressures were intensified by the need to strengthen capital cushions to regain market confidence. The result was a 'bad equilibrium' of rising sovereign yields, funding pressures for banks and weaker growth.

In this turbulent environment with lower global growth, Greece's non-compliance with the ambitious programme targets and increasing opposition in creditor countries to further bailouts contributed to the decision to move ahead with the PSI. Burden sharing with private bondholders through sharply lower debt service costs could help sell to the public a second rescue package for Greece. But the PSI's contribution to easing the euro area debt crisis was conditional on stronger financial backstops to contain market contagion. A positive outcome of the G20 meeting in Cannes in early November 2011 and the subsequent EU Summit in December was thus essential to regain market confidence. In particular, an appropriate 'safety net' needed to be agreed, including an EU bank recapitalisation plan and credible backstop facilities for Italy and Spain. Without a safety net, policymakers – especially the ECB – were likely to consider a hard restructuring of Greek debt involving CACs as too risky and might have put it on hold to avoid contagion. Also Greek financial institutions would need to receive all the needed support in terms of liquidity and capital from the troika of creditors to avert the risk of a bank run that could have EU-wide repercussions. It became increasingly clear that a Greek debt restructuring would ultimately be unavoidable as the country was insolvent.

The debt exchange

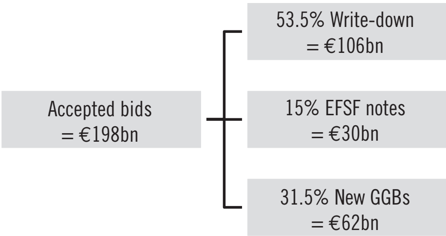
Greece's debt restructuring deal in 2012 was aimed at reducing its debt ratio from 165% of GDP to 120% of GDP by 2020 – the IMF's threshold of debt sustainability, enshrined in the original stand-by agreement agreed in May 2010 (EU Council 2011). Implementation of the PSI was thus a prerequisite for the conclusion of a second rescue package for Greece in March 2012.[6] The PSI deal was simpler than that proposed in July 2011, in so far as there was only one option: holders of eligible Greek Government Bonds (GGBs) had to exchange their bonds for uncollateralised discount bonds with a face value of 31.5% of the original claim. The bonds had a maturity of between 10 and 30 years, and a step-up coupon starting at 2% and averaging 3.85% over the life of the bonds. In addition, bondholders received short-term EFSF notes amounting to 15% of the face value of the original claim through a co-financing agreement between the EFSF and Greece to provide credit enhancement for the deal. The write-down thus amounted to 53.5%.

The 2012 debt restructuring was aimed at reducing the debt ratio from 165% to 120% of GDP by 2020.

Outstanding bonds of €205 billion with maturities out to 2057 were subject to restructuring, of which €177 billion were government bonds issued under Greek law while the remaining €28 billion were bonds issued or guaranteed by Greece under the laws of foreign jurisdictions. All €177 billion of Greek law bonds and €21 billion of the foreign law bonds (75% of the total) were tendered in the debt exchange, after CACs were retrofitted in the Greek law bonds and activated. Overall, the aggregate principal amount tendered was €198 billion, while €7 billion remained in the hands of holdout creditors who hoped to be repaid in full under the threat of triggering cross-default clauses included in foreign law bonds and thus causing a disorderly default. However, the new bonds issued after the exchange were not cross-defaultable with the old bonds, so their holders were protected: a payment default on

[6] On 14 March 2012, euro area finance ministers approved financing of the Second Economic Adjustment Programme for Greece. The euro area member states and the IMF committed the undisbursed amounts of the first programme (Greek Loan Facility) plus an additional €130 billion for the years 2012–14. Whereas the financing of the first programme was based on bilateral loans, it was agreed that – on the side of euro area member states – the second programme would be financed by the EFSF, which had been fully operational since August 2010.

Figure 1: Loss sharing under PSI



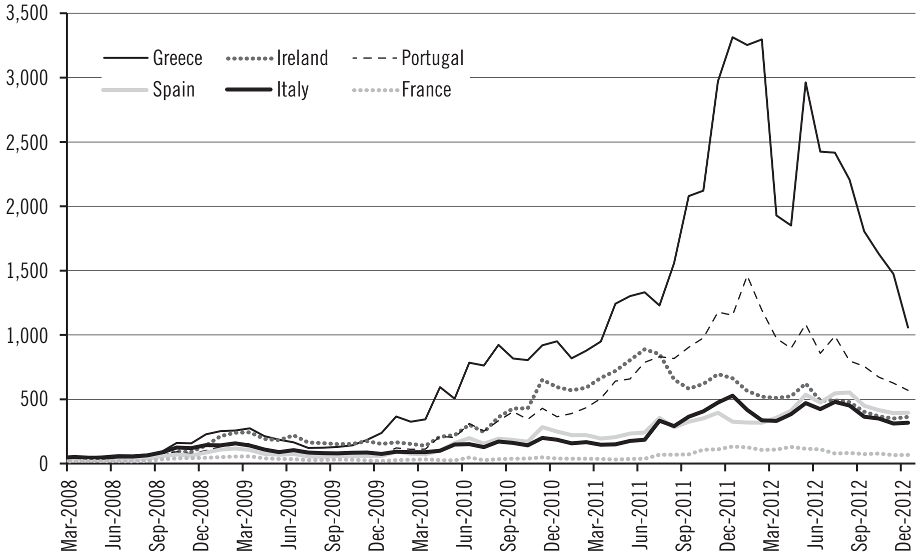
a Greek foreign law bond would not have cross-default consequences across most of the debt stock, but would still trigger a disorderly default on the remaining foreign law bonds.

The exact terms of the new Greek Government Bonds (GGBs) were as follows:

- Twenty new bonds were issued under English law with full creditor rights, each maturing in one-year increments from 24/2/2023 to 24/2/2042.
- Step-up coupons of 2% until 24/2/2015, 3% until 24/2/20, 4.3% thereafter.
- Sweetener: detachable GDP warrants, with notional of 31.5% of original face value and annual payments capped at 1% of new face.

The debt exchange was successfully concluded in early March, under a tight timetable constrained by a mammoth €14.4 billion bond maturing on 20 March. The steps to the exchange are outlined in Box 1. A total of 97% of eligible bonds were tendered in the exchange, among the highest ever take-ups by investors. The deal cleared the way for a €130 billion second EU/IMF rescue package for Greece, of which €30 billion was the official contribution to the PSI. The PSI and rescue package helped tighten the GGB spread over Bunds from 3,330 basis points to 1,800 basis points (Figure 2). Euro area creditors also agreed to reduce the spread over Euribor on bilateral loans to Greece from 300 bps to 150 bps retroactively to March 2011, and extend the average maturity of their loans from 10 to 15 years (with a ten-year grace and five-year repayment period). An additional €50 billion out of the new rescue package was set aside to

Figure 2: Spreads over the 10-year German bond yield



Source: Bloomberg

recapitalise Greek banks, which held nearly a third of GGBs. The restructuring dramatically impaired the value of their assets and added to the strains imposed by deposit withdrawals and non-performing loan losses as the recession deepened.

Since the new GGBs were uncollateralised, investors would still hold Greek credit risk if they held on to the new bonds. Greece's low credit rating, which prevented pension funds and other institutional investors from holding them, triggered a seismic shift in the investor base for Greek bonds that pushed their price far below par. Demand from hedge funds was insufficient to compensate for the sell-off by institutional investors, so the new GGBs dropped all the way to a trading range of 19 to 24 cents, i.e. not far from the levels at which the old bonds traded (Figure 2). This was a most unusual outcome, as in the vast majority of debt swaps the new bonds trade around par, or at least at prices far above the old bonds, in view of the decline in the debt burden and/or lower debt service costs. Yet in Greece, the market discounted the probability of a new default with an extremely low recovery value; the net present value (NPV) loss thus far exceeded the 53.5% face value loss (see Table 1).

Table 1: Greek PSI – NPV loss far exceeds face value loss

Exit yield (%)	GGB component	EFSF component	PV of PSI package	NPV loss
9	15.1	15.0	30.1	69.9
15	8.1	15.0	23.1	76.9
20	5.6	15.0	20.6	79.4
25	4.1	15.0	19.1	80.9

Amid concerns about Greece's exit from the euro area, the new bonds' prices continued to sink. The May 2012 national elections, which resulted in a hung parliament and a sharp rise of the radical left to become the second largest party, added to the uncertainty. The GGB trading range dropped to a low of 13–18 cents and the huge bid-offer spread reflected lack of liquidity and extreme distress. At the time, most experts argued that a further default and euro area exit were all but inevitable. Bond prices did not bounce back after repeat elections on 17 June, even though the radical left did not win, pointing to the concern that the post-election coalition might backtrack on reforms and lose official support. But Greece's low debt service costs on the new bonds suggested that market prices had overshot on the downside: a year before the PSI, the IMF projected annual interest expenditure averaging 8.5% of GDP in 2012–14, the bulk of which was to service private-sector debt (IMF 2011b). The implication was that the country would need a 6.5% primary surplus to place the debt on a firmly downward path – an unlikely prospect given that the starting point was a primary deficit of 10.5% of GDP in 2009.

Overall, the PSI extinguished €106 billion of debt (54% of GDP), but it also generated new debt of €30 billion to the EFSF (the 'credit enhancement'), as well as an estimated €36 billion of losses for Greek banks, which would need to be recapitalised (including the 53.5% face value loss and subsequent mark-to-market losses). The net debt reduction thus amounted to €40 billion (20% of GDP, see Figure 3). However, interest payments declined much more than the debt ratio due to the very low coupon on the new bonds and significantly reduced interest rate on official loans. Post-PSI, the overall interest burden in 2012–14 dropped to about 6.5% of GDP a year (Figure 4), of which only €1.2 billion (0.6% of GDP) was for servicing the new bonds (2% on €61.8 billion). The step-up coupon on the new bonds implied that debt service costs to private bondholders

BOX 1
Timetable of the March 2012 Greek debt exchange

24 February: The Greek Ministry of Finance announces the terms of the exchange and invites bondholders to tender their bonds by 8 March.

9 March: The Greek Ministry of Finance announces that 85.8% of private bondholders who tendered €152 billion of bonds issued under Greek law agreed to the terms of the bond exchange. In addition, only 69% of bonds issued under foreign law were tendered in the exchange, bringing the total to €177 billion. The Greek government thus decided to activate the CACs that had been retrofitted by an act of the Greek parliament to the bonds issued under Greek law, raising the participation of those bondholders to 97% of the total. In the case of Greek law bonds, CACs were invoked after a majority of more than 66% signed up to the new terms. At the same time, the deadline in respect to foreign law bonds was extended to 23 March, given that no such bond matured until 15 May.

9 March (cont.): The international Swaps and Derivatives Association (ISDA) rules unanimously that a Restructuring Credit Event has occurred with respect to the Hellenic Republic, triggering payment of CDS contracts.

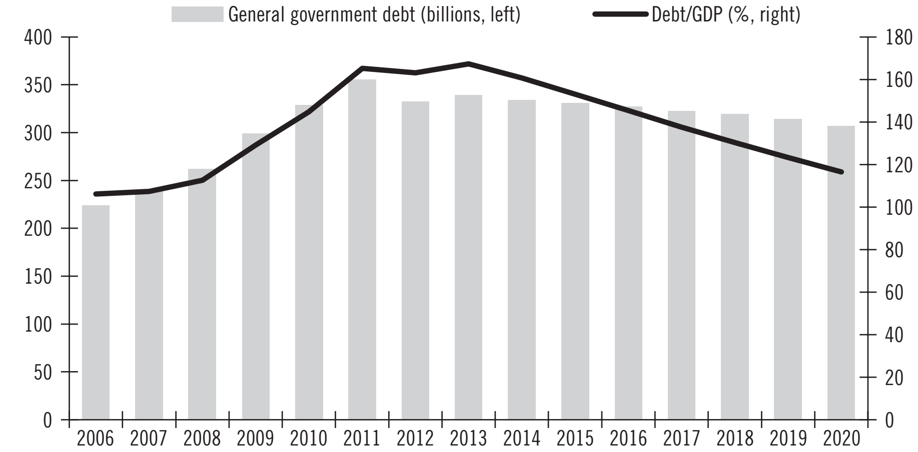
22 March: Eurozone finance ministers issue a statement indicating they would strongly back Greece if it didn't make the payments on the foreign law bonds, which would be an effective default on those bonds. The ministers said they had been 'informed that a failure to make timely payment of Greece's eligible foreign law bonds that are not exchanged does not constitute an event of default under Greece's new bonds issued in the exchange'.

2 April: The Greek Ministry of Finance announces that it has accepted the effective amendment of all series of foreign law bonds where the extraordinary resolutions were approved by the requisite majority (typically 75%), and reopened the consent solicitation for all series where meetings were adjourned to 18 April. Apart from the bondholders who postponed meetings, the previous 4 April deadline for participation in the foreign-law bond swap remained in force, as did a scheduled 11 April settlement date.

(continued)

15 May: The Greek Ministry of Finance announces that it would make timely payment of the full principal and interest due on approximately €435 million of bonds maturing on 15 May 2012. These bonds were among the €7 billion of bonds issued under foreign law, which were eligible for inclusion in Greece's recently completed bond exchange, but were not tendered for exchange. The statement said that 'the decision to make full payment weighed carefully all relevant factors and implications as well as the current conjuncture [...] Today's decision does not prejudice future decisions on the treatment of the remaining bonds not tendered in the PSI exchange.'

Figure 3: Greece – general government debt

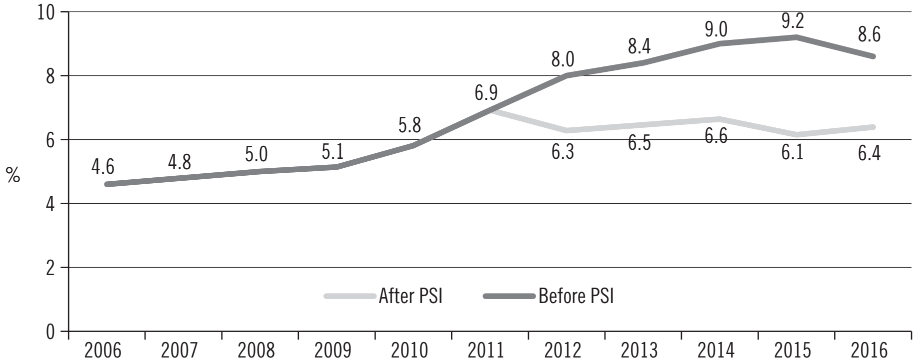


Source: IMF 2011a; 2012

would rise to €1.9 billion in 2015–19 (0.8% of GDP) and to €5.7 billion (1.5% of GDP) subsequently, while the bonds would only start amortising in 2023. Critics of the deal focused on the still-high notional debt burden instead of the sharp fall in interest payments (and in the debt-stabilising primary surplus), which effectively lowered the Greek debt in net present value terms well below the notional amount.

In addition to the limited debt relief that would be provided by defaulting on the new GGBs, the legal rights of creditors also reduced the probability of default. The new GGBs were issued under English law with full creditor rights, which meant that they could not be redenominated into drachmas, or easily restructured. They also benefited

Figure 4: Interest payments (% GDP)



Source: IMF 2011a; 2012

from a co-financing agreement (simultaneous and proportional payment) with the EFSF, which contributed official financing of €30 billion to the PSI. The new GGBs rank *pari passu* with the EFSF loan, implying that if Greece defaulted on the GGBs it would also default on the EFSF. Moreover, under the second rescue package agreed after the PSI, a portion of official loans would be disbursed into an escrow account (the 'segregated account') earmarked for debt service, making it hard for Greece to default even if wanted to.

The debt buyback

Greece entered a period of extreme economic and political uncertainty soon after the PSI and the second rescue package were concluded. As discussed above, the new GGB prices plummeted ahead of the 17 June elections as public support in creditor countries for Greece faded and market analysts assigned a high probability to Greece's euro area exit. A three-party right–left coalition government was formed with a mandate to secure Greece's future in the euro area, but uncertainty lingered as intergovernmental negotiations to reach agreement on spending cuts mandated by the second rescue package dragged on. Delays in the implementation of agreed measures and a deeper-than-expected recession implied that, by late October 2012, the programme was seriously off-track. Following negotiations with the troika, the adjustment path was extended by two years to 2016, with a commensurate increase in both the fiscal consolidation effort and programme financing in the outer years. The revised fiscal path implied a postponement of the 4.5% primary surplus target needed to secure debt sustainability from 2014 to 2016.

With the outlook for debt sustainability considerably worse than projected under the programme only agreed in March 2012, by late November the Eurogroup decided to provide debt relief to Greece by postponing interest payments due to the EFSF, reducing further the interest margin on bilateral loans that funded the first rescue package (the 'Greek Loan Facility') from 150 bps to 50 bps, deferring interest on EFSF loans, cancelling the EFSF guarantee commitment, extending the maturities of EFSF and Greek Loan Facility (GLF) loans, and passing on to Greece the income on the ECB's Securities Markets Programme (SMP) portfolio (including capital gains) as of 2013. This debt relief would be provided in a phased manner, conditional on full implementation of the agreed adjustment measures (EU Council 2012). Taken together, these measures contributed €8.2 billion in additional financing over the period 2013–16 and reduced the debt stock by 7.2% of GDP by 2020 (EC 2012).

Greek banks were urged to do 'their patriotic duty' to ensure that a sufficient amount of debt would be tendered.

Implementation of the official debt relief measures agreed at the November 2012 Eurogroup would have still left Greece's debt ratio well above the original target of 120% of GDP by 2020. The Eurogroup therefore also agreed to a debt buyback scheme proposed by the Greek authorities, which could potentially reduce the debt ratio by a further €20 billion (10% of GDP). Under the plan, the Greek Public Debt Management Agency (PDMA) would conduct a reverse auction to buy back a portion of the new GGBs to take advantage of and capture the substantial discount prevailing in the secondary market. The tendering process for the debt buyback was concluded on 11 December, a couple of days ahead of the disbursement of the second tranche of the EU loan. About one-half of the €62 billion of new GGBs issued in March under the PSI were tendered in the buyback operation. Greece formally accepted all €31.9 billion of debt offered at a cost of €11.3 billion (including accrued interest) in exchange for six-month EFSF notes. The weighted average price amounted to 33.8 cents per euro of face value of

Table 2: Greece – outcome of debt buyback, December 2012

Stock of new GGBs	€62.0bn
A. New GGBs tendered in the debt exchange	€31.9bn
B. Accepted bids	€31.9bn
C. Cost of buyback (including accrued interest)	€11.3bn
D. Cost of buyback (excluding accrued interest)	€10.8bn
E. (D/B) Weighted average buyback price	33.8 cents
F. (B – D) Net debt reduction	€21.1bn
G. Net debt reduction (% GDP)	10.8%

the new GGBs, thus providing significant debt relief (PDMA 2012). The debt offered in the buyback was split almost equally between Greek banks and foreign investors, even though Greek banks held only about a quarter of the outstanding stock of GGBs post-PSI.[7] Although the buyback operation was voluntary (i.e. collective action clauses were not invoked), Greek banks were urged to do 'their patriotic duty' to ensure that a sufficient amount of debt would be tendered to achieve the targeted debt reduction. Indeed, the invitation period was extended by a couple of days to ensure that this goal would be achieved. Greek banks had marked the new GGBs below the buyback price, implying no additional recapitalisation needs from participation.

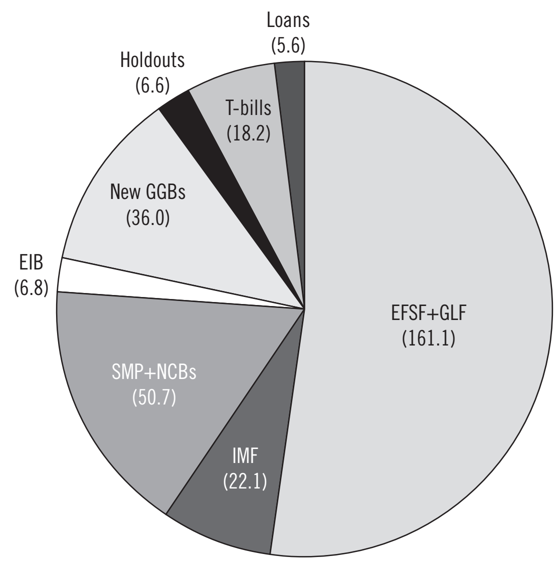
Funding for this operation was provided through a series of Eurogroup initiatives to ensure adequate programme financing. Besides the official debt relief measures mentioned above, these included forgoing the previously targeted decline in the stock of Treasury bills held by Greek banks and postponing the build-up of a Treasury cash buffer, which together provided €12.5 billion in additional financing over the period 2013–16. The net debt reduction resulting from the buyback amounted to €21.1 billion (10.8% of GDP), bringing the projected debt ratio closer to (but still above) the 120% target by 2020. The Eurogroup committed to additional debt relief if necessary to ensure debt sustainability after Greece achieved a primary surplus (and after the German elections scheduled for September 2013).

[7] Greek pension funds, which held €7 billion of new GGBs (11% of the total), did not participate in the buyback because their claims represented intergovernmental debt that would not give rise to net debt reduction.

Following the debt buyback, the debt due to bondholders is far lower than official debt (Figure 5). Greece's general government debt amounted to €307 billion at end-2012, of which only €36 billion was due to bondholders (excluding holdouts), suggesting that if Greece needs any further debt relief it would probably be provided by official creditors. Defaulting on the new GGBs, which amounted to just 12% of gross public debt at end-2012, and would cost less than 1% of GDP a year over the next decade, is simply not worth the costs. Any future restructuring is thus likely to involve the official sector, which has so far resisted debt write-downs.

The risks at this stage are primarily political. Markets remain fearful of the potential for the fiscal consolidation process to slide or to be derailed by public dissent. Failure to follow through on the programme due to 'reform fatigue' could open the way for the EU and IMF withdrawing support from Greece, creating a disorderly outcome. But this probability is lower than markets discount, as the vast majority of the Greek population, and the political establishment, are decisively pro-euro (apart from the extreme right and the communists). Greece's political establishment may be prone to populism but it is not suicidal, so it would never voluntarily opt for euro area exit.

Figure 5: Breakdown of public debt by creditor, 2012 (€ billion)



Source: European Commission

Policy conclusions

What message should policymakers and market participants take away from the Greek PSI and debt buyback for the future treatment of debt restructurings in Europe?

Timing of the restructuring

Delaying the debt restructuring reduced the stock of privately held debt subject to a haircut. This delay may make an official debt restructuring inevitable some time down the road. At end-2009, Greece's stock of privately held public debt (excluding €9 billion in T-bills) amounted to €253 billion (110% of GDP);[8] by the time the PSI was implemented, debt due to the private sector was down to €205 billion, as redemptions were funded by official loans under the EU/IMF-funded economic programme agreed in May 2010.

When the first rescue package was agreed in May 2010, the average remaining maturity of the general government debt was eight years, but this was skewed by a few very long-term issues. More than one-third of the debt stock would mature in the next three years, and nearly half in the next five years (IMF 2010a). If the PSI terms had been agreed up front in May 2010, the public debt would have declined by at least an additional €25 billion (53.5% haircut × €47 billion), equivalent to 12% of GDP (plus the interest savings from lower coupons going forward). Whether this would have made the difference between solvency and insolvency is debatable, but it would clearly have reduced the debt burden up front.

At the time of Greece's request for official assistance in 2010, Lee Buchheit of Cleary Gottlieb Steen & Hamilton LLP's New York office, the law firm involved in the restructuring of the Argentine debt, and Miyu Gulati of Duke University's law school, published a joint paper on how to restructure Greek debt (Buchheit & Gulati 2010). The authors advocated a Plan B involving a Brady-type debt exchange for par or discount bonds, combined with official financing to backstop the domestic banking system

[8] These figures refer to bonds only and take into account Eurostat's expanded coverage of the general government, to include loss-making public enterprises whose sales covered less than 50% of production costs. A total of 17 loss-making entities in the rail, public transport and defence sectors, as well as some off-budget accounts, were identified in Greece. The debt of these entities (7.25% of GDP) was included in the debt data in late 2010, and their annual losses added to the fiscal deficit (IMF 2010b, p. 22).

instead of paying off maturing debt in full. What prevented this solution from being adopted was not that it was unnecessary or untested but that euro area policymakers insisted at the time that there would be no debt restructurings in the euro area. This insistence was motivated by concerns about contagion to other weak euro area countries and the still-fragile state of EU financial institutions after the global financial crisis of 2008–09 (Spink 2012). These concerns will recede as European banks are recapitalised and the Eurozone builds up a 'firewall' to limit contagion through European Financial Stability Facility/European Stability Mechanism (EFSF/ESM) resources and ECB purchases of sovereign bonds in the secondary market.

It became clear to EU policymakers that the possibility of default is necessary to impose market discipline.

Eventually it became clear to EU policymakers that the possibility of default is necessary to impose market discipline. The first hint of a private-sector contribution to the funding of euro area adjustment programmes came at the Franco-German summit in Deauville in October 2010. This was confirmed at the March 2011 EU summit, in which leaders agreed to set up an orderly workout mechanism, the European Stability Mechanism (ESM), by mid-2013 and declared that there would be no debt restructuring before then. In July 2011 the Greek PSI was agreed in principle and the Eurogroup declared that the Greek case was exceptional. Obviously further statements to this effect lacked credibility.

Voluntary vs involuntary default

As noted, the ECB was strongly opposed to an event of default on the grounds that it could not accept sovereign bonds of a country in default as collateral. However, as it turned out, the ECB's objections were easily addressed by providing liquidity to Greek banks through the Exceptional Liquidity Assistance (ELA) window of the national central bank for the few weeks that the country remained in default. In any case, even before the collective action clauses (CACs) were activated and the CDS triggered, the deal was not viewed by private investors as voluntary. According to the CEO of Commerzbank, 'to call it voluntary is the equivalent of obtaining a voluntary confession at the Spanish inquisition'. With the benefit of hindsight, activating the CACs and triggering the CDS contracts did not upset financial stability.

The CDS market

If the International Swaps and Derivatives Association (ISDA) had not called the PSI an event of default, the CDS market would have been finished. Risk managers would not be seen as prudent to accept CDS contracts as adequate insurance against sovereign exposure. This would trigger a huge sell-off that would lead to spread widening throughout the European South.

Subordination

The de facto seniority achieved by the ECB, whereby debt acquired and held by the ECB under its SMP programme was treated in a different (better) way than that held by the private sector, was viewed by the market as bad news with adverse consequences. In so far as they reduced the seniority of private bondholders, SMP purchases were a double-edged sword in terms of investor appetite for euro area sovereign bonds. This was clearly understood by ECB President Draghi, who declared in August 2012 that 'the concerns of private investors about seniority will be addressed'. Indeed, the ECB's Outright Monetary Purchase (OMP) programme announced on 5 September, intended to provide unlimited liquidity by buying bonds in the secondary market subject to conditionality, included a 'pari passu' ('equal treatment') clause that addressed investor concerns. However, it left open the question of the EBC's participation in 'voluntary' debt restructurings, which might be considered as financing of government deficits. Guarantees provided to the ECB via the EFSF/ESM could potentially overcome this problem (subject to the constraint imposed by the finite resources of these facilities), but this remains an open question.

Cross default

The newly issued GGBs did not have cross-default clauses with the old bonds. Therefore, if Greece defaulted on the bonds issued under foreign law, the new bonds would not be affected. Nevertheless, holdout creditors were paid in full in 2012 to avoid a disorderly default that would be triggered by cross-default clauses on old foreign law bonds. This drove a wedge between foreign law versus domestic law bonds in other weak euro area countries, reflecting the different probabilities of repayment at full face value, and thus confirming that market expectations of further debt restructurings within the euro area have not receded.

Debt buyback

The November 2012 Eurogroup statement set a limit on buyback prices by saying they were ‘expected to be no higher than those at the close on Friday, 23 November 2012’ (EU Council 2012). This limit overlooked the fact that investors expected to receive a premium over secondary market prices, without which the buyback would probably elicit low participation. The Eurogroup eventually agreed to somewhat higher prices and the buyback succeeded in extinguishing roughly half the debt due to bondholders. This was an efficient use of creditor funding: first, by borrowing €10.8 billion from the EFSF, Greece extinguished €31.9 billion of gross debt due to bondholders, i.e. each euro of funding retired three euros of debt; second, the consequent decline in the discount at which the remaining debt traded in the secondary market would help support the privatisation programme. The still-high discount is an obstacle to selling real assets in Greece, as GGB investors could potentially reap returns in excess of 50% within a year if Greece’s programme implementation improves – a return that would be almost impossible to achieve by buying assets under privatisation.

To conclude, whereas mistakes were made – the foremost being the ECB’s reluctance to accept a forced restructuring – the Greek PSI and debt buyback showed that an orderly default can take place within the euro area. The possibility of default is essential to impose market discipline, and thus an orderly workout mechanism within the euro area is necessary. Designing an adjustment programme involves a probabilistic judgement about debt sustainability, and it is important to make this judgement as rigorously as possible early on.

The precise role and function of the ESM are still evolving. The Eurogroup’s recent decision to permit the ESM to recapitalise banks directly would, if implemented, be a decisive step in breaking the negative feedback loop between bank and sovereign stress. Retail deposits have migrated from the weak southern economies to the north, while interbank claims within the euro area have fallen sharply since the peak in mid-2008. Both stress in bank funding and redenomination risk have led to a massive reduction in cross-border lending of euro area banks. A transfer of the fiscal backstop for banks from the sovereign to a pan-European institution would lead to the re-integration of the banking system. Restoration of credit is necessary for a resumption of growth and for debt sustainability in Greece and the rest of the European South. Full implementation of Basel III capital and liquidity standards also would help credit growth to resume, including across euro area borders.

As noted by Financial Stability Board chairman Mark Carney ahead of the G20 Summit in Mexico in June 2012:

> a focus on full and consistent implementation is essential to preserve the advantages of an open and globally integrated financial system. Market participants and authorities need to have confidence in the strength of financial institutions and markets in other countries. Recent experience demonstrates that when mutual confidence is lost the retreat from an open and integrated system can occur rapidly. A return to a nationally segmented global financial system would reduce both financial capacity and systemic resilience, with major consequences for jobs and growth across our economies. (FSB 2012)

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