Greece Government
Working Draft Balance Sheet
and
Analysis of Third Programme Debt Relief

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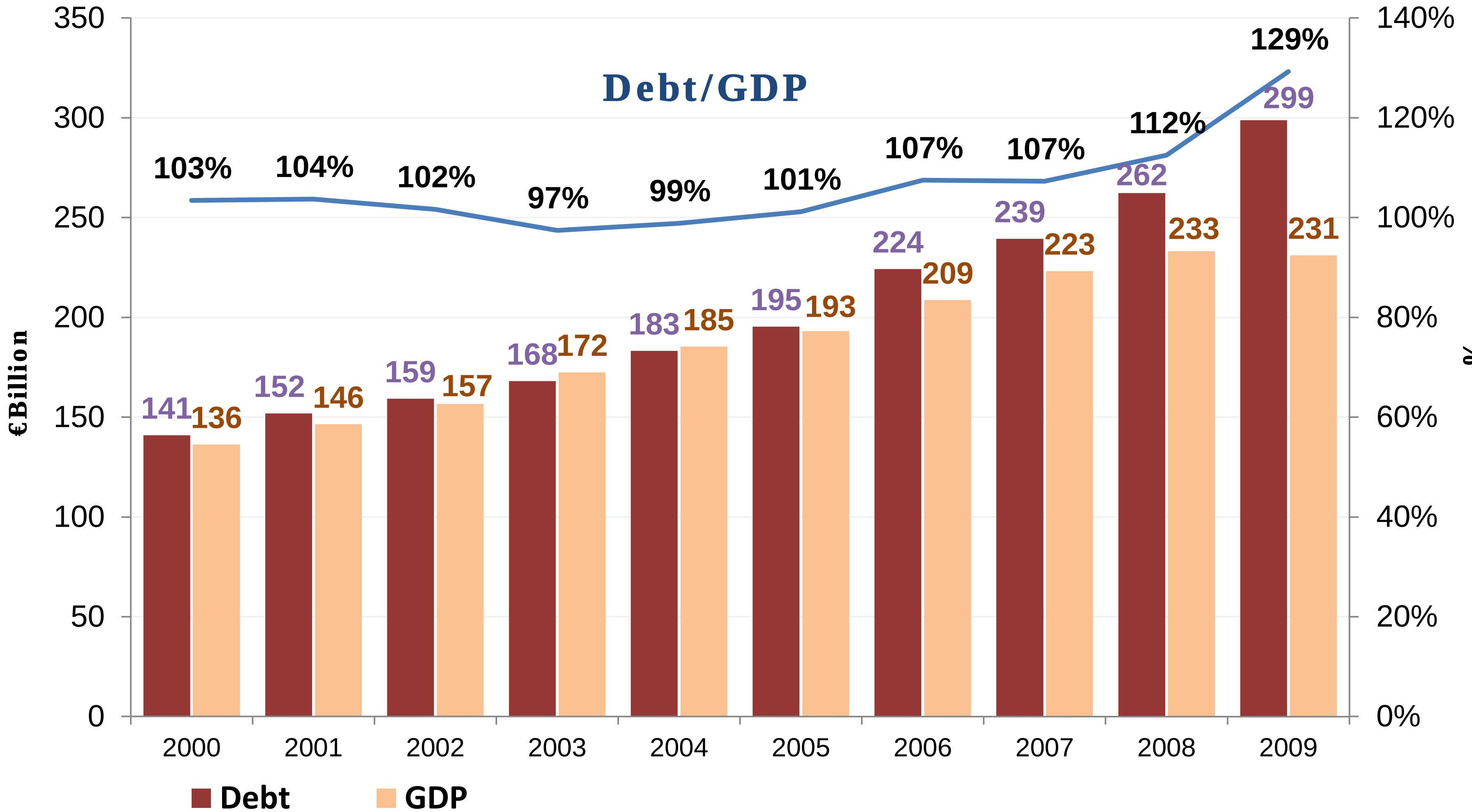
Overview

1. Background information about Greek crisis
2. Challenges to implement IPSAS
3. Greece Government Working Draft Balance Sheet
4. Analysis of Greece Third Programme Debt Relief

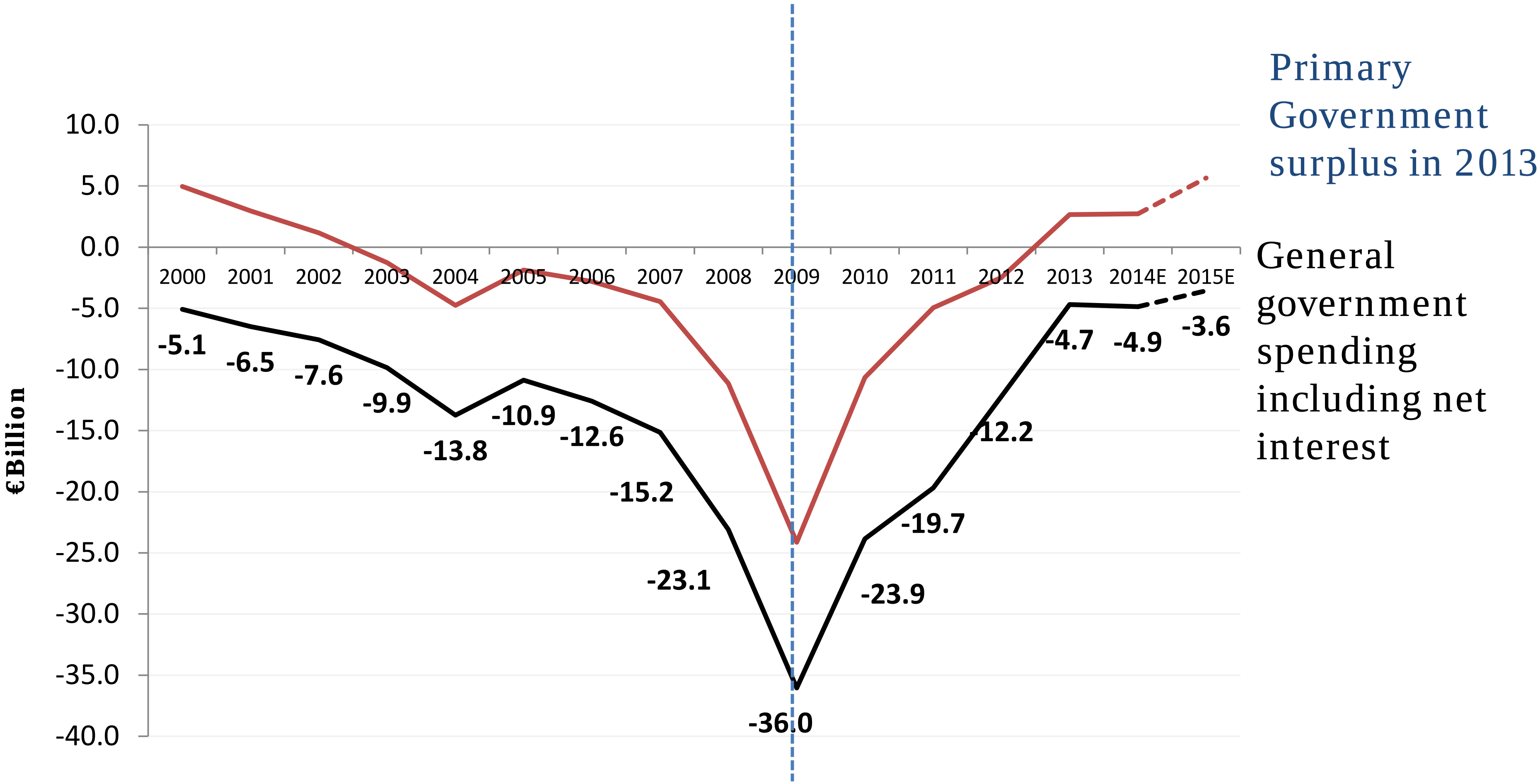
Growth driven by public sector borrowing



Source: International Monetary Fund (WEO April 2014)

PwC

Rapid deterioration of public deficit up until 2009-dramatic fiscal adjustment thereafter



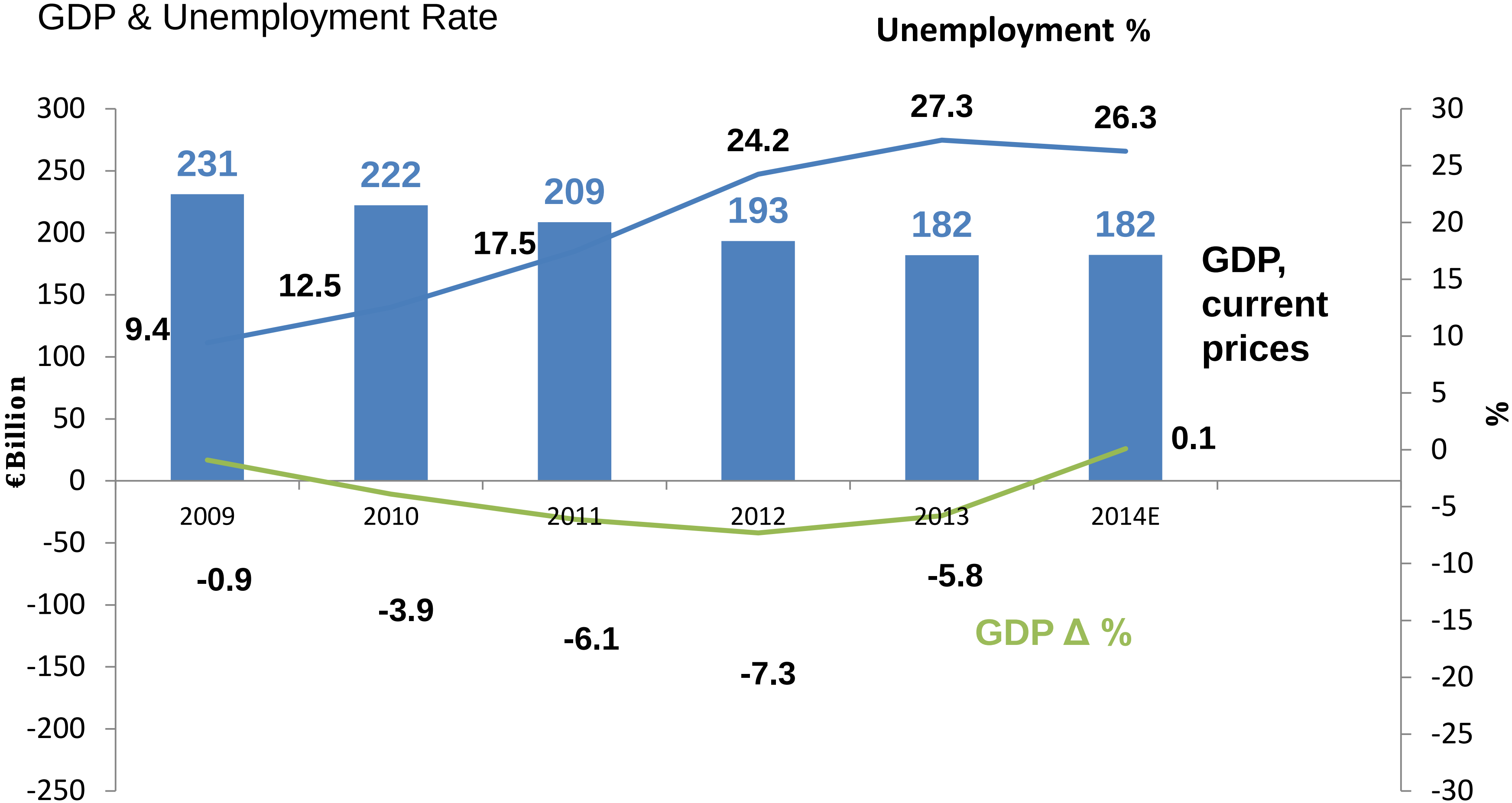
Source: International Monetary Fund (WEO April 2014)

Variance in reported public deficit

(€bn)	Δ Debt	Public Deficit	Variance
2001	11	7	-4
2002	7	7	0
2003	9	10	1
2004	15	14	-1
2005	12	11	-1
2006	29	13	-16
2007	15	15	0
2008	24	23	-1
2009	37	36	-1

Contraction of GDP and rise in unemployment

GDP & Unemployment Rate



State debt burden is not as heavy as it looks…

75% of Government Debt held by official sector
(Financial Support Mechanisms)

Weighted average residual maturity of Government Debt
16 years

Weighted average cost
2.2%

Total Government Debt in NPV terms?

Source: Hellenic Republic Public Debt Bulletin, IMF

Need for Greek economy turnaround

- Now that fiscal position has improved, need to focus on how the Greek economy is turned around
- Introduce the right reforms to achieve long-term fiscal sustainability
- From an accounting perspective, Greece should start from the basic:
  - Implement full accrual accounting
  - Measure the opening position (Balance Sheet)
  - Set a realistic plan to implement IPSAS in public sector
- Improve transparency, enable informed decisions
- Enhance accountability and governance of political decisions (reduce ability to fiddle numbers, reduce corruption, explanations for changes in net wealth)

Challenges to implement IPSAS

- Change management challenges (strong political willingness, ownership of project, technical support, educating public administration, adapt system & processes)
- Include whole government, including local authorities and state owned enterprises
- Adopt common chart of accounts, accounting policies and measurement methodology, including assumptions that should be used for valuation/provisions/other estimate and ensure consistent application
- Determine opening balance sheet position (completeness/valuation of assets and liabilities)
- Estimate unfunded pension obligations, state guarantees and other provisions
- Calculate net present value of debt and future accretion of interest

Greece Government
Working Draft Balance Sheet

Greece Government Working Draft Balance Sheet

(31 December 2015; €, billions)

SN	Balance Sheet Item	Amount	% of GDP
1.	Financial Assets	€ 52	30%
2.	Non-Financial Assets	€ 90	51%
3.	Total Assets	€ 142	81%
4.	Financial Liabilities	€ 118	67%
5.	Non-Financial Liabilities	€ 255	145%
6.	Total Liabilities	€ 373	212%
7.	Net Worth	-€ 231	-131%
Note:			
	GDP	€ 176	

Global Benchmark Government Net Worth as a Percentage of GDP

Source: Government Financial Statements based on International Accounting Standards

Global Benchmark	Latest
New Zealand, Government of	38%
Swiss Confederation	-5%
Australia, Commonwealth of	-19%
Canada, Government of	-31%
United Kingdom *(Whole of Government)*	-93%
United States Government	-101%
France, Republic of	-130%
Israel, Government of the State of	-158%

Notes: Latest available (2014 or 2015) data. Nominal GDP from EC AMECO and IMF World Economic Outlook (Oct 2015) databases. Net worth data from respective government financial statements. France and Swiss Net Worth adjusted for pension commitments. UK net worth adjusted for undervaluation of infrastructure assets. Canada and United Kingdom as a percentage of prior year GDP due to 31 March fiscal year end.

Other Government Net Worth as a Percentage of GDP

Source: IMF

Country	Net Worth	Source
Romania	63%	2012; IMF Romania FTE (March 2015)
Ireland	-69%	2011; IMF Ireland FTA (July 2013)
Portugal	-138%	2012; IMF Portugal FTA (October 2014)

Greece Government Financial Assets

		2012	2013	2014	2015
1.	Total Financial Assets	**105,729**	**97,679**	**71,558**	**52,243**
2.	Currency and Deposits	21,061	22,183	17,297	14,824
3.	Short-term Debt Securities	0	0	0	0
4.	Long-term Debt Securities	12,732	14,480	12,891	4,888
5.	Short-term Loans	26	26	26	26
6.	Long-term Loans	1,217	799	748	679
7.	Listed Shares	9,778	38,745	19,356	10,763
8.	Unlisted Shares	60,407	20,872	20,726	20,551
9.	Other Equity	0	0	0	0
10.	Investment Fund Shares	458	526	468	467
11.	Insurance, Pensions and Standardised Guar.	49	48	45	45
12.	Fin. Deriv. and Employee Stock Options	0	0	0	0

Source: Eurostat database accessed 27 April 2016; Annual Financial Assets excluding Accounts Receivable.

Non-Financial Assets

Country	Non-Financial Assets	Source
Romania	135%	2012; IMF Romania FTE (March 2015), Eurostat
Portugal	98%	2012; IMF Portugal FTA (October 2014), Eurostat
Ireland	93%	2011; IMF Ireland FTA (July 2013), Eurostat

For Greece, assumed approximately half of the average of peers Portugal and Ireland as cap rates are twice these countries, and financial assets have been halved over the past few years while these countries have remained stable or increased.

Notes: Consists of General Government and Central Government non-financial corporation data from IMF plus Other Accounts Receivable from Eurostat database (accessed 28 April 2016).

Financial Liabilities

- Expert's Opinion – Revaluation of Greece Financial Liabilities and Discussion on the Implications to the Net Debt Amount of Greece compared to its Peers as of December 31, 2013.
  - 53 page KPMG report based on IPSAS/IFRS international accounting standards.
  - Verification Statement: "Nothing has come to our attention that causes us to believe that the calculations of Greece financial liabilities as reported to us as of December 31, 2013 have not been, in all material respects conducted reasonably in accordance with IAS 39 and IFRS 13, which are deemed an appropriate approximation of IPSAS 29, applicable for Greece."
- Number preliminarily updated for December 31, 2015.

IPSAS 29 / IFRS 39: Highlights

"No material differences" between the standards on the below.

Objective: IPSAS/IFRS improves decision-making, increases transparency, strengthens accountability, and facilitates global comparability.

1. Initial Recognition
- **Fair value** of debt is market value (confirming arm's length) at date of event.
- **Market price/YTM** or most comparable market price/YTM.
- **If necessary**, PV with maximum use of observable/prevailing market YTM.

2. Substantial Modification
- If PV of cash flows is at least 10% different from PV of original financial liability.
- All financial liabilities utilize the **same market based principles**.

3. Concessionary Loans and Grants
- **Fair value** measurement.
- Recognized existence of **non-exchange transaction** as a subsidy.

4. Subsequent Measurement: At amortized cost using **EIR method** accretion.

Non-Financial Liabilities

- Pensions: based on two methodologies
  - Multiple to global benchmarks
  - Comparison to Portugal % of GDP
- Payables: Eurostat financial balance sheet data.
- Other Non-Financial:
  - estimate of ~10% of GDP based on limited sample of available benchmarks
  - Includes various provisions, deferred revenue, etc.

Public Sector Pensions: Greece Extrapolation

	Country	Balance Sheet Pension Liability	GDP	Balance Sheet Pension Liability as a % of	Government Employee Pension Payments	Ratio of Pension Liability to Expenditures
	Balance Sheets:					
1.	France, Republic of	€ 1,752	€ 2,132	82%	€ 53	33x
2.	Portugal (IMF FTA, October 2014)	NA	NA	134%	NA	NA
3.	United Kingdom	£1,302	£1,735	75%	£36	36x
4.	United States Government	$6,719	$17,348	39%	$249	27x
	Extrapolated Based on EU Member State Average:					
5.	Greece	*€ 222*	€ 176	***126%***	€ 6	*35x*

Analysis of Third Programme Debt Relief

2015 Greece Debt Relief of €17.0 Billion

(Point of clarification: There is no cost or loss on debt relief for Greece creditors given ESM intermediary structure.)

SN	Disbursement Date	Disbursement Amount	Balance Sheet Debt	Debt Relief
1	20 Aug 2015	€ 13.0	€ 2.5	€ 10.5
2	24 Nov 2015	€ 2.0	€ 0.5	€ 1.5
3	1 Dec 2015	€ 2.7	€ 0.6	€ 2.1
4	8 Dec 2015	€ 2.7	€ 0.6	€ 2.1
5	23 Dec 2015	€ 1.0	€ 0.2	€ 0.8
	Total:	€ 21.4	€ 4.4	€ 17.0
	% of Total:		20%	80%

Notes: Data updated as 4 Feb 2016. Calculated according to international rules; assumes interest rate of 1% and maturity schedule of bank recap funds matching cash disbursements.

ESM Third Programme 2015-2025 Impact with €60 Billion in Funding through 2018 (1 of 3)

(€, Billions)

SN	**Data Items**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
1.	ESM Funding	€ 21.4	€ 10.0	€ 15.7	€ 12.9	€ 0.0	€ 0.0	€ 0.0	€ 0.0	€ 0.0	€ 0.0	€ 0.0
2.	Change in Net Worth (Cumulative)	**€ 17.0**	**€ 24.7**	**€ 36.8**	**€ 46.3**	**€ 45.6**	**€ 44.8**	**€ 43.9**	**€ 43.0**	**€ 42.0**	**€ 40.9**	**€ 39.7**
3.	Net Worth as % of GDP	**9.7%**	**14.1%**	**20.4%**	**25.2%**	**24.3%**	**23.4%**	**22.5%**	**21.6%**	**20.6%**	**19.7%**	**18.8%**
4.	Balance Sheet Debt Impact	-€ 11.6	-€ 19.2	-€ 31.2	-€ 40.7	-€ 39.9	-€ 39.0	-€ 38.0	-€ 37.0	-€ 35.9	-€ 34.7	-€ 33.5
5.	Balance Sheet Debt Impact as % of GDP	-6.6%	-11.0%	-17.3%	-22.1%	-21.2%	-20.4%	-19.5%	-18.6%	-17.7%	-16.8%	-15.8%
6.	Balance Sheet Net Debt Impact	-€ 17.0	-€ 24.7	-€ 36.8	-€ 46.3	-€ 45.6	-€ 44.8	-€ 43.9	-€ 43.0	-€ 42.0	-€ 40.9	-€ 39.7
7.	Balance Sheet Net Debt Impact as % of GDP	-9.7%	-14.1%	-20.4%	-25.2%	-24.3%	-23.4%	-22.5%	-21.6%	-20.6%	-19.7%	-18.8%

Note: Data updated as 4 Feb 2016.

ESM Third Programme 2015-2025 Impact with €60 Billion in Funding through 2018 (2 of 3)

(€, Billions)

SN	Data Items	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Notes
1.	ESM Funding	€ 21.4	€ 10.0	€ 15.7	€ 12.9	€ 0.0	€ 0.0	€ 0.0	€ 0.0	€ 0.0	€ 0.0	€ 0.0	(a)
	Balance Sheet Data:												
2.	Initial Balance Sheet Debt Value	4.4	2.4	3.4	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(b)
3.	Initial Change in Net Worth from ESM Funding	17.0	7.6	12.3	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(c)
4.	Refinanced Debt	16.0	10.0	15.7	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(d)
5.	Balance Sheet Debt Impact	-11.6	-19.2	-31.2	-40.7	-39.9	-39.0	-38.0	-37.0	-35.9	-34.7	-33.5	(e)
6.	Balance Sheet Debt Impact as % of GDP	-6.6%	-11.0%	-17.3%	-22.1%	-21.2%	-20.4%	-19.5%	-18.6%	-17.7%	-16.8%	-15.8%	
7.	Bank Equity	1.3	1.4	1.5	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	(f)
8.	Bank Co-Cos	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	(g)
9.	Financial Assets	5.4	5.5	5.5	5.6	5.7	5.8	5.9	5.9	6.0	6.1	6.2	(h)
10.	Balance Sheet Net Debt Impact	-17.0	-24.7	-36.8	-46.3	-45.6	-44.8	-43.9	-43.0	-42.0	-40.9	-39.7	(i)
11.	Balance Sheet Net Debt Impact as % of GDP	-9.7%	-14.1%	-20.4%	-25.2%	-24.3%	-23.4%	-22.5%	-21.6%	-20.6%	-19.7%	-18.8%	
12.	Annual Change in Net Worth	€ 17.0	€ 7.6	€ 12.1	€ 9.5	-€ 0.7	-€ 0.8	-€ 0.9	-€ 0.9	-€ 1.0	-€ 1.1	-€ 1.1	(j)
13.	Annual Change in Net Worth as % of GDP	9.7%	4.4%	6.7%	5.2%	-0.4%	-0.4%	-0.4%	-0.5%	-0.5%	-0.5%	-0.5%	
14.	**Change in Net Worth (Cumulative)**	**€ 17.0**	**€ 24.7**	**€ 36.8**	**€ 46.3**	**€ 45.6**	**€ 44.8**	**€ 43.9**	**€ 43.0**	**€ 42.0**	**€ 40.9**	**€ 39.7**	(k)
15.	**Change in Net Worth (Cumu.) as % of GDP**	**9.7%**	**14.1%**	**20.4%**	**25.2%**	**24.3%**	**23.4%**	**22.5%**	**21.6%**	**20.6%**	**19.7%**	**18.8%**	
	Annual Flows:												
16.	Cumulative Inflows	21.4	31.4	47.1	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	(l)
17.	Interest Payments	0.00	0.13	0.17	0.26	0.30	0.35	0.40	0.45	0.50	0.54	0.59	(m)
18.	Interest Income on Cocos	0.00	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	(g)
19.	Net Interest Payments	0.00	-0.20	-0.15	-0.06	-0.02	0.03	0.08	0.12	0.17	0.22	0.26	(n)
20.	Net Interest Payments as % of GDP	0.00%	-0.11%	-0.08%	-0.04%	-0.01%	0.01%	0.04%	0.06%	0.08%	0.11%	0.12%	
21.	Accretion to OCI	0.00	0.22	0.39	0.61	0.85	0.86	0.88	0.90	0.93	0.96	0.99	(o)
22.	GDP Growth	--	-0.7%	3.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
23.	GDP	175.7	174.4	180.5	184.1	187.8	191.5	195.4	199.3	203.3	207.3	211.5	(p)

ESM Third Programme 2015-2025 Impact with €60 Billion in Funding through 2018 (3 of 3)

Notes:

(a) Three year Programme scheduled to conclude in 2018. Total ESM Funding of €60 billion based on interview with Klaus Regling, ESM Managing Director published in Neue Zürcher Zeitung (Switzerland), 18 March 2016; see: http://www.esm.europa.eu/pdf/2016_03_18_Regling_NZZ_EN.pdf. Post-2015 estimates based on IMF Gross Financing Needs (IMF Preliminary Draft DSA, 26 June 2015) with 2016 adjusted for €9 billion in T-bills to total €60 billion.

(b) Initial recognition value based on IPSAS/IFRS using most comparable yield-to-maturity of GGB due 2042.

(c) Difference between disbursement amount and Initial Balance Sheet Debt Value increases net worth through other comprehensive income (OCI).

(d) Estimated amount of annual ESM disbursements used to refinance maturing debt.

(e) Impact on year-end balance sheet debt value from cumulative ESM disbursements which is prior year Impact less current year Initial Change in Net Worth from ESM Funding plus net interest and accretion.

(f) Estimated value of common equity purchased with ESM recap funds; assumed to grow at 5% per year.

(g) Contingent convertible debt instruments purchased with ESM recap funds; annual coupon of 8% per year, which is netted against Interest Payments.

(h) Value of financial assets purchased with ESM funds.

(i) Impact on year-end value of balance sheet debt less Financial Assets from cumulative ESM disbursements.

(j) Change in Net Worth plus annual increase in Financial Assets less Net Interest Payments less Accretion to OCI.

(k) Change in Net Worth is Initial Change in Net Worth from ESM Funding plus annual increase in Financial Assets less Net Interest Payments less Accretion.

(l) Cumulative total ESM loan disbursements.

(m) Interest rate on ESM loans is ESM cost of funds, estimated based on yield curve plus 10.5 basis point margin on Cumulative Inflows assuming 20% maturity per year refinanced at rolling 5-year rate.

(n) Interest Payments plus Cost to Cover Interest Payments less Interest Income on Cocos.

(o) Initial recognition value accretes based on initial market yield-to-maturity to future face value over the life of the debt instrument. OCI is other comprehensive income.

(p) 2015-2017 based on EC AMECO database (accessed 20 Jan 2016); subsequent years assume 2% annual growth.

Conclusions

- For investors, a balance sheet is the first step on the path to prosperity and is essential to build trust and confidence with transparency and accountability.
- Greece received significant debt relief in 2015 and will continue to do so under the generous Third Programme.