

Understanding the Truth of Greek Government Debt

“Greece has among the best debt metrics in the Eurozone”

Briefing Materials by:

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Chairman & CEO

JAPONICA PARTNERS

The Bloomberg logo, featuring the word "Bloomberg" in a bold, yellow, sans-serif font, set against a black rectangular background.

15 February 2017

London

Paul B. Kazarian Summary CV

- **Over 100 presentations** on the topic of Greek debt and debt sustainability including: AmCham, BHCC, CEPS, CESifo, CIPFA, EGPA, FEE, HBS, IIF, IFAC, INET Oxford, ISCTE, LBS, OECD, PMI Congress, S&P, and USC.
- **Sole Special Advisor** to the Centre for European Policy Studies Task Force on How Better Managing Government Balance Sheets Can Enhance Growth.
- **Visiting Professor** of Government Financial Management for 2017-2018 at the ISCTE Business School at the Instituto Universitário de Lisboa in Portugal.
- Received the **2016 William Pitt the Younger Award** for extraordinary leadership in strengthening democracy through government financial management.
- Analysis on Greek debt **cited in prestigious publications** including: HBS Case Study, InterEconomics, The Accountant, Der Spiegel, and the FT.
- **Authored multiple presentations** on IMF best practices not applied to Greece.
- **Creator** of www.MostImportantReform.info.
- **Personal relationships** with executives at the largest SWFs.
- As **CEO and CFO** of Fortune 300 diversified conglomerate, turned around over a dozen multinational businesses from bankruptcy to world-leading successful growth companies.
- Japonica Partners founder (est. 1988), **Chairman, and CEO**.

Greece has a Competitive Advantage when 2016 Debt is Measured According to Internationally Agreed Upon Standards

(€, billions)

Rules Set Politically with Little to No Regard to Economic Reality	Amount (€)	% of GDP	Internationally Agreed Upon Standards Designed to Reflect Economic Reality	Amount (€)	% of GDP
Excessive Deficit Procedure (EDP) Debt: Future Face Value	€ 317	180%	International Accounting Standards (IPSAS/IFRS) Balance Sheet Debt	€ 132	75%
IMF Baseline Debt: Future Face Value	€ 325	184%	ESA 2010 / 2008 SNA Debt: Correctly Calculated	€ 161	91%
IMF DSA Debt: Correctly Calculated	€ 204	116%	International Accounting Standards (IPSAS/IFRS) Balance Sheet Net Debt	€ 84	48%

Notes: IAS, ESA/SNA, and EDP from EC AMECO, Eurostat, and Bloomberg data accessed 17 Feb 2017; IMF Baseline data from Greece Article IV (Feb 2017).

Greece has Among the Best 2016 Debt to GDP Metrics in the Eurozone

	<u>EZ Member State</u>	<u>Balance Sheet Debt % of GDP</u>
1.	Estonia	10%
2.	Luxembourg	21%
3.	Latvia	39%
4.	Lithuania	41%
5.	Slovakia	52%
6.	Malta	60%
7.	Netherlands	62%
8.	Finland	64%
9.	Germany	68%
10.	Ireland	71%
11.	Greece	75%
12.	Slovenia	81%
13.	Austria	84%
14.	Cyprus	88%
15.	France	96%
16.	Spain	98%
17.	Belgium	107%
18.	Portugal	119%
19.	Italy	133%

Notes: EC AMECO data accessed 13 Feb 2017 except Greece, Cyprus, Ireland, Portugal, and Spain calculated according to international accounting standards; adjustments to future face value include Greece (180%), Cyprus (107%), Ireland (75%), Portugal (131%), and Spain (100%).

Illustrative Comments on Correctly Measuring Greece Debt: EU-Related

1. **European Stability Mechanism Managing Director Klaus Regling:** “the actual cost to Greece of servicing its debt is among the **lowest in Europe** and will remain so for a long time. Its gross financing needs will drop in the coming years and fall **well below those of most other eurozone countries** by 2020” (FT, 9 Feb 2017). 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)
2. **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)
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)

Confirmation of Incorrectly Calculated Greek Government Debt Numbers

“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, London Business School**

“Greece’s government accounting, **‘The Biggest Lie of the Century** – Kazarian.” **The Accountant**. October 2016.

“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

Greece 2016 YE Balance Sheet Net Debt, Correctly Calculated in Accordance with International Accounting or Statistics Rules is **48%** and **64%** of GDP, Respectively (€, 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 Treaty Excessive Deficit Procedure* (EDP)	
					FFV	PV
2. Gross Debt	€ 132	€ 161	€ 161	€ 204	€ 317	€ 161
3. Gross Debt % of GDP	75%	91%	91%	116%	180%	91%
4. Net Debt	€ 84	€ 113	€ 113	€ 186	NA	NA
5. Net Debt % of GDP	48%	64%	64%	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 €22 billion, €18 billion, and €11 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".
2016 GDP of €176 billion from EC AMECO database and financial asset data from Eurostat (accessed 17 February 2017).

Debt Measurement by International Standards/Guidelines

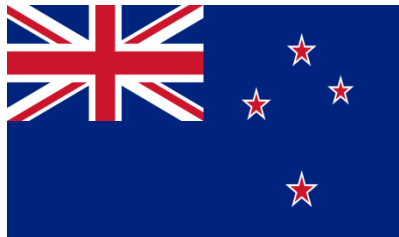
“The truth only counts when there are agreed rules of evidence.” Financial Times, 9 October 2016.

Standards / Guidelines	Securities	Loans	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 nominal value; requires grant element of 35%+ to qualify			Financial assets corresponding to debt instruments
EDP (Dual)	Face value / PV	Face value	Face value / PV	None

Note: Present value at time of transaction using market rates on commercial arms length basis.

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

NZ



IPSAS

UK



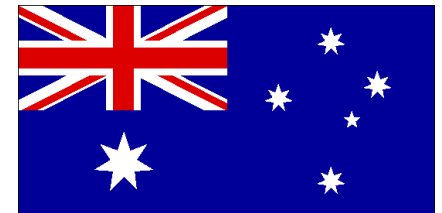
IFRS

CA



IPSAS-like

AU



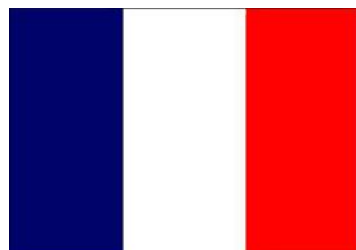
IFRS-like

CH



IPSAS

FR



IPSAS/IFRS

IL



IPSAS

US



US GAAP

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

AT



IPSAS

EE



IPSAS

IE



IPSAS

PH



IPSAS

PT



IPSAS

RO



IPSAS

SK



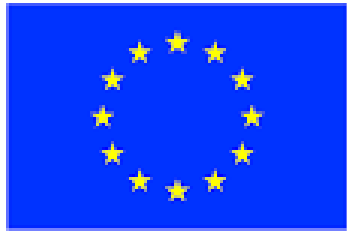
IPSAS

ES



IPSAS

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



European Union
IPSAS



IFRS



IFRS



US GAAP



IPSAS



IPSAS

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/prevaling 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.

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, **irrespective of the legal arrangements.**”
ESA 2010 Page 440.

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

ESA 2010 Debt operations

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

Other debt restructuring

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

Chapter 5: Valuation

5.19 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 non-financial counterpart transactions are recorded at the same transaction value. There are three possibilities:

(c) neither the financial transaction nor its counterpart transaction is a transaction in cash or via other means of payment: the transaction value is the current market value of the financial assets and/or liabilities involved.

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 involved.

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

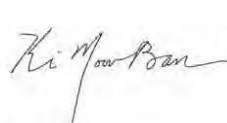
Foreword

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 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.



BAN Ki-moon
Secretary-General
United Nations



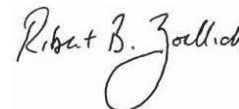
José Manuel Barroso
President
European Commission



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



Dominique Strauss-Kahn
Managing Director
International Monetary Fund



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:

- b. Debt rescheduling or re-financing. A change in the terms and conditions of the amount owed, which may result or not in a reduction in burden in present value terms.

Debt rescheduling and refinancing

- 22.109 Debt rescheduling (or refinancing) is an agreement to alter the terms and conditions for servicing an existing debt, usually on more favourable terms for the debtor. Debt 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 existing contract is extinguished and a new contract created. 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.

2060 Debt Projections are a Totally Politically Driven Number Without Substantive Meaning

- 2060 projections can be made to show debt at either a small fraction of GDP or a multiple of GDP.
- Future face value of debt is a hidden driver of the massive increase.
- Same assumptions applied to France, Italy, or Spain would lead to the same “explosive” debt increases.

	Feb 2017	May 2016	Jun 2015	June 2014
	Article IV	DSA	DSA	Fifth Review
	<u>Baseline</u>	<u>Baseline</u>	<u>Baseline</u>	<u>Baseline</u>
Debt to GDP	275%	250%	100%	60%
Gross Financing Needs % of GDP	62%	60%	22%	12%
<i>International Accounting Standards (IPSAS/IFRS) Balance Sheet Debt Numbers:</i>				
		<u>YE 2016</u>	<u>YE 2015</u>	<u>YE 2014</u>
Debt to GDP		75%	71%	70%

Notes: IMF data from sources as noted. International Accounting Standards (IPSAS/IFRS) Balance Sheet Debt calculated according to international accounting standards based on EC AMECO and Greece MoF data accessed 13 Feb 2017.

Greece has a Competitive Advantage When Gross Financing Needs (GFN) is Correctly Calculated

IMF GFN definition and 15% to 20% targets are not based on internationally agreed upon standards but solely derived by the IMF.

		2016 GFN <u>% of GDP</u>
1.	IMF	17.3%
2.	Correctly Calculated According to ESM Definition	12.7%
3.	Correctly Calculated According to ESM Definition - Adjusted	5.2%

Notes: Correctly Calculated based on EC AMECO and Bloomberg data accessed 13 Feb 2017; IMF from Feb 2017 Greece Article IV. Adjusted GFN assumes T-Bills refinanced at five year market yield except Greece at ESM rate of 1% with 10 year even amortization.

ESM's Regling is Correct: Greece Has Among the Lowest 2016 Debt Metrics Compared to Peers and Now it is About **Winning the Trust & Confidence** of the Global Capital Markets

(% of GDP except Avg. Maturity of Debt)

	<u>Greece</u>	<u>Peer Average</u>	<u>Cyprus</u>	<u>Ireland</u>	<u>Italy</u>	<u>Portugal</u>	<u>Spain</u>
1. Balance Sheet Net Debt	48%	70%	47%	43%	113%	79%	70%
2. Balance Sheet Debt	75%	102%	88%	71%	133%	119%	98%
3. Cash Interest	2.5%	3.2%	2.8%	2.3%	3.9%	4.3%	2.8%
4. Debt Service	6.6%	10.3%	7.7%	5.2%	15.0%	10.6%	12.9%
5. GFN	12.7%	14.0%	7.1%	4.2%	20.6%	16.2%	22.1%
6. GFN - Adjusted	5.2%	9.6%	5.2%	3.9%	14.1%	9.6%	15.5%
7. Avg. Maturity of Debt (Yrs)	25.5	9.6	9.7	14.0	6.7	10.7	6.9
8. Interest Expense (ESA)	3.3%	3.2%	2.8%	2.3%	3.9%	4.3%	2.8%

Notes: Based on EC AMECO data accessed 13 Feb 2017. Balance Sheet Debt calculated according to international accounting standards; Balance Sheet Net Debt net of estimated financials assets based on Eurostat data accessed 13 Feb 2017. Greece Cash Interest is AMECO less EFSF deferred (non-cash) interest of an estimated €1.2 billion and SMP/ANFA rebates of €0.4 billion. Adjusted GFN assumes T-Bills refinanced at five year market yield except Greece at ESM rate of 1% with 10 year even amortization.

Paul B. Kazarian Bloomberg TV and Radio: February 2017

Bloomberg TV: Japonica's Kazarian Says Politics Drives Greek Crisis

- <https://www.bloomberg.com/news/videos/2017-02-15/japonica-s-kazarian-says-politics-drives-greek-crisis>
- <https://www.bloomberg.com/politics/videos/2017-02-15/japonica-ceo-sees-mercenary-market-embracing-trump>
- <https://www.bloomberg.com/news/videos/2017-02-15/gilbert-investors-look-for-insurance-against-le-pen>

Bloomberg Radio: Kazarian - Dialogue Around Greek Bail-Out is Not Based on Facts

- <https://www.bloomberg.com/news/audio/2017-02-15/kazarian-dialogue-around-greek-bail-out-is-not-based-on-facts>

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