The Facts on Greece Government Financial Sustainability and Stability (Part 1 of 4)

September 2016

www.MostImportantReform.info

Southern Axis countries is a phrase reported to be used by the Greek government in communicating potential September 2016 meetings in Greece of select EZ member states.

Part 1 of 4: The Facts on Greece Government Financial Sustainability and Stability

(Released: September 2016)

Part 2 of 4: IMF and Greece: 12 Helpful Facts to Better Understand Greece Government Debt Sustainability

(Scheduled Release: October 2016)

www.MostImportantReform.info

Part 1 of 4:

The Facts on Greece Government Financial Sustainability and Stability

In Summary: The Facts on Greece Government Financial Sustainability and Stability

- 1. Massive EZ Debt Relief: The Greece government has and continues to receive massive debt relief, including from southern axis countries.
- 2. Debt Competitive Advantage: The Greece government has been given a significant debt competitive advantage, including compared to southern axis countries, when correctly calculated in accordance with international rules.
- **3. High Capital Spending:** The Greece government has high annual capital spending, especially when compared to EZ peer countries.
- **4. Total Balance Sheet:** The Greece government has a total balance sheet to manage or mismanage in excess of ½ trillion euros.
- **5. Asset Value Lost:** Quantification of Greece government balance sheet asset values reveals large undisclosed losses.
- **6. Government Financial Transparency:** Little progress on Greece government financial transparency and accountability processes to win the trust and confidence of taxpayers.

Overview Points: The Facts on Greece Government Financial Sustainability and Stability

- 1. Massive EZ Debt Relief: The southern axis countries have given Greece €128 billion in highly concessional loans with an opportunity cost to southern axis taxpayers of €8 billion per year. Since 2010, Greece has received €354 billion in debt relief, which is 17 times more than the EZ programme country average. The 3rd programme has already provided €23 billion in debt relief. Greece receives on average €6.6 billion per year in EU funds which is 251% of comparable size Portugal and Ireland.
- 2. Debt Competitive Advantage: The Greece government has been given a significant debt competitive advantage, with a debt burden of about 50% of investment grade EZ member state peers, but earns worse ratings and higher borrowing costs. Greece 2015 YE Balance Sheet Net Debt, correctly calculated in accordance with international accounting or statistics rules is 41% and 58% of GDP, respectively. Greece will save €10 billion from a lower cash interest burden compared to the southern axis from 2016 to 2020. Greece debt service is 50% of EZ peers versus a GFN of 123%. Greece floating rate debt is only 17% of total debt, not the 69% reported.
- 3. High Capital Spending: The Greece government spent on average €364 million per week on capital spending from 2013 to 2015, which is 297% of comparable size Portugal and Ireland.
- **4. Total Balance Sheet:** At year-end 2015, the Greece government had over ½ trillion euros in assets and liabilities to manage or mismanage, which is €48,060 per citizen.
- **5. Asset Value Lost:** Analysis indicates that €69 billion, or on average €625 million per week, of Greece government asset value was lost from 2014 to August 2016. From 2001 to 2015, Greece added only 10 cents in GDP for each additional euro of debt, compared to EZ peer average 45 cents.
- **6. Government Financial Transparency:** Little progress on Greece government financial transparency and accountability processes to win the trust and confidence of taxpayers. No opening balance sheet and no senior level ministers with professional turnaround, financial, or accounting experience.

Note: Southern axis euro area member states include France, Italy, Portugal, and Spain. In addition to the following slides, Appendix 1 contains a list of 20 Select Conference Resources (2013 to 2016) and the URLs.

1. Massive EZ Debt Relief

The Facts on Greece Government Financial Sustainability and Stability

Southern Axis Countries Have Given Greece €128 Billion in Highly Concessional Loans with an Opportunity Cost to Southern Axis Taxpayers of €8 Billion Per Year

SN		Highly Concessional Loans to Greece	Annual Opportunity Cost to Southern Axis Taxpayers
1.	Total Euro Area	€244 Billion	€16 Billion
2.	France	€50 Billion	€3 Billion
3.	Italy	€44 Billion	€3 Billion
4.	Spain	€29 Billion	€2 Billion
5.	Portugal	€6 Billion	€0.4 Billion
6.	Subtotal Southern Axis	€128 Billion	❸ Billion
7.	Southern Axis % of Total	53%	53%

Notes: Based on EC, EFSF, ESM, and Bloomberg data. Includes GLF, EFSF, and ESM disbursed and committed, which is allocated to member states according to member state capital percentage or direct holdings; euro area annual opportunity cost of €16 billion includes €2 billion for pending 2017-18 ESM disbursements of €31 billion. Annual Cost to Southern Axis Taxpayers based on difference between 2042 GGB YTM of 7.52% (5 August 2016) and estimated average loan rate of 1%.

Since 2010, Greece Has Received €354 Billion in Debt Relief, which is 17 Times More than the EZ Programme Country Average

(€, Billions)

			Greece Multiple	Peer				
<u>SN</u>		Greece		Average	Portugal	Ireland	Spain	Cyprus
1.	Total Debt Relief/Forgiveness % of GDP	201%	17x	12%	16%	7%	2%	24%
2.	Months in Programme(s)	75+		28	37	36	18	22
	Official Sector Debt Relief:							
3.	Pre-Third Programme	€182		€17	€29	€14	€21	€4
4.	Third Programme (to Date)	€23		NA	NA	NA	NA	NA
5.	Total Official Sector Debt Relief	€205		€17	€29	€14	€21	€4
6.	Private Sector Debt Forgiveness	€149		€0	€0	€0	€0	€0
7.	Total Debt Relief and Forgiveness	€354		€17	€29	€14	€21	€4
8.	Southern Axis EU Member States Contribution to Greece	€91						
9.	2015 GDP	€176		€373	€179	€215	€1,081	€17

Notes: Japonica Partners collaborative analysis. Based on EC, IMF, and Bloomberg data. Debt relief calculated as of 3 August 2016 according to IPSAS/IFRS.

Greece Receives on Average €6.6 Billion Per Year in EU Funds, which is 251% of Comparable Size Portugal and Ireland

(€, Millions)

211		2013 - 2015 Average EU	2245	0044	2042
<u>SN</u>		Annual Funds	<u>2015</u>	<u>2014</u>	<u>2013</u>
	Greece:				
1.	EU Annual Net Grants	€5,231	€5,004	€5,268	€5,420
2.	EIB Concessionary Loans	€1,406	€1,348	€1,556	€1,315
3.	Total	€6,637	€6,352	€6,824	€6,735
	Portugal:				
4.	EU Annual Net Grants	€2,952	€1,067	€3,306	€4,484
5.	EIB Concessionary Loans	€1,235	€1,413	€1,320	€971
6.	Total	€4,187	€2,480	€4,626	€5,455
	Ireland:				
7.	EU Annual Net Grants	€314	€450	€138	€354
8.	EIB Concessionary Loans	€789	€755	€932	€680
9.	Total	€1,103	€1,205	€1,070	€1,034
	Total EU Annual Funds Ratios:				
10.	Greece as % of Portugal	159%	256%	148%	123%
11.	Greece as % of Ireland	602%	527%	638%	652%
12.	Greece as % of Portugal/Ireland Average	251%	345%	240%	208%

Notes: EU Annual Net Grants based on EU budget data (Total Expenditure less National Contribution) from EC website; EIB Concessionary Loans (Total Signatures) from EIB website; data accessed 16 August 2016. Gross National Income 2015: Greece: €176,500; Ireland: €182,200; Portugal €175,500 from EC AMECO data accessed 3 August 2016.

2. Debt Competitive Advantage

The Facts on Greece Government Financial Sustainability and Stability

Greece Has Been Given a Significant Debt Competitive Advantage, with a Debt Burden of About 50% of Investment Grade EZ Member State Peers, but Earns Worse Ratings and Higher Borrowing Costs

(% of GDP, except as otherwise indicated)

	August 2016 Credit Ratings (M/S&P/F/D)	2015 Balance Sheet Net Debt	2016 Annual Debt Service	2016 Net Cash Interest	Next 5-Years Unfunded Debt Service	3-Year Govt Bond Yields (YTM)
						Delta vs. Peer Avg.:
Greece as % of Peers		52%	50%	57%	27%	8.72%
Greece	Caa3/ B- / CCC/CCCH	41%	6%	2.0%	16%	8.78%
Ireland	A3 /A+ / A/AH	54%	9%	2.8%	46%	-0.45%
Spain	Baa2/BBB+/ BBB+/ AL	69%	13%	2.9%	58%	-0.09%
Italy	Baa2/BBB-/ BBB+/ AL	113%	15%	4.0%	74%	-0.04%
Portugal	Ba1/BB+/ BB+/ BBBL	80%	11%	4.6%	61%	0.81%

Notes: Japonica Partners collaborative analysis. Future Face Value of Debt (Maastricht) as a percentage of GDP: Greece 177%, Ireland 94%, Spain 99%, Italy 133%, Portugal 129% (EC AMECO data accessed 3 August 2016). Based on EC, Eurostat, IMF, Member State MOFs, and Bloomberg data.

Greece 2015 YE Balance Sheet Net Debt, Correctly Calculated in Accordance with International Accounting or Statistics Rules is 41% and 58% of GDP, Respectively: Summary

(€, Billions)

1.	Rules:	International Accounting Standards (IPSAS/IFRS)	2008 System of National Accounts (2008 SNA)	European System of Accounts 2010 (ESA 2010)	IMF Debt Sustainability Analysis (DSA)	Lisbon Excessiv Proce (EI	e Deficit
						FFV	PV
2.	Gross Debt	€125	€155	€155	€203	€311	€155
3.	Gross Debt % of GDP	71%	88%	88%	116%	177%	88%
4.	Net Debt	€72	€102	€102	€183	NA	NA
5.	Net Debt % of GDP	41%	58%	58%	104%	NA	NA

Debt metrics for Greece EZ member state peers are not reduced under ESA 2010, 2008 SNA, or IMF DSA as there is no qualifying concessional or reorganized debt; and under IPSAS/IFRS, Portugal, Spain, and Ireland would report lower debt by approximately €23 billion, €18 billion, and €12 billion respectively.

Notes: Japonica Partners collaborative analysis. *EC 479/2009 "Whereas (4)" states "The definition of 'debt' laid down in the Protocol on the excessive deficit procedure needs to be amplified by a reference to the classification codes of ESA 95". 2015 GDP of €176 billion from EC AMECO database and financial asset data from Eurostat (accessed 19 July 2016).

Greece 2015 YE Balance Sheet Net Debt, Correctly Calculated in Accordance with International Accounting or Statistics Rules is 41% and 58% of GDP, Respectively: Details

(€, Billions)

	(C, Dillions)					
			2008 System of			
	Destar	International Accounting	National Accounts	European System of	IMF Debt Sustainability	Lisbon Treaty Excessive
1.		Standards (IPSAS/IFRS)	(2008 SNA)	Accounts 2010 (ESA 2010)	Analysis (DSA)	Deficit Procedure* (EDP)
2.	Authority and	Produced by independent	Produced and released	ESA 2010 was promulgated to	Series of IMF Staff	Debt definition is in Lisbon
	Benchmarks:	and professional	under the auspices of the	achieve the objectives set by	Guidance Notes and	Treaty (2007) attached as
		accounting standards	United Nations, the	the Treaty on the Functioning	papers from 2007 to	Protocol 12 on Excessive
		boards. Utilised by leading	European Commission,	of the European Union (TFEU)	2015. Topics include:	Deficit Procedure* (EDP).
		governments globally	the OECD, IMF, and the	and adopted in the form of a	public debt limits	Operative metric is the
		including the UK,	World Bank Group. All	regulation of the European	(effective date June 30,	60% debt to GDP for
		Switzerland, New Zealand,	countries encouraged to	Parliament and of the Council	2015), DSA-LIC	Member States. Of note,
		France, and Israel. Debt	report under 2008 SNA	dated 21 May 2013 to give a	frameworks and excel	at year end 2015, the EU
		standards are IPSAS 29	as soon as possible.	solid legal basis for Member	model, unification of	average D/GDP was 87%
		and IFRS 39 and 9.	2008 SNA Sections	States. ESA 2010 Sections	discount rates, and	and the EZ average was
		Utilized by all major	13.59 and 22.106-113.	5.19-21, 7.67, 20.221 and	Greece DSAs.	93%. EDP Notifiction
		international publicly traded		20.236.		Tables require present
		companies.				value of debt.
3.	Type of Debt	All debt	Debt reorganizations and	Debt restructurings and debt	Concessional debt	Protocol 12: None;
	Recalculated from		debt securities	securities		EDP Table 4, Item 4:
	(Future) Face Value:					Debt restructurings and
						debt securities
4.	Framework:	Reflect economic reality	Statistical framework that	To achieve the objective of the	The present value (PV)	Legal compliance with the
		and provide most	provides macroeconomic	Treaty on the Functioning of	of debt is a more relevant	Treaty on the Functioning
		meaningful information for	accounts for	the EU (TFEU). To provide a	indicator as it takes into	of European Union
		decision-making and	policymaking, analysis,	set of harmonized and reliable	account the	(TFEU) and Stability and
		accountability.	and research purposes.	statistics on which to base	concessionality of debt.	Growth Pact with debt
			Of note, politically	decisions and policy advice.	For countries where	measured at face value.
			influenced rules and	Of note, politically influenced	official external financing	EDP Notifiction Table 4,
			application provide	rules and application provide	on concessional terms is	Item 4 requires present
			numbers that reflect	numbers that reflect public	a key source of public	value of debt.
			public policy preferences.	policy preferences.	external financing or has	
					become a normality.	
5.	Debt Valuation	Market at initial recognition	Debt reorganizations	Debt reorganizations based on	Concessional debt at 5%	Face value and present
	Reference Points:	or substantial modification	based on market (PV) at	market (PV) at time of	unification discount rate	value.
		and then at amortized cost.	time of transaction,	transaction, securities at	and other debt at nominal	
			securities at market, and	market, and other debt at	value. Requires grant	
			other debt at nominal	nominal value.	element of at least 35%	
	0	On the Head and Star	value.	Occupation EDE to all OOF	to qualify for PV.	Occident EDE Land COE
6.	Consolidated	Controlled entities	Central, EBF, local,	Central, EBF, local, SSFs, and	Central, EBF, local,	Central, EBF, local, SSFs,
	Sectors		SSFs, and non-market	non-market SOEs	SSFs, and non-market	and non-market SOEs
7.	Gross Debt	€125	SOEs €155	€155	SOEs; and as designated € 203	FV: €311 / PV: €155
8.	Gross Debt % of GDP	€ 125 71%	€ 155 88%	€155	€ 203 116%	FV: 177% / PV: 88%
9.	Financial Assets	All financial assets	All financial assets	All financial assets including	Financial assets	NA
٥.	i ilialiciai Assets	, ai illialiciai assets	including receivables	receivables	corresponding to debt	IVA
			moraumy receivables	receivables	instruments	
10	Net Debt (7. less 9.)	€72	€102	€102	€ 183	NA
11.		41%	58%	58%	104%	NA NA
<u></u>	1	1170	5570	0070	10170	1 1/ 1

Notes: *Japonica Partners collaborative analysis. EC 479/2009 "Whereas (4)" states "The definition of 'debt' laid down in the Protocol on the excessive deficit procedure needs to be amplified by a reference to the classification codes of ESA 95". 2015 GDP of €176 billion from EC AMECO database and financial asset data from Eurostat (accessed 19 July 2016).

Greece Will Save €10 Billion from a Lower Net Cash Interest Burden Compared to Southern Axis from 2016 to 2020

(€, Billions)

<u>SN</u>			<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	2020	<u>Total</u>
	Greece:							
1.	Net Cash Interest		€3.5	€4.0	€4.2	€4.4	€4.6	
2.	Revenue		€83.3	€86.6	€90.1	€93.7	€97.4	
3.	Net Cash Interest % of Revenue	9	4.2%	4.6%	4.7%	4.7%	4.8%	
	Southern Axis Country Average	e:						
4.	Net Cash Interest % of Revenue	e	7.4%	7.1%	6.9%	6.6%	6.3%	
	Greece Savings vs. Southern A	Axis:						
5.	Net Cash Interest % of Revenue	e (SN4 less SN3)	3.2%	2.6%	2.2%	1.9%	1.6%	
6.	Net Cash Interest (SN2 x SN5)		€2.7	€2.2	€1.9	€1.7	€1.5	€10.1
	Impact from Net Cash Interest	Savings:						
		Fiscal Multiplier		Ecoi	nomic Ber	nefit to Gr	eece	
7.		0.1x	€0.3	€0.2	€0.2	€0.2	€0.2	€1.0
8.		0.5x	€1.3	€1.1	€1.0	€0.9	€0.8	€5.0
9.		1.0x	€2.7	€2.2	€1.9	€1.7	€1.5	€10.1
10.		1.5x	€4.0	€3.3	€2.9	€2.6	€2.3	€15.1
11.		2.0x	€5.3	€4.4	€3.9	€3.5	€3.0	€20.2

Notes: Estimates based on EC AMECO data accessed 12 August 2016. 2016-17 interest expense data from EC AMECO database; 2018-20 held constant at 2017 amount. 2016-17 Revenue from EC AMECO database; 2018-20 assumes 4% growth. Greece Cash Interest net of deferred interest on EFSF co-financed loans, interest income on bank CoCos, and SMP/ANFA rebates. Southern axis euro area member states include France, Italy, Portugal, and Spain.

Greece Publicly Held Long-Term Bond Interest as a Percentage of Revenue is 13% of EZ Member State Peers

(€, Billions; as of YE 2015)

			Greece as % of Peer				
<u>SN</u>		<u>Greece</u>	<u>Average</u>	<u>Portugal</u>	<u>Ireland</u>	<u>Spain</u>	<u>ltaly</u>
1.	Long-Term Bonds Outstanding	€24		€111	€124	€793	€1,707
2.	Long-Term Bond Interest Expense	€0.8		€5	€5	€30	€61
3.	Long-Term Bonds % of GNI	13%	17%	63%	68%	73%	104%
4.	Long-Term Bond Interest % Revenue	0.9%	13%	6%	7%	7%	8%
5.	GNI	€177		€176	€182	€1,080	€1,634
6.	Revenue	€85		€79	€71	€414	€784

Notes: Long-Term bonds are bonds due in excess of one year, excluding T-bills; Greece total excludes ANFA/SMP bonds held by the ECB and NCBs as part of the PSI. GNI and revenue data from EC AMECO database accessed 3 August 2016. Long-Term Bonds Outstanding and Interest Expense calculations based on Bloomberg, EC, and EDP report data.

Greece Debt Service is 50% of EZ Peers versus a GFN (which Includes Non-Debt Flow Assumptions) of 123%

GFN ignores highly concessional EZ 3rd Programme 2016 - 2018 funding support.

		IMF Gross Financing
	Debt Service	Needs (GFN)
	% of GDP	% of GDP
Greece	6%	19%
Portugal	11%	20%
Ireland	9%	9%
Spain	13%	17%
Italy	15%	17%
Peer Average	12%	15%
Greece % of Peer Average	50%	123%

Notes: Debt Service is 2016 estimate based on Bloomberg, EC, and IMF data; includes interest expense and principal payments excluding T-Bills; Greece adjusted for deferred interest on EFSF co-financed loans, interest income on bank CoCos, and SMP/ANFA rebates. GFN includes assumptions such as cash buffer build-ups, payables reductions, fiscal balance, T-bills, and paydown of IMF loan balance, and ignores highly concessional EZ 3rd Programme funding support (estimated total remaining 2016-2018 funding of €31 billion).

Greece Floating Rate Debt is Only 17% of Total Debt, Not the 69% Reported

(€, Billions)

ESM and EFSF loans are clearly not floating by any international accounting standards definition, as they relate to each entity's entire capital structure, unlike the GLF loans that float based on 3-month Euribor plus 50 bps. ESM weighted average life of debt capital structure is approximately seven years, which is similar to many sovereigns.

	PDMA Public Debt Bulletin No. 81 March 2016		Publicly	Based on Available ata
			<u>Amount</u>	% of Total
Fixed Rate	31%	Fixed:		
Floating Rate	69%	ESM	€21.4	
Total	100%	EFSF	€130.9	
		PSI GGBs	€25.6	
		ANFA/SMP GGBs	€20.5	
		T-bills	€14.8	
		2014 GGBs	€6.1	
		IMF	€14.5	
		Other	€23.1	
		Subtotal	€256.9	83%
		Floating:		
		GLF	€52.9	17%
		Total	€309.8	100%

Notes: Hellenic Republic Public Debt Management Agency (PDMA) data from Public Debt Bulletin, which notes "Fixed/floating participation is calculated including Interest Rate Swap transactions." Estimate Based on Publicly Available Data from Japonica Partners collaborative analysis.

3. High Capital Spending

The Facts on Greece Government Financial Sustainability and Stability

The Greece Government Spent on Average €364 Million Per Week on Capital Spending from 2013 to 2015, which is 297% of Comparable Size Portugal and Ireland

(€, Millions)

<u>SN</u>		2013 to 2015	<u>2015</u>	<u>2014</u>	<u>2013</u>
	Greece:				
1	Gross Fixed Capital Formation	€19,400	€6,700	€6,500	€6,200
2	Other Capital Expenditures	€37,400	€10,800	€2,200	€24,400
3	Total Capital Expenditures	€56,800	€17,500	€8,700	€30,600
4	Total Capital Expenditures per Week	€364	€337	€167	€588
	Portugal:				
5	Gross Fixed Capital Formation	€11,100	€3,900	€3,500	€3,700
6	Other Capital Expenditures	€12,100	€3,500	€6,900	€1,700
7	Total Capital Expenditures	€23,200	€7,400	€10,400	€5,400
8	Total Capital Expenditures per Week	€149	€142	€200	€104
	Ireland:				
9	Gross Fixed Capital Formation	€11,200	€3,900	€4,000	€3,300
10	Other Capital Expenditures	€5,100	€3,600	€1,200	€300
11	Total Capital Expenditures	€16,300	€7,500	€5,200	€3,600
12	Total Capital Expenditures per Week	€104	€144	€100	€69
	Total Capital Expenditures Ratios:				
13	Greece as % of Portugal	245%	236%	84%	567%
14	Greece as % of Ireland	348%	233%	167%	850%
15	Greece as % of Average	297%	235%	125%	708%

Notes: EC AMECO data accessed 3 August 2016. Gross National Income 2015: Greece: €176,500; Ireland: €182,200; Portugal €175,500. Other Capital Expenditures includes capital transfers.

4. Total Balance Sheet

The Facts on Greece Government Financial Sustainability and Stability

At Year-End 2015, the Greece Government had Over ½ Trillion Euros in Assets and Liabilities to Manage or Mismanage, which is €48,060 per Citizen (1 of 2)

(€, Billions; as of 31 December 2015)

<u>SN</u>	Balance Sheet Item	Amount	□ Financial Assets
1.	Financial Assets	€52	10%
2.	Non-Financial Assets	€90	☐ Non-Financial
3.	Total Assets	€142	17% Assets
			49%
4.	Financial Liabilities	€125	Financial
5.	Non-Financial Liabilities	€255	24% Liabilities
6.	Total Liabilities	€380	
			■ Non-Financial
7.	Net Worth	-€238	
			Liabilities
8.	Total Assets and Liabilities	€522	

Notes: Japonica Partners collaborative analysis. Working draft balance sheet. For additional details, see Japonica Partners 30 April 2016 USC Global Leadership Summit presentation: mostimportantreform.info/MAGARIAN_USC_20160430.pdf.

At Year-End 2015, the Greece Government had Over ½ Trillion Euros in Assets and Liabilities to Manage or Mismanage, which is €48,060 per Citizen (2 of 2)

(€, Billions; as of 31 December 2015)

SN	Balance Sheet Item	<u>Amount</u>	% of Total Assets and Liabilities Combined	% of GDP
1.	Financial Assets	€52	10%	30%
2.	Non-Financial Assets	€90	17%	51%
3.	Total Assets	€142	27%	81%
4.	Financial Liabilities	€125	24%	71%
5.	Non-Financial Liabilities	€255	49%	145%
6.	Total Liabilities	€380	73%	216%
7.	Net Worth	-€238	-46%	-135%
8.	Total Assets and Liabilities	€522	100%	
9.	GDP			€176

Notes: Japonica Partners collaborative analysis. Working draft balance sheet. For additional details, see Japonica Partners 30 April 2016 USC Global Leadership Summit presentation: mostimportantreform.info/MAGARIAN_USC_20160430.pdf.

Greece Government Financial Sustainability and Stability is Better Assessed with Relative Change in Net Worth Rather than Future Face Value of Debt

(€, Billions)

<u>SN</u>		Greece General <u>Government</u>	Consolidated Annual Accounts of the European Union	European Union Member States <u>Aggregated</u>	<u>Time Period</u>
1	Annual Return on Assets (ROA)	-23%	-6%	-12%	EU: 2011-15 Average; GR: 2015
1.	Allital Retail of Assets (ROA)	(Non-Financial Liabilities Impact TBD)	-070	- 12 /0	GIV. 2013
2.	% Annual Change in Taxpayers' Equity	-23% (Non-Financial Liabilities Impact TBD)	-21%	-17%	EU: 2011-15 Average; GR: 2015
3.	Taxpayers' Equity % of GDP	-135%	NA	-101%	2015 YE
4.	Total Assets as % of GDP	81%	NA	104%	2015 YE
5.	Total Assets	€142	€154	€15,145	2015 YE
6.	Taxpayers' Equity	-€238	-€72	€14,729	2015 YE
7.	GDP	€176	NA	€14,621	2015 YE

Notes: Japonica Partners collaborative analysis. The Consolidated Annual Accounts of the European Union are from audited financials prepared in accordance with International Public Sector Accounting Standards (IPSAS). Greece General Government and European Union Aggregated are estimated values. Greece ROA and Change in Taxpayers' Equity is based only on change in Total Assets (estimated as 52 weeks as a percentage of the 109 weeks and €69 billion asset value decline; see slide 29 for details) as change in value of Greece Non-Financial Liabilities is not yet estimated. Taxpayers' Equity also referred to as Net Assets, Net Worth, and Net Liabilities. For additional details, see Japonica Partners 30 April 2016 USC Global Leadership Summit presentation: mostimportantreform.info/MAGARIAN_USC_20160430.pdf. TBD: To be determined. NA: Not applicable.

5. Asset Value Lost

The Facts on Greece Government Financial Sustainability and Stability

Analysis Indicates that €69 Billion, or on Average €625 Million Per Week, of Greece Government Asset Value was Lost from 2014 to August 2016

				Identified \	Value Lost
<u>SN</u>	Greek Government	<u>2014</u>	<u>2016</u>	<u>Amount</u>	Percentage of 2014
1	Financial Assets	€109 Billion	€71 Billion	€40 Billion	37%
2	Non-Financial Assets	€115 Billion	€86 Billion	€29 Billion	25%
3	Total Assets	€224 Billion	€157 Billion	€69 Billion	31%
4	Value Lost Per Week			€625 Million	
5	Value Lost Per Greek Citizen			€6,275	

Notes: Japonica Partners collaborative analysis. Identified Value Lost may differ from change in Financial Assets due to additions and disposals. From 30 June 2014 to 3 August 2016 or closest date of data available. Per week calculation based on 109 weeks. Based on population of 10.9 million from EC AMECO database and unconsolidated general government financial asset data from Eurostat (accessed 3 August 2016). Non-Financial Assets estimate based on data from Japonica Partners 30 April 2016 USC Global Leadership Summit presentation: mostimportantreform.info/MAGARIAN_USC_20160430.pdf.

Greece Government Identified Financial Asset Value Lost from 2014 to August 2016

<u>SN</u>	<u>Identified items</u>	Financial Asset <u>Value Lost</u>			
1.	Pre-2015 Recap Bank Equity	€19,400	Million		
2.	SMP/ANFA Rebates	€7,010	Million		
3.	Unlisted Shares (excl. Bank CoCos and Supranational Entities)	€4,296	Million		
4.	Deficit Spending: 30 Jun 2014 - 3 Aug 2016	€3,807	Million		
5.	2015 Bank CoCos	€1,718	Million		
6.	Listed Shares (excl. Bank Shares)	€1,093	Million		
7.	2015 Recap Bank Equity	€848	Million		
8.	Late Payment Directive 2011/7/EU	€730	Million		
9.	PSI GGBs	€654	Million		
10.	2014 GGB Issues	€103	Million		
11.	Identified Financial Asset Value Lost	€39,658	Million		

Notes: Japonica Partners collaborative analysis. From 30 June 2014 to 3 August 2016 or closest date of data available. Based on unconsolidated general government financial asset data is from Eurostat accessed 3 August 2016.

Impact on Greece Government Fixed Assets: Cost of Capital and Public Equity Market Methodologies

(€, Millions)

2015 Year-End estimate is starting point with 30 June 2014 and 3 August 2016 extrapolated based on change in market levels.

SN		30 Jun 2014	31 Dec 2015	3 Aug 2016	Decline in Fixed Asset Value
<u> </u>	Cost of Capital Methodology:	<u> </u>	31 Dec 2013	<u>5 Aug 2010</u>	value
1.	Greek Government Bond Yield (10-Year)	5.91%	8.07%	8.24%	
2.	Risk Premium Estimate	2.00%	3.00%	4.00%	
3.	Investor Required Rate of Return	7.91%	11.07%	12.24%	
4.	Government Non-Financial Assets Value	€117,721	€90,000	€83,367	-€34,354
5.	Of which: Government Fixed Assets Value	€97,111	€69,390	€62,757	-€34,354
6.	Earning Stream Extrapolation		€7,681		
	Greek Public Equity Market Methodology:				
7.	Government Non-Financial Assets Value	€111,491	€90,000	€88,856	-€22,634
8.	Of which: Government Fixed Assets Value	€90,881	€69,390	€68,246	-€22,634
9.	% Change from 30 Jun 2014		-24%	-25%	
10.	Average Non-Financial Assets Value	€114,606	€90,000	€86,112	-€28,494

Notes: Japonica Partners collaborative analysis. Non-Financial Assets estimates based on data from Japonica Partners 30 April 2016 USC Global Leadership Summit presentation: mostimportantreform.info/MAGARIAN_USC_20160430.pdf. Greek Public Equity Market Methodology based on a composite of ten hard asset indices. Market data from Bloomberg accessed 15 August 2016.

From 2001 to 2015, Greece Added Only 10 Cents in GDP for Each Additional Euro of Debt, Compared to EZ Peer Average 45 Cents

(€, Billions)

			Peer	Peer Countries			
SN	GDP Increase / Debt Increase	Greece	Average	Ireland	Italy	Spain	Portugal
1	Historical (2001 - 2015)	10%	45%	58%	42%	55%	27%
2	Forecast (2015 - 2017)	42%	184%	365%	90%	95%	187%
3	Forecast / Historical	428%	406%	633%	217%	173%	680%

ON 1		PSI Adjusted 2001-15	0045	0044	0040	0040	0044	0040	0000	0000	0007	0000	0005	0004	0000	0000	0004
SN	Metric	Delta	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
1	GDP	23.8	176.0	177.6	180.4	191.2	207.0	226.0	237.5	242.0	232.7	217.9	199.2	193.7	178.9	163.5	152.2
2	Gross Debt - EDP FFV	243.3	311.5	319.7	320.5	305.1	356.3	330.6	301.1	264.8	239.9	225.6	214.0	199.3	181.5	171.4	163.0
3	GDP Δ / Debt Δ (Annual)		19%	NM	-70%	NM	-74%	-39%	-12%	37%	104%	161%	38%	83%	153%	134%	93%
4	GDP Δ / Debt Δ (Cumulative)	10%	16%	16%	18%	27%	28%	44%	62%	88%	105%	105%	92%	114%	144%	134%	

6. Government Financial Transparency

The Facts on Greece Government Financial Sustainability and Stability

Little Progress on Government Financial Transparency and Accountability Processes to Win the Trust and Confidence of Taxpayers

- 1. No opening balance sheet has been published.
- No senior level ministers with professional turnaround, financial, or accounting experience.
- 3. No actions to educate the public on changes in the government balance sheet or financial performance.
- 4. Continued overstatement of government debt and debt metrics, including errant application of ESA 2010 and EDP notification.*
- Continued use of single-entry, pre-modern era accounting system.
- 6. Dormant international public sector accounting standards committee.

Note: *Appendix 2 has relevant ESA 2010 text for valuing restructured debt; Appendix 3 has an EDP notification table requesting present value of debt; and Appendix 4 has a ten year comparison of Greece debt components as reported on Eurostat and the AMECO EDP face value.

Part 2 of 2:

Managing the Greece Government Balance Sheet as the Most Important Reform

(Scheduled Release: Fall 2016)

APPENDICES

Appendix 1: 20 Conference Resources

Conference presentations, videos, and agendas can be found at www.MostImportantReform.info/relevant-conferences.

SN	Conference	Date	Location
1	University of Southern California Global Leadership Summit	29 Apr 2016	Los Angeles, USA
2	CESifo Re-Thinking Sovereign Debt Summit	8 Jul 2015	Munich, Germany
3	CEPS Balance Sheet Task Force	24 Jun 2016	Brussels, Belgium
4	Institute for New Economic Thinking Oxford Wealth Conference	20 Jun 2016	Oxford, UK
5	OECD Public Sector Accruals Symposium	27 Feb 2015	Paris, France
6	Standard & Poors/Institute of International Finance Executive	11 Nov 2014	New York, NY
	Program on Sovereign Risk Management		
7	London Business School	3 Jun 2016	London, UK
		10 Dec 2015	
8	European Group for Public Administration Spring Workshop	7 May 2015	Zurich, Switzerland
9	CESifo/Süddeutsche Zeitung Munich Lecture	27 Apr 2015	Munich, Germany
10	International Federation of Accountants Roundtable	15 Apr 2015	Washington, DC, USA
11	CIPFA Annual Conference	7 Jul 2015	London, UK
12	European Federation of Accountants Public Sector Roundtable	15 Jun 2016	Brussels, Belgium
13	The Accountant & International Accounting Bulletin Conference	6 Oct 2016	London, UK
14	Centre for European Policy Studies Ideas Labs	26 Feb 2016	Brussels, Belgium
15	New Era in Sovereign Accounting	16 Jun 2014	Athens, Greece
		17 Feb 2014	London, UK
16	e-Kyklos	12 Apr 2016	Athens, Greece
17	American-Hellenic Chamber of Commerce Annual Greek	30 Nov 2015	Athens, Greece
	Economy Conferences	2 Dec 2014	
		1 Dec 2013	
18	Project Management Institute Greece Congress	5 Nov 2015	Athens, Greece
19	University of Piraeus	7 Dec 2015	Athens, Greece
20	Forbes Banking and Insurance Forum	27 Mar 2015	Athens, Greece

Appendix 2: ESA 2010 Rules Specify that Restructured Debt is Extinguished and Revalued at Transaction Value

ESA 2010 Debt operations

20.221 Debt operations can be particularly important for the general government sector, as they often serve as a means for government to provide economic aid to other units. The recording of these operations is covered in Chapter 5. The general principle for any cancellation or assumption of debt of a unit by another unit, by mutual agreement, is to recognise that there is a voluntary transfer of wealth between the two units. This means that the counterpart transaction of the liability assumed or of the claim cancelled is a capital transfer. No flow of money is usually observed, this may be characterised as a capital transfer in kind.

Other debt restructuring

20.236 Debt restructuring is an agreement to alter the terms and conditions for servicing an existing debt, usually on more favourable terms for the debtor. The debt instrument that is being restructured is considered to be extinguished and replaced by a new debt instrument with the new terms and conditions. If there is a difference in value between the extinguished debt instrument and the new debt instrument, it is a type of debt cancellation and a capital transfer is necessary to account for the difference.

Chapter 5: Valuation

Financial transactions are recorded at transaction values, that is, the values in national currency at which the financial assets and/or liabilities involved are created, liquidated, exchanged or assumed between institutional units, on the basis of commercial considerations.

- 5.20 Financial transactions and their financial or nonfinancial counterpart transactions are recorded at the same transaction value. There are three possibilities:
 - (c) neither the financial transaction nor its counterpart transaction is a transaction in cash or via other means of payment: the transaction value is the current market value of the financial assets and/or liabilities involved.
 - 21 The transaction value refers to a specific financial transaction and its counterpart transaction. In concept, the transaction value is to be distinguished from a value based on a price quoted on the market, a fair market price, or any price that is intended to express the generality of prices for a class of similar financial assets and/or liabilities. However, in cases where the counterpart transaction of a financial transaction is, for example, a transfer and therefore the financial transaction may be undertaken other than for purely commercial considerations, the transaction value is identified with the current market value of the financial assets and/or liabilities involved.

Appendix 3: Greece Continues to Omit Disclosing the Present Value of Government Debt as Required in EDP Notification Table 4, Item 4

"In case of substantial differences between the face value and the present value of government debt, please provide information on: (i) the extent of these differences; (ii) the reasons for these differences."

The answers provided by Greece in the table below are qualitative, not quantitative: (i) "Market value of securities much lower than nominal value"; (ii) "Economic crisis".

1	In case of substantial differences between government debt, please provide informat	
	i) the extent of these differences:	t value of securities much lower than nominal value
	ii) the reasons for these differences:	Beonomic crisis

Appendix 4: In 2011, Eurostat Reported ESA 2010 Greece Government Debt Components €151 Billion Lower than EDP Face Value

SN	ı.	<u>2006</u>	<u> 2007</u>	<u>2008</u>	<u> 2009</u>	<u>2010</u>	<u> 2011</u>	<u> 2012</u>	<u>2013</u>	<u> 2014</u>	<u>2015</u>
	ESA 2010 Debt Components	:									
1.	Loans	€40,997	€38,662	€39,108	€37,007	€67,100	€99,165	€212,469	€241,075	€250,244	€252,354
2.	Debt Securities	€195,031	€206,643	€222,170	€257,377	€199,873	€104,620	€78,059	€64,092	€52,839	€46,601
3.	Currency & Deposits	€1,158	€806	€902	€1,694	€1,203	€1,106	€1,055	€1,088	€995	€1,341
4.	ESA 2010 Debt Components	€237,186	€246,111	€262,180	€296,077	€268,175	€204,890	€291,582	€306,255	€304,078	€300,296
5.	ESA 2010 Debt Components % of GDP	109%	106%	108%	125%	119%	99%	152%	170%	171%	171%
	EDP Debt:										
6.	Consolidated Gross Debt (Face Value)	€225,648	€239,915	€264,775	€301,062	€330,570	€356,289	€305,094	€320,510	€319,718	€311,452
7.	EDP Debt as % of GDP	104%	103%	109%	127%	146%	172%	160%	178%	180%	177%
8.	EDP Debt Less ESA Debt	-€11,538	-€6,196	€2,596	€4,985	€62,395	€151,399	€13,512	€14,255	€15,640	€11,156
9.	GDP	€217,862	€232,695	€241,990	€237,534	€226,031	€207,029	€191,204	€180,389	€177,559	€176,023

Notes: Eurostat data accessed 25 August 2016. Under ESA 2010, long-term debt securities are reported at market value (7.69), which for Greece is often below face value; loans are reported at face value (7.70); and restructured debt reported at transaction value, identified as market value based on commercial considerations at time of the restructuring (not face value) (5.19-21, 20.221, and 20.236), which appears to be a rule not properly complied with for Greece. ESA Debt is different from what Eurostat reports as Total Financial Liabilities, which includes items such as payables, but is often mistakenly reported as and compared with total debt.

Appendix 5: Additional Readings

- "Greece's New Agreement with Europe: This Time Different?" Intereconomics. September/October 2015. **Pelagidis**, **Theodore and Kazarian**, **Paul B**.
- "Greece's Debt: Sustainable?" Harvard Business School Case Study. June 2015. **Serafeim, George**
- "Greece's Bailout Package: Missing IPSAS?" The Accountant. September 2015. **Tornero, Carlos**
- "The Curious Case of the Rules for Calculating Debt Relief: A Technical Note on EU Accounting for Debt, Especially Restructured and Concessional Debt." Sep 2015. **Ball, Ian**
- "What if Greece got massive debt relief but no one admitted it? (Part 2)" Financial Times. 9 June 2016. **Klein, Matthew C.**

See also: www.MostImportantReform.info