How Responsible Greece Key Stakeholders Can Win the Trust and Confidence of the Capital Markets by Following the UK Government Best Practices and Discontinuing the Worst Practices

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JAPONICA PARTNERS

THE CHARLES & AGNES KAZARIAN FOUNDATION

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"Greece, a Financial Overview and Investment Opportunities"





working logether

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Outline of Observations

- Section A. Background Observations
- Section B. Best Practices to win the trust and confidence of capital markets are based on international accounting standards and senior ministers with decades of directly relevant and successful experience.
- Section C. Worst Practices to undermine the trust and confidence of the capital markets are "duplicity" and touting political spin and not the facts based on international standards.

Quick Facts on Japonica and Kazarian

- Japonica Partners was founded in 1988 with our core competency of rejuvenating (turning around) multinational conglomerates that most see as un-savable.
- Our skillsets include improving employee performance through extensive education and training programs, and winning the trust and confidence of key stakeholders with transparency of financial results. Our track record is one of the best in the world.
- We extended our reach in summer 2012 to an underperforming EU country with a major investment in Greek government bonds.
- Our efforts in the EU have gained professional recognition, including winning the 2016 William Pitt the Younger award for our work in strengthening democracy through government financial management. Appointed sole special advisor to the CEPS EU Balance Sheet Task force.

Select Conference Resources

Conference presentations, videos, and agendas can be found at www.MostImportantReform.info.

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

Executive Education Materials

"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

"The Curious Case of the Rules for Calculating Debt Relief: A Technical Note on EU Accounting for Debt, Especially Restructured and Concessional Debt." September 2015. **Ball, Ian**

"Greece Needs to Be Honest About the Numbers." Harvard Business Review. September 2016. Jacobides, Michael

"Greece's Bailout Package: Missing IPSAS?" The Accountant. September 2015. **Tornero, Carlos**

"What if Greece got massive debt relief but no one admitted it? (Part 2 of 7 article series)" Financial Times. 9 June 2016. **Klein, Matthew**

See also: www.MostImportantReform.info

Who are The Key Stakeholders Responsible for Leading Greece

(Alphabetical order)

- ECB
- European Commission
- ESM
- Greece Government
- Greece Political Party Leadership
- IMF

Section A. Background Observations

General Background Observations

- 1. Markets are **globally interconnected** and with the EU trends of both more integration and separation require internationally comparable government financial statements.
- 2. Governments are often over a **majority of the economy** and have **massive balance sheets**.
- 3. Absence within government of **professional managers and management processes.**
- 4. Lack of government transparency of internationally comparable financial statements, especially **no balance sheets**.
- 5. The focus on headline debt (FFV) and cash deficits cultivates **destructive short-termism and misleading reporting** schemes.
- 6. There is a significant and increasingly destructive **lack of trust and confidence** in government and government financial reporting.

Governments all too often aid capital market forces seeking to profit from market volatility and biased commentary by focusing their presentations on political considerations and headline economic soundbites.

EU Member State General Governments are a Very Significant Part of the Economy with Total Expenditures an Average 46% of GDP

		Total			Total
		Expenditure			Expenditure
SN	Country	% of GDP	SN	Country	% of GDP
1	Finland	58%	15	Germany	44%
2	France	57%	16	Malta	43%
3	Denmark	56%	17	Spain	43%
4	Greece	55%	18	United Kingdom	43%
5	Belgium	54%	19	Czech Republic	43%
6	Austria	52%	20	Luxembourg	42%
7	Hungary	51%	21	Poland	41%
8	Italy	51%	22	Bulgaria	40%
9	Sweden	50%	23	Cyprus	40%
10	Portugal	48%	24	Estonia	40%
11	Slovenia	48%	25	Latvia	37%
12	Croatia	47%	26	Romania	36%
13	Slovakia	46%	27	Ireland	35%
14	Netherlands	45%	28	Lithuania	35%
				Average:	46%

Source: EC AMECO database; 2015 data (5 July 2016).

The Focus on Headline Debt (FFV) and Cash Deficits Cultivates Destructive Short-Termism and Misleading Reporting Schemes: Examples

- Focus on debt at future face value (FFV) and cash balances are two of the most easily manipulated financial numbers.
- Focus on FFV **ignores changes in Taxpayers' Equity**, which is vastly more meaningful.
- Focus on cash balances increases pressure to spend more money on vote buying (consumption) and less on capital expenditures (e.g., infrastructure).
- Focus on FFV and cash increases pressure to sell government assets rather than increase value through better management.

Market Forces Profit from Volatility and Risk Assessment Swings

Hedge funds:

- Increase trading profits
- Increase frequency of trading
- Create relational profit anomalies
- Improve CDS profit opportunities

Investment Banks:

- Wider bid-ask spreads
- Increase price of liquidity
- Increase trading commissions

Media

 Volatility sells papers and generates profitable internet activity

A Growing Consensus Among Voters as to the Reasons Government Will Not Publish a Balance Sheet in Accordance with International Standards

- #1. Exposes hidden vote buying
- #2. Exposes incompetence
- #3. Don't want to be compared based on financial facts
- #4. Don't want to be held **accountable** for financial underperformance
- #5. Exposes corruption

Section B. Best Practices to win the trust and confidence of capital markets are based on international accounting standards and senior ministers with decades of directly relevant and successful experience.

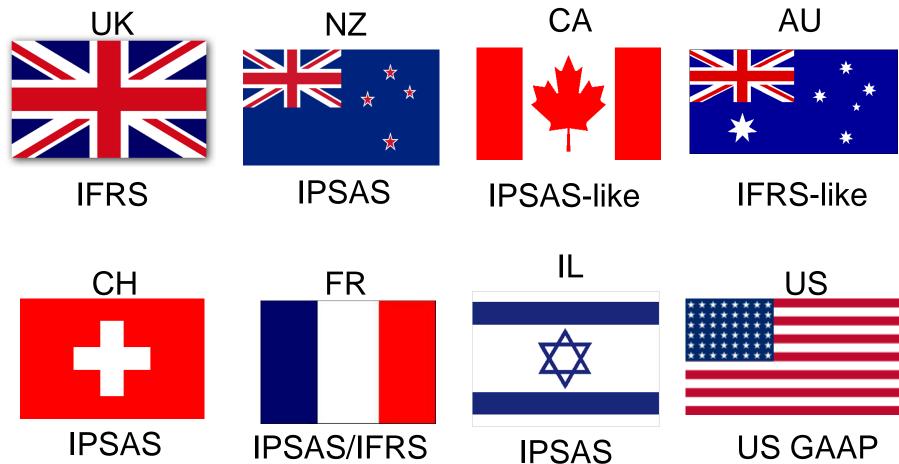
Section B. Best Practices

- 1. Debt: IPSAS/IFRS
- 2. Correctly using ESA 2010 Section 20.236 and 2008 SNA 22.110
- 3. Balance Sheet Net Debt
- 4. Debt Service
- 5. Balance Sheet
- 6. Three Basic Decision-Making Tools
- Designate the 1st Senior Government Official with Decades of Successful Relevant Finance and Management Experience

Section B. Best Practices

1. Debt: IPSAS/IFRS

Government Benchmarks with Financial Statements Prepared in Accordance with International Accounting Rules



Public Sector Benchmarks with Financial Statements Prepared in Accordance with International Accounting Rules



European Union IPSAS European Financial Stability Facility



IFRS



IFRS



US GAAP



IPSAS



IPSAS

Greece and Peer Balance Sheet Debt and Net Debt (IPSAS/IFRS): 2013-2015

(€, Billions)

	Working Draft Estimate							
	Greece	<u>Ireland</u>	<u>Italy</u>	Portugal	<u>Spain</u>			
1. Balance Sheet Debt	€ 125	€ 190	€ 2,172	€ 208	€ 1,054			
2. Financial Assets	€ 45	€ 76	€ 328	€ 66	€ 312			
3. Balance Sheet Net Debt	€ 80	€ 114	€ 1,844	€ 142	€ 742			
4. GDP	€ 176	€ 215	€ 1,636	€ 179	€ 1,081			
5. Balance Sheet Debt / GDP	71%	88%	133%	116%	97%			
6. Financial Assets / GDP	25%	35%	20%	37%	29%			
7. Balance Sheet Net Debt / GDP	45%	53%	113%	79%	69%			
8. Future Face Value of Debt	€ 312	€ 201	€ 2,172	€ 231	€ 1,072			
9. Future Face Value / GDP	177%	94%	133%	129%	99%			

Notes: Balance sheet debt estimates as of August 2016 prepared under the direction of Japonica Partners according to IPSAS/IFRS based on publicly available sources including EC, EFSF, ESM, IMF, and Bloomberg data. Financial asset data from Eurostat as of October 2016.

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Debt Measurement by International Standards/Guidelines

"The truth only counts when there are agreed rules of evidence." Financial Times, 9 October 2016.

Standards / Guidelines	•		Rescheduled Debt	Financial Assets				
IPSAS	Amortized cost	Amortized cost	Amortized cost	All financial assets				
IFRS	Amortized cost	Amortized cost	Amortized cost	All financial assets				
2008 SNA	Market value Nominal value		Present value	All financial assets incl. receivables				
ESA 2010	Market value	Nominal value Present value		All financial assets incl. receivables				
IMF DSA		Concessional debt at 5% discount rate and other at ominal value; requires grant element of 35%+ to qualify						
EDP (Dual)	Face value / PV	Face value	Face value / PV	None				

IPSAS 29 / IFRS 39: Highlights

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

Objective: 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.

3. Concessionary Loans and Grants

- Fair value measurement.
- Recognized existence of **non-exchange transaction** as a subsidy.

3. 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.

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

IFRS 39 Passed by EC Parliament

The EC made the IFRS debt measurement standards **mandatory for all companies** listed on major stock exchanges in the EU from 2005. Commission Regulation (EC). No.1864/2005 of 15 November 2005.

Section B. Best Practices

2. Correctly using ESA 2010 Section 20.236 and 2008 SNA 22.110.

ESA 2010: Legal Status and Central Framework in EU

"To ensure that the concepts, methodologies, and accounting rules set out in this volume are strictly applied, it has been decided, following a proposal from the Commission, to give it a solid legal basis." ESA 2010 was thus adopted in the form of a regulation of the European Parliament and the Council dated 21 May, 2013. Page iii.

"The ESA 2010 therefore serves as the **central framework for reference for the social and economic statistics** of the EU and its member states." ESA 2010 Page 2.

"Reporting the **economic reality** where it is different from the legal form is a fundamental accounting principle to give consistency and to make sure that transactions of similar type will produce similar effects on the macroeconomic accounts, **irrespectively of the legal arrangements**." ESA 2010 Page 440.

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

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 conomic 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: <u>the transaction</u> value is the current market value of the financial assets and/or liabilities involved.
- 5.21 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.

2008 SNA Statistical Framework Produced by Five NGOs

"It [2008 SNA] has been **produced and is released under the auspices** of the United Nations, the European Commission, the Organization for Economic Co-operation and Development, the International Monetary Fund, and the World Bank Group." Forward.

"At its fortieth session, the Statistical commission **unanimously adopted** the 2008 SNA as the international statistical standard for national accounts. We **encourage all countries** to compile and report their national accounts on the basis of the 2008 SNA **as soon as possible**." Signed by BAN Ki-Moon, UN; BARROSO Jose Manuel, EC; GURRIA Angel, OECD; STRAUSS-KAHN Dominique, IMF; and ZOELLICK Robert B, World Bank. Forward.

Five Signatories to System of National Accounts (2008 SNA), including the European Commission and the IMF

Foreword

The System of National Accounts, 2008 (2008 SNA) is a statistical framework that provides a comprehensive, consistent and flexible set of macroeconomic accounts for policymaking, analysis and research purposes. It has been produced and is released under the auspices of the United Nations, the European Commission, the Organisation for Economic Co-operation and Development, the International Monetary Fund and the World Bank Group. It represents an update, mandated by the United Nations Statistical Commission in 2003, of the System of National Accounts, 1993, which was produced under the joint responsibility of the same five organizations. Like earlier editions, the 2008 SNA reflects the evolving needs of its users, new developments in the economic environment and advances in methodological research.

A working group, comprising representatives of each of our organizations, managed and coordinated the work. National statistical offices and central banks from countries throughout the world made valuable contributions. Expert groups carried out research on the issues being reviewed. An advisory expert group was established to provide expert opinions from a broad range of countries. During the update work, the recommendations and the updated text were posted on the website of the United Nations Statistics Division for worldwide comment, thereby achieving full transparency in the process.

The 2008 SNA is intended for use by all countries, having been designed to accommodate the needs of countries at different stages of economic development. It also provides an overarching framework for standards in other domains of economic statistics, facilitating the integration of these statistical systems to achieve consistency with national accounts.

At its fortieth session, the Statistical Commission <mark>unanimously adopted</mark> the 2008 SNA as <mark>the international statistical standard for</mark> national accounts. We encourage all countries to compile and report their national accounts on the basis of the 2008 SNA as soon as possible.

BAN Ki-moon Secretary-General United Nations

José Manuel Barroso President European Commission

Angel Gurría Secretary-General Organisation for Economic Co-operation and Development

Dominique Strang. Hay

Dominique Strauss-Kahn Managing Director International Monetary Fund

Kibert B. Joellick

Robert B. Zoellick President The World Bank Group



2008 SNA Rules Specify that Restructured Debt is Extinguished and Revalued at Transaction Value

Debt reorganization

- 22.106 There are four main types of debt reorganization:
- Debt rescheduling or re-financing. A change in the terms and conditions of the amount owed, which may result or not in <u>a reduction in burden in present value</u> terms.

Debt rescheduling and refinancing

- 22.109 <u>Debt rescheduling (or refinancing)</u> is an agreement to alter the terms and conditions for servicing an existing debt, usually on more favourable terms for the debtor. <u>Debt</u> rescheduling involves rearrangements on the same type of instrument, with the same principal value and the same creditor as with the old debt. Refinancing entails a different debt instrument, generally at a different value and may be with a creditor different than that from the old debt.
- 22.110 Under both arrangements, the debt instrument that is being rescheduled 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, part is a type of debt forgiveness by government and a capital transfer is necessary to account for the difference.

- 22.111 *Debt rescheduling* is a bilateral arrangement between the debtor and the creditor that constitutes a formal deferment of debt-service payments and the application of new and generally extended maturities. The new terms normally include one or more of the following elements: extending repayment periods, reductions in the contracted interest rate, adding or extending grace periods for the repayment of principal, fixing the exchange rate at favourable levels for foreign currency debt, and rescheduling the payment of arrears, if any.
- 22.112 The treatment for debt rescheduling is that the <u>existing</u> <u>contract is extinguished and a new contract created</u>. The applicable existing debt is recorded as being repaid and a new debt instrument (or instruments) of the same type and with the same creditor is created with the new terms and conditions.
- 22.113 The transaction is recorded at the time both parties record the change in terms in their books, and is valued at the value of the new debt.

Section B. Best Practices

3. Balance Sheet Net Debt

Greece 2015 YE Balance Sheet Net Debt, Correctly Calculated in Accordance with International Accounting or Statistics Rules is 45% and 62% 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 (ED	e Deficit dure*
						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	€ 80	€ 110	€ 110	€ 187	NA	NA
5.	Net Debt % of GDP	45%	62%	62%	106%	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 45% and 62% of GDP, Respectively: Details

(€, Billions)

		International Accounting	2008 System of National	European System of	IMF Debt Sustainability	Lisbon Treaty Excessive
1.	Rules:	Standards (IPSAS/IFRS)	Accounts (2008 SNA)	Accounts 2010 (ESA 2010)	Analysis (DSA)	Deficit Procedure* (EDP)
2	Authority and Benchmarks:	Produced by independent and professional accounting standards boards. Utilised by leading governments globally including the UK, Switzerland, New Zealand, France, and Israel. Debt standards are IPSAS 29 and	Produced and released under the auspices of the United Nations, the European Commission, the OECD, IMF, and the World Bank Group. All countries encouraged to	ESA 2010 was promulgated to achieve the objectives set by the Treaty on the Functioning of the European Union (TFEU) and adopted in the form of a regulation of the European Parliament and of the Council dated 21 May 2013 to give a solid legal basis for Member	Series of IMF Staff Guidance Notes and papers from 2007 to 2015. Topics include: public debt limits (effective date June 30, 2015), DSA-LIC frameworks and excel	Debt definition is in Lisbon Treaty (2007) attached as Protocol 12 on Excessive Deficit Procedure* (EDP). Operative metric is the 60% debt to GDP for Member States. Of note, at year end 2015, the EU average D/GDP was 87% and the EZ average was 93%. EDP Notification Tables require present
3.	Type of Debt Recalculated from (Future) Face Value:	All debt	Debt reorganizations and debt securities	Debt restructurings and debt securities	Concessional debt	value of debt. Protocol 12: None; EDP Table 4, Item 4: Debt restructurings and debt securities
4.	Framework:	Reflect economic reality and provide most meaningful information for decision- making and accountability.	provides macroeconomic	set of harmonized and reliable statistics on which to base decisions and policy advice. Of note, politically influenced rules and application provide numbers that reflect public policy preferences.	debt is a more relevant indicator as it takes into account the concessionality of debt.	Legal compliance with the Treaty on the Functioning of European Union (TFEU) and Stability and Growth Pact with debt measured at face value. EDP Notification Table 4, Item 4 requires present value of debt.
5.		or substantial modification	Debt reorganizations based on market (PV) at time of transaction, securities at market, and other debt at nominal value.	Debt reorganizations based on market (PV) at time of transaction, securities at market, and other debt at nominal value.		Face value and present value.
6.	Consolidated Sectors	Controlled entities	Central, EBF, local, SSFs, and non-market SOEs	Central, EBF, local, SSFs, and non-market SOEs	Central, EBF, local, SSFs, and non-market SOEs; and as designated	Central, EBF, local, SSFs, and non-market SOEs
7.	Gross Debt	€ 125	€ 155	€ 155	€ 203	FV: € 311 / PV: € 155
8.	Gross Debt % of GDP	71%	88%	88%	116%	FV: 177% / PV: 88%
9.	Financial Assets	Financial assets	Financial assets, including receivables	Financial assets, including receivables	Financial assets corresponding to debt instruments	NA
	Net Debt	€ 80	€ 110	€ 110	€ 187	NA
11.	Net Debt % of GDP	45%	62%	62%	106%	NA

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). Net Debt is Gross Debt less Financial Assets.

Progression of Maastricht Gross Debt to Balance Sheet Net Debt through Financial Engineering

(Euros, Billions)

		Maastricht	ht IPSAS/IFRS International Accounting Adjustments (Includes Accretion)							
		Debt	OSI #1	OSI #1	OSI #2/PSI #1	OSI #3/PSI #2	OSI #4		Sheet	
	Type of	(Face Value)	Loans	Loan Modification	Extensive Restructuring	Modification/Buyback	Loans	Total	Net Debt	
SN		31 Dec 2015	May 2010	June 2011	Feb/Mar 2012	December 2012	August 2015	Adjustments	31 Dec 2015 SN	
1.	Modified Securities	€41	€0	€0	€ 24	€4	€0	€ 28	€13	1.
2.	Modified/Concessionary Loans	€221	€9	€5	€ 69	€ 57	€17	€ 157	€ 64	2.
3.	Non-Revalued Debt	€47	€0	€0	€0	€0	€0	€0	€ 47	3.
4.	Adjustments		€9	€5	€ 93	€61	€17	€ 185		4.
	Total Gross Debt	€ 312	€ 303	€ 298	€ 205	€ 144	€ 127		€ 125	5.
6.	GDP	€176							€176	6.
7.	Debt/GDP	177%							71%	7.
8.	Financial Assets Funded w/ Loar	ns		Concessiona	ary Terms and Modificati	ons: Highlights			€7	8.
9.	Other Financial Assets		EU Loans: 3M Euribor	EU Loans cut to 3M	EU Loans cut to 3M	EU Loans cut to 3M			€ 38	9.
10.	Total Financial Assets		plus 300-400 bps.	Euribor plus 200-300	Euribor plus 150bps.	Euribor plus 50bps.			€ 45	10.
11.	Balance Sheet Net Debt		Maturities: 5 yrs.	bps. Maturities up to	Maturities up to 15 yrs.	Maturities extended to			€ 80	11.
12.	Balance Sheet Net Debt/GDP		Grace period: 1.5 yrs.		Grace period up to 10 yrs.	30 yrs.			45%	12.
				to 4.5 yrs.						
					EFSF Loans: Cost-of-	EFSF Loans cut to cost-of-				
					funding plus 200-300bps.	funding. Interest				
					Maturities: 30 yrs.	deferred for 10 yrs.				
						Maturities extended to				
						maximum 45 yrs.				
					ANFA bonds issued on					
					extant terms with interest					
					and partial principal rebate.					
					SMP bonds issued on	SMP interest and partial				
					extant terms.	principal rebate.				
					GGBs start at 2% coupon	principal resulte.				
					with maturities up to					
					30 yrs.					
					,		ESM Loans: ESM cost of			
							funds (est. rate <1%).			
							Maturities up to 44			
							years. Grace periods of			
							18+ years.			
					st Comparable Debt Inst		1			
			~400 bps below market	Market prices/YTMs	Market prices/YTMs	Market prices/YTMs	Market prices/YTMs			
			YTMs.	reflects CCC-rated GGB		reflects CCC-rated GGB	reflects CCC-rated GGB			
				high yield status.	high yield status.	high yield status.	high yield status.			
Ma	astricht Debt - Cumulative Face Va	alue Adjusted	€71	€71	€ 275	€ 275	€ 296			

Notes: Simplification for presentation purposes. Estimate as of October 2016.

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)

	October 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 <i>(YTM)</i>
Greece as		57%	50%	609/	27%	Delta vs. Peer Avg.: 6.92%
% of Peers		57 %	50%	60%	2170	0.92%
Greece	Caa3/ B- / CCC/CCCH	45%	6%	2.0%	16%	7.16%
Ireland	A3 /A+ / A/AH	53%	9%	2.3%	46%	-0.39%
Spain	Baa2/BBB+/ BBB+/ AL	69%	13%	2.8%	58%	0.08%
Italy	Baa2/BBB-/ BBB+/ AL	113%	15%	4.0%	74%	0.36%
Portugal	Ba1/BB+/ BB+/ BBBL	79%	11%	4.3%	61%	0.92%

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. YTM as of 11 November 2016.

Section B. Best Practices

4. Debt Service

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 % of GDP	Needs (GFN) % of GDP
Crosso		
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).

Cash Interest: Greece vs. Peer 2016-2017

		2016				2017					
		Cash Interest	GDP	<u>% GDP</u>	<u>Rev</u>	<u>% Rev</u>	Cash Interest	GDP	% GDP	<u>Rev</u>	<u>% Rev</u>
1.	Greece	5.2	174.8	3.0%	85.9	6.1%	5.2	181.6	2.9%	87.5	5.9%
2.	Portugal	8	184.4	4.3%	80.7	9.9%	8.3	190.6	4.4%	83.5	9.9%
3.	Spain	31.3	1,118.0	2.8%	424.4	7.4%	30.4	1,163.2	2.6%	437.5	6.9%
4.	Italy	66.4	1,669.8	4.0%	790.8	8.4%	64.3	1,710.6	3.8%	797.9	8.1%
5.	Ireland	6.2	265.1	2.3%	72.1	8.6%	6.1	240.6	2.5%	75.4	8.1%
6.	Peer Average			3.4%		8.6%			3.3%		8.3%
7.	Greece as % of Peer Average			88%		71%			86%		72%
8.	Greece w/ Rebates	3.5	174.8	2.0%	85.9	4.1%	3.8	181.6	2.1%	87.5	4.3%
9.	Greece w/ Rebates as % of Peer Average			2.576	0010	48%	5.0			0.10	53%

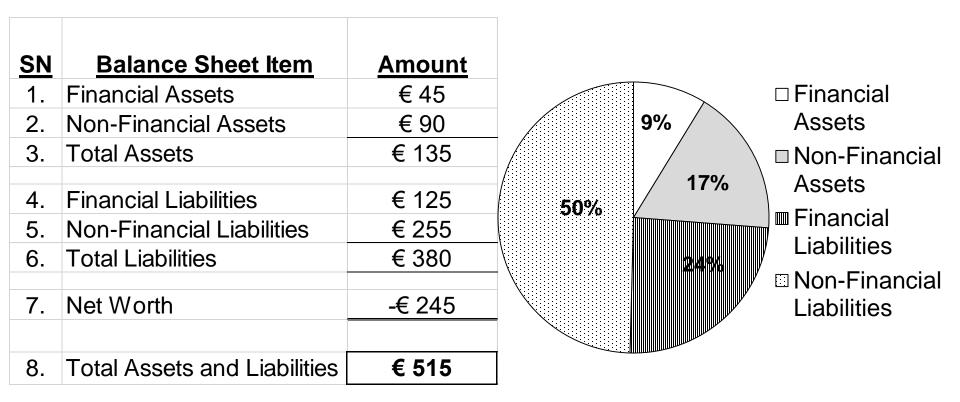
Notes: Greece cash interest estimated to include effects of interest deferrals, rebates, and payments on ESM loan investment in systemic bank CoCos. Other data from EC AMECO database (accessed 13 Nov 2016). Greece w/ Rebates assumes receipt of additional SMP/ANFA rebates as projected by IMF.

Section B. Best Practices

5. Balance Sheet

At Year-End 2015, the Greece Government had Over ¹⁄₂ Trillion Euros in Assets and Liabilities to Manage or Mismanage, which is €47,400 per Citizen

(€, Billions; as of 31 December 2015)



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.

Examples of Financial Decisions Benefiting from Understanding Financial Statement Impact

Assess transparency, performance, comparability (globally and historically), and accountability of the following (listed alphabetically by balance sheet section):

	Financial Assets:				
1.	Bank sector recapitalizations				
2.	Impairment on financial assets				
3.	Temporary designations hiding financial transactions				
	Non-Financial Assets:				
4.	Asset sale vs. reinvestment decisions				
5.	Fixed asset deterioration				
6.	Leasing vs. buying				
7.	Public – private partnerships				
8.	Revenue and expense recognition on long-life agreements				
9.	Tax waivers				
	Financial Liabilities:				
10.	Concessional loans				
11.	Debt buybacks				
12.	Emission premiums to understate debt				
13.	Exclusion of debt raised for specific purposes				
	Non-Financial Liabilities:				
14.	Delaying government payments				
15.	Environmental liabilities bail-out				
16.	Government employee pension changes				
17.	Litigation exposure				
18.	Private pension bail-out				

Section B. Best Practices

6. Three Basic Decision-Making Tools

Three Basic Decision-Making Tools

- 1. Modified T-Accounts
- 2. Six Key Performance Indicators
- 3. Performance Gap

How do these Tools Improve Performance: Examples

- Allow decision makers to see the economic reality of complex financial transactions and decisions.
- Provide insights into prospective liabilities.
- Assist in ranking financial impact of various alternatives.
- Provide accurate information to **better manage financial and fixed assets**.

Tool 1: Modified T-Account Start with 500 million plus euro decisions.

Assets	Total Debts / Net Worth
Financial Assets	Debt
	Total Debts
	Net Worth
Total Assets	Total Debts and Net Worth

Tool 2: Six Key Performance Indicators for Global Benchmarks Highlight Wide Performance Gap

(2001 to 2015) Benchmarks include AUS, CAN, FRA, ISR, NZL, CHE, GBR, USA.

		<u>Rank #1</u>	<u>Rank #8</u>	Median	Definition
1.	Value Creation Ratio (VCR)	NWI 70% of GDP	0.3x	2.0x	Change in GDP per unit change in Net Worth start point to end point.
2.	Return on Assets (ROA)	4%	-38%	-7%	Average annual change in net worth as a % of total assets.
3.	Net Worth % of GDP - Latest	38%	-158%	-66%	Latest period end net worth as a % of latest year GDP.
4.	Net Worth Annual % Change	19%	-13%	-4%	Average annual percentage change in net worth during period.
5.	GDP Change to Debt Change Ratio	651%	53%	147%	GDP increase per unit of debt increase start point to end point.
6.	Net Debt % of GDP - Latest	3%	64%	30%	As reported balance sheet net debt as a % of GDP.

Notes: 2001 to 2015 data or all available data from this period.

Value Creation Ratio: Full period change in GDP divided by change in Net Worth.

Return on Assets (ROA): Change in net worth as a percentage of assets.

Net Worth as % of GDP - Latest: Latest period end (2014 or 2015) net worth divided by corresponding year GDP.

Net Worth Annual Percentage Change: Annual change in year end net worth.

GDP Change to Debt Change Ratio: GDP increase as a % of debt increase.

Net Debt % of GDP - Latest: Latest period end (2014 or 2015) net debt (debt less financial assets) derived from respective government balance sheets divided by corresponding year GDP.

VCR and ROA KPIs: Goals, Meaning, and Source of Improvement

- Value Creation Ratio (VCR):
- **Definition:** change in GDP per unit change in Net Worth start point to end point.
- Goal: increase GDP and/or reduce cost of generating GDP.
- Meaning: value for money.
- Sources of Improvement: GDP growth and balance sheet management.

Return on Assets (ROA):

- Definition: annual or average annual change in net worth as a % of total assets.
- Goal: improve trends in net worth and/or improve the mix of revenue and expenses, and importantly changes in assets and liabilities.
- Meaning: performance of balance sheet management.
- Sources of Improvement: balance sheet management.

Financial Impact From Closing Government VCR and ROA Performance Gaps

- Valuation Creation Ratio (VCR) Increase: A VCR increase with same change in net worth corresponds to an increase in GDP, which if high value-add GDP, has precedent of yielding 25% to 50% in additional government revenue.
- Return on Assets (ROA) Increase: Increases in net worth reported in accordance with international accounting standards can confirm a combination of greater cash inflows on assets, increases in asset values, and reductions in current and future cash outflows.

Tool 3 - Performance Gap Framework: Greece Summary

(€, billions)

	Value Creation KPI		Return on Assets (ROA)	
	<u>Ratio</u>	GDP Increase	<u>Ratio</u>	Net Worth <u>Change</u>
Greece Current (Est.)	0.3x	€ 5	-12%	<i>-</i> € 17
Benchmark KPI	1.1x	€ 18	-7%	- € 10
Performance Gap	0.8x	€ 13	5%	€7
Performance Gap % of GDP		8%		4%

Notes: see subsequent sheets for Greece calculations.

Tool 3 - Performance Gap Framework: Increase in GDP from Improving Value Creation Ratio (VCR)

Greece estimate based on benchmarks.

<u>SN</u>	<u>Metric</u>	<u>Amount</u>	<u>% of GDP</u>
1.	Net Worth (2015)	- € 238	
2.	Currently Estimated Annual % Change in Net Worth	-7%	
3.	Expected Change in Net Worth (SN1*SN2)	€ 17	
4.	Benchmark Value Creation Ratio	1.1x	
5.	Currently Estimated Value Creation Ratio	0.3x	
6.	VCR Performance Gap (Multiple) (SN4-SN5)	0.8x	
7.	VCR Performance Gap (€) (SN3*SN6)	€ 13	8%

Notes: Benchmarks include AUS, CAN, FRA, ISR, NZL, CHE, GBR, USA. Greece 2015 GDP of €176 billion (EC AMECO accessed 10 Apr 2016).

Tool 3 - Performance Gap Framework: Increase in Net Worth from Increasing Return on Assets (ROA)

Greece estimate based on benchmarks.

<u>SN</u>	Metric	<u>Amount</u>	<u>% of GDP</u>
1.	Total Assets (2015)	€ 142	
2.	Currently Expected Return on Assets	-12%	
3.	Expected Change in Net Worth (SN1*SN2)	- € 17	-9%
4.	Benchmark Return on Assets Ratio	-7%	
5.	ROA Performance Gap (%) (SN4-SN2)	5%	
6.	ROA Performance Gap (€) <i>(SN1*SN5)</i>	€7	4%

Notes: Benchmarks include AUS, CAN, FRA, ISR, NZL, CHE, GBR, USA. Greece 2015 GDP of €176 billion (EC AMECO accessed 10 Apr 2016). 48

Best - Worst Practices Performance Gap: Illustrative Balance Sheet Line Items (1 of 2)

	Best Practice	Worst Practice
	Financial Assets:	Financial Assets:
1.	Internal cost of capital allocation.	Ignore existence of working capital and its cost.
2.	Benchmarking to achieve top quartile performance.	Bottom quartile performance or no benchmarking or management of financial assets.
3.	Better returns and minimized risk exposure on politically influenced loans.	Opacity and large losses on politically influenced loans.
4.	Full disclosure of financial assistance to and returns on SOEs.	Hidden SOE economic burden and risk.
	Non-Financial Assets:	Non-Financial Assets:
5.	Optimal re-investment in and use of real estate assets.	Chronic mismanagement of potentially high value commercial real estate assets.
6.	Charge units market cost of real estate to improve utilization.	Cost of real estate of units limited to maintenance cost and no impairment charges.
7.	Better management of and reinvest in potential asset sales to increase value and Taxpayer's Net Worth.	Fire sales of public assets to gain current cash.
8.	Low and declining single digit percentage fraud in accounts receivable.	Double digit percentage fraud in accounts receivable payments.
9.	Projects built based on lowest cost to financial metrics.	Public private partnerships with private party has required double digit rate of return, including sale-and-leasebacks.
10.	Concessions that both maximize long term value creation and improve value for the money in delivery of services.	Front-end load inflows to fund exiting (or even worse, new promises) annually recurring operating expenditures.
11.	Asset depreciable lives that encourage high ROI program maintenance.	Unrealistically long depreciation lives that short change program maintenance and create larger replacement costs in the future.
12.	Measure and report real estate tax basis appreciation in areas surrounding government infrastructure investments.	Ignore reporting and accountability for impact of infrastructure investments.
13.	Annual impairment reviews of tangible and intangible assets create discipline to protect asset value.	No balance sheet and/or no proper annual review hides asset value destruction.
14.	Measure, manage, and disclose both billed and collected taxes, including on the balance sheet.	Focus on and report only taxes collected not billed, with no balance sheet.

Best - Worst Practices Performance Gap: Illustrative Balance Sheet Line Items (2 of 2)

	Best Practice	Worst Practice
	Financial Liabilities:	Financial Liabilities:
15.	International standards and audits.	Incorrectly calculating balance sheet debt.
16.	Report pro-forma impact on financial statements.	Ignoring quantification of debt relief impact on net worth.
17.	Use all three tools to understand economic impact of liability management exercises.	Liability management without consideration of financial statement impact.
	Non-Financial Liabilities:	Non-Financial Liabilities:
18.	Payables paid on exact date due.	Incur and not report interest penalties on arrears.
19.	Disclose impact on financial statements of change in government employee pension terms.	Non-quantification of balance sheet impact of change in government employee pension terms.
21.	Quantifies and proactively manages litigation risk.	Ad hoc post-event handling.
22.	Fully funded civil service pension funds.	Assuming non-government pension liabilities in exchange for cash, and showing cash inflow as revenue while not reporting the corresponding liability.

Section B. Best Practices

 Designate the 1st Senior Government Official with Decades of Successful Relevant Finance and Management Experience

Designate the 1st Senior Government Official with Decades of Successful Relevant Finance and Management Experience

- 1. Greece currently has no senior level ministers with professional turnaround, financial, or accounting experience.
- 2. Senior leadership must take ownership and win the trust and confidence of key stakeholders with transparency and accountability of government financial management.
- 3. **Designate the 1st senior government official** with decades of successful experience in finance, accounting, and management who can convincingly educate and train key stakeholders, including government officials and their staff.

Brazil and Argentina Demonstrate Market Benefits of Professional Management Teams

- Brazil: Government appoints "real superstars" to finance team. (FT, May 2016)
- Argentina: Argentina now has the **"best economic** policy teams" in Latin America. (FT, April 2016)
 - Within 50 days of legal settlement receive almost \$70 billion in orders and sold \$16.5 billion in bonds including 30-year bonds.

Section C. Worst Practices to undermine the trust and confidence of the capital markets are "duplicity" and touting political spin and not the facts based on international standards.

Section C. Worst Practices

- 1. Political Spin Overrides Accurate Facts
- 2. Opaque and Biased Modeling Assumptions
- 3. Deny Existence of Debt Relief and Corresponding Reduction in Balance Sheet Net Debt
- 4. Gross Financing Needs
- 5. Multi-Decade Projections of Government Debt are Highly Prone to Political and Lender Bias
- 6. Financial Asset Mismanagement and Non-Disclosure
- 7. Don't Use or Misuse Peer Comparisons
- 8. Preventing Best Practice Implementation

Section C. Worst Practices

1. Political Spin Overrides Accurate Facts

Examples of Public Statements on Greece Government Debt Based on Politics, not Facts

- Governor of the Bank of Greece Yannis Stournaras comments illustrate that vested interests override facts and transparency: "Everybody realizes the importance of the IMF staying in the program and the IMF realizes it too. The IMF is close to our proposal at the Bank of Greece on debt measures and relaxing fiscal targets somewhat after the expiry of the current program." (Reuters, 10 Nov 2016)
- 2. IMF Managing Director Christine Lagarde comments indicative of lender bias: "Our conditions have not changed. We believe that there have to be very significant structural reforms in place and delivered. We also believe that there has to be debt that is sustainable going forward. We have demonstrated flexibility in the past in order to assess debt sustainability. We clearly believe that, as is, the debt is not sustainable." (Press conference, 6 Oct 2016)
- 3. Deputy Minister of Finance Giorgos Chouliarakis recent speech includes relentlessly repetitive references to the Greek debt being unsustainable, stating: "It is clear that, under present circumstances, Greek debt is unsustainable... There is no doubt that the public debt's haircut is a crucial link on the way to the state's exit from the crisis. There is no doubt for this." (Speech to Parliamentary Subcommittee, 3 Nov 2016)
- 4. The Truth Committee on Public Debt stated that Greek government "debt is odious, illegal and illegitimate and wholly unsustainable...the Third MoU is based on the same hypotheses and postulates as the two previous MoU. Therefore, it is destined to fail, leaving the debt unsustainable." (August 2015 Report) 57

Present Value Acknowledged but Not Properly Reflected on the Balance Sheet: EU-Related Comments

- Germany Deputy Minister of Finance Jens Spahn: Debt burden should be assessed based on "net present value of debt" and "how much in fact does Greece have to pay per year". (Bloomberg, 2 Sep 2015)
- 2. European Stability Mechanism Managing Director Klaus Regling: Greece debt ratio is meaningless (WSJ, 26 Sep 2013) given very generous concessional terms on the debt, and the debt relief should be measured using net present value (ESM Annual Report, 18 Jun 2015)
- **3. Germany Chancellor Angela Merkel**: "It is **rightful that we do not ask about the 120% debt [to GDP] ratio**, but ask, what is the actual burden on Greece from its debt service." (Axia, 1 Sep 2015)
- 4. IMF: Given the extraordinarily concessional terms that now apply to the bulk of Greece's debt, the debt/GDP ratio is not a very meaningful proxy (Greece Preliminary DSA 26 Jun 2015). Present value of debt is the appropriate measure for non-market access countries (DSA LIC Framework, 5 Nov 2013)
- 5. CDU Economic Council: It is the present value of a loan that is decisive, not the nominal value. Greece debt is significantly lower than thought. This 'competitive edge' is kept quiet. (Letter to Members of the CDU/CSU Parliamentary Group, 24 Feb 2015)
- 6. Former Member of German Council of Economic Experts Beatrice Weder di Mauro: The present value of outstanding Greek debt is now about 100% of GDP. (Brookings, Sept 2015)

Present Value Acknowledged but Not Properly Reflected on the Balance Sheet: Within Greece Comments (1 of 4)

- 1. New Democracy President Kyriakos Mitsotakis: The public debt is not the most fundamental problem of the Greek economy. The problem is the reform deficit, competitiveness deficit, investment deficit, and the persistent unemployment. In other words, the denominator is the problem. The GDP, far more than the numerator, the debt. A very interesting debate has begun on the accurate representation of the public debt in present value terms. (Speech in Parliament, 22 May 2016)
- Former Deputy Prime Minister and Finance Minister Evangelos Venizelos: Since the beginning of 2012, Greece has received a debt reduction of more than €200 billion: €100 billion in nominal terms, and another €100 billion in net present value terms. (Speech to Hellenic Republic Parliament, 4 Dec 2015)
- 3. Former Finance Minister Gikas Hardouvelis: Greece was offered substantial debt relief through the PSI of February 2012 as well as maturity extensions, interest rate reductions and even a grace period in its interest rate obligations... The long maturities, low yields and grace period render the true (present) value of debt obligations very small relative to its nominal (face) value. (World Post, 29 Feb 2016)
- 4. Former Finance Minister Yannis Varoufakis: A Misunderstanding The misunderstanding regarding Greece solvency owes to the fact that the blunt 175% Debt-to-GDP number does not fully describe the actual burden to public debt over the economy. Indeed, if Greece's debt was calculated in NPV terms, say with a 5% discount rate factor, the Debt-to-GDP ratio would already be as low as 133% of GDP. (Eurogroup Non-Paper, 16 Feb 2015)

Present Value Acknowledged but Not Properly Reflected on the Balance Sheet: Within Greece Comments (2 of 4)

- **5. Former Minister of Economy and Finance Nikos Christodoulakis**: I agree that the **present value** of the debt is the right way to look at the debt stock. Debt is not the issue, it's about growth. (CEPS, 9 Feb 2016)
- 6. Bank of Greece Deputy Governor and Former Deputy Finance Minister lannis (John) Mourmouras: Greek debt should be correctly calculated using international accounting standards, based on present value terms, which would most accurately reflect the economic reality that most of Greek government debt is with the official sector and under concessional terms (low interest rates and long maturities).
- 7. Deputy Minister of Foreign Affairs and Former Deputy Finance Minister Dimitris Mardas: Greece government debt would be recorded at net present value taking into consideration the current value of the debt discounted by their expiry date on the basis of the market. (Economist Government Roundtable Speech, 14 May 2015)
- 8. Governor of the Bank of Greece Yannis Stournaras: The combination of these actions would amount to a net present value benefit of about 17% of 2015 GDP for Greece over the next 35 years, thus improving debt sustainability. (LSE Speech, 25 Mar 2015)
- 9. Deputy Minister of Finance Giorgos Chouliarakis: The main short-term measure is considered to be the restructuring under conditions of present value of the large debt of EFSF. (Speech to Parliamentary Subcommittee 3 November 2016)

Present Value Acknowledged but Not Properly Reflected on the Balance Sheet: Within Greece Comments (3 of 4)

- **10. PWC Greece:** The net present value of Greece government debt is less than half of its nominal value. (Directions for Economic Recovery in Greece, Sep 2013)
- 11. Brookings Institute Senior Fellow Theodore Pelagidis: Undermining business confidence for political reasons by saying that debt is unsustainable? A vicious circle of political risk and debt sustainability. Greece debt metrics are a fraction of peers, but its borrowing costs are almost 1,000 bps greater. Why? The political risk again is the answer. Numbers are even better when using present value, not future face value. (LSE, 1 Mar 2016)
- 12. LBS Professor Michael Jacobides: Calculating this debt in "present" (i.e., today's) value, as the leading governments and businesses that follow international accounting standards do, suggest that the debt is actually 68% of GDP rather than 176%, the number you get if you considered the debt without taking into account maturities and duration. And that is without even deducting the significant value of government financial holdings to produce the net debt figure. (Harvard Business Review, 16 Sep 2016).
- **13.** American-Hellenic Chamber of Commerce Executive Director Elias Spirtounias: When accounted for correctly, Greece's net debt to GDP is significantly below 60%, not the often cited figure of 175%. (Nov 2014)

Present Value Acknowledged but Not Properly Reflected on the Balance Sheet: Within Greece Comments (4 of 4)

- 14. Chair of Transparency International Greece Costas Bakouris: Using IPSAS, we could highlight that the fair value of our loan obligations is much lower than the nominal one... comparison of the fair value versus the nominal value of the net versus the gross debt to GDP will be considerably less and it is estimated to be comparatively less than that of our creditors, which actually constitutes an important competitive advantage. (Naftemporiki, 19 Feb 2015)
- **15.** Chairman of AmCham Taxation Committee Stavros Costas: In the framework of the implementation of IPSAS, the value of the Net Debt on 31 December 2013 would be 18% of GDP, a substantially lower level than the subversive threshold of 60% GDP provided for by Maastricht Treaty... By the principal criterion of Net Present Value, instead of the Market Value, the classification of the Country, according to the Maastricht Treaty, at the 12th and final unfavorable position among the 12 Eurozone Countries with an increased Debt, would change drastically by bringing competitively the Country to the second best position, after Slovenia. (Voria, 23 Dec 2014)
- **16.** Kathimerini Editorial (INYT local affiliate): Editorial calls the government claims of a debt mountain a hoax on the public and the refusal to admit that debt relief reduced the debt outstanding part of a failed and destructive political strategy. (Kathimerini, 4 July 2016)

Greece Ministry of Finance Non-Paper to European Working Group (Circa Feb 2015) Indicating Debt as a "Misunderstanding"

Where is the net debt?

Annex 2: Debt Sustainability

Debt sustainability is about keeping the debt-to-GDP ratio under control. This typically requires that the deficit is low enough to guarantee that the debt ratio is falling rather than rising. To compute this threshold one needs to make assumptions on growth. An economy with zero (nominal) growth needs a balanced budget. With positive growth, some deficit is consistent with solvency; all it takes is for the debt to grow less rapidly than GDP.

In the case of Greece, with a debt-to-GDP ratio at 175%, the deficit that would stabilize the debt to GDP ratio at its current level is 7% of GDP (=4%*1.75) assuming a conservative growth of 4% in nominal term. Greece has already better performed since in 2014, the deficit fell under the Maastricht benchmark of 3%. In structural terms, correcting the measure of the deficit for the output gap, Greece is actually engineering a fiscal surplus of 1.6% of GDP (according to IMF).

In other words, a 3% deficit is well within the boundaries of sustainability as conventionally defined. Given the interest bill, of about 3% of GDP today and potentially of 4.5% in the future (once the interest deferral on EFSF loans expires), a primary surplus of 1.5% is up to the task.

The attached simulation shows the downward debt trajectory until 2054 assuming a constant 1.5% of GDP primary surplus.

Discussion with the IMF over such DSA-style discussions would be critical. The 4.5% primary target is only required to bring debt below an arbitrary threshold of 124% by 2020 (according to the latest DSA) and below 120% in 2022. However, the IMF does not take into account the adverse consequences on growth of the austerity shock that is required to meet this fiscal target. Yet, GDP growth is as important, and even more important, than the primary surplus to reduce the debt to GDP ratio. Besides, any attempt to further squeeze the budget in the current context of humanitarian crisis and slight resurgence of economic growth would have a disastrous impact on both the economic and social fronts.

A Misunderstanding

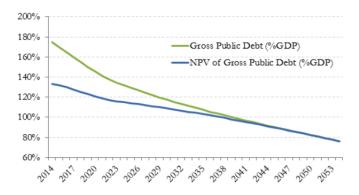
The misunderstanding regarding Greece solvency owes to the fact that the blunt 175% Debt-to-GDP number does not fully describe the actual burden of public debt over the Greek economy.

Greece currently <u>owes the EFSF c</u>. €142bn (75% of 2015 IMF projected GDP), bearing an interest rate of c. 2.5%, and having a final maturity of 39yrs (amortizing from year 2023 until year 2054). This high level of <u>concessionality</u> of the EFSF loans is not captured in the <u>nominal</u> debt/GDP ratio used by the IMF in the case of Greece. The same analysis can be made for GLF loans (interest rate at 50bp above Euribor, i.e. currently 0.65%, and final maturity 2041). In an interview in September 2013, head of ESM Klaus Regling strikingly stated that DSA analyses undertaken by the IMF are <u>"meaningless"</u> A key argument from Regling is that the debt parameters are as important to assess debt sustainability as the debt nominal level itself. EFSF loans are very long term, with very <u>concessional interest rate reduced to EFSF funding cost of approximately</u> 2% plus an operational margin cost of c. 50bp.

Indeed, if Greece's debt was calculated in <u>NPV terms, say with a 5% discount</u> factor, the Debt-to-GDP ratio would already be <u>as low as 133% of GDP</u> (see below), and reach 127% in 2020 (as expected by the IMF in nominal term) with a primary surplus maintained at 1.5% of GDP instead of 4.5%.

We show below the debt-to-GDP ratio dynamics under the assumption of a primary surplus maintained at 1.5% and conservative assumptions of nominal growth at 4% (below IMF expectations).

Under this set of assumptions, the $\underline{\text{NPV}}$ of Public debt reaches 120% of GDP in 2020.



We show below the same dynamics under the assumption of a long term primary surplus of 4% as requested by the EU. <u>Under these unjustified assumptions, the debt would dramatically decrease and totally disappear within the next 30 yrs, which is not the definition of sustainability.</u>

US President Obama (2008-2016) on Greek Debt Relief

"The International Monetary Fund has said that debt relief is crucial to put Greece's economy on a sustainable path and set the stage for a return to prosperity. This is why I will continue to urge Greece's creditors to take the steps needed to ensure the country is well placed to return to robust economic growth, including by providing meaningful debt relief." (Kathimerini, 13 November 2016)

Comparison of International Accounting and Political Definition of Greek Debt Relief and Debt Reduction

Background facts: Greece rated CCC and 25-year bonds YTM approximately 8%. ESM 30-year bond YTM less than 1%.

Debt Operations	Properly Reported as Reduction in Net Debt	Politically Called Debt Relief	Politically Called Debt Reduction
 €60 billion of 30+ year below 1% loans mostly to refinance existing debt. 	Yes	No	No
2. Rebates of interest and principal.	Yes	No	No
 Concessional loans to purchase financial assets. 	Yes	No	No
4. Restructured loans with lower interest, grace period, maturity extensions.	Yes	Yes	No
5. Change terms on bonds to reduce interest rates and extend maturities.	Yes	Yes	No
6. Haircut the face value of debt.	Yes	Yes	Yes
7. Paying more interest by using swaps to change interest rate profile.	No	Yes	No 65

IMF Greece Loan Profitability

- Greece has paid over €3.5 billion in interest payments and fees to the IMF, averaging 37% of IMF total net income, and covering 79% of IMF total administrative expenses.
- The IMF had an average operating margin of 71%, three times major banks, and over one million in net income pre employee, almost ten times major banks.

Greece has paid over €3.5 billion in interest payments and fees to the IMF, averaging 37% of IMF total net income.

 $(\in millions)$

	(C, 111110113)					
YEAR	REVENUE	EXPENSES	NET OPERATIONAL INCOME	GREECE PROFIT CONTRIBUTION	GREECE PROFIT CONTRIBUTION AS A % OF NET OP. INCOME	NET OP. INCOME AS A % OF REVENUE
2008	€ 981	€ 1,104	(€ 122)	€ 0	0%	-12%
2009	€ 973	€ 797	€ 176	€0	0%	18%
2010	€ 1,184	€ 926	€ 258	€ 70	27%	22%
2011	€ 1,747	€ 897	€ 850	€ 385	45%	49%
2012	€ 2,724	€ 1,000	€ 1,723	€ 589	34%	63%
2013	€ 3,264	€ 994	€ 2,270	€ 813	36%	70%
2014	€ 2,765	€ 1,058	€ 1,707	€ 938	55%	62%
2015	€ 3,860	€ 1,131	€ 2,729	€ 764	28%	71%
Total sind	ce 2010 Pro	gram:	€ 9,537	€ 3,558	37%	

Notes: IMF fiscal year end is 30 April; Greece profit contribution is calendar year. Conversion rates as of 30 April to conform with IMF fiscal year.

The IMF had an average operating margin of 71% and over one million in net income per Employee, which are a multiple of major banks.

IMF vs. Major Bank Profit Margin Comparison 2015:

(Currency as indicated in billions except per employee.)

BANK	REVENUE	NET INCOME	PROFIT MARGIN	NET INCOME PER EMPLOYEE
IMF	€ 3.9	€ 2.7	71%	€ 1,024,690
JP Morgan	\$93.5	\$24.4	26%	\$104,008
Citi Bank	\$76.4	\$17.2	23%	\$74,459
Goldman Sachs	\$33.8	\$6.1	18%	\$165,761
Morgan Stanley	\$35.2	\$6.1	17%	\$108,506
Deutsche Bank	€ 37.0	-€ 6.8	-18%	-€ 67,257

Notes: SDR converted to euros as of 30 April 2015 (IMF fiscal year end).

Predatory Lending

- In any debt reorganization in the civilized world, the starting point is the balance sheet value of the debt or the fair value of the debt at the time the funds were advanced.
- If a default could trigger an acceleration of future face value (nominal) from the fair value upon which the funds were issued and accrued interest, then there would exist a predatory relationship where the creditor could extract unearned and extraordinary profits by forcing an in-badfaith default.
- The rules are designed to protect the borrower from abusive and predatory lending.

Greece Political Rationale Summary

"To understand the Greek government's logic, you have to adopt a Byzantine rather than a Classical Greek mindset. The only plausible reason for not applying international standards in reporting Greece's public debt is that a rosier picture weakens the case for debt forgiveness, because it suggests that the admittedly harsh medicine inflicted on the country might actually be working. Since the government was elected on the premise that Greece needs debt forgiveness rather than reform in order to survive, a rosy picture is the last thing it wants."

LSE Professor Michael G. Jacobides (Harvard Business Review, 16 Sep 2016)

Section C. Worst Practices

2. Opaque and Biased Modeling Assumptions

IMF GFSM Recommends Use of IPSAS (IFRS) Financial Statements

IPSAS [Public Sector Version of IFRS]:

•General purpose financial statements are used to evaluate financial performance and financial position, hold management accountable, and inform decision making by users of the general purpose financial statements. (GFSM Box A6.1 p.343)

•"IPSASs are international standards and recognized as **best practice** for public sector financial reporting." (GFSM p.341)

Government Finance Statistics:

•The GFS reporting framework was developed specifically for public sector input to other macroeconomic datasets. (GFSM Box A6.1 p.343)

IMF Recommends Present Value of Debt for Measuring Concessional Financing

IMF Staff Guidance Note prepared by the IMF and the World Bank (April 2007):

- Countries that primarily rely on concessional financing, the net present value (NPV) of debt is needed to be informative as a measure of a country' s effective debt burden. (p.25)
- 2. This [debt] burden is **best measured** using the **net present value (NPV) of debt** to **capture the concessionality** of outstanding debt. (p.7)
- 3. **NPV debt ratios** are summary indicators of the burden represented by the future obligations of a country and thus **reflect long-term risks to solvency**. (p.7-8)

DSA LIC Framework (5 Nov 2013):

Debt stock indicators in the DSF are in present value rather than nominal terms. (p.12)

IMF Factsheet (7 Apr 2016):

Discusses use of present value of debt. (p.1)

IMF Recommends Net Debt, in Addition to Gross Debt, as an Important Metric

IMF Staff Guidance Note (May 2013):

- 1. Staff should consider three important issues including gross versus net debt. (p.8)
- 2. Complementary analysis based on **net debt** presented to show the impact of **riskmitigating factors**. (p.8)
- 3. The use of a standard statistical definition of net debt in line with the Public Sector Debt Statistics Guide is recommended. (p.9)

IMF Designates Greece Debt to GDP as Not Meaningful but Uses as a Key Modelling Assumption

The IMF states clearly that Greece's "debt/GDP ratio is not a very meaningful proxy for the forward-looking debt burden", but continues to make it a headline target for decision-making. (Preliminary DSA June 26, 2015, page 11)

IMF Market Interest Rate Formula Comparison Using Different Debt Numbers

			IPSAS/IFRS	IPSAS/IFRS	2008 SNA /	IMF	
		Future	Balance	Balance	ESA 2010	DSA	
		Face	Sheet	Sheet	Debt	Debt	
		<u>Value</u>	<u>Debt</u>	Net Debt	Value	<u>Value</u>	
1.	Debt/GDP (2015)	177%	71%	45%	88%	116%	
2.	Maastricht Limit	60%	60%	60%	60%	60%	
3.	Delta	117%	11%	-15%	28%	56%	
4.	Bps per 1% above Lisbon Treaty Limit	4 bps	4 bps	4 bps	4 bps	4 bps	
5.	Risk Premium	4.68%	0.44%	-0.60%	1.12%	2.24%	
6.	Risk Free Rate Estimate	1.25%	1.25%	1.25%	1.25%	1.25%	
7.	Market Interest Rate Estimate	5.93%	1.69%	0.65%	2.37%	3.49%	

Formula from IMF May 2016 DSA, Box 3: Risk free rate 1.25% plus four bps for each 1% of GDP above Maastricht limit (60%).

IMF Greece DSA Interest Rate Assumptions

	2016	2020	2024	2030	2060	Source(s)
May 2016 DSA - Publicly Released:				\frown		
1. Effective Interest Rate w/ Restructuring	1.1%	1.1%	1.3%	(1.1%)	NA	Figure 1 (Pg. 20).
2. Market Interest Rates w/ Restructuring	6.2%	5.8%	5.2%	4.5%	2.9%	Figure 1 (Pg. 20) and Figure 2 (Pg. 7); Formula (see note), Box 3 (Pg. 16).
3. Market Interest Rates - Baseline	6.2%	5.8%	5.3%	5.7%	8.9%	Figure 2 (Pg. 7); Formula (see note), Box 3 (Pg. 16).
4. Market Interest Rates - Baseline	6.0%	5.8%	5.5%	5.5%	8.5%	Box 3, Chart (Pg. 16).
12 May 2016 DSA - Leaked:						
5. Market Interest Rates w/ Restructuring	6.2%	5.6%	NA	4.5%	3.1%	Table 2 (Pg. 3) and Formula (see note).
6. Market Interest Rates - Baseline	6.2%	5.6%	NA	5.2%	10.6%	Table 1 (Pg. 2) and Formula (see note).
June 2015 DSA:						
7. Effective Interest Rate - Baseline	2.20%	2.50%	3.50%	NA	NA	Figure 1 (Pg. 19)
8. Market Interest Rates - Baseline	6.25%	6.25%	6.25%	6.25%	NA	"Borrowing from the market is assumed at an average nominal interest rate of 6 ¹ / ₄ percent for the next several decades." (Pg. 6).
9. Market Interest Rates w/ Restructuring	TBD	TBD	TBD	TBD	TBD	
June 2014 Fifth Review:						
10. Effective Interest Rate - Baseline	3.1%	3.4%	NA	NA	NA	Annex Figure I.3. (Pg. 65)
11. Nominal external interest rate [Proxy]	2.6%	3.3%	NA	NA	NA	

Formula from IMF May 2016 DSA, Box 3: Risk free rate 1.25% plus four bps for each 1% of GDP above Maastricht limit (60%).

Two Critical Questions for Additional Research

- 1. How much lower is Greece projected Debt to GDP and GFN if model interest rate formula was driven by IPSAS/IFRS net debt and not future face value of debt?
- 2. How much would peer interest rates and GFN increase or decrease if modelling assumptions were based on future face value of debt and IPSAS/IFRS net debt?

Section C. Worst Practices

3. Deny Existence of Debt Relief and Corresponding Reduction in Balance Sheet Net Debt

Key Stakeholder Statements on Greek Government Debt and Debt Relief

- The Greek PM: Debt relief by year-end is an "indispensable condition" to returning to the markets. (Sept. 2016)
- The Greek FM: If Greece's EU partners kick the can two years down the road on debt relief, then investors will remain far away, it will be bad for the government and the country, and there should be a discussion about Greece's place in Europe. (Oct. 2016)
- 2017 Budget: Talks on the restructuring of public debt will play a decisive role on the developments of 2017 as they are a crucial step in restoring investor confidence, the (country's) long-term credit rating and the credibility of the economy. (Oct. 2016)
- IMF: Greek government debt remains unsustainable and requires substantial debt relief. (Sept. 2016)
- Rating Agencies: S&P: Greece has the highest debt/GDP ratio of all sovereigns we rate. (July 2016). Fitch: Greece has the second highest debt/GDP ratio of all the countries we rate. (Sept. 2016)
- International Commentators: For example, Former Citi Vice Chairman: Greece government debt is the barrier to confidence and debt relief is essential. (Sept. 2016)

Actual Text from May 2016 EU-Greece Agreement on Short-Term Measures has No Debt Relief

- Eurogroup Statement: "For the short-term, the Eurogroup agrees on a first set of measures which will be implemented after the closure of the first review up to the end of the programme and which includes:
 - Smoothening the EFSF repayment profile under the current weighted average maturity;
 - ✓ Use EFSF/ESM diversified funding strategy to reduce interest rate risk without incurring any additional costs for former programme countries;
 - Waiver of the step-up interest rate margin related to the debt buy-back tranche of the 2nd Greek programme for the year 2017."
- Dijsselbloem Statement: "The short term is basically a debt management... The possible debt relief -- mainly talking about the medium term package-- will be delivered at the end of the programme, so we are talking mid-2018."
- Regling Statement: "Under the short-term measures, the ESM in our own responsibility will do debt management exercises." As these measures include lengthening maturities, "in the short run, interest costs may go up."

Klaus Regling (ESM/EFSF) on Reducing Greece Interest Rate Risk

- "It's important as a reminder that some of these measures mean there could be additional costs upfront before one can have benefits later on. For example, if one has an interest rate swap – swapping shorter-term rates for longer-term rates. The costs go up in the short run, but there are savings in the longer term." Eurogroup press conference, 7 November 2016.
- "But one also has to understand that does not necessarily, and certainly not in the short run, lead to savings for Greece. Actually, if we extend our maturities, in the short run, interest costs may go up. But then we would lock it in, so that's a benefit in itself, that the risk of interest rate change is reduced. And then, in the longer run, there should be savings if the expectation that interest rates go up globally in the longer run materialises." *Eurogroup Press Conference, 25 May 2016.*

In 2015, Greece Net Worth Increased €17 Billion from Third Programme Debt Relief on €21.4 Billion of Loans

During 2015, ESM made five concessionary loans to the CCC-rated Greece government for a total of \in 21.4 billion. The loans have an interest rate equal to AAA/Aa1-rated ESM cost of funds, which is less than 1%, not the yield-to-maturity of 7% to 8% on the longest maturity publicly traded Greece government bond. The loans have maturities out to 2059, 18-year grace periods, and weighted average lives of 32.5 years. Approximately, \in 16 billion of the proceeds were used to repay maturing debt and \in 5.4 billion to purchase financial assets of domestic banks, most of which was invested in 8% interest CoCos.

	Before Th	ird Programme		Post-Third Programme					
Ass	ets	Liabilities / Net Worth		Assets		Liabilities / Net Worth			
Financial Assets	€0.0	Debt	€ 16.0	Financial Assets	€ 5.4	Debt	€ 4.4		
		Total Liabilities	€ 16.0			Total Liabilities	€ 4.4		
		Net Worth	-€ 16.0			Net Worth	€ 1.0		
Total Assets	€ 0.0	Total Liabilities and Net Worth	€ 0.0	Total Assets	€ 5.4	Total Liabilities and Net Worth	€ 5.4		

Note: As of 31 December 2015. The €21.4 billion of ESM loans are reported on the balance sheet at initial recognition value (also known informally as present value) which is amortized cost under international accounting rules and increase (accrete) to maturity value (known informally as future face value) each accounting period. The subsequent accretion impact to net worth is reduced by appreciation in the financial assets and debt relief from inflows of ESM funds.

Greece-ESM 3rd Programme Debt Relief, Debt Reduction, and Interest Savings: 2015 and 2016

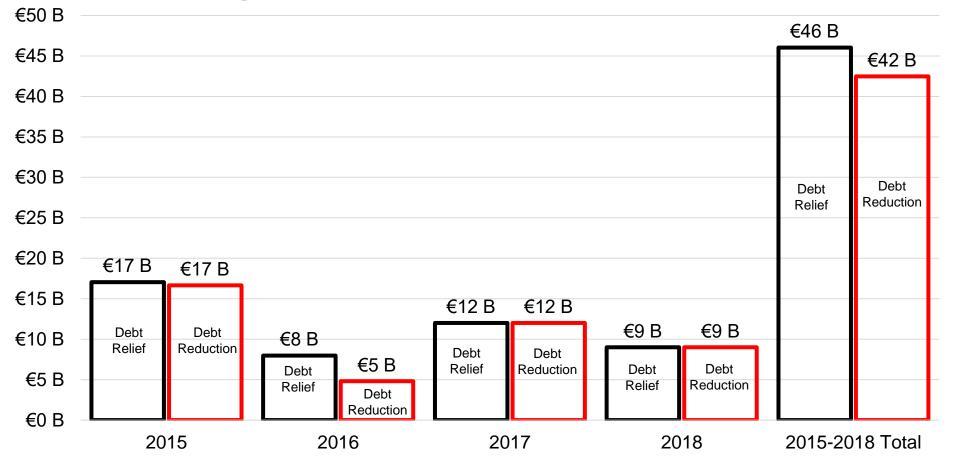
(€, Millions)

- ESM 3rd Programme concessional loans have interest rate of approximately 1%, grace periods of 18 years, and final maturities of 43 years.
- Greece long-term bonds yield approximately 8% and have average credit rating of CCC.
- International rules utilized are the world-class International Public Sector Accounting Standards (IPSAS) and the International Financial Reporting Standards (IFRS).

		Loan		Balance	Net Debt	Annualized Interest
<u>SN</u>	Distribution Date	Disbursed	Debt Relief	Sheet Debt	Reduction	Saving
1.	20 Aug 2015	€ 13,000	€ 10,486	€ 2,514	€ 10,086	€ 910
2.	24 Nov 2015	€ 2,000	€ 1,536	€ 464	€ 1,536	€ 140
3.	1 Dec 2015	€ 2,720	€ 2,112	€ 608	€ 2,112	€ 190
4.	8 Dec 2015	€ 2,710	€ 2,142	€ 568	€ 2,142	€ 190
5.	23 Dec 2015	€ 1,000	€ 780	€ 220	€ 780	€ 70
6.	21 Jun 2016	€ 7,500	€ 5,687	€ 1,813	€ 3,887	€ 525
7.	21 Oct 2016	€ 1,100	€ 853	€ 247	€ 853	€ 77
8.	21 Oct 2016	€ 1,700	€ 1,318	€ 382	EQ	€ 119
9.	Total	€ 31,730	€ 24,914	€ 6,816	€ 21,395	€ 2,221
Inpu	ts:					
ESM Interest Rate:		1%				
Ma	Market Interest Rate		8%			
Pre	esent Value of Est. Dis	sbursements:	20%			

Notes: Prepared under the direction of Japonica Partners based on ESM and Bloomberg data as of 14 October 2016. Use of proceeds: SN1./SN2./SN5.: €400 million for arrears; SN3./SN4. bank recap; SN6. €1.8 billion for arrears; SN7. debt service; SN8. arrears.

Who Will be Held Accountable for Not Recognizing the €46 Billion of Debt Relief and the €42 Billion of Debt Reduction from the 3rd Programme Concessionary Loans?



Notes: Prepared under the direction of Japonica Partners based on ESM and Bloomberg data as of 14 October 2016. 2017 estimate assumes present value of 22% of €15.7 billion disbursement; 2018 estimate assumes present value of 27% of €12.9 billion disbursement. 2017-2018 debt reduction estimates may require adjustment upon further disclosure of use of proceeds.

Since 2010, Greece Has Received €356 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	203%	17x	12%	16%	7%	2%	24%
2.	Months in Programme(s)	77+		28	37	36	18	22
	Official Sector Debt Relief:							
3.	Pre-Third Programme	€ 182		€ 17	€ 29	€ 14	€ 21	€4
4.	Third Programme (to Date)	€ 25		NA	NA	NA	NA	NA
5.	Total Official Sector Debt Relief	€ 207		€ 17	€ 29	€ 14	€ 21	€4
6.	Private Sector Debt Forgiveness	€ 149		€0	€0	€0	€0	€0
7.	Total Debt Relief and Forgiveness	€ 356		€ 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 31 October 2016 according to IPSAS/IFRS.

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		Estimate Based on Publicly Available Data		
			<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.

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Section C. Worst Practices

4. Gross Financing Needs Misunderstood and Misused

Gross Financing Needs (GFN) Pervasive Misunderstanding

There is a pervasive misunderstanding of the term GFN as illustrated by recent comments by Deputy Minister of Finance Giorgos Chouliarakis (Speech to Parliamentary Subcommittee, 3 November 2016):

- GFN "consists of the total debt, both short term and long term", and "includes treasury bills".
- Based on GFN as a percentage of GDP, the "Greek economy surpasses the limit of 15% quite early, i.e. in the early 2030 and the 20% by early 2040. So, we have clearly an unsustainable debt, by today's standards, and always according to the assumptions made by the ESM for the growth rate of the economy, the cost of refinancing and the primary surplus."

The GFN should be correctly calculated as debt service, fairly compared to peers, and smart management strategies suggested.

Correctly Calculate Debt Service and Not Confuse with Gross Financing Needs

- IMF Staff Guidance Note (5 Nov 2013), p.11: "the evolution of debt-service ratios provides an indication of the likelihood and possible timing of liquidity problems." Debt service defined as principal and interest payments.
- IMF Factsheet (7 Apr 2016) discusses use of debt service.
- Greece 2016 Debt Service, which is interest expense and principal payments less rebates and deferrals, is 50% of peers:

		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; Greece adjusted for deferred interest, SMP/ANFA rebates, and interest savings related to 2016 ESM funding.

Annual Debt Service vs IMF GFN: Reconciliation Estimate for Greece 2016

<u>SN</u>		<u>Euros</u>	% of GFN	Notes
1.	IMF Gross Financing Needs (GFN)	€ 34.6	100%	SN 2 times SN 18.
2.	IMF GFN % of GDP	19%		Source: IMF Greece DSA (June 26, 2015) Figure 1, p.19.
	Annual Dakt Comises			
~	Annual Debt Service:	674	000/	
	Interest Payments	€7.1	20%	Derived based on IMF Greece DSA (June 26, 2015) Figure 1, p.19 data.
4.	Bond and Loan Principal Payments	€7.4	21%	Source: IMF Greece Fifth Review (June 2014).
5.	Deferred Interest	- € 1.3	-4%	Deferred interest on non-financed EFSF loans at rate of 1.4%.
6.	SMP/ANFA Rebates	-€ 3.5	-10%	Rebates of interest and principal on ECB and NCB bond holdings assuming no breach of MoU.
7.	Other	-€ 0.8	-2%	Japonica estimate includes interest income, lower principal payments, and third programme/T-bill savings.
8.	Annual Debt Service	€ 8.8	26%	
9.	Annual Debt Service % of GDP	5%		
	Non-Annual Debt Service Reconciling Adjustments:			
10.	Overall Balance	€ 6.5	19%	Source: IMF WEO Database (October 2015) accessed 30 Jan 2015.
11.	T-Bills	€ 14.8	43%	Bloomberg and PMDA bulletin.
12.	Arrears	€ 5.3	15%	Source: IMF Greece DSA (June 26, 2015) Table 1, p.7. Estimate of 75% of IMF projection.
13.	Cash Buffer for Deposit Build-up	€ 1.5	4%	IMF email 9 February 2016.
14.	Net Privatization Proceeds	-€ 0.5	-1%	IMF email 9 February 2016.
15.	SMP/ANFA Rebates	€ 1.9	5%	IMF email 9 February 2016 difference between total due and IMF projection.
16.	To Be Reconciled	- € 3.7	-11%	In process of reconciling.
17.	Adjustments Subtotal	€ 25.8	75%	
18.	Total Annual Debt Service and Adjustments	€ 34.6	100%	Sum of SN 8 and SN 16.
19.	GDP	€ 182		Derived based on IMF Greece DSA (June 26, 2015) Figure 1, p.19 Nominal GDP Growth data and IMF WEO reported 2014 GDP.

Gross Financing Needs Comparative Evaluation

The GFN ratio, which is useful in assessing liquidity, ignores basic financial statements and does not distinguish between interest and principal, creating shortcomings in assessing debt sustainability and liability management. For example, a lower GFN may be obtained when paying vastly higher interest but extending maturities (see example below).

Assumptions:													
Debt	1,000												
GDP	1,000												
													Total
		<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>5-Year</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	Payments
Alternative A:													
1. Debt Maturity (Years)	20	(Due in f	inal year)										
2. Interest Rate	10%												
3. Principal Payment		0	0	0	0	0		0	0	0	0	0	0
4. Interest Payment		100	100	100	100	100		100	100	100	100	100	1000
5. GFN		100	100	100	100	100	500	100	100	100	100	100	1,000
6. GFN/GDP		10%	10%	10%	10%	10%		10%	10%	10%	10%	10%	
Alternative B:													
7. Debt Maturity (Years)	5	(Constar	nt amortiza	ation and	refinanci	ng)							
8. Interest Rate	5%												
9. Principal Payments		100	100	100	100	100		100	100	100	100	100	1,000
10. Interest Payment		50	50	50	50	50		50	50	50	50	50	500
11. GFN		150	150	150	150	150	750	150	150	150	150	150	1,500
12. GFN / GDP		15%	15%	15%	15%	15%		15%	15%	15%	15%	15%	
Alternative A vs. B:													
14. Delta (Amount)							-250						-500
15. Delta (%)							-50%						-50%

IMF Latest DSA Projections for Greece and Peers

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	IMF Source
Gross Fina	ncing Need	s % GDP:				
Greece	17.9%	19.1%	16.3%	13.0%	8.2%	May 2016
Portugal	19.6%	14.9%	16.9%	18.3%	22.3%	August 2015
Spain	17.3%	17.4%	16.9%	16.3%	16.2%	August 2015
Italy	20.4%	16.9%	16.4%	16.1%	14.0%	July 2016
Ireland	8.5%	6.8%	7.4%	10.2%	13.0%	March 2015
Primary Ba	lance % of	GDP:				
Greece	-0.5%	0.3%	1.5%	1.5%	1.5%	May 2016
Portugal	1.8%	1.9%	1.8%	1.8%	1.8%	August 2015
Spain	-0.6%	-0.1%	0.2%	0.7%	0.7%	August 2015
Italy	1.5%	1.8%	2.4%	3.1%	3.4%	July 2016
Ireland	1.5%	2.4%	3.0%	3.0%	2.9%	March 2015

Section C. Worst Practices

5. Multi-Decade Projections of Government Debt are Highly Prone to Political and Lender Bias

Projections Time Frame

- Half-century projections are not credible. Assumptions for Greece on growth, interest rates, and fiscal balances if applied to many EU member states would show similarly unsustainable debt metrics.
- The woeful track record of predicting even 12 months out should not lead to multi-decade projections but to 3, 5, and 10 year full financial statement projections, especially changes in net worth.

Greece IMF 2060 Projection Comparison

	May 201	6 DSA	12 May 20	D16 DSA	26 Jun 2015	June 2014	
	Publicly Released		Leal	ked	DSA	Fifth Review	
	Restructured	Baseline	Restructured	Restructured Baseline		Baseline	
Debt to GDP	100%	250%	106%	294%	100%	60%	
Gross Financing Needs	20%	200%	20%	67%	22%	12%	
	1						

IMF DSA Historical Comparison: Summary Metrics

		Мау	Мау	June	June
		2016	2016	2015	2014
		<u>Public</u>	Leaked	Public	Public
		Restructed	Baseline	Baseline	Baseline
		(2024 Data)	(2024 Data)	(2024 Data)	(2022 Data)
1.	GDP	€ 235	€ 236	€ 246	€ 257
2.	Debt (FFV)	€ 375	€ 382	€ 330	€ 302
3.	Debt/GDP	159%	162%	134%	118%
4.	Interest	€ 5	€ 15	€ 11	€ 11
5.	Revenue	€ 98	€ 98	€ 103	€ 109
6.	Interest/Revenue	5%	15%	11%	10%
7.	PB/Revenue	4%	4%	8%	9%
8.	PB/GDP	1.5%	1.5%	3.5%	4.0%
9.	GFN/GDP	9%	17%*	13%	6%
10.	GDP Growth Rate	3.3%	3.3%	3.7%	3.9%
11.	Δ in GDP / Δ in Debt	93%	86%	399%	-384% (Debt Decrease)

*Estimate based on May 2016 Public DSA Figure 2 chart.

2022 Debt Hump Excel Error

Year	TBills	ANFA	Bonds excl SMP, ANFA, Hold, Sec/n	HOLD	Securitisati on	SMP	Swaps	BOG LOANS	EIB LOANS	Private Sector	EFSF	GLF	IMF	REPO	new loans	Total
2015	322,131,434	344,188,797	836,417,679	108,074,021	480,798	1,035,487,932	736,392,224	<mark>41,523,73</mark> 2	316,761,359	-124,608,927	585,585,580	283,796,881	881,524,653	437,339,295		
2016	297,166,730	283,560,447	1,155,356,129	100,078,165	370,924	772,361,739	711,850,718	24,091,543	301,328,100	-130,056,592	733,027,574	302,287,669	1,180,833,704	482,743,833	170,603,901	6,385,604,584
2017	296,874,600	254,000,845	1,155,731,763	74,605,068	337,456	718,814,916	666,506,125	30,921,942	287,647,837	-146,723,626	833,997,396	400,734,763	1,251,823,521	340,282,028	0	6,165,554,634
2018	296,874,600	181,533,686	1,087,567,087	54,738,211	358, <mark>670</mark>	544,678,392	598,365,700	30,037,788	277,402,200	-154,924,503	931,601,291	550,812,258	1,322,150,224	327,181,944	109,415,371	6,157,792,919
2019	308, <mark>16</mark> 2,231	154,414,935	1,089,971,785	55,015,798	161,411	486,366,978	576,978,124	31,829,940	267,931,960	-159,638,171	1,014,580,938	736,809,323	1,321, <mark>457,81</mark> 8	327, <mark>181,</mark> 944	29,185,199	6,240,410,213
2020	350,783,796	91,872,622	887,479,106	53,549,823		191,820,385	535,634,429	31,334,886	256,986,799	-164,505,026	1,085,597,825	932,613,718	1,203,894,051	328,078,333	172,902,444	5,958,043,191
2021	<mark>384,494,586</mark>	77,302,706	1,079,741,846	53,902,717		121,052,435	537,113,298	26,976,013	243,272,407	-169,526,432	1 125,548,562	1,050,494,209	944,888,787	327,181,944	151,051,828	5,963,494,906
2022	417,953,651	77,364,209	1,272,004,586	54,296,739		121,056,818	537,049,506	20,113,153	225,959,566	-174,713,951	17,840,124,015	1,121,929,129	680,004,761	327,181,944	199,703,486	22,720,027,612
2023	441,581,726	32,124,355	1,271,891,974	54,735,132		89,242,994	537,167,540	10,844,106	207,282,280	-180,072,568	8,729,799,292	1,150,875,775	407,339,450	327,181,944	655,642,209	13,735,636,209
2024	452,806,664	32,196,982	1,194,816,375	55,200,415		89,248,169	603,966,304		188,160,579	-185,607,098	7,532,651,747	1,123,354,368	188,475,745	328,078,333	1,059,090,966	12,662,439,549

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Debt Hump 2022/2023: Analysis

Overview: In yet another example of not correctly calculating the Greek government debt numbers, a reported 2022 payment of deferred interest has been incorrectly calculated, overstated, and contributing to the wide spread of Greek government bonds over Portugal government bonds.

Consistent with industry standard and customary practices the deferred interest is added to principal and earns compounded interest. As the EFSF loan is amortizing, the math insights on amortizing this deferred amount once the deferral stops can be found in several documents and confirmed with primary sources.

- The ESM 2014 annual report, page 30.
- EC First Review December 2012, page 53.
- Master Financial Assistance Facility Agreement, page 56-57.
- IMF DSA 26 June 2015, page 3.

Section C. Worst Practices

6. Financial Asset Mismanagement and Non-Disclosure

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>	<u>Greek Government</u>	<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>	Identified items	Financial Asset Value Lost		
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.

Section B. Worst Practices

7. Don't Use or Misuse Peer Comparisons

Greece Government 2014 New Bond Issue Rates and Spreads vs. Portugal

	Date	<u>Maturity</u>	Greece Government Bond <u>Yield</u>	Portugal Government Bond <u>Yield</u>	<u>Spread</u>
1.	10 April 2014 (Date Sold)	2019	4.95%	2.53%	2.42%
2.	11 November 2016 (Current)	2019	7.16%	0.84%	6.32%
3.	Current if Date Sold Spread	2019	3.26%	0.84%	2.42%
4.	Interest Penalty		3.90%		
5.	10 July 2014 (Date Sold)	2017	3.50%	1.90%	1.60%
6.	11 November 2016 (Current)	2017	4.86%	-0.10%	4.96%
7.	Current if Date Sold Spread	2017	1.51%	-0.10%	1.60%
8.	Interest Penalty		3.36%		

Why are Greek Government Bond Yields so Much Higher than Cyprus and Portugal? It's not the Debt. It's not the Need for More Debt Relief. It's not QE. And, it's not the Credit Ratings. Could it be a Lack of Trust and Confidence in Greek Leadership and Crying Wolf for More Debt Relief Claiming the Country is Bankrupt?

		<u>Greece</u>	Portugal	<u>Cyprus</u>
	Bond Yields:			
1.	10-Year YTM	7.09%	3.27%	3.39%
2.	3-Year YTM	7.16%	0.84%	1.42%
3.	T-Bill Yield-at-Issue	2.97%	-0.01%	0.31%
4.	Net Debt % of GDP (2015)	45%	79%	49%
5.	QE Eligible	No	Yes	No
	Credit Ratings:			
6.	Moody's	Caa3	Ba1	B1
7.	DBRS	CCCH	BBBL	(B)
8.	Fitch	CCC	BB+	B+
9.	Standard & Poor's	B -	BB+	BB

Notes: YTM data from Bloomberg as of 11 November 2016. T-Bill data is yield-at-issue from most recent sale (Portugal: 1 year, Cyprus: 3 month, Greece: 6 month). Net Debt calculated under the direction of Japonica Partners as IPSAS/IFRS debt valued according to IPSAS 29/IFRS 39 less financial assets (excluding accounts receivable); debt calculation based on EC, ESM, and IMF data and financial assets data from Eurostat; data accessed 11 November 2016.

Γιατί οι Αποδόσεις των Ελληνικών Κρατικών Ομολόγων είναι τόσο πολύ υψηλότερες από αυτές των Κυπριακών και Πορτογαλικών; Δεν οφείλεται στο Χρέος. Ούτε στην Ποσοτική Χαλάρωση. Ούτε στις Αξιολογήσεις Πιστοληπτικής Ικανότητας. Μήπως οφείλεται στην Έλλειψη Εμπιστοσύνης προς την Ελληνική Ηγεσία, καθώς και στο Πρόσχημα για Αξίωση Μεγαλύτερης Ελάφρυνσης του Χρέους Υποστηρίζοντας ότι η Χώρα είναι Πτωχευμένη;

		Ελλάδα	Πορτογαλία	<u>Κύπρος</u>
	Απόδοση κρατικών ομολόγων:			
1.	Δεκαετές, Απόδοση μέχρι τη Λήξη	7,09%	3,27%	3,39%
2.	Τριετές, Απόδοση μέχρι τη Λήξη	7,16%	0,84%	1,42%
3.	Έντοκα Γραμμάτια Δημοσίου Απόδοση κατά την Έκδοση	2,97%	-0,01%	0,31%
4.	Καθαρό χρέος (2015)	45%	79%	49%
	Επιλέξιμα για το πρόγραμμα Ποσοτικής Χαλάρωσης	Όχι	Ναι	Όχι
	Αξιολογήσεις Πιστοληπτικής Ικανότητας:			
6.	Moody's	Caa3	Ba1	B1
7.	DBRS	CCCH	BBBL	В
8.	Fitch	CCC	BB+	B+
9.	Standard & Poor's	B-	BB+	BB

Σημειώσεις: Σημείωση: Τα στοιχεία περί της απόδοσης των ομολόγων μέχρι τη λήξη προέρχονται από το Bloomberg από την 11 Νοέμβρη 2016. Τα στοιχεία για την απόδοση κατά την έκδοση των έντοκων γραμματίων δημοσίου προέρχονται από την πιο πρόσφατη πώληση (Πορτογαλία: 1 έτος, Κύπρος: 3 μήνες, Ελλάδα: 6 μήνες). Το Καθαρό Χρέος υπολογίστηκε με βάση τα IPSAS/IFRS υπό τη διεύθυνση της Japonica Partners, ως το χρέος που αποτιμάται σύμφωνα με τα πρότυπα IPSAS 29/IFRS 39 μείον τα χρηματοοικονομικά περιουσιακά στοιχεία (εξαιρουμένων των εισπρακτέων λογαριασμών), ο υπολογισμός του χρέους έγινε με βάση τα στοιχεία τως ξαιρουμένων των εισπρακτέων λογαριασμών), ο υπολογισμός του χρέους έγινε με βάση τα στοιχεία της ΕΚ, του ΕΜΣ και του ΔΝΤο καθώς και με βάση τα δεδομένα των χρηματοοικονομικών περιουσιακών στοιχείων της Eurostat, η πρόσβαση στα εν λόγω δεδομένα είναι της 11 Νοέμβρη 2016.

Section B. Worst Practices

8. Preventing Best Practice Implementation

Tactic Used by Vested Interests to Prevent UK Government Best Practice from Being Implemented in Greece

- Refuse to debate publicly with educated professionals
- Agree in public, then do the opposite
- Agree in public, then appoint incompetent individuals who cannot execute
- Establish "proper sounding" committees that have no corresponding mandate
- Design overly complicated multi-year timelines
- Claim UK government best practices are illegal

Accounting Failed Attempts History

Greece has had seven failed attempts at implementing government accrual accounting:

- 1: 1992 Greek Ministry of Economy pushes for accrual accounting
- 2: 1998 Presidential Decree for double-entry accounting systems for public bodies and institutions.
- 2003 Public hospitals in Greece to implement accrual accounting
- 3: 2005 Greece law passed for public entities to use IAS (IFRS)
- 2006 SEV publicly supports adoption of IPSAS
- 2008 EC recommends, unofficially, that Greece implement IPSAS
- 4: 2009 (March) Greece self-reports to OECD that it has full accrual based financial statements
- 2009 Greece big four accounting firms plus locals form IPSAS committee
- 2010 IPSAS Greece government training of low level employees started (not Minister or MP level)
- 2011 IPSAS Greece government training stopped prior to certification exams
- 5: 2011/12 IPSAS Greece projects started
- 2012 (April) IPSAS conference in Athens
- 2013 IPSAS Greece projects stopped with expiration of funds
- 2014 (June) Public tender for computer accrual accounting systems pending
- **6: 2014 (December)** For the fifth time, Government again promises to adopt IPSAS "next year" ignoring that implementation could start today
- 7: 2015 (May) MoF announces intention to adopt IPSAS, forms committee, but no tangible results.

Greece Should Not be Incentivized to Non-Market Access

- "Moreover, Greece deters investors by depicting itself as crushed by a crippling debt mountain and a victim of predatory creditors rather than as a land of opportunity for business." Reuters (6 Dec 2015)
- 2. They [Greece government] **do not return our calls**. The main issue is not the debt, but governance and the political economy. DBRS, USC Summit (30 Apr 2016)
- 3. **Investor presentations so downbeat** that attendees sell their GGBs after the meetings. (Spring 2016)
- Commenting on Greece, "You have to have a positive story and sell a business case." John Moran, former Secretary-General of Ireland Department of Finance, Reuters (6 Dec 2015)
- Greece economic advisor to the prime minister promoted for winning battle against finance ministry to gain market access. Euro2day (Nov 2015)

CRA Comments on Greece

- **DBRS:** (10 June 2016) Using conventional stock analysis, Greece gross general government debt to GDP is extremely high at 176.9%, the highest in the Eurozone. First two risks of lower rating cited: political uncertainty and structural reform implementation. Most distant projections 2030.
- Fitch: (16 September 2016) Debt to GDP is 177% in 2015, the second highest of all Fitch-rated companies. First two risks of lower rating cited: deterioration in creditor relations and programme and economic performance. Most distant projections 2024.
- **Moody's:** (14 October 2016) Debt to GDP 176.9% in 2015, one of the highest debt burdens in the universe of Moody's-rated countries. First two risks of lower rating cited: failure to implement 3rd programme and wider political or social turmoil. Most distant projections 2017.
- S&P: (22 July 2016) Debt to GDP will peak at 179%, the highest of all the sovereigns we rate. First two risks of lower rating cited: government doesn't implement reforms and prolonged non-implementation of ESM program. Most distant projections 2019.

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%

SN	Metric	PSI Adjusted 2001-15 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%	

Notes: EC AMECO data accessed 12 August 2016. Greece Gross Debt Delta 2001-2015 adjusted for PSI. Analysis using gross national income in process.

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".

	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 di	i) the extent of these differences:	t value of securities much lower	than nominal value						
ii) the reasons for these	ii) the reasons for these differences:		Economic crisis						

Appendices

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 (Released: October 2016)

www.MostImportantReform.info

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

- Greek Government Received 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. Additionally, Greece receives on average €6.6 billion per year in EU funds which is 251% of comparable size Portugal and Ireland.
- 2. Greek Government Significant Debt Competitive Advantage: The Greek 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 gross financing needs of 123%. Greece floating rate debt is only 17% of total debt, not the 69% reported.

The Facts on Greece Government Financial Sustainability and Stability (Part 1 of 4 - Con't)

- Greek Government High Capital Spending: The Greek 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. Greek Government Total Balance Sheet of ½ Trillion Euros: At year-end 2015, the Greek government had over ½ trillion euros in assets and liabilities to manage or mismanage, which is €48,060 per citizen.
- 5. Greek Government €69 Billion Asset Value Lost: Analysis indicates that €69 billion, or on average €625 million per week, of Greek 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. Greek Government Little Progress in Financial Transparency: Little progress on Greek government financial transparency and accountability processes to win the trust and confidence of taxpayers. No opening balance sheet. No senior level ministers with professional turnaround, financial, or accounting experience.

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

On 23 September 2016, the IMF released a Greece Article IV Mission Staff Concluding Statement, a useful complement to its May 2016 Debt Sustainability Analyses. The headline message is that Greece government debt is unsustainable, further debt relief is required, and debt continued to rise reflecting shortfalls between economic outcomes and Greece's ambitious targets. (Article IV, page 3)

The following are **12 Helpful Facts to Better Understand Greece Government Debt Sustainability**:

- 1. Trust and confidence: Contrary to the IMF's long-standing tradition, the Statement does not acknowledge building trust and confidence as a cornerstone of government responsibility and omits from its recommendations a most important reform for Greece, which is transparency and accountability of financial information. Despite IMF advocating IPSAS for transparency and accountability of government financials, especially balance sheets, in numerous publications, the Statement makes no mention of these reforms for Greece exposing the IMF to criticism for showing creditor bias in not wanting to report the correct value of Greece government 2015 net debt/GDP of 41%, thereby advancing the IMF's economic interests. Of note, the IMF uses similar rules (IFRS) for its own balance sheet.
- 2. Debt relief: The DSA acknowledges the "very large NPV (net present value) relief" provided by the EU to Greece, but does not report the impact on Greek balance sheet debt. (DSA May 2016, page 1)

IMF and Greece: 12 Helpful Facts to Better Understand Greece Government Debt Sustainability (Part 2 of 4 - Con't)

- **3. DSA on PV:** Although the IMF's guidelines for highly concessional loans recommend the present value of debt be reported in debt sustainability analyses, present value is not reported for Greece. (Public Debt Limits June 2015, page 27) Using the IMF guidelines and public information, Greece 2015 gross debt/GDP was 116% and net debt was 104%.
- **4. Debt/GDP:** The IMF states clearly that Greece's "debt/GDP ratio is not a very meaningful proxy for the forward-looking debt burden", but continues to make it a headline target for decision-making. (Preliminary DSA June 26, 2015, page 11)
- **5. Concessional debt:** Replacing debt that matures at face value with highly concessional debt with a present value as low as 20% of future face value is recorded as no change in Greece government debt by the IMF rather than reflecting the economic reality that debt actually declined by up to 80%. Recording restructured debt at present value, also known as initial recognition value, is a global best practice for independently developed international rules, such as IPSAS, IFRS, 2008 SNA, and ESA 2010.

IMF and Greece: 12 Helpful Facts to Better Understand Greece Government Debt Sustainability (Part 2 of 4 - Con't)

- 6. Restructured debt: The IMF GFSM guidelines are the only internationally applied rules that do not seek to report the economic reality that rescheduled debt is extinguished and recorded at fair value on the date of rescheduling. Sections A3.12-13 are superficially harmonized with the international consensus saying that "rescheduled debt is considered repaid and replaced with a new debt instrument created with new terms and conditions" and recorded at the "value of the new debt". However, inserted parentheses directly undermine the harmonized text and defy economic reality by adding, "which, under a debt rescheduling, is the same value as the value of the old debt". Furthermore, the GFSM again favors creditors by diverging from international standards and economic reality in section A3.15 requiring debt refinancing in the replacement of existing debt to be recorded at the value of the new instrument by inserting the text, "except for nonmarketable debt (e.g., a loan) owed to official creditors".
- 7. Use of proceeds: Incurring highly concessional debt to invest in financial assets is reported as a debt increase by the IMF. In economic reality, receiving highly concessional loans and investing in financial assets decreases Greece government net debt as the asset value exceeds the initial value of debt.
- 8. Interest rates: There is an irreconcilable *non sequitur* between the Statement concluding that the debt stock number is not "meaningful" and using that same number to project interest rates in the DSA.

IMF and Greece: 12 Helpful Facts to Better Understand Greece Government Debt Sustainability (Part 2 of 4 - Con't)

- 9. Asset losses: The Statement does not mention the tens of billions of euros in Greece government asset value lost as the main cause for the increase in Greece net debt, a key metric used in other DSAs. Our estimate of government asset value lost is €69 billion or €625 million per week.
- **10. GFN:** Gross financing needs should not replace debt service as a key metric, as about 75% of projected GFN components are not conventional debt service but IMF discretionary assumptions. Conventional debt service for Greece would be approximately 50% of peers.
- **11. Projections:** Half-century projections are not credible. Assumptions for Greece on growth, interest rates, and fiscal balances if applied to many EU member states would show similarly unsustainable debt metrics.
- 12. Loan profitability: Greece has paid over €3.5 billion in interest payments and fees to the IMF, averaging 37% of IMF total net income, and covering 79% of IMF total administrative expenses. Over the past five years, the IMF had an average operating margin of 63%, a multiple of major banks.