WP-16-02

ESMT White Paper

# WHERE DID THE GREEK BAILOUT MONEY GO?

## DRAFT VERSION

JÖRG ROCHOLL, ESMT
AXEL STAHMER, ESMT

ISSN 1866-4016

# Citation

Rocholl*, J., and A. Stahmer (2016). *Where did the Greek bailout money go?* ESMT White Paper No. WP–16–02.

* Contact: Jörg Rocholl, ESMT, Schlossplatz 1, 10178 Berlin,
Phone: +49 30 21231-1010, joerg.rocholl@esmt.org.

# Contents


| | | |
|---|---|---|
| **1.** | **Executive summary** | **4** |
| **2.** | **Introduction** | **5** |
| **3.** | **Where did the money come from?** | **6** |
| 3.1. | The first programme | 6 |
| 3.2. | The second programme | 7 |
| 3.3. | The third programme | 9 |
| **4.** | **Where did the money go?** | **11** |
| 4.1. | The first and second programmes combined | 11 |
| 4.2. | The March 2012 government debt restructuring | 13 |
| 4.3. | Planned uses of the third programme | 15 |
| **5.** | **Broader context and implications** | **16** |
| **6.** | **Conclusion** | **19** |
| **References** | | **20** |


# Figures

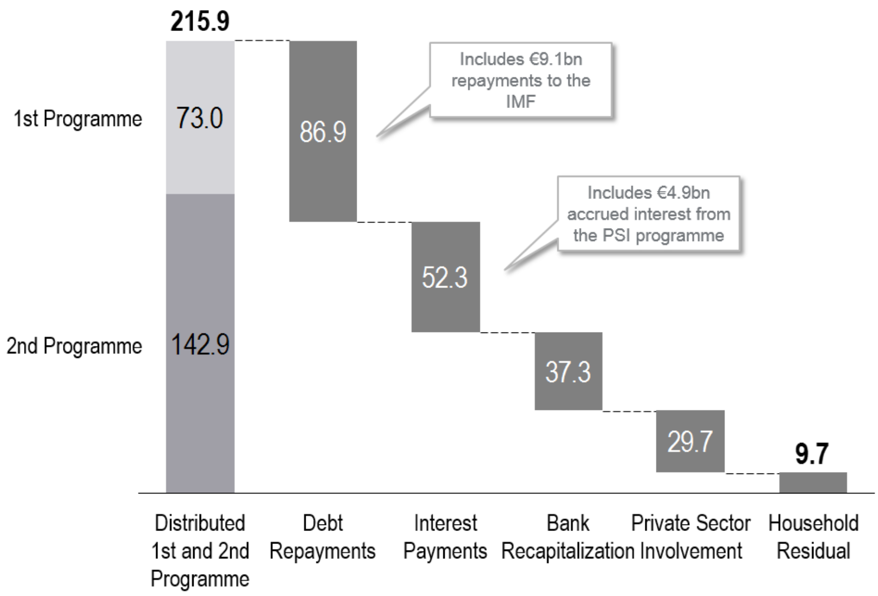

| | | |
|---|---|---|
| Figure 1: | 1st and 2nd Economic Adjustment Programme uses [€ bn] | 4 |
| Figure 2: | 1st Economic Adjustment Programme [€ bn] | 7 |
| Figure 3: | 2nd Economic Adjustment Programme [€ bn] | 8 |
| Figure 4: | 1st and 2nd Economic Adjustment Programme [€ bn] | 9 |
| Figure 5: | 1st and 2nd Economic Adjustment Programme sources and uses [€ bn] | 12 |
| Figure 6: | Debt restructuring in 2012 [€ bn] | 13 |
| Figure 7: | Greece total debt (ESA10) 2011 vs 2012 [€ bn] | 14 |
| Figure 8: | 3rd Economic Adjustment Programme (2015-2018) [€ bn] | 15 |

# 1. Executive summary

This paper analyzes the flow of money for the different Greek bailout funds and concentrates on two key questions. First, where did the money come from? Second, where did the money go to? Finally, the paper discusses the findings in a broader context and derives policy implications.

Figure 1 presents the main results and exhibits that only €9.7 billion or less than 5% of the total amount of €215.9 billion being distributed in the 1st and 2nd programme were not used for debt-related payments and bank recapitalizations and thus directly contributed to the Greek fiscal budget. In contrast, €139.2 billion[1] or more than 64% were used to repay the existing debt and serve interest payments. Furthermore, €37.3 billion or 17% were used to recapitalize Greek banks, while the remaining €29.7 billion or 14% provided incentives for investors to engage in the Private Sector Involvement (PSI) in March 2012.[2]

**Figure 1: 1st and 2nd Economic Adjustment Programme uses [€ bn]**




Source: European Commission, European Financial Stability Facility, Hellenic Statistical Authority, IMF.

---

1 Thereof €9.1 billion were repayments to the IMF.

2 The additional accrued interest payment of €4.9 billion, which was also part of the PSI, is already accounted for in the general government interest payments.

# 2. Introduction

The question on how to treat Greek government debt has resulted in major discussions among policy-makers, academics, financial specialists, and the general public at least since the outbreak of the Greek government debt crisis in early 2010. This holds in particular for the question of where the money flew that was designated for the Greek bailout. The analysis of this question has resulted in vastly differing estimates by different individuals and institutions. The reported values for the share of the funds from the first and second Greek bailout programmes to go to creditors cover a range from 33% to almost 100%. But what is the correct value?

A correct answer to this question is of crucial importance in the debate on how to find the best recipe to fight this crisis as well as to best tackle future government debt crises. The purpose of this paper is thus to shed light on the exact numbers and provide transparency in a descriptive way. This study focuses exclusively on the fiscal rescue packages, as agreed upon by European and international institutions and parliaments, and ignores other types of intensely discussed mechanisms including Target 2/ELA. The study extends an open invitation to fellow researchers and the public to critically check the very detailed figures and thus to create a sustainable and commonly agreed upon basis for further discussions.

The discussion in this paper is related, but not equivalent to the question of how the cumulated Greek primary deficit after adjusting for the support to financial institutions of €16.3 billion was financed in the years 2010-2014.[3] [4] This analysis would include a number of payments not analyzed in this article such as gains from privatizations, short-term financing via T-Bills and repo operations, payments caused by the Securities Markets Programme (SMP) and the Agreement on Net Financial Assets (ANFA) programme of the ECB, contributions to European and International Monetary Fund (IMF) programmes as well as the management of cash reserves and arrears. Moreover, the first and second bailout programmes do not cover the full 2010-2014 period.

---

3 Cumulated data from the Hellenic Statistical Authority (2014a), Press release and Hellenic Statistical Authority (2015a), Press release.

4 The primary deficit in other sources may include the support of financial institutions. Deficit and surplus data from different sources can vary depending on the use of ESA95 or ESA10 accounting standards and the accounting methods of the IMF.

# 3. Where did the money come from?

The Greek bailout funds comprise three economic adjustment programmes. The first programme started in May 2010 and was planned to run until June 2013. It ended prematurely in March 2012, when it was succeeded by the second programme. The second programme was initially planned to be finalized by the end of 2014, but it was extended until June 2015. The fifth review of the second programme could not be concluded and thus the programme stopped before all planned funds could be disbursed.[5] Therefore, the Greek government requested a new programme in July 2015.[6] The third programme is scheduled to run from August 2015 until May 2018.[7]

## 3.1. The first programme

The first programme had a planned initial volume of €110 billion. Figure 2 shows that €80 billion were provided by the European Union (EU) in the form of bilateral loans through the Greek Loan Facility (GLF) and €30 billion were contributed by the IMF through the Stand-by Arrangement (SBA).[8] The overall programme amount was lowered by €2.7 billion, as Slovakia did not participate and Ireland and Portugal decided to seek financial assistance themselves, leaving €107.3 billion to be distributed.[9] The disbursed volume amounted to €73.0 billion with €52.9 billion coming from the EU and €20.1 billion from the IMF.[10] This left €34.3 billion of the first programme undisbursed, which are €24.4 billion from the EU and €9.9 billion from the IMF.

---

[5] European Commission, Economic and Financial Affairs, Greece. Financial assistance to Greece.

[6] Detail of the request can be found in the official document: European Commission, Directorate-General for Economic and Financial Affairs (2015). Greece – request for stability support in the form of an ESM loan.

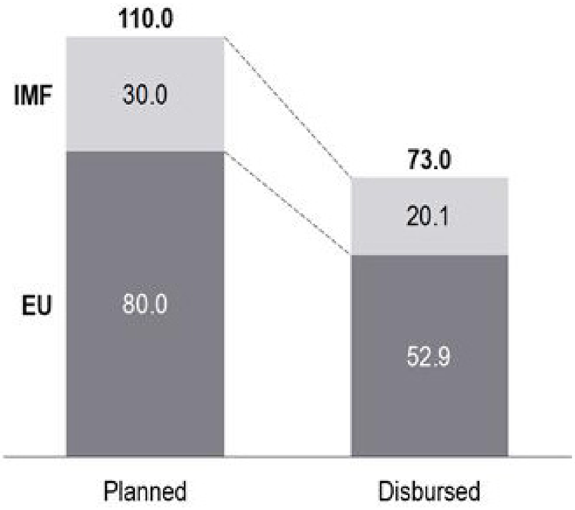
[7] A comprehensive overview is provided on the European Commission webpage.

[8] European Commission, Directorate-General for Economic and Financial Affairs (2012). The Second Economic Adjustment Programme for Greece, *Occasional Papers* 94, 5.

[9] European Commission, Directorate-General for Economic and Financial Affairs (2011). The Economic Adjustment Programme for Greece, 5th ed., *Occasional Papers* 87, 5.

[10] European Commission, Directorate-General for Economic and Financial Affairs (2014). The Second Economic Adjustment Programme for Greece, 4th ed., *Occasional Papers* 192, 69.

**Figure 2: 1st Economic Adjustment Programme [€ bn]**




Source: European Commission.

## 3.2. The second programme

The second programme comprised a total volume of €172.6 billion. Figure 3 exhibits the composition of the total volume, which is the sum of €34.3 billion undisbursed fund from the first bailout package, €130.1 billion of new funds and an additional IMF loan of €8.2 billion to be disbursed after 2014.[11] The total bailout amount of €164.4 billion, representing the bailout package net of the additional IMF loan, is frequently mentioned in different public sources. The total IMF contribution of €28.0 billion is made up of €9.9 billion in undisbursed funds, €9.9 billion of new funds, and the additional loan of €8.2 billion.[12] The payments from the SBA facility were cancelled and all new funds distributed under the IMF's Extended Fund Facility (EFF). The EU pledged additional €120.3 billion on top of the undisbursed €24.4 billion from the first programme, committing to a total of €144.7 billion.[13] The payments of the European countries were made through the newly created EFSF.[14] The disbursed volume amounted to €153.8 billion,

---

[11] (2013) European Financial Stability Facility, 18.

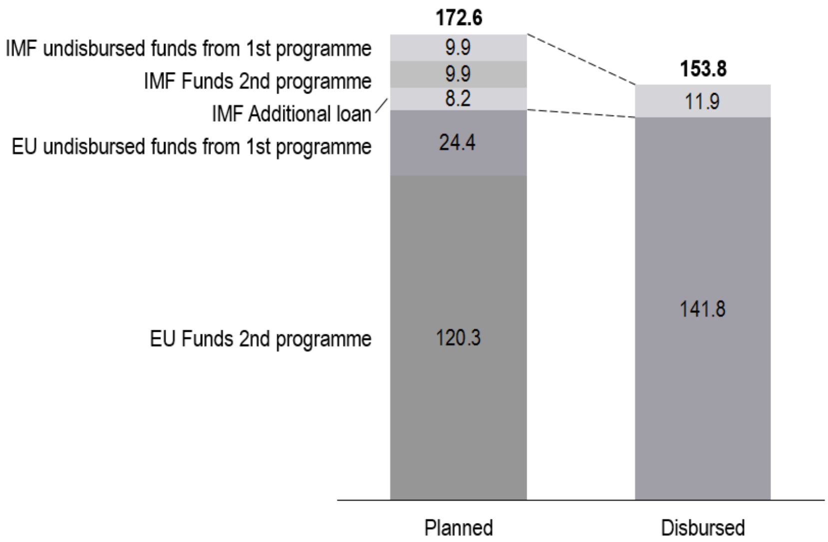
[12] The complete planned disbursement schedule is available at: International Monetary Fund (2014). Greece, *IMF country report* 14/151, 55.

[13] European Commission, Financial assistance to Greece.

[14] European Commission, The Second Economic Adjustment Programme for Greece, 5.

€141.8 billion stemming from the EU and €11.9 billion from the IMF.[15] This leaves €18.8 billion undisbursed compared to the total amount of €172.6 billion initially planned. Moreover, the Hellenic Financial Stability Fund (HFSF) paid back €10.9 billion to the EFSF in February 2015, which reduces the total disbursed EU funds from €141.8 billion to €130.9 billion.[16]

**Figure 3: 2nd Economic Adjustment Programme [€ bn]**




Source: European Commission, European Financial Stability Facility.

In combination, the first and second programmes amounted to €226.8 billion in disbursed funds and €215.9 billion net of the HFSF repayment, €73.0 billion from the first programme and €153.8 (€142.9 billion net) from the second programme, leaving a total of €18.8 billion undisbursed.[17] In sum, the IMF disbursed €32 billion and the EU €194.8 billion (€183.9 billion net), as shown by Figure 4.

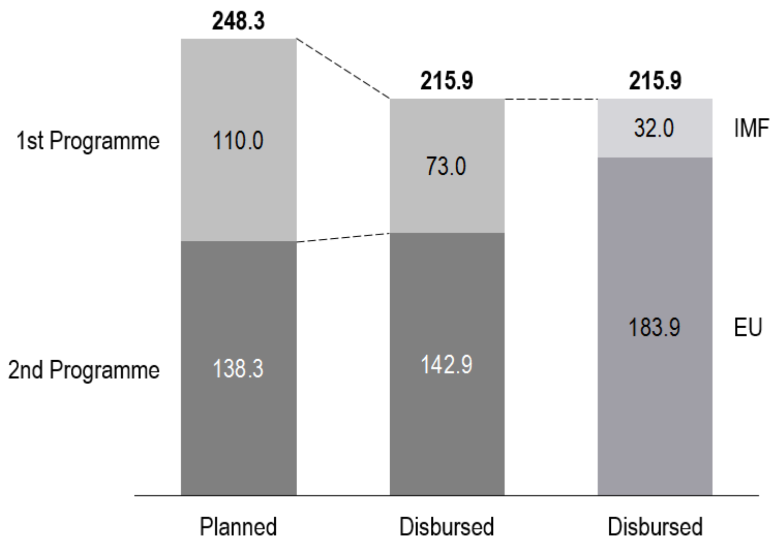
---

15 A different rounding in the original documents of the IMF and EU leads to €153.8 billion as the sum of EU and IMF payments.

16 European Financial Stability Facility, Lending operations, Greece. EFSF programme for Greece (expired).

17 European Commission, The Second Economic Adjustment Programme for Greece, 69.

**Figure 4: 1st and 2nd Economic Adjustment Programme [€ bn]**




Source: European Commission.

## 3.3. The third programme

In July 2015, the Greek government officially requested further financial assistance. Following the approval by national governments, the board of the European Stability Mechanism (ESM) approved the Memorandum of Understanding (MoU) in August 2015.[18] The third programme comprises a volume of €86 billion, all of which being pledged by the EU through the ESM, which replaces the EFSF.[19] The payments are subject to milestones outlined in the MoU, which include deregulation, reform, and privatization measures. Until the end of 2015, the first tranche amounting to €26 long term government bonds and €9.1 billion was fully disbursed, of which €10 billion was distributed through ESM notes with an average maturity of 32.5 years for bank recapitalization/resolution and additional €16 billion through ESM loans with an average maturity of 32.34 years. Of the €10 billion for bank recapitalization, €5.4 billion were used and the remaining ESM notes were cancelled, reducing the net disbursed amount of the first tranche to €21.4 billion.[20] The programme is subject to the privatization schedule (Asset

[18] The European Commission, on behalf of the European Stability Mechanism. Memorandum of understanding for a three-year ESM programme (2015).

[19] Eurogroup (2015). Eurogroup statement on the ESM programme for Greece, 2.

[20] European Stability Mechanism, Financial assistance. ESM programme for Greece.

Development Programme ADP), as set out in the MoU, which is executed through the privatization entity Hellenic Republic Asset Development Fund (HRADF).[21] The privatizations are expected to generate €6.4 billion through the sale of Greek government assets, which mainly includes airports, ports and public oil, gas and water companies.[22] [23]

---

[21] The European Commission, on behalf of the European Stability Mechanism. Memorandum of understanding for a three-year ESM programme.

[22] The European Commission, Memorandum of understanding for a three-year ESM programme, 27.

[23] Full list provided in: The European Commission, on behalf of the European Stability Mechanism. Memorandum of understanding for a three-year ESM programme.

# 4. Where did the money go?

This paper analyzes how the first and second programmes contribute to the Greek fiscal budget, net of payments for interest, debt repayments, bank recapitalizations, and debt restructuring measures. Obviously, there is no one-to-one correspondence between the programme contribution and the accumulated Greek primary budget deficit, as the latter includes other income streams, which are described above.

## 4.1. The first and second programmes combined

As described before, the total volume of disbursed funds amounted to €226.8 billion before and €215.9 billion after the HFSF repayment for the combined first and second programme over the time period between May 2010 and June 2015. This compares to the following payments that the Greek government conducted over the same time period: Figure 5 documents, in order of decreasing importance, that €86.9 billion[24] were used to repay maturing government debt (thereof €77.8 billion in medium and long term government bonds and €9.1 billion[25] in IMF loans),[26] €52.3 billion[27] were paid for interest on existing government debt, €37.3 billion[28] were paid to the HFSF, and €29.7 billion[29] were paid for the PSI. The maturing debt repayments exclude repayments of €9.1 billion before May 2010[30]

[24] This is the cumulated sum of debt payments for 2010-2014 of €96.1 billion, as provided by: International Monetary Fund, Greece. *IMF country report* 13/20, 62, International Monetary Fund, Greece. *IMF country report* 13/241, 60, International Monetary Fund, Greece. *IMF country report* 14/151, 56, less €9.1 billion which were paid in 2010 before the first bailout (European Commission, The Economic Adjustment Programme for Greece. *Occasional Papers* 77, 75.) and €0.1 billion paid in 2014 after the second bailout package (European Commission, The Second Economic Adjustment Programme for Greece. *Occasional Papers* 192, 71).

[25] Possible positive effects on the household during the time before repayment are not analyzed as part of this paper.

[26] The €9.1 billion in IMF loans are projections from the latest IMF review of the Second Economic Adjustment Programme (*IMF country report* No. 14/151, 56). The €77.8 billion also include €15.6 billion in projected repayments (*IMF country report* No. 14/151, 56). Both numbers can be subject to adjustments.

[27] Hellenic Statistical Authority (2014b), Press release 1 and Hellenic Statistical Authority (2015b) 1.

[28] European Financial Stability Facility, Lending operations.

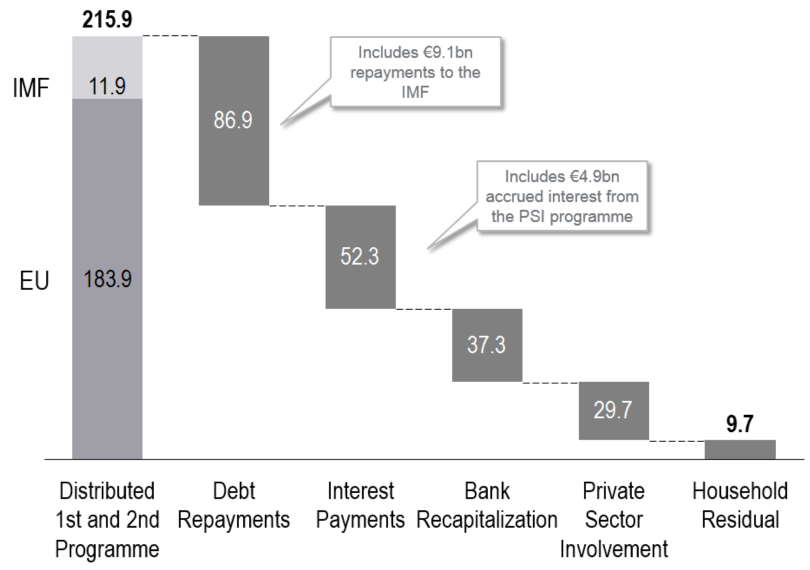
[29] European Financial Stability Facility, Lending operations.

[30] European Commission, The Economic Adjustment Programme for Greece. *Occasional Papers* 77, 75.

and €0.1 billion in the last quarter of 2014.[31] The interest payments include, due to data availability, full years and €4.9 billion of accrued interest as part of the PSI programme. It is important to note that the debt repayments also include the mentioned €9.1 billion debt repayments to the IMF.

While the repayment of maturing debt and the interest service to existing debt are straightforward, the HFSF and the PSI payments require a more detailed explanation. First, the HFSH was created in July 2010 as a private legal entity to stabilize the Greek banking sector. It received a total committed volume of €48.2 billion as part of the second bailout package, out of which €10.9 billion were repaid, resulting in a total amount of €37.3 billion. Second, the PSI payments were originally planned to amount to €30.0 billion for the sweetener plus €5.5 billion for accrued interest, while the actual payments resulted in €29.7 billion for the sweetener and €4.9 billion for accrued interest, leaving a combined total of €34.6 billion.[32] The purpose of the PSI payments was to allow and provide appropriate incentives for the Greek government debt restructuring in March 2012.

**Figure 5: 1st and 2nd Economic Adjustment Programme sources and uses [€ bn]**




Source: European Commission, European Financial Stability Facility, Hellenic Statistical Authority, IMF.

---

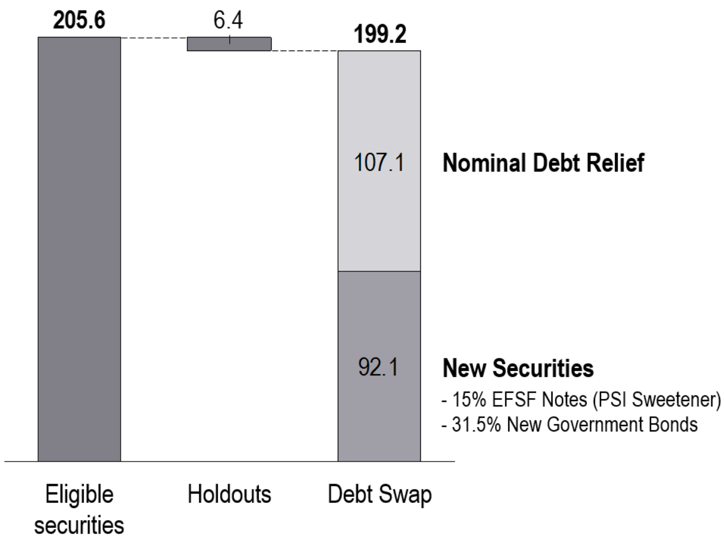
[31] European Commission, The Second Economic Adjustment Programme for Greece. *Occasional Papers* 192, 71.

[32] European Financial Stability Facility. Lending operations.

## 4.2. The March 2012 government debt restructuring

Before the debt restructuring, the Greek government had €205.6 billion in outstanding government bonds owed to private investors, which were eligible for debt restructuring.[33] Figure 6 shows that €199.2 billion took part in the debt restructuring.[34] The bondholders agreed to receive the accrued interest and exchange the bonds for a combination of PSI bonds and Greek government bonds. The relief comprised two parts.

**Figure 6: Debt restructuring in 2012 [€ bn]**




Source: European Financial Stability Facility, Hellenic Republic Ministry of Finance, Zettelmeyer et. al. *The Greek debt restructuring.*

For each €100 of eligible bonds for which their holders accepted the debt swap conditions, €15 were paid as EFSF notes as part of the second economic adjustment programme, the so-called PSI sweetener, i.e. two bonds that mature on March 12, 2013 and March 12, 2014 with a fixed rate of 0.4% and 1.0%, respectively. Another €31.5 were provided as a series of 20 bonds issued by the Greek government with equal nominal value to mature between 2013 and 2042 and with interest rates of 2.0% between 2012 and 2015, 3.0% between 2016 and 2020, 3.65% for 2021, and

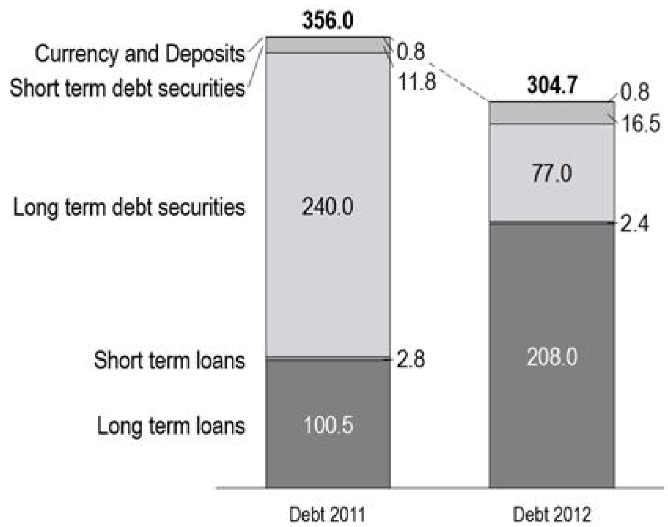
---

[33] Zettelmeyer, J., C. Trebesch, and M. Gulani (2013). *The Greek debt restructuring: An autopsy*, Peterson Institute for International Economics Working Paper No. 13-8, 34.

[34] For a detailed analysis of the eligible bonds and hold-outs please view: Zettelmeyer et. al. *The Greek debt restructuring*, 34.

4.3% thereafter.[35] This resulted in payments of €29.7 billion for the PSI Bonds and €62.4 billion for the government bonds.[36] Hence the government debt for respective bonds was reduced from €199.2 billion to €92.1 billion, constituting a debt relief of €107.1 billion or 53.7%. Additionally €4.9 billion were paid for the accrued interest of the exchanged bonds. The restructuring was followed by a €11.3 billion debt buyback financed through the second bailout programme, in which a nominal value of €31.9 billion of the newly issued Greek government bonds were bought back, reducing the face value of Greeks government debt by further €20.6 billion.[37] Figure 7 exhibits that, as a result, with the new bailout loans from the IMF and the EU, the overall Greek government debt decreased from €356.0 billion in 2011 to €304.7 billion in 2012. Put differently, the nominal gross debt relief resulting from the €107.1 billion haircut and from the €20.6 billion bond buyback programme was significantly reduced by the need to finance the HFSF and PSI payments of €37.3 billion and €34.6 billion, respectively. The overall debt burden only decreased €51.3 billion from 2011 to 2012.[38]

**Figure 7: Greece total debt (ESA10) 2011 vs 2012 [€ bn]**




Source: Eurostat Database.

[35] Hellenic Republic, Ministry of Finance (2012). Athens, Greece, March 9, 2.

[36] The numbers deviate from the official 15% and 31.5% of the €199.2 billion total bond value taking part in the restructuring. Zettelmeyer explains the difference due to the treatment of a 2057 English-law CPI indexed bond, which was only partly exchanged.

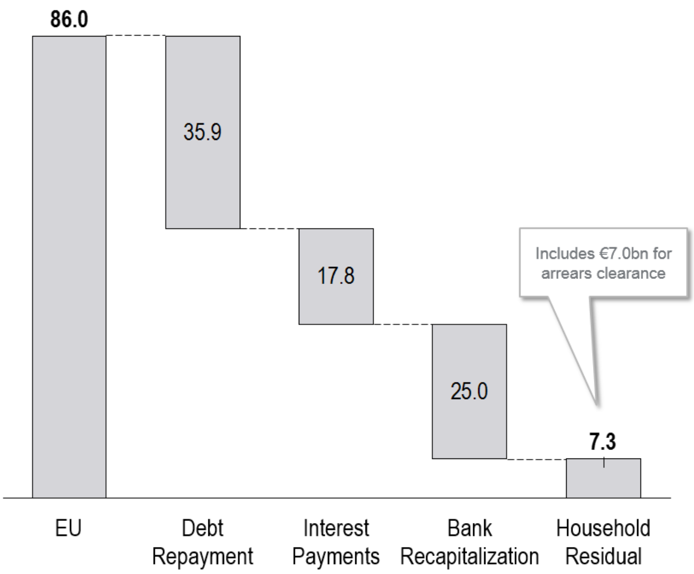
[37] Zettelmeyer et. al. *The Greek debt restructuring,* 30.

[38] Eurostat Database, *Government deficit/surplus debt and associated data.*

## 4.3. Planned uses of the third programme

The future financing needs for the time of August 2015 until July 2018 include €35.9 billion for debt amortization, €17.8 billion in for interest payments, €7.0 billion for clearance of arrears, and €25 billion for bank recapitalization and resolution costs of the financial sector, as shown by Figure 8.[39] While the exact outcome of the third programme remains to be seen, the upfront structure is very clear. The major part of the programme serves again to cover the debt repayment and interest payment to existing creditors, this time mainly the European Central Bank (ECB) and the IMF.

**Figure 8: 3rd Economic Adjustment Programme (2015-2018) [€ bn]**




Source: European Commission.

[39] European Commission, Greece - request for stability support in the form of an ESM loan, 11.

# 5. Broader context and implications

This paper analyzes where the Greek bailout funds came from and where they went. It shows that less than 5% of the overall funds went to the Greek fiscal budget, with the overwhelming rest going to existing creditors in the form of debt repayments and interest payments. Further funds were needed to provide incentives to holders of Greek government bonds to engage in the PSI and to recapitalize the Greek banks which incurred direct losses from the consequences of the PSI.

This part will discuss the findings in a broader context and derive five policy implications. First, the root cause of the crisis is the inability of the Greek state to properly manage its public budget, most dramatically evidenced by a primary budget deficit of 10.2% in 2009, following many years of keeping to failing its own yearly budget projections. Strong inefficiencies in the public sector including overemployment, tax evasion, lack of registries for real estate, and resulting uncertainty for investors have led to Greece being correctly viewed as a failed state according to many dimensions. The level of private debt and the state of the Greek banking sector were not in such a detrimental condition with total private sector debt amounting to 128.7% of GDP in 2009. This figure represents a significantly lower level of private debt than that in many other European countries, including not only other programme countries, but also Germany and France.[40] This means constitutional, organizational, and political measures in Greece have to be in force so that such a grand mismanagement of public funds cannot and will not happen again.

Second, Greek primary budget deficits were reduced significantly between 2009 and 2012 and turned into primary surpluses in 2013, not considering recapitalization payments to the banking sector. However, structural (and thus non-fiscal) reforms significantly lag behind. Some prominent examples comprise a) the still unresolved lack of public registries for land and real estate, b) the only slowly developing process of privatizations, and c) an inefficient bankruptcy law that prevents banks from cleaning their balance sheets from non-performing loans and moving on. In sum, real structural reforms are needed. They are more difficult to achieve and require more time than for example increases in tax rates, but their long-term potential is significant and they cannot easily be reverted by future governments.

---

40 OECD Database, http://stats.oecd.org/index.aspx?queryid=34814#.

Third, one may wonder why investors were willing to finance absurdly high primary budget deficits over many years and to help accumulate a public debt level of €330 billion or 146% of GDP by 2010.[41] Obviously, as reflected by the rather low risk spreads on Greek government bonds before 2010, the fear of a sovereign bankruptcy was rather mild. Financial institutions were helped in their investments by the fact that the regulation on investing in (Greek) sovereign debt was mild or non-existing. In particular, European banks did (and mostly still do) not have to provide equity for investments in European sovereign debt nor, even more importantly, do they face any maximum thresholds of how much they can invest in these securities. This leads to the outcome that Greek banks had a combined exposure of €54.4 billion towards its government.[42] These figures imply that banking regulation needs to quickly and comprehensively adjust the standards for lending to governments to those for lending to other institutions, in particular private companies. Removing regulatory privileges for government debt is important to loosen the widely cited nexus between banks and states and make the financial system more resilient.

Fourth, there were reasonable and unreasonable arguments to not conduct a haircut in Greek government debt in April 2010. The lack of an immediate significant restructuring of Greek government debt was (correctly) anticipated by investors in the years before 2010 and was mirrored in the relatively low risk premia charged by these investors. The reasonable arguments comprise in particular the fear of contagion just 19 months after the bankruptcy of Lehman Brothers and the looming risk of another financial crisis. The unreasonable arguments deal with the fear of major losses in particular in German and French banks as major investors in Greek government debt, and the resulting necessity of a recapitalization in these banks. It is reasonable to assume that the public debate would have taken a different direction if losses had been borne by Germany and France right away, making it more difficult in public sentiment to seek the responsibility in Greece alone. In sum, the lack of a haircut and the subsequent bailout packages led to the transfer of risk from private to public creditors. In general, early creditor losses are important to achieve a significant reduction of government debt, before any fresh funds should be put at risk.

Fifth, the question of debt sustainability is currently subject to major debates between the Greek government, the IMF, and the European partner countries. The

---

41 Public Debt Management Agency, *Economic indicators.* The figures might vary between IMF, OECD, PDMA and different sources due to different accounting details.

42 European Banking Authority (2011), EU-wide stress test results.

Greek government, probably correctly so, points out that the current sovereign debt level, in particular after the political and economic turmoil in 2015, is unsustainable and concludes that another debt restructuring would be necessary already at this point of time. The other side argues that a significant restructuring of existing debt has already taken place in the form of a lengthening of debt maturities and a reduction of interest rates. More importantly and less openly argued in public, Greek partners have lost trust in the Greek government to not start the same accumulation of sovereign debt again once another debt restructuring will have taken place (first implication). Second, while they acknowledge the Greek progress in closing the primary budget deficit, significant progress in structural reform still needs to take place (second implication). Furthermore, banks are not constrained by regulation in their general ability to finance the Greek state again by investing significant amounts of funds into Greek government debts (third implication). These aspects together suggest that there is good reason to delay the discussion on another debt restructuring in Greece to the time when the Greek government will have built trust again to maintain a balanced budget, when it will have finally implemented important structural reforms, and when banking regulation has accepted the necessity to remove the regulatory privileges for bank investments in government debt.

# 6. Conclusion

This paper provides a descriptive analysis of where the Greek bailout money went since 2010 and finds that, contrary to widely held beliefs, less than €10 billion or a fraction of less than 5% of the overall programme went to the Greek fiscal budget. In contrast, the vast majority of the money went to existing creditors in the form of debt repayments and interest payments. The resulting risk transfer from the private to the public sector and the subsequent risk transfer within the public sector from international organizations such as the ECB and the IMF to European rescue mechanisms such as the ESM still constitute the most important challenge for the goal to achieve a sustainable fiscal situation in Greece.

This study offers an open invitation to other researchers to critically check the detailed figures presented in this paper and to further the analysis of the primary deficit financing and broader implications such as the distribution effects of bailout programmes on the Greek economy and other EU member states.

# References

Eurogroup (2015). Eurogroup statement on the ESM programme for Greece. http://www.consilium.europa.eu/press-releases-pdf/2015/8/40802201771_en_635751847200000000.pdf (accessed April 27, 2016).

European Banking Authority. 2011 EU-wide stress test results. http://www.eba.europa.eu/risk-analysis-and-data/eu-wide-stress-testing/2011/results (accessed April 27, 2016).

European Commission, Directorate-General for Economic and Financial Affairs (2015). Greece – request for stability support in the form of an ESM loan. http://ec.europa.eu/economy_finance/assistance_eu_ms/documents/2015-07-10_greece_art__13_eligibility_assessment_esm_en.pdf (accessed April 27, 2016).

European Commission, Directorate-General for Economic and Financial Affairs (2012). The Second Economic Adjustment Programme for Greece, *Occasional Papers* 94. http://ec.europa.eu/economy_finance/publications/occasional_paper/2012/pdf/ocp94_en.pdf (accessed April 27, 2016).

European Commission, Directorate-General for Economic and Financial Affairs (2011). The Economic Adjustment Programme for Greece, 5th ed., *Occasional Papers* 87. http://ec.europa.eu/economy_finance/publications/occasional_paper/2011/pdf/ocp87_en.pdf (accessed April 27, 2016).

European Commission, Directorate-General for Economic and Financial Affairs (2014). The Second Economic Adjustment Programme for Greece, 4th ed., *Occasional Papers* 192. http://ec.europa.eu/economy_finance/publications/occasional_paper/2014/pdf/ocp192_en.pdf (accessed April 27, 2016).

European Commission, Directorate-General for Economic and Financial Affairs (2011). The Economic Adjustment Programme for Greece, 3rd. ed., *Occasional Papers* 77. http://ec.europa.eu/economy_finance/publications/occasional_paper/2011/pdf/ocp77_en.pdf (accessed April 27, 2016).

European Commission, Economic and Financial Affairs, Greece. Financial assistance to Greece. http://ec.europa.eu/economy_finance/assistance_eu_ms/greek_loan_facility/index_en.htm (accessed April 27, 2016).

The European Commission, on behalf of the European Stability Mechanism. Memorandum of understanding for a three-year ESM programme (2015). http://ec.europa.eu/economy_finance/assistance_eu_ms/greek_loan_facility/pdf/01_mou_20150811_en.pdf (accessed April 27, 2016).

(2013) European Financial Stability Facility. http://www.efsf.europa.eu/attachments/EFSF%20FAQ%2004032013.pdf (accessed April 27, 2016).

European Financial Stability Facility, Lending operations, Greece. EFSF programme for Greece (expired). http://www.efsf.europa.eu/about/operations/Greece/index.htm (accessed April 27, 2016).

European Financial Stability Facility, Lending operations. http://www.efsf.europa.eu/about/operations/index.htm (accessed April 27, 2016).

European Stability Mechanism, Financial assistance. ESM programme for Greece. http://www.esm.europa.eu/assistance/Greece/index.htm (accessed April 27, 2016).

Eurostat (2016). Government deficit/surplus, debt and associated data. http://ec.europa.eu/eurostat/web/products-datasets/-/gov_10dd_edpt1 (accessed April 27, 2016).

Hellenic Republic, Ministry of Finance (2012), Press release. Athens, Greece. http://www.pdma.gr/attachments/article/81/9%20MARCH%202012%20-%20RESULTS.pdf (accessed April 27, 2016).

Hellenic Statistical Authority (2014a), Press release, 14 April. Fiscal data for the years 2010-2013. http://www.statistics.gr/en/news-announcements?p_p_id=101_INSTANCE_oj6VK3PQ0oCe (accessed April 27, 2016).

——— (2015a), Press release, 21 October. Fiscal data for the years 2011-2014.

——— (2014b), Press release, 13 October. Fiscal data for the years 2010-2013.

——— (2015b), Press release, 15 April. Fiscal data for the years 2011-2014.

International Monetary Fund (2013). Greece. *IMF country report* 13/20. https://www.imf.org/external/pubs/ft/scr/2013/cr1320.pdf (accessed April 27, 2016).

——— (2013). Greece. *IMF country report* 13/241. https://www.imf.org/external/pubs/ft/scr/2013/cr13241.pdf (accessed April 27, 2016).

——— (2014). Greece. *IMF country report* 14/151. http://www.imf.org/external/pubs/ft/scr/2014/cr14151.pdf (accessed April 27, 2016).

Public Debt Management Agency. Economic indicators. http://www.pdma.gr/index.php/en/economic-indicators.(accessed April 27, 2016).

Zettelmeyer, J., C. Trebesch, and M. Gulani (2013). *The Greek debt restructuring: An autopsy*. Peterson Institute for International Economics Working Paper No. 13-8. http://iie.com/publications/wp/wp13-8.pdf (accessed April 27, 2016).

# Authors

**Jörg Rocholl** is President of ESMT European School of Management and Technology in Berlin and member of the economic advisory board of the German Federal Ministry of Finance.

**Axel Stahmer** is an Albert Einstein scholar in the Berlin Doctoral Program in Economics & Management Science (BDPEMS) at ESMT.

# About ESMT

**ESMT European School of Management and Technology** was founded by 25 leading global companies and institutions. The international business school offers a full-time MBA, an executive MBA, an executive MBA/MPA, a master's in management as well as open enrollment and customized executive education programs. ESMT focuses on three main topics: leadership and social responsibility, European competitiveness, and the management of technology. ESMT faculty publishes in top academic journals. Additionally, the business school provides an interdisciplinary platform for discourse between politics, business, and academia. ESMT is based in Berlin, Germany, with Schloss Gracht as an additional location near Cologne. ESMT is a private business school with the right to grant PhDs and is accredited by the German state, AACSB, AMBA, EQUIS, and FIBAA. www.esmt.org

ESMT
European School of Management and Technology
Faculty Publications
Schlossplatz 1
10178 Berlin

Phone: +49 30 21231-1279
publications@esmt.org
www.esmt.org