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# Why Is Sovereign Debt Restructuring a Challenge? The Case of Greece

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The views expressed in the briefing are those of the author.

# Why Is Sovereign Debt Restructuring a Challenge?

## The Case of Greece

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Joanna Dreger

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### Abstract

The reduction of Greek sovereign debt by €106 billion, agreed in the second bailout package of February 2012, is the largest in history. Nevertheless, immediately after publishing the key terms of the package, doubts arose whether it would achieve its goals: to reduce the debt-to-GDP ratio to 120.5% in 2020 and to ensure the return of Greece to market financing by 2015.

This Briefing gives a timely input to the debate as it develops an analytical framework through which the expected failure of the Greek debt reduction can be assessed. It surveys the economic literature to identify three groups of factors reducing the effectiveness of sovereign debt restructuring: (1) sovereign's fundamentals, (2) inefficiencies inherent in the restructuring process and (3) costs of restructuring; and applies them to the case of Greece.

Based on this analysis, three policy implications are formulated, with relevance to Greece and the wider eurozone. Firstly, the importance of increased policy effort by Greece to enact current structural and growth-enhancing reforms is underlined. Secondly, the introduction of uniform CACs is proposed that will reduce the market participants' uncertainty, discipline the runs on government debt and address the holdout inefficiency. Finally, sovereign debt restructuring is not recommended as a universal solution for over-indebtedness in the EU, given the direct and reputation costs of sovereign debt restructuring and the self-fulfilling nature of sovereign debt crises.

**Keywords:** sovereign debt, debt restructuring, eurozone, Greece

**JEL codes:** F15, F33, F34, F36, G01, G24, H63

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# 1 Introduction

*“Fair Greece! Sad relic of departed worth!  
Immortal, though no more;  
though fallen, great!  
Who now shall lead thy scattered children forth,  
And long-accustomed bondage uncreate?”*

Lord George Byron (1812): *Childe Harold's Pilgrimage*,  
Canto II, Stanza 73 – 74.

The second bailout package for Greece, finalised on 21<sup>st</sup> February 2012 under its official name of ‘The Second Economic Adjustment Programme for Greece’, paved the way for the largest sovereign debt restructuring in history, equal to almost €106 billion. For the first time in the EU, sovereign debt of a Member State (MS) was to be reduced through a haircut of above 50% negotiated with private creditors. Economists (Buchleit and Gulati 2010, 2011; Economides and Smith 2011; Gulati and Zettelmeyer 2012) have called upon restructuring of Greek debt since 2010 as a way out of the sovereign debt crisis.

Nevertheless, soon after publishing the key terms of the package, doubts arose whether it would achieve its primary goals: to reduce the Greek debt from current 164% to 120.5% of Gross Domestic Product (GDP) by 2020 and to secure the return of Greece to the capital markets by 2015.

This Briefing gives a timely input to the debate as it develops an analytical framework through which the potential failure of the Greek debt reduction can be assessed. It surveys the economic literature to identify three groups of factors reducing the effectiveness of sovereign debt restructuring:

- 1) the fundamentals of the debtor (its inability to retain sustainability of the debt);
- 2) the coordination problems and market failures in the form of holdout, funding and adjustment inefficiency;
- 3) the costs of sovereign debt restructuring, particularly the reputation and domestic costs.

As will be shown in the case study of Greece, the three arguments relate to the specific situation of the second bailout package to a varying degree. Most of all, Greece will face the problem to regain its debt sustainability because of the macroeconomic fundamentals: its

inability to sustain external surpluses coupled with low growth outlook for the economy that will exacerbate the difficulty of achieving primary balances necessary to reach debt sustainability. The target of Greek access to the markets in 2015 is likely to be missed due to the lack of incentives for creditors to invest in Greek government securities in the mid-term and political uncertainty and administrative incapacity to enact necessary reforms in the short-term. The holdout, funding and adjustment inefficiency are not likely to significantly affect the debt restructuring period, while the reputation implications of restructuring are valid both for Greece, but most importantly for the eurozone as a whole.

Based on this analysis, three policy implications are formulated, with relevance to Greece and the wider eurozone. Firstly, the importance of increased policy effort by Greece to enact structural and growth-enhancing reforms is underlined. Secondly, the introduction of uniform CACs is proposed that will reduce the market participants' uncertainty, discipline the runs on government debt and address the holdout inefficiency. Finally, sovereign debt restructuring as a universal solution for over-indebtedness in the EU is not recommended, given the direct and reputation costs of sovereign debt restructuring and the self-fulfilling nature of sovereign debt crises.

This Briefing is structured as follows. Chapter 2 shortly defines debt restructuring. Chapter 3 analyses the caveats of debt restructuring as a solution to over-indebtedness, forming three hypotheses on factors diminishing effectiveness of sovereign debt restructuring. Chapters 4 and 5 apply the analytical framework to Greece and draw the policy implications, accordingly. The conclusions are summarised in Chapter 6.

## 2 Restructuring sovereign debt: why and how?

*“A national debt, if it is not excessive, will be to us a national blessing”*

Alexander Hamilton, in a letter to Robert Morris, 1781.

The problems of unsustainable levels of sovereign debt are not new<sup>1</sup>, yet the solutions used in case of insolvency or illiquidity of a country and the source of debt financing changed over time (Sawicki 2011, p.1). Before the introduction of Brady bonds<sup>2</sup> in 1989, sovereigns borrowed through bilateral country-to-country loans or banking credit, often with no guarantees of government institutions. Today most of the sovereign debt is issued on bond markets by state institutions and bought by numerous creditors. The restructuring process thus requires negotiation with a wide range of creditors of different types, rather than one big financial institution or creditor country.

There is no universal numerical rule of what constitutes an unsustainable level of sovereign debt. As de Grauwe (2011) pointed out, the markets perceive the 90% of sovereign debt in the UK as more sustainable than 72% of debt in Spain, pricing the government bonds of Spain 200 basis points higher than those of Great Britain.

Nevertheless, overborrowing – accumulation of high debt levels, close to the limit that the creditors accept – may not be optimal in the long term. It hinders growth<sup>3</sup>, hampers investment<sup>4</sup> and leads to sharp increases of risk premiums<sup>5</sup>. It is also one of the primary causes of sovereign debt crises, whereby a country is unable to honour its liabilities and to obtain new funding at the capital market. In order to avoid the consequences of over-indebtedness, some form of debt restructuring may be necessary.

### Debt reduction and debt rescheduling

Sovereign debt can be restructured in four different ways, as presented in the Table 1. On the one hand, coupon earnings can be cut or delayed. On the other hand, the payment of

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<sup>1</sup> In fact, in the last eight centuries financial crises occurred in clusters, with surprisingly consistent frequency and similar patterns – see Reinhart and Rogoff (2009) for their analysis of ‘eight centuries of financial folly’.

<sup>2</sup> The Brady plan was a novel debt-resolution agreement, whereby the creditors (commercial banks) agreed to exchange their illiquid claims on developing countries for new tradable dollar-denominated instruments with changed payment terms, often including US guarantees.

<sup>3</sup> Reinhart and Rogoff (2010) performed a study of 44 countries in the time span of two centuries and found that when the ratio of public debt-to-GDP exceeds 90%, the median growth decreases by one percentage point, while the reduction of average growth is even more significant. A similar threshold was found by the Cecchetti, Mohanty and Zampolli (2011) from the Bank of International Settlements, who applauded the work of Reinhart and Rogoff.

<sup>4</sup> See debt overhang and underinvestment problem – Sachs (1989), Krugman (1988), based on the corporate finance view of Myers (1977).

<sup>5</sup> Roubini (2001); Reinhart, Rogoff and Sevastano (2003); Orszag, Sinai and Rubin (2004).



the principal at the end of maturity of the bond can similarly be cut or delayed. In general, these options form two broad methods. Debt rescheduling (also described as *bailout*), in the case of postponing/extension of the debt repayments, does not reduce the net present value (NPV) of debt. In contrast, debt reduction (also described as *bail-in*) results in the NPV reduction, implying that the creditors incur losses.<sup>6</sup>

Table 1. Debt rescheduling versus debt reduction

	<b>Affecting the coupon</b>	<b>Affecting the principal</b>
<b>Debt rescheduling</b> (does not change the NPV of debt)	Extending the period of coupon repayments	Postponing the moment of the principal repayment
<b>Debt reduction</b> (reduces the NPV of the debt, creditors incur cost)	Application of below-market interest rates, moratorium on interest, forgiving past due interest	Reducing the principal amount due

Source: own analysis, Roubini 2001, Sawicki 2011, p.2.

A decision on debt restructuring requires the assessment of whether a country suffers from solvency or liquidity problem (Roubini 2001). Debt rescheduling may be enough as a medium-term solution for a solvent but illiquid country that is temporarily not able to rollover its debt. In contrast, debt reduction is required in case of insolvency, i.e. permanent inability to honour debt obligations. In practice, sovereign debt resolution often includes a mixture of fiscal adjustment and additional funding coupled with a reduction of the outstanding debt, extending maturity of the debt and cutting the coupon.

The aim of sovereign debt restructuring is therefore to alleviate the debt burden in a way that the country can eventually autonomously pay its liabilities and regain access to market funding. However, as the following chapter presents, a number of factors can successfully diminish the effectiveness of the restructuring.

<sup>6</sup> However, the creditor losses do not correspond to the nominal write-down of the debt, as Cohen (1993, p.25) showed in a simulation of a debt write-down. In his example, the debt (1 dollar) is originally priced at 32 cents. 50% write-off has an impact on the price of debt bringing it to the level of 57 cents. The market value decreases from 0.32 to 0.285. Such a result represents only 11% of write-off in real terms and only 3.5% of the original 1 dollar value of the debt, in the nominal terms.

### 3 Limits to the effectiveness of sovereign debt restructuring

*“Forgive us our debts, as we forgive our debtors.”*

New Testament, Matthew 6:12

Economic literature<sup>7</sup> proposes three competing answers as to why sovereign debt restructuring may fail. Firstly, the underlying fundamentals of the sovereign may prevent it from regaining the debt sustainability. Secondly, the process of debt restructuring has inherent inefficiencies in the form of holdout, funding and adjustment problem. Finally, the restructuring does not happen at no cost. These three aspects are discussed below.

#### 3.1 Fundamentals of the sovereign debtor

*Hypothesis 1: The success of sovereign debt restructuring is prevented by the fundamentals of the debtor (its inability to retain sustainability of the debt).*

Empirical literature, dating back to Cline (1984), suggests that certain macroeconomic factors specific to a debtor country yield sovereign debt crisis and default more probable, and in the longer turn minimise the chance of a successful debt restructuring process. The following macroeconomic variables can be associated with the probability of debt crises, as summarized by Manasse, Roubini and Schimmelpfennig (2003, p.2, bullets added):

- “low GDP growth;
- current account imbalances;
- low trade openness;
- tight liquidity and monetary conditions (...);
- monetary mismanagement (in the form of high inflation);
- policy uncertainty (in the form of high volatility of inflation); and
- political uncertainty leading to economic uncertainty (years of presidential elections).”

Panizza, Sturzenegger and Zettelmeyer (2009, p.15) add a few other characteristics to the list, namely:

- higher shares of short term debt, dangerous especially in the event of debt run and confidence crisis;
- low level of international reserves, necessary in the event of currency crisis preceding a sovereign debt crisis;
- persistent fluctuations of output;

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<sup>7</sup> Three comprehensive literature overviews on the topic of sovereign debt include Kletzer (1994); Eaton and Fernandez (1995); Panizza, Sturzenegger and Zettelmeyer (2009).

- weak institutions; and
- previous history of defaults.

The relevance of the above mentioned characteristics is largely intuitive. Low output growth has direct effect on the debt-to-GDP ratio and drives the country into debt unsustainability. Similarly, continuous fluctuations of output hinder an economy from insuring itself and affect the creditors' confidence, which may lead to higher volatility of interest rates on debt that can suddenly cut off a country from the market. Persistent current account (CA) imbalances in an uncompetitive economy indicate that the country depends on financial transfers to finance its imports, without supporting its economy with exports. Weak institutions in the climate of political uncertainty have problems to enforce structural reforms that boost the competitiveness of the economy and thus are unable to increase its ability to service the debt. Even worse, weak administrative capacity of the country can be a reason for wide tax evasion that further exacerbates fiscal problems of the country.

### 3.2 *Holdout, funding and adjustment inefficiency*

*Hypothesis 2: The success of sovereign debt restructuring is hindered by coordination problems and market failures in the form of holdout, funding and adjustment inefficiency.*<sup>8</sup>

Debt resolution is surrounded by uncertainty relating to coordination problems, both among the creditors and between creditors and debtors. *Ex ante*, when restructuring or default is expected by the creditors even though it has not been declared, the risk prevails that individual creditors would rush to sell their bonds with the hope to recover a higher value. Such behaviour leads to a decline in bond prices and may deter potential lenders from the market and accelerate the crisis in a self-fulfilling manner (Gianviti et al. 2011, p. 8). *Ex post*, after the restructuring has been announced, three broad inefficiencies come to the fore: holdout, funding and adjustment inefficiency.

#### **Holdout inefficiency**

The first risk that a sovereign debtor faces is that of holdout, in which “one or more creditors may strategically hold out from agreeing to a reasonable debt-restructuring plan” (Schwarcz 2011, p.6). Typically, in order to change the payment terms of a contract (concerning maturity, amount of principal and coupons), consent of the parties is required. In the case of sovereign bonds, this means that any form of debt restructuring requires the approval of investors. The creditors that hold out, i.e. reject the restructuring offer by the

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<sup>8</sup> See Haldane et al. (2003) and Schwarz (2011), for an analytical discussion of the inefficiencies.

debtor, aim to receive full payment of the claims at the expense of the majority of the creditors.

The holdout problem is a source of market inefficiency. It increases the burden of the restructuring process with litigation costs, but most importantly can be discouraging for other lenders to accept the offer and may thus jeopardize the success of debt restructuring. Additionally, a country anticipating large numbers of holdouts may postpone the decision to restructure fundamentally unsustainable debt, leading to unnecessarily higher costs.

In order to reduce the likelihood of a holdout problem, Collective Action Clauses (CACs) are introduced in the bond contracts. If the contract contains CACs, it is enough if a qualified majority (usually 66 or 75%) of creditors agrees to the changes – the holdouts are bound by their decision. In the case of Greece, such a solution was not available straight away, as 90% of the total debt in 2011 did *not* contain the CACs (Choi et al. 2011, p.13).

### **Funding problem**

The second risk of the debtor is the funding problem, in which a country is unable to obtain financing during the debt restructuring process itself. As Chapter 3.3 outlines, debt restructuring in a country leads to a number of domestic costs (e.g. need to recapitalize banks) and hence necessitates expenses on the side of the country already in trouble. The funding problem occurs, because no lender agrees to provide funds, “unless its right to repayment has priority over existing debt claims.” (Schwarcz 2011, p.25).

Funding in the period of distress is particularly important in order to retain the confidence of creditors in the country. Restructuring of the debt reduces the pressure on the debtor country, but may lead to other runs – be it a run on the domestic banking system or withdrawal of cross-border bank credit, when the creditors realize their obligations may not be met (Roubini and Setser 2004, p.3). The sovereigns show great vulnerability to such reputation risks, that can undermine the entire payment system of the country.

### **Adjustment inefficiency**

The final risk, that may prevent the restructuring process from bringing the desired results, is the adjustment inefficiency, “whereby the debtor knowing that surplus output will be usurped by holdouts fails to exert sufficient policy effort” (Haldane et al. 2003, p.23). Additionally, the adjustment inefficiency represents a moral hazard that a country bears, if it expects a relatively easy restructuring process – it faces lower incentives to enact reforms necessary to regain the ability to pay its debt. Such an expectation can have two reasons. On

the one hand, the legal changes that bind the creditors make the restructuring easier. On the other hand, a country that is ‘too big to fail’ or ‘too important to fail’ may expect to be bailed out, as the creditors and lending institutions hope to prevent a wider economic downturn that the default of the sovereign could cause.

Restructuring of debt is thus often coupled with conditionality – the creditors agree to take on certain losses, if they can expect that a country will undertake reforms to increase its ability to service obligations in the future. The moral hazard is that such efforts will either not be enacted at all, or not properly.

### 3.3 *Costs of debt restructuring: to forgive is to forget?*

*Hypothesis 3: The success of sovereign debt restructuring is jeopardised by the costs it incurs, particularly the reputation and domestic costs, specific to the economy.*

#### **Market exclusion and interest rate spreads**

In their widely quoted paper, Bulow and Rogoff (1989) argued that participants in financial markets are characterised by a very short memory when it comes to sovereign debt defaults or debt restructuring. “Debts that are forgiven will be forgotten” (Bulow and Rogoff 1989, p.49) – they claimed, undermining the body of research that emphasised reputation concerns as a reason to repay the debt (Eaton et al. 1986; Grossman and Van Huyck 1988). However, as Cruces and Trebesh (2011) showed, restructuring does not happen at zero cost. Particularly, the authors establish that the post-restructuring spreads and the duration of exclusion from the capital markets are highly correlated with the haircut size, casting doubt on the “forgive and forget” belief. It seems that the creditors do in the end impose some form of penalties on the defaulting country.

#### **Costs on the domestic economy**

Empirical literature suggests that debt restructuring decreases the GDP growth rate in the year after the default episode, although the precise calculation of the impact varies between studies.<sup>9</sup>

There are various channels through which debt restructuring affects the economy, as was highlighted by IMF (2002) and Darvas (2011, p.5). The channels include:

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<sup>9</sup> For instance, Sturzenegger (2004) identifies the reduction at the level of 0.6 percentage points and, if the default episode is coupled with a banking crisis, at the level of 2.2 percentage points. Sandleris (2012) approximates the impact at the level of 1.5 percentage points.

- *Direct wealth effect* on holders of the bonds who see the value of the government instruments cut. Eventually, the negative wealth effect on corporations and households can lead to a decrease of consumption and investment.
- *Loss of confidence* that exacerbates the fall in output and is manifested by capital outflows, falling money demand and sharp hikes of interest rates on sovereign bonds.
- *Disruption of the domestic financial system* as the banks receive the hit, through:
  - direct effect on the asset side of balance sheets of the banks;
  - bank runs and deposit withdrawals as a result of loss in confidence;
  - interbank market freeze due to the increase of overall lending risk; credit crunch;
  - interest rate hikes, typical to crises, increasing the cost of funding;
  - flight to quality – deposits shifted to other, often foreign owned, banks.

Because of the costs to the economy, the decision to restructure is not an easy one, but even more importantly the success of the restructuring (regaining debt sustainability) is under threat.

### **Contagion and reputational spill-overs**

The restructuring of the debt can lead to contagion and spill-over effects. Firstly, the debt restructuring can start the so called ‘credit event’<sup>10</sup> which triggers repayments of Credit Default Swaps (CDS).<sup>11</sup> Due to the interconnection of the European banking system, triggering CDS repayments could lead to severe tensions, with non-linear or threshold effects in financial markets, resulting in widespread market instability.<sup>12</sup>

Secondly, debt restructuring sends a signal to the markets that undermines confidence in the government bonds, as described in the section on market exclusion. It is particularly important in the eurozone, as restructuring represented a change in the official policy stance of the EU and shift away from the old principle of ‘*pacta sunt servanda*’<sup>13</sup>.

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<sup>10</sup> *Credit event* applies in the case of: (1) *failure to pay* an obligation, (2) *repudiation* of an obligation and (3) *restructuring* – change in the contractually agreed coupon or principal (ISDA 2003).

<sup>11</sup> CDS is a form of credit derivative that insures against the risk of default on a given security. In return for a quarterly premium (spread), the protection buyer can expect that in the case of credit event that significantly diminishes the value of a given instrument, the protection seller will compensate the loss. Since CDS are traded mostly on over-the-counter markets, the exact estimation of exposures of banks is not possible. For the case of Greece, the impact of restructuring on *non-Greek* euro-zone banks was a matter of concern (Interview, ECB official 13.04.2012).

<sup>12</sup> It would also push into the future the moment when Greece would be in a position to access capital markets for its own financing. This in turn, could make it more difficult for Greece to put its fiscal position on a sustainable footing, which was the aim of the second bailout package.

<sup>13</sup> From Latin: ‘agreements shall be kept’.

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The discussion of the factors reducing the effectiveness of sovereign debt restructuring forms an analytical framework for assessing the debt restructuring in the case of Greece (see Table 2).

Table 2. Factors reducing the effectiveness of sovereign debt restructuring

Factors	Specification	Discussion
Fundamentals of the sovereign debtor that increase the probability of sovereign debt crisis	<ul style="list-style-type: none"> <li>• Low GDP growth</li> <li>• Persistent fluctuations of output</li> <li>• Higher shares of short-term debt</li> <li>• Current account imbalances</li> <li>• Low trade openness</li> <li>• Low level of international reserves</li> <li>• Monetary mismanagement</li> <li>• Political uncertainty</li> <li>• Weak institutions</li> </ul>	Empirical literature identifies macroeconomic factors specific to a country that yield sovereign debt crises more probable. In the longer term, these economic fundamentals translate into inability to retain sustainability of the debt: in such case, even substantial reduction of debt does not prevent the country from falling into debt problems again.
Coordination problems and market failures resulting from the design of the debt restructuring	<ul style="list-style-type: none"> <li>• Holdout inefficiency</li> <li>• Funding problem</li> <li>• Adjustment inefficiency</li> </ul>	The success of the debt restructuring can be hindered when a significant proportion of creditors <i>hold out</i> from agreeing to the debt restructuring plan; a country is unable to secure <i>funding</i> in the debt restructuring period; or when the debtor fails to exert <i>adjustment</i> policy effort after the debt restructuring agreement, due to moral hazard.
Costs of the debt restructuring	<ul style="list-style-type: none"> <li>• Market exclusion and interest rate spreads</li> <li>• Costs on domestic economy (direct wealth effect, loss of confidence, disruption of domestic financial system)</li> <li>• Contagion and reputational spill-overs</li> </ul>	The debt restructuring does not happen at zero cost. The debtor can be 'penalised' by market exclusion and higher post-restructuring spreads; the restructuring period is often followed by lower growth and domestic financial system disruptions as well as loss of reputation with possible spill-over effect leading to wider market instability. The burden of these costs can ultimately prevent the success of sovereign debt restructuring.

Source: own analysis.

As will be shown in the following chapter, the factors apply to Greece to a varying degree.

## 4 Greek debt restructuring in the light of the second bailout package

*“If I owe you a pound, I have a problem; but if I owe you a million, the problem is yours.”*

John Maynard Keynes

The Greek sovereign debt crisis became imminent in late 2009, when the newly appointed Prime Minister George Papandreou announced that after revision Greek budget deficit would exceed 12%, double the figure previously reported.<sup>14</sup> The ensuing loss of confidence in the domestic and European banking system, sovereign debt rating downgrades, interest rate hike and effective exclusion of Greece from the financial markets led to the conclusion of the first three-year rescue programme in May 2010. The agreement of EU and IMF to establish a €110 billion Greek Loan Facility (EU - €80bn, IMF – €30bn) required that Greece continued with strict austerity measures to achieve fiscal consolidation, and simultaneously restored competitiveness through internal devaluation. As soon became clear to the EU authorities, the scale of structural problems that Greece was facing was overwhelming for a eurozone country (Interview, EU official 25.04.2012).

At the outset of the crisis the Greek economy suffered from a number of structural problems and competitiveness issues. The levels of public finance were completely unsustainable, with expenditure rising by 87% in the years 2004-2010 with only 31% tax revenue increase in the same period (Greek Ministry of Finance 2010, p.14). Pervasive tax evasion, largely inefficient public administration, serious labour market barriers and particularly unfavourable business environment made the country unattractive for FDI. As was clear to the Commission later, a serious overhaul of the Greek health and pension system, liberalisation of strategic sectors (including energy and transport) and addressing judicial shortcomings (lack of competition authority, high cost of litigation, unenforceability of tax cases) had urgently been needed (European Commission 2012b). Furthermore, since entering the eurozone, the nominal unit labour costs in Greece rose by almost 40% and the minimum wage level rose by almost 60% (European Commission 2012b, p.39-40). As these increases were not accompanied by productivity boost, the economy became uncompetitive.

The Economic Adjustment Programme of May 2010 aimed to address the extensive fiscal imbalances through austerity. As a result, Greece entered into deep recession with the economy decreasing by 3.5% in 2010 and 7.1% in 2011 (Eurostat), while its debt-to-GDP

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<sup>14</sup> In fact, the government deficit level for 2009 was revised later up to 15.8%. Unreliability of data published by Greece was a permanent problem since Greece applied to join the eurozone (European Commission 2010a).



ratio continued growing (See Table 3). The economic depression in Greece persisted in 2011: industrial production decreased by 12.4% in comparison to 2010 (Eurostat 2012) and over 110,000 companies in Greece went bankrupt (Süddeutsche Zeitung 2012). The unemployment rate rose up to 21% in December 2011 and over 25.1% in July 2012 (Elstat).

Table 3. Macroeconomic variables for Greece 2000 – 2012

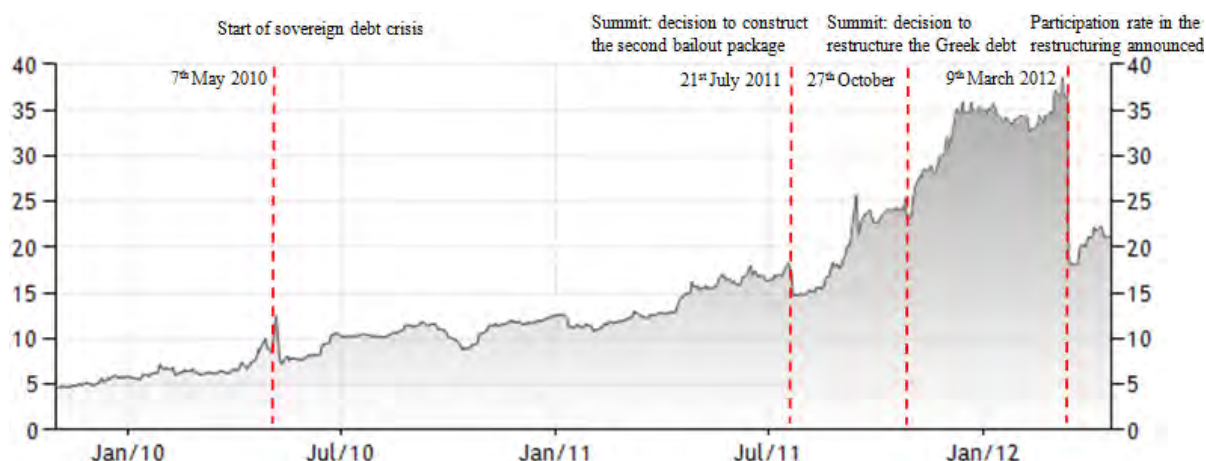
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
GDP growth, annual %	3.5	4.2	3.4	5.9	4.4	2.3	5.5	3.0	-0.2	-3.3	-3.5	-7.1 <sup>p</sup>	-4.7 <sup>f</sup>
Sovereign debt, % of GDP	103.4	103.7	101.7	97.4	98.6	100.0	106.1	107.4	113.0	129.3	144.9	162.8*	161.4*
Budget deficit % of GDP	-3.7	-4.5	-4.8	-5.6	-7.5	-5.2	-5.7	-6.5	-9.8	-15.8	-10.6	-9.4	-7.3*

Source: Eurostat and ELSTAT; p – provisional, f – forecast, \*European Commission (2012a).

#### 4.1 The context of the debt restructuring

In July 2011, it was clear that the first rescue programme was a failure. Greece was nowhere close to regaining the access to wholesale markets with the yields on 10-year bonds above 15% (see Graph 1) and the projected level of debt reaching up to 198% of GDP in 2012 (Eurostat, European Commission 2011c). The first programme was enough to cover Greek needs until the beginning of 2012, yet the repayment of €14.5bn worth of loans maturing in late March 2012 stood under serious risk. In October 2011 and then February 2012, the second bailout package for Greece was thus finalised. (Eurogroup 2012).

Graph 1. 10-year Greek government bond yield, 2010 – 2012



Source: Trading Economics, as of 20.04.2012. Events marked by the Author.

The aim of the second bailout package was to restore competitiveness and ensure debt sustainability of Greece, defined numerically as 120.5% of debt-to-GDP ratio by 2020. The bailout package assumed that Greece would return to the markets in 2015 and the money

provided by the Troika (European Commission, European Central Bank [ECB] and IMF) would suffice to fund the country until then.

The key features of the programme included:

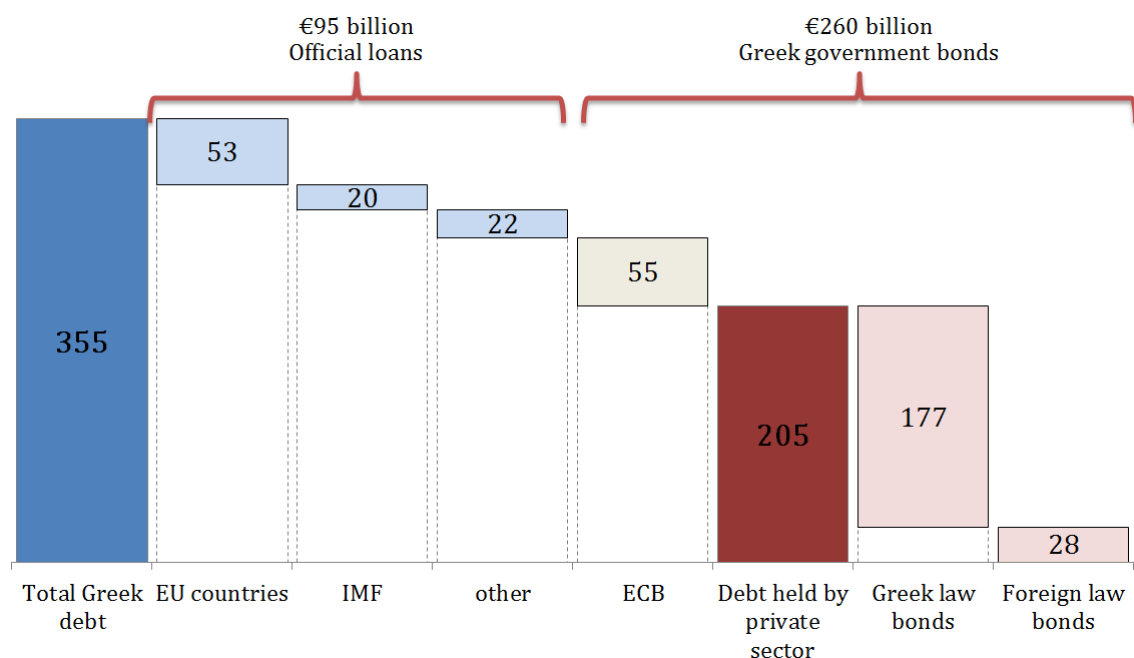
- private sector involvement (PSI) with reduction of the principal by 53.5%, in the form of a bond swap<sup>15</sup>;

and limited official sector involvement:

- retroactive cut of interest rates on GLF, so that the spread over 3-month Euribor would not exceed 150 bp.;
- income earned on government bonds held by Eurosystem disbursed back to MS, that *may* pass them to Greece;
- Eurozone governments passing on to Greece amounts equal to income generated by their national Central Banks on their investment portfolios until 2020.

As can be seen from the Graph 2, only privately held government debt was to be restructured, which under the 53.5% haircut corresponded to €109.7 billion. About 86% of the bonds to be restructured were governed by domestic law.

Graph 2. The distribution of Greek debt, as of February 2012



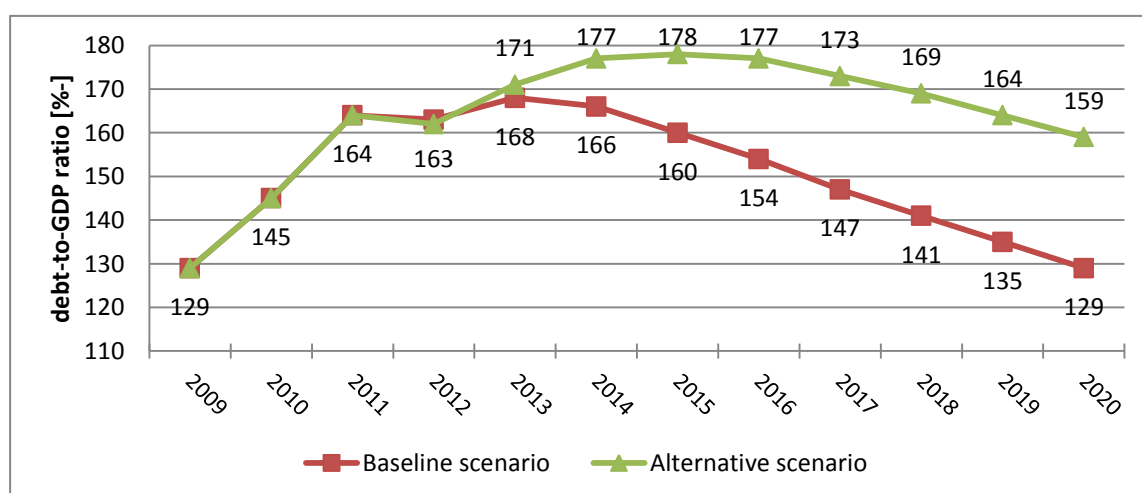
Source: own analysis, based on Spiegel (2011), European Commission and ELSTAT.

<sup>15</sup> The remaining 46.5% were structured as follows: 15% paid upfront through European Financial Stability Facility (EFSF) notes and 31.5% in new Greek bonds.

In order for the restructuring to bring the desired effect, a high 95% participation of creditors was necessary. The investors who would agree to the offer, were to swap their bonds for a range of instruments: short-term triple-A EFSF notes (a cash equivalent that constituted a ‘sweetener’ of the offer), new Greek bonds with longer maturity of up to 30 years and lower interest rate (3% in 2012-20 and 3.75% from 2021 onwards), and additional GDP-linked securities “with a notional amount equal to the face amount of the new [Greek] bonds.” (Greek Ministry of Finance 2012b). The restructuring was thus comprehensive and included both debt reduction and debt rescheduling, as well as additional funds to facilitate the fiscal consolidation. The total NPV reduction for investors was calculated at around 74%, due to lower nominal interest rates on the new bonds (Benedetti-Valentini 2012).

Nevertheless, immediately after publishing the key terms of the package, doubts arose whether it would achieve its goals: reduce the debt burden to 120.5% of GDP by 2020 and restore trust of the markets by 2015. In a confidential IMF report that soon leaked to the press, two scenarios for debt sustainability were presented (IMF 2012a).<sup>16</sup> In the baseline, Greece had a burden of equal to 129% of GDP in 2020, noticeably higher than the goal of policy makers and above what could be considered sustainable for Greece. In the alternative scenario that reflected the risks inherent in the process, Greece faced a debt level of 159% in 2020 (See Graph 3).

Graph 3. Debt sustainability analysis for Greece, 2009 – 2020



Source: data from IMF (2012a). Alternative scenario takes into consideration political risk of delays of reforms (e.g. privatisation) outlined in the second bailout package.

<sup>16</sup> The baseline assumes 50% debt reduction and does not include the decrease of GLF interest rates and additional official sector involvement. It is very clear from the report though, that even with those measures (Chapter IV), it is highly improbable that the debt level will reach 120.5% in 2020.

Scepticism about the success of the debt restructuring was shared by major media (Financial Times 2012a, Economist 2012) and top-politicians, including Wolfgang Schäuble, German finance minister, and Jean-Claude Juncker, president of the Eurogroup, who admitted that a third bailout package may be needed for Greece (Scally 2012, Croft 2012). The aim of this Briefing is thus to establish what factors contribute to the expected failure of the debt restructuring as envisaged in the second bailout package.

## 4.2 What are the limitations to the Greek sovereign debt restructuring?

### 4.2.1 Debt restructuring and Greece fundamentals

*Hypothesis 1: The success of sovereign debt restructuring is prevented by the fundamentals of the debtor (its inability to retain sustainability of the debt).*

The relevance of factors hindering the ability of a country to regain sustainability of the debt (see chapter 3.1) in the case of Greece is presented in the Table 4 and discussed below. Four factors: low GDP growth, CA imbalances, political uncertainty and weak institutions significantly decrease the chance for Greece to regain the debt sustainability with the second bailout package, which lead to the conclusion that Hypothesis 1 is valid for the case of Greece.

Table 4. Factors increasing the probability of sovereign debt crisis

Characteristic of a debtor	Relevance for the case of Greece	Comments
<b>Low GDP growth</b>	<b>High</b>	Greece is in a third year of deepening recession and does not have positive outlook for growth for the next years.
Persistent fluctuations of output	Low	Greece does not face a risk of fluctuations in output but rather a low or negative output growth.
Higher shares of short-term debt	Low	The maturities of the Greek debt have been extended in the series of debt rescheduling in 2011 and 2010 (Council of the EU 2011).
<b>Current account imbalances</b>	<b>High</b>	Greece has persistent CA deficit and relies on foreign transfers to finance its imports.
Low trade openness	Medium	According to International Chamber of Commerce (ICC 2011), Greece scores 'average' in the trade openness index that includes indicators for trade policy, capital inflows and trade infrastructure.
Low level of international reserves	Low	Relevant for debtors facing a risk of a currency crisis accompanying the sovereign debt crisis. Greece is part of the eurozone, the currency crisis risk is not relevant here.
Monetary mismanagement – high inflation	Low	Not relevant for Greece, that as part of the eurozone gave up the monetary policy competences to the ECB.
<b>Political uncertainty</b>	<b>High</b>	Social unrest firing up the streets of Greece

		since early 2010, shaky elections in 2012 and the continuing struggle to enact the promised structural changes and budget cuts increase the risk that the reforms necessary for the success of second bailout package are not implemented.
<b>Weak institutions</b>	<b>High</b>	Greece has a history of high tax evasion rates and has been unable to implement reforms recommended by the international creditors behind the first bailout package. The second package poses similar problems to the country administration. Most importantly, weak government has severe problems to sustain primary surpluses necessary to regain debt sustainability.
Previous history of defaults	Medium	As shown by Reinhart and Rogoff (2009), Greece was in the state of default for half of the past two centuries and entered the eurozone in 2001 with public debt exceeding 100%.

Source: own analysis. Characteristics based on Manasse, Roubini and Schimmelfennig (2003) and Panizza, Sturzenegger and Zettelmeyer (2009).

### Low GDP growth

The second bailout package relies on certain macroeconomic assumptions which seem overly optimistic given the recessionary forces that accompany the deep austerity plan in Greece and the weak growth outlook for eurozone (see Table 5).

Table 5. Main assumptions of the second bailout package

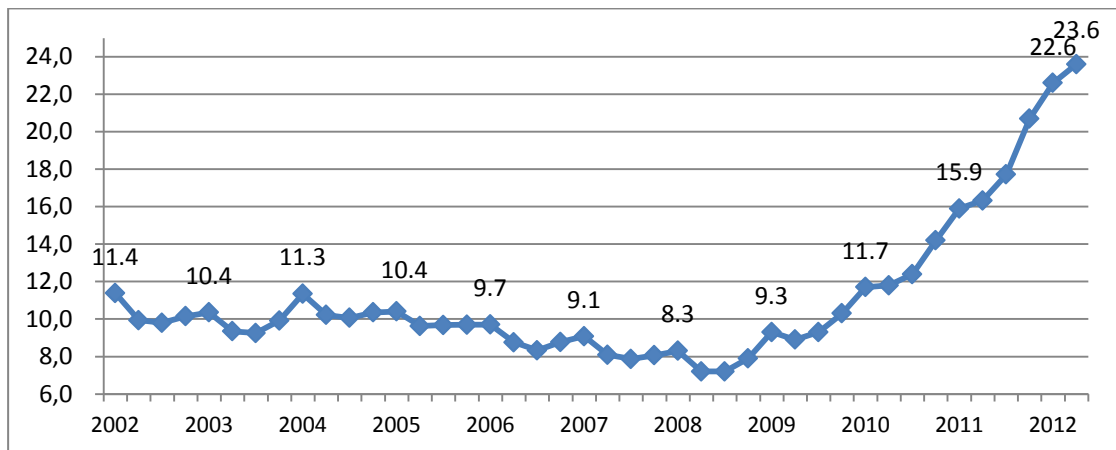
	2009	2010	2011	2012	2013	2014
Real GDP (growth rate)	-3.2	-3.5	-6.9	-4.7	0.0	2.5
Domestic demand contribution	-3.6	-7.0	-10.0	-7.2	-1.4	1.5
Unit labour cost growth rate	4.3	-1.6	-1.0	-7.8	-1.3	-1.9
CA balance (% of GDP)	-14.3	-12.3	-10.3	-6.9	-5.3	-4.6
Budget deficit (% of GDP)	-15.8	-10.6	-9.3	-7.3	-4.6	-2.1
Primary surplus (% of GDP)	-10.6	-5.0	-2.4	-1.0	1.8	4.5
Sovereign debt (% of GDP)	129.3	144.9	165.3	161.4	165.4	162.1

Source: selection from European Commission (2012b, p.16).

Recession deeper than expected was one of the reasons of the failure of the first bailout programme and the scenario is likely to repeat. The provisional Eurostat data for 2011 indicated in October 2012, that Greek GDP contracted by -7.1% rather than the estimated -6.9%. As of second quarter of 2012, Elstat suggested the contraction of -6.3% for 2012, significantly above the assumed -4.7% (Elstat).

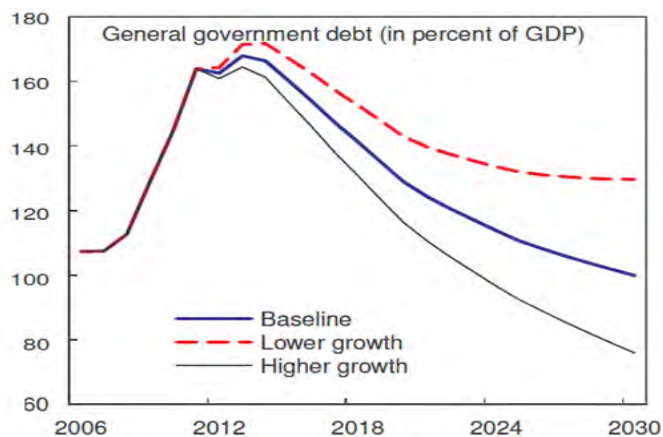
The second bailout package comes with a new set of structural measures that strengthen the recessionary forces. The measures include a cut of minimum wage by 22%, cancelling holiday wage bonuses, pension cuts and public sector job cuts, measures facilitating lay-offs, privatisation (long term target of €50 billion) and opening up of closed professions. In the long term, these reforms are supposed to increase competitiveness of the Greek labour market and help to absorb youth workforce. In the short term they will further hamper domestic demand and negatively affect the unemployment rates, already at historically high levels, with 23.6% unemployed in the second quarter of 2012 (See Graph 4). Wage cuts in the private sector are likely to hinder consumer and business confidence – currently at historically low levels (Morgan Stanley 2012), which is likely to further aggravate the domestic demand contraction.

Graph 4. Unemployment rate development in Greece 2002 – 2012



Source of data: Eurostat and ELSTAT.

Graph 5. Sensitivity of Greek government debt level to changes of GDP growth



Source: IMF (2012a, p.5).

In fact, lower GDP growth will have serious impact on the debt sustainability of Greece in the long term. The debt sustainability analysis by IMF shows high sensitivity of debt level to GDP growth. “Fixing the primary balance, nominal growth permanently lower by 1 per cent per annum would send debt-to-GDP to 143 per cent by 2020” (IMF 2012a, p.4) – see Graph 5, p.17. Despite the substantial debt reduction of the second bailout package, lower growth is very likely to prevent Greece from achieving the target of 120.5% debt-to-GDP by 2020.

### **Current account imbalances**

Greece cannot expect strong external demand either, as the economic growth outlook for the eurozone is weak. In 2011 the growth of exports of Greek goods and services decelerated from 4.2% in 2010 to 3.9% in real terms (European Commission 2012a, p.24). In 2012 and 2013 the growth in the eurozone is likely to be negative (IMF 2012b), which does not give a prospect for strong external demand for Greece.

Neglecting the pervasive CA deficits (see Table 5, p.17) is the biggest shortcoming of the current package, according to Martin Wolf, chief economics commentator of the Financial Times (Financial Times 2012b). The discussion concentrates on fiscal policy that is continuously tightened in order to remove the fiscal deficit, but ignores the fact that Greece depends on foreign resources in order to finance its CA. The Greek economy is not competitive<sup>17</sup> and does not have a strong export sector that could support its imports. The two largest industries, shipping and transport, were particularly badly hit in the aftermath of the financial crisis with revenues decreasing by 15% in 2009 (Berteloot and Hebert 2010), while Greek society became used to consumption above its means in the last ten years (Gros 2012). The deep-seated lack of competitiveness of Greece and the resulting untamed CA deficit is therefore a factor that will lead the debt burden to grow further, minimising the effects of the debt reduction of February 2012.

Greece is, thus, a country with a serious ‘cash flow problem’. The attempts to achieve primary surplus through fiscal consolidation are likely to push the economy towards even deeper recession, while the CA deficit is likely to hinder the attempts to reduce the total budget deficit. Without a boost to competitiveness that could stimulate the external demand for Greek products and reduce the CA imbalance, the debt burden is likely to keep on

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<sup>17</sup> Since 2001, the real effective exchange rate of Greece appreciated by 20% (based on prices) to 40% (based on unit labour costs. (Ghezzi and Pascual 2011), making the country uncompetitive in comparison to other eurozone MS. The sources can be seen in the deeply rooted structural problems such as high administrative costs, increasing labour costs and inefficient publicly-owned enterprises.

increasing. At the same time, the process of internal devaluation is likely to have a negative effect on nominal GDP and tax bases, compromising the process of fiscal consolidation.

### **Political uncertainty**

The success of the second bailout package is further jeopardised by political uncertainty in Greece in the years of its implementation. Around the parliamentary elections in May 2012, fears of Greek exit (*Grexit*) from the Eurozone arose, exacerbating the historically lowest investors' confidence (Financial Times 2012c). The parliamentary elections of 6<sup>th</sup> of May 2012 ended in a failure to form a coalition government and had to be repeated in mid-June 2012. The newly formed government immediately sought a two-year extension of the rescue programme and additional funding until 2017, given the delays in structural reform and the worse than expected recession (Hope 2012).

The government is under high pressure from a society that protested almost continuously over the last two years. In the case of the first rescue programme, the manifestations intensified before each round of discussion on austerity measures in the Parliament. In fact, 'political instability' and 'social unrest' are named as one of the main causes of the failure of the first bailout for Greece in the Troika report of 2012 (European Commission 2012b). The risk of further social unrest is significant, given that Greece needs further austerity: "Current projections reveal a cumulated fiscal gap in 2013-14 of 5½ per cent of GDP. Therefore, substantial additional expenditure cuts will have to be announced and adopted by Greece in the coming months." (European Commission 2012b, p.6). The government request for prolonging the programme includes slowing the adjustment process with the cuts spread over a longer period, yet it remains to be seen, how much the Troika is willing to compromise.

Addressing the political uncertainty was the main motivation to appoint an interim, independent Prime Minister in November 2011. The task of the new government leader, Lucas Papademos, who previously served as Vice President of the ECB, was to ensure smooth implementation of austerity measures until the May elections. In the period that the second bailout package was being negotiated, the leaders of political parties in Greece signed legally binding letters in which they promised that they will continue with austerity measures until 2020 (Phillips 2011).

Nevertheless, despite this binding political commitment, private sector creditors remain sceptical about political stability in the mid-term (Morgan Stanley 2012, p.6).



Regaining investor confidence is indispensable. Without this trust, Greece will not be able to return to the markets in 2015 and thus fail to achieve the goal of debt sustainability in 2020.

### **Weak institutions**

Finally, the success of the second bailout package relies on the ability to implement politically difficult structural reforms (labour market, liberalization of closed sectors, privatization, improving business environment). “The debt trajectory is extremely sensitive to program delays, suggesting that the program could be accident prone, and calling into question sustainability” (IMF 2012a, p.6). If Greece fails to implement these reforms, the competitiveness gains and the rebound of the economy will be postponed, compromising the goals of the package.

Policy implementation of the first rescue programme in Greece was at most partial. In the words of an ECB official: “No one imagined how bad the fiscal situation was and how low the administrative capacity of the state is to actually implement the programme” (Interview 13.04.2012). Indeed, as the Troika reported in March 2012, Greek progress in “modernising revenue administration and expenditure control, and steps taken in the fight against tax evasion and the prompt settlement of payments to suppliers have remained far too timid.” (European Commission 2012b, p.1).<sup>18</sup> The inability to adopt reforms – “inefficient structures, inadequate access to information and lack of coordination” (OECD 2011, p.23) – contributed to the lack of confidence of the markets in the financing ability of Greece. Unless the administrative capacity of Greece increases significantly, their weakness is likely to contribute to the failure of the second bailout package.

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The first hypothesis is valid in the case of Greece. Greece may be unable to reduce its debt burden to 120.5%, because it is likely to enter recession harder than expected, as the austerity takes its contractionary toll. Political uncertainty and institutional weaknesses of Greek administration will most probably lead to delays of implementation of the programme, further postponing the moment of GDP rebound and hindering the process of Greece regaining competitiveness, necessary to address persistent CA imbalances and achieve long term fiscal sustainability.

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<sup>18</sup> The size of the shadow economy in Greece in 2007 was equal to 27.5% of GDP, highest in the EU and close to the level of Mexico and South Korea (Schneider and Kepler 2011, p.35). As the Commission (2011b, p.13) reported in November 2011: “in total, it is estimated that there are 60bn€ outstanding in unpaid taxes. 30bn€ in uncollected tax revenues are the subject of court cases – some of which have been running for over a decade.”

#### 4.2.2 Holdout, funding and adjustment inefficiency in Greece

*Hypothesis 2: The success of sovereign debt restructuring is hindered by coordination problems and market failures in the form of holdout, funding and adjustment inefficiency.*

As argued below, the second bailout package and the accompanying initiatives of the Troika (e.g. Task Force for Greece) do address the market inefficiencies of debt restructuring in the form of holdout, funding and adjustment. The negative impact of the three inefficiencies on the result of the sovereign debt restructuring process will thus be limited (see Table 6).

Table 6. Inefficiencies of debt restructuring that may lead to its failure

Restructuring inefficiency	Relevance for the case of Greece	Comments
Holdout risk	Medium, well addressed	Thanks to the retroactive introduction of CACs in domestic law bonds, Greece was able to ensure participation of 97% of investors in the offer. Although the approach that will be taken by the government with respect to the 3% of holdouts is not clear, means to honour their bonds are earmarked in the programme.
Funding problem	Medium, well addressed	The funding needs in the 'restructuring period' are provided by the Troika (additional €130bn). If Greece is unable to return to markets after 2014, it will likely receive further EU loans.
Adjustment inefficiency	Medium, well addressed	Employing Commission's officials on the ground and disbursement of fund tranches conditional on meeting Programme targets decreases the risk of insufficient policy effort.

Source: own analysis.

#### **Holdout risk**

The holdout risk in the case of Greek debt restructuring is likely to create minor problems, only in the case of foreign law bonds.

At the outset, the holdout risk was to be mitigated by designing an 'orderly default' in the form of a voluntary bond swap with private creditors. "You do have the holdout risk, theoretically speaking, if you perform voluntary restructuring. But you have to make the offer so attractive, that for a private sector bondholder the incentives are clear." (Interview, ECB official 13.04.2012). For this reason, Greece, in coordination with the Eurogroup and the IMF, negotiated with the IIF, representing private bondholders, from summer 2011 to early 2012. The final deal of February 2012 implicitly assumed that at least 95% of creditors agree to the restructuring offer and the total sum of debt that could get restructured amounted to €205 billion. The very design of the debt swap, including sweeteners in the form of EFSF

triple-A bonds, equivalent to upfront cash payment, was to incentivise the investors to agree to the deal (Interview, EU official 25.04.2012).

In the case of domestic bonds, the holdout risk was ultimately dealt with by retroactive introduction of CACs on 23<sup>rd</sup> February 2012 in the Greek law bonds (86% of the bonds to be restructured, worth €177 billion). Initially, the CACs were not intended to be used, but as the participation rate of 9<sup>th</sup> of March 2012 did not exceed the required 95%<sup>19</sup> the Greek authorities decided to execute the CACs. In this way the nature of the debt restructuring changed from voluntary to ‘coercive’ and the holdout creditors were bound to the offer by the vote of qualified majority. The bonds governed by domestic law were swapped on 12<sup>th</sup> of March.

The holdouts of foreign law bondholders could not be forced to agree by retroactive inclusion of the CACs. Greek authorities extended the deadline for the investors to accept the swap until 20<sup>th</sup> of April 2012. In the end, some of the creditors holding foreign bonds did not agree to the offer (approximately €5.6 billion – Greek Ministry of Finance 2012d), yet the total participation rate of 96.9% was sufficient for the success of the restructuring. Funds to deal with the holdouts up to 5% are provided for in the Programme. (See Table 7, p.24, Bonds & loans after exchange).

Nevertheless, the uncertainty about how the restructuring would be executed and what solutions for holdouts would be used created unnecessary uncertainty among investors, contributing to the volatility of Greek bond yields<sup>20</sup> (Georgiopoulos and Papadimas 2012). The speculation on PSI that intensified from October 2010 led to a rapid increase of market distrust towards Greece, and escalated after the restructuring, when the Greek bonds received a sovereign debt rating downgrade to ‘defaulted’.

### **Funding problem**

Since the debt restructuring of the second bailout package is coupled with a funding programme by the EU and IMF, Greece does not face a funding problem until the end of 2014.

In the provisional schedule of disbursement for the new programme, the EU and IMF plan to disburse €164.5 billion by the end of 2014 (see Table 7) and continue with assistance in 2015 and 2016, when Greece is to regain access to market financing. The final amount of

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<sup>19</sup> 85.8% for Greek law bonds (€152 billion) and 69.8% for foreign law bonds (€20 billion).

<sup>20</sup> Greece has not issued debt on the markets since mid-2010, so the yields do not represent the actual cost of financing of Greece, but rather the investor perception of the bond riskiness.

assistance – €172.7 billion is higher than the officially stated €130 billion, as the remaining non-disbursed funds from the first rescue programme for Greece are now a part of the second one.

The funding problem of Greece is thus non-existent in the next years. In contrast to developing countries defaulting in the 80s and 90s, Greece can rely on the support of the EU, simply because it is a member of a supranational entity (Interview, EU official 25.04.2012). EU policy makers have signalled that they stand ready to provide Greece with adequate support until it regains market access (also beyond 2015), *if* the government complies with agreed conditionality.

Table 7. Financing needs and sources for Greece 2012 – 2020

in billion €	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Financing needs</b>									
<b>A. Government cash deficit</b>	<b>12.2</b>	<b>7.1</b>	<b>1.8</b>	<b>1.7</b>	<b>2.4</b>	<b>2.1</b>	<b>2.1</b>	<b>1.6</b>	<b>1.3</b>
Primary deficit/surplus	-2	3.7	9.4	9.7	10.1	10.6	10.5	11	11.3
Interest payments	10.2	10.8	11.2	11.5	12.5	12.6	12.6	12.6	12.6
<b>B. Other government cash needs</b>	<b>6.9</b>	<b>6.3</b>	<b>5.9</b>	<b>1.8</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>
<b>C. Maturing debt</b>	<b>18.8</b>	<b>15.6</b>	<b>25.4</b>	<b>17</b>	<b>7.8</b>	<b>8.6</b>	<b>5.8</b>	<b>10.5</b>	<b>9.8</b>
Bonds & loans after exchange	12.8	10.8	18	8.4	4.4	6.9	3.3	6.9	2.4
EU repayment	0	0	0	0	0	0	0	0	2.8
IMF repayment	0	1.7	7.4	8.6	3.2	1.4	2.5	3.6	4.5
Short-term debt	6	3.1	0	0	0	0	0	0	0
<b>D. Cost of PSI</b>	<b>78.3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Cash upfront	29.5	0	0	0	0	0	0	0	0
Bank recapitalisation	48.8	0	0	0	0	0	0	0	0
<b>Gross financing needs (A+B+C+D)</b>	<b>116.3</b>	<b>29.1</b>	<b>33.1</b>	<b>20.5</b>	<b>11.1</b>	<b>11.5</b>	<b>8.7</b>	<b>13</b>	<b>12</b>
<b>Financing sources</b>									
<b>E. Private financing sources</b>	<b>3.2</b>	<b>4.3</b>	<b>4.4</b>	<b>13.3</b>	<b>8.9</b>	<b>11.1</b>	<b>8.4</b>	<b>12.7</b>	<b>11.9</b>
Market financing	0	0	0	7.6	3	5	3.3	7.4	6.4
Privatisation	3.2	4.3	4.4	5.7	5.9	6.1	5.1	5.3	5.5
<b>F. Additional OSI</b>	<b>1.2</b>	<b>0.6</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>
<b>H. EU-IMF assistance</b>	<b>112</b>	<b>24.2</b>	<b>28.3</b>	<b>6.6</b>	<b>1.6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Gross financing sources (E+F+H)</b>	<b>116.3</b>	<b>29.1</b>	<b>33.1</b>	<b>20.5</b>	<b>11.1</b>	<b>11.5</b>	<b>8.7</b>	<b>13</b>	<b>12</b>

Source: adapted from European Commission (2012b, p.30, 46).

### Adjustment inefficiency

The adjustment inefficiency was one of the causes why the first programme for Greece failed. Anticipating support by the international community, the Greek government had

relatively low incentives to enact politically difficult reforms.<sup>21</sup> As was noted in the assessment of the first rescue programme for Greece: “On several occasions, there were legitimate doubts about the ownership of the programme by the Greek government” (European Commission 2012b, p.1). It is an important observation given that the success of the second bailout package critically depends on prudent implementation of fiscal policy recommendations, timely privatization, liberalization and labour market reforms, necessary to allow Greece to fund its future obligations in the mid- and long-term.

The moral hazard of the government is currently addressed in two ways. Firstly, the tranches of the bailout fund are disbursed quarterly, conditional on meeting specific targets by Greece. Failure to meet the targets may lead the creditors to withholding the money, as was the case with the three-month freeze of the €31.5bn disbursement in August 2012 following the uncertainty over the Greek government’s ability to follow the adjustment path.

Secondly, a special Task Force for Greece was established in June 2011 including experts that provide technical assistance for Greece and support policy efforts in three main areas:

- “growth and employment fostering measures to speed up and focus in the EU funds as well as to create improved business environment and sectorial measures for energy, tourism, agribusiness and waste management,
- taxes, expenditure control and privatisation,
- horizontal structural reforms for the labour market, public health, justice, public administration and waste management” (European Commission 2011a).

It is important to note though, that the implementation of the programme remains within the competence of Greek authorities, who will now only be supported and advised by Troika experts.

While the employment of the Task Force may well solve the problem of moral hazard of the Greek government, another risk appears, namely that Greek society will have difficulty accepting “external interference with domestic affairs in conjunction with deep austerity” (Morgan Stanley 2012). The social unrest puts pressure on the Greek authorities who in turn face yet another incentive to reduce the policy effort. Nevertheless, Greece relies on the official funding from its creditors and cannot afford to sidestep the planned reforms.

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<sup>21</sup> In June 2011, Greek finance minister Evangelos Venizelos suggested that Europe needs saving Greece more than Greece does, following the famous Keynes logic: “If I owe you a pound, I have a problem. If I owe you a million, the problem is yours.” (Economist 2011).

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The second hypothesis does not apply in the case of Greece, as the inefficiencies are well addressed. The holdout inefficiency poses problems only in the case of foreign law bonds, yet some funds are earmarked for this purpose. The funding problem is solved through international loans to Greece until at least 2014. The adjustment inefficiency is partly mitigated by the fact that the distribution of tranches of the money depend on meeting specific targets. Additionally, the employment of the Special Task Force for Greece shall help monitor the policy effort.

#### 4.2.3 Greek debt restructuring costs and implications

*Hypothesis 3: The success of sovereign debt restructuring is minimized by the costs it incurs, particularly the reputation and domestic costs.*

The direct costs of debt restructuring in the case of Greece are limited (see Table 8). Since the debt restructuring happened two years after the beginning of the Greek sovereign debt crisis, the markets had enough time to prepare for the ‘shock’ and the risk of the loss in value of Greek instruments was already priced in by the markets (see Graph 1, p.13). Nevertheless, the restructuring may have serious implications for the eurozone as a whole.

Table 8. Implications of debt restructuring

Restructuring inefficiency	Relevance for the case of Greece	Comments
Market exclusion	High	The bailout programme assumes market exclusion until the end of 2014. Serious doubts remain however, whether Greece will return to the markets from 2015 onwards.
Domestic costs	Medium	The direct costs of the PSI deal are equal to €78.3 billion, out of which almost €50 billion is devoted for the recapitalization of banks. Nevertheless, the banking sector is going through a difficult period, as the write-downs go together with a decrease in the quality of loan portfolios, loss in deposits and limited access to liquidity.
Contagion and reputation spillovers	Medium	ISDA declared the PSI agreement a ‘credit event’ which led to repayments of about \$2.5 billion in CDS – a relatively small sum. The restructuring did not cause particular distress on financial markets. Nevertheless, the reputation of other periphery countries and the eurozone as a whole is under question, as markets anticipate that PSI restructuring could be extended to other countries.

Source: own analysis.

### **Market exclusion**

The market exclusion that Greece experiences in 2012 is not a direct ‘punishment’ for the current debt restructuring: Greece is without access to international financing for two years. The second bailout package assumes that Greece will only return to capital markets in 2015.

The success of the bailout package is under threat though, if Greece does start sustainable bond issues as planned. There are number of problems that could complicate the timely market access in 2015 (European Commission 2012b, p.39). Firstly, the reduction of Greek debt will only commence from 2014, which may keep investors wary of investing in Greek bonds. Secondly, the restructured Greek bonds that are swapped in the current deal will be senior to new instruments issued in 2015, which is a disincentive for investors. Finally, in 2014 around two thirds of Greek debt will be held by the official sector. Since official debt is typically repaid first, investors may feel discouraged to invest in subordinate class of bonds.

If these expectations materialize, the success of the second bailout package will be limited and Greece will require another rescue programme.

### **Domestic costs**

The direct costs of debt restructuring in Greece do not pose a serious threat to the success of sovereign debt restructuring as they will be covered by the bailout funding. The costs of PSI equal €78.3 billion and include €29.5 billion of upfront cash payment of the EFSF sweetener and €48.8 billion for bank recapitalization (European Commission 2012b, p.46). In fact, the effect of sovereign debt restructuring on the banking sector was one of the main concerns when the PSI deal was being designed (Darvas 2011). As can be seen from Table 9, the Greek banking sector held around a quarter of the private debt that was to be restructured, while around a fifth was kept by the other European banks.

The banking sector of Greece has suffered badly in the sovereign debt crisis. The four biggest Greek banks reported in April 2012 that the combined write-downs on Greek bonds in their balance sheets following the sovereign debt restructuring amounted to €27.9 billion (Benasson et al. 2012). It is another hit to the Greek banking sector in the fifth year of a recession. More than 20% of bank deposits have been lost only in 2010, the quality of loan portfolios is steadily decreasing and the access of banks to international markets is shut off (Pascual and Ghezzi 2011). Luckily, the banking sector in distress can rely on official lenders, and even more so, if the currently discussed European Banking Union project enters into

force. Unless there is a major fall-back of confidence and no recapitalisation of banks from the private sector, the domestic costs of debt restructuring do not jeopardise its success.

Table 9. Distribution of Greek debt under restructuring

Debt distribution	in billion €
Total debt in 2011 (A+B)	355
A. Official loans	95
EU	53
IMF	20
Other	22
B. Government bonds	260
B.1. ECB	55
B.2. Private sector (debt under restructuring)	205
Investment funds, pensions, sovereign wealth funds and hedge funds	70
Greek banks	50
Other European banks	40
Greek social security funds	30
European insurers	15

Source of data: Spiegel (2011), European Commission and ELSTAT.

The outlook for the banking sector remains uncertain though. As the Economic and Financial Committee (EFC), that advises the Council, anticipates: “contagion may (...) re-emerge at very short notice (...) and re-launch a potentially perverse triangle between sovereign, bank funding risk and growth” (EFC 2012, p.1). Weakening growth perspective and sensitivity of banking sector to investor sentiments may lead to a failure to achieve the ambitious goals of the second bailout package.

### **Contagion and reputation spill-overs**

The contagion effect of debt restructuring, measured through CDS exposure, was not overwhelming and does not pose a threat to the success of the bailout package. The ECB was against debt restructuring in the first place, as little information was available about the nature and the size of exposures in the CDS market, given the opacity of that market and the fact that many market participants are simultaneously both sellers and buyers of insurance (Interview, ECB official 13.04.2012). In the end, ISDA did announce the credit event on the day that Greece executed the CACs leading to a situation “such that the right of all holders of the Affected Bonds to receive payments has been reduced” (ISDA 2012). Nonetheless, the auction of the outstanding CDS transactions on 19<sup>th</sup> of March went smoothly without any major hit to any market. It led to repayments of CDS at the level of \$2.5 billion, mostly in the United States (Whitthall 2012).



The reputation costs of the debt restructuring are more important in the case of Greece. Greek debt restructuring was the largest performed in history and set a precedent. It was the first such restructuring in a developed economy – a member of the powerful EU block and an OECD country. As such, it marks a historic moment when ‘*pacta sunt servanda*’ no longer applies and acutely undermines the confidence of investors. Without supply of credit and incoming FDI, the future debt sustainability of Greece is under serious threat.

What is more important, the reputation costs apply to the eurozone as a whole. One of the risks that the EFC saw in March 2012 was that markets believed that Greece was not a unique case and expected similar PSI deals in other countries of the eurozone (EFC 2012). The concern for the policy makers is thus that the markets will not discern between periphery countries and trigger self-fulfilling confidence crisis jeopardizing the sustainability of debt of the wider eurozone. As a result, sovereign debt restructuring in Greece could put a pressure on debt sustainability of other eurozone countries. Uncertainty of the markets and the resulting decrease in credit provision and potential postponement of investment decisions can further exacerbate the weak growth prognosis, preventing the exit from the European sovereign debt crisis.

\* \* \*

The third hypothesis is only partially validated in the case of Greece. There are serious grounds to believe that Greece will be excluded from the markets for longer than until the end of 2014, in which case the second bailout programme will essentially fail. The domestic costs, particularly on banks, should not be big enough to jeopardize the success of the restructuring, since the programme entails resources specifically to recapitalize the banks. The reputation implications of the restructuring are valid both to Greece and to the whole eurozone, and of major concern to the European policy makers.

## 5 Policy implications

*“Rather go to bed without dinner than to rise in debt.”*

Benjamin Franklin, 1732

As was argued in the previous chapter, the factors jeopardising the success of the debt restructuring process stem mostly from fundamental characteristics of the Greek economy: low growth outlook coupled with an inability to sustain primary and external surpluses given weak administrative capacity (1). To a lesser extent, the process has been put under risk due to market uncertainty over the ambiguous nature of PSI and the treatment of holdouts (2). Finally, the event is likely to have significant reputation implications, not only for Greece, but for the whole eurozone (3). These three findings lead to specific policy implications outlined in the chapter.

### 5.1 Greek fundamentals: restructuring necessary but not enough

The first policy implication is that Greece cannot become complacent now that the debt burden is reduced, but should rather put particular effort to reform the economy as soon as possible.

The restructuring of Greek sovereign debt was an inevitable step, given the insolvency of the country with no access to the markets and alarming prospects of debt evolution in the future. Reducing the burden of debt by €106 billion (Greek Ministry of Finance 2012d) is likely to give Greece some breathing space, while the bailout loans by the IMF and the EU will provide Greece with the necessary time to get back on its feet. The restructuring itself does not solve the root cause of the problems though – an inability to sustain primary balance, deeply rooted lack of competitiveness of Greece and inefficiencies of a regulatory nature. Reducing the debt burden, hypothetically even to zero, will not resolve Greek problems, as budget and CA deficits accumulate quickly.

The measures undertaken in response to the sovereign debt crisis exert downward pressure on GDP growth. In the case of fiscally profligate Greece, the most important change is the fiscal consolidation – a process that started in early 2010. In the short term, however, austerity has increased the recessionary forces that prevail in Greece since the financial crisis in 2008. Similarly, economic contraction has been fuelled by internal devaluation of inflated unit labour costs that hindered international competitiveness. Both fiscal and labour market adjustment has contributed to the current economic downturn. Yet, since Greece is a part of a

monetary union, it can neither stimulate the economy through a monetary impulse nor adjust its uncompetitive labour costs through an exchange rate.

In order to achieve debt sustainability in the mid-term, Greece needs growth. The potential sources for growth in the short term are difficult to identify though. Cutting taxes and increasing government expenditure, as was advised by the opposition in Greece (Granitsas and Walker 2011) is not an option, because Greece does not have the necessary means. The country is shut off from the capital markets and cannot expect to get unconditional transfers from the international community to finance its needs. What is necessary, thus, are the structural and growth-enhancing reforms that would raise the competitiveness of Greek exports, help attract foreign investment and increase the flexibility of the Greek labour market. The Second Economic Adjustment Programme for Greece, in contrast to the first bailout package, puts a prime on precisely such reforms.<sup>22</sup>

The exit from the debt crisis relies on more than just sovereign debt restructuring: it is crucially important that Greece restructures the economy in a wider sense. The delays of structural measures – ranging from product market liberalisation to business environment reforms and fighting tax evasion are likely to postpone the moment when Greece can start to grow and tap international markets. Overcoming the institutional inefficiencies of Greece will thus have a critical role for the success of the programme.

## *5.2 Addressing uncertainty of holdouts: towards uniform CACs*

The second policy implication is that the uncertainty of the sovereign debt restructuring process should be minimised by harmonising the use of CACs in the government securities of eurozone countries.

Uncertainty accompanying the Greek sovereign debt crisis brought suboptimal outcomes. The uncertainty of the market participants about the nature of PSI since late 2010 lead to high volatility in bond yields and euro exchange rates (Gianviti et al. 2010, p.7). The volatility was accompanied by speculation that if the Greek crisis is not properly managed, it could lead even to the demise of the euro. The uncertainty continued with regard to the way that Greece will deal with holdouts on foreign law bonds, with newspapers suggesting that the default on the instruments is inevitable (Georgiopoulos and Papadimas 2012). Such speculations negatively affect the outlook of Greece tapping the capital markets in 2015.

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<sup>22</sup> Six specific categories of growth enhancing measures are outlined in the programme: labour market, regulated professions, energy and transport, business environment, absorption of structural funds and judicial reform (European Commission 2012b).

The restructuring of sovereign debt in Greece could have been smoother and more efficient, if all the government bonds in Europe included CACs. It is thus sensible, that the Eurogroup and then the European Council decided to introduce standardised and identical CACs in all eurozone government securities from July 2013 (European Council 2011). The standardised CACs have two major benefits. Firstly, in case a PSI restructuring is bound to happen, they facilitate agreement between the debtor country and creditors, reducing the length, costs and uncertainty of the process. Secondly, independently from whether restructuring would happen or not, they discipline the markets in the sense that they prevent rapid changes of market expectations leading to bond sell-offs. At the same time, the CACs do not imply increased probability of debt restructuring or default, especially if they are uniform among all the eurozone countries.

### *5.3 Reputation implications: sovereign debt restructuring in a monetary union*

Finally, the case of Greece leads to a conclusion that sovereign debt restructuring should not be contemplated as a universal solution to over-indebtedness problems in Europe, particularly because of the reputation implications.

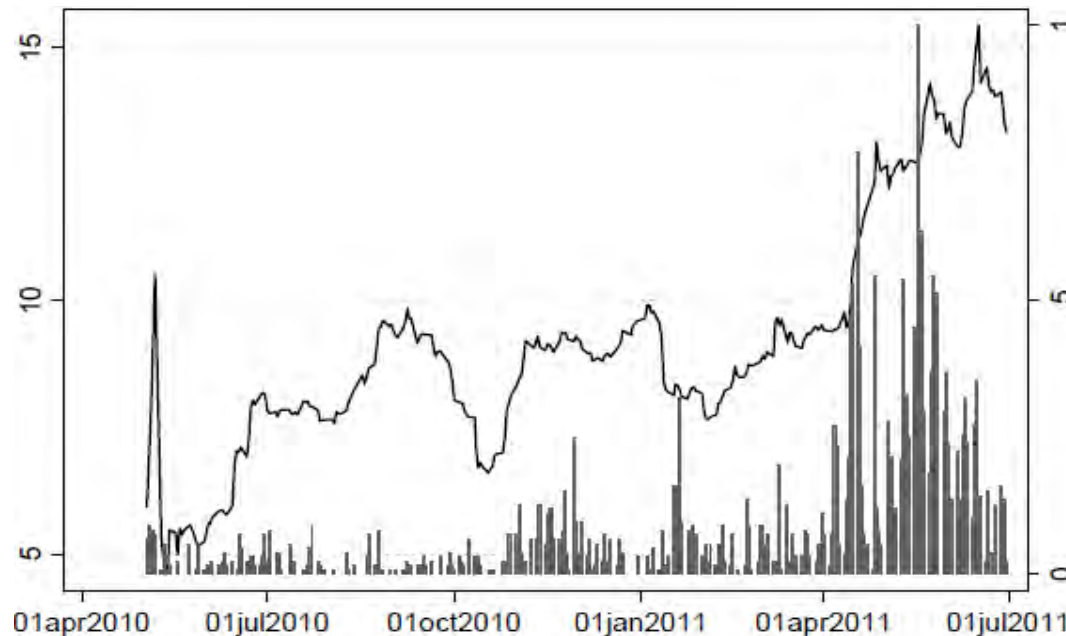
The European Commission defines three problems with sovereign debt in the eurozone Member States: liquidity, sustainability and the solvency problem. (Interview, EU official 25.04.2012). The illiquidity requires time (debt rescheduling and additional funding), unsustainability requires policies (fiscal consolidation, competitiveness enhancing), while insolvency requires debt restructuring in the form of debt reduction. According to the ECB and the Commission, other periphery countries, particularly Spain and Italy, remain solvent (Interview, ECB official 13.04.2012; EU official 25.04.2012), and thus do not require debt reduction in the first place.

Speculation about European sovereign debt restructuring has a nature of a self-fulfilling prophecy. Concerns about debt restructuring lead to higher risks of reduced yield and increase in the interest rate demanded by investors. The servicing of the debt becomes more difficult for a state, as the amount of interest payments increase. This in turn endangers the debt sustainability even more and worsens the prospect of default.

Once restructuring starts to be contemplated in public, it will have to happen. “If Europe starts, as it did at the end of 2010, speak about restructuring of Greek debt, the restructuring becomes inevitable. We come from illiquidity immediately to solvency issues.”

(Interview, EU official 25.04.2012). The loss of trust in the ability of a government to repay its obligations instantly affects its bond yields and may push a solvent, but temporarily illiquid country, directly into insolvency. The influence of statements on restructuring on the bond yields was clear during the Greek sovereign debt crisis (see Graph 6).

Graph 6. Greek government bond spreads over Germany and politicians' statements about restructuring



Source: Mohl and Sondermann (upcoming, 2013). LHS – Greek government bond spreads in percentage points. RHS – Intensity of noise talk about restructuring, scaled between zero and 1. Statements on restructuring extracted from around 15,000 wire service reports.

The reputation costs of debt restructuring in one eurozone country can quickly spill over to other eurozone MS. The precedent of debt restructuring for Greece brings the perception to the markets that some payment obligations in Europe are not honoured. “We are crossing the Rubicon here” (Interview, ECB official 13.04.2012) – sovereign debt, allegedly a risk-free asset class, is not fully repaid in Europe. This affects sovereign debt as an entire asset class, not only of the country under sovereign debt restructuring, but of all eurozone countries that appear similar to market analysts.

A debt restructuring in one MS may undermine investor confidence in the euro as a whole. In the case of Greece, this negative effect is luckily relatively small, given that all the policy makers constantly repeat that Greece is a unique case that will not re-emerge elsewhere. Introducing sovereign debt restructuring as a universal solution could have dire consequences for the investment attractiveness of the EU as a whole. This ability to attract investment is particularly important in Europe right now, given the weak economic outlook.

## 6 Conclusion

The aim of this Briefing was to investigate the risk factors that decrease the effectiveness of debt restructuring, with a particular focus on the case of Greece. The analysis of three groups of factors: (1) fundamentals of the debtor, (2) design of the restructuring (holdout, funding and adjustment) and (3) the costs of debt restructuring, reveals that resolving the sovereign debt problems in Greece will be a challenge for two main reasons.

Firstly, regaining a sustainable level of debt is jeopardised by the fundamentals of Greece. The country has a very low growth outlook exacerbated by fiscal consolidation and suffers from an inability to sustain primary and external surpluses. GDP growth is likely to be compromised as Greece simultaneously follows two adjustment goals (devaluation and closing the fiscal gap) which will worsen the recession in Greece in the short term and contribute to the alarming level of unemployment. At the same time, the administrative ineffectiveness of Greek institutions is likely to cause delays in the implementation of the structural and growth-enhancing reforms and further postpone the moment when Greece exits recession, preventing debt-to-GDP ratio from substantial decrease. Even with the employment of the special Task Force for Greece of an advisory nature, the ownership of the reforms stays within the Greek government.

Secondly, the bailout package is not likely to allow Greece to tap the capital markets in 2015 as planned. The scale of the current debt reduction will only allow the Greek government debt to fall in 2014, two years after private investors note 74% decrease in NPV of their securities, making it unconvincing for future private creditors. At the same time, factors like the structure of Greek debt in 2014 (two thirds in official debt) and the continuing political uncertainty in Greece discourage investment in Greek bonds. Failure to regain market access in 2015 will give rise to a funding problem and necessitate another bailout package, possibly coupled with further debt reduction.

The sovereign debt restructuring in Greece does not only have shortcomings though. Retroactive introduction of CACs in the bonds governed by domestic law and ‘sweetening’ the offer with upfront cash payment and GDP-linked securities allowed Greece to reach the necessary participation rate of 95% and successfully addressed the holdout risk. The adjustment inefficiency is minimised too, since the disbursement of rescue funding tranches depends on meeting specific targets outlined in the programme.

The study of Greece leads to specific policy implications of relevance both to Greece and to the European Union. For Greece, it is indispensable to enact the structural and growth-enhancing reforms as proposed in the second bailout package as soon as possible. The reforms will boost Greek growth in the mid-term and are the only politically acceptable way for Greece to exit the crisis, as neither unconditional transfers nor expenditure-led boom are viable. Even writing off all the debt will not solve the Greek problems, since excessive budget and CA deficits accumulate quickly. For the EU, introduction of uniform CACs is proposed, that will reduce the market participants' uncertainty. The political agreement at the European Council level to standardise the government securities issued in the eurozone from July 2013 is thus a positive development.

Finally, sovereign debt restructuring is not a universal solution for over-indebtedness in the EU. Debt restructuring does not happen at no cost: it may lead to market exclusion and exert pressure on the domestic economy, particularly through the banking system. In the highly interconnected banking system in the EU, triggering CDS repayments could lead to severe tensions, with non-linear or threshold effects in financial markets, resulting in widespread market instability. At the same time, sovereign debt restructuring has reputation implications which spread easily between countries that appear similar to market analysts. Given the self-fulfilling nature of sovereign debt crises, speculation about debt restructuring makes it inevitable. This reputation cost affects the sovereign debt as a whole asset class and has dire consequences for European investment attractiveness, desperately needed in the EU given the weak economic outlook.

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