Unique Insights into Sovereign Credit Risk using IPSAS Framework

(Working Draft)

IIF EXECUTIVE PROGRAM ON

Country and Sovereign Risk Management

Strategic Perspective on Sovereign Credit Risk

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Unique Insights into Sovereign Credit Risk using IPSAS Framework

Topics to Cover

A. Overview of IPSAS Framework

B. Benefits of IPSAS Framework

C. Insights from IPSAS Net Debt

A. Overview of IPSAS Framework

IPSAS: International Public Sector Accounting Standards

IPSAS is the public sector version of IFRS, which is the international accounting standards used in the private sector.

(See IPSAS Q&A handout - #1.)

- Full set of 32 Accrual Standards.
- Exposure drafts.
- Independent standards setting board.

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A1. Goals of IPSAS

#1. Improve Decision-Making (improves financial performance)
* Before (internal stakeholders) and after (external stakeholders)

#2. Increase Transparency (minimizes corruption)
* Provides details to the public that empower investigative analysis

#3. Strengthen Accountability (combats kleptocracy risks)

#4. Facilitate Global Comparability (contributes to stability and sustainability)

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A2. IPSAS/IFRS for Setters of International Statistics

Entity	Supported Statistics Reporting System	Accounting Standard for Entity Financial Statements	Auditor
EU	ESA 95 / ESA 2010 / PSDS / EDS / SNA 2008	EC: IPSAS EFSF: IFRS	EC: European Court of Auditors EFSF: PWC
IMF	GFSM / PSDS / EDS / BPM6 / SNA 2008	IFRS	Deloitte
OECD	SNA 2008 / PSDS / EDS	IPSAS	Cour des comptes
UN	SNA 2008 / PSDS / EDS	UN-SOs: IPSAS	UN Board of Auditors
WB	SNA 2008 / PSDS / EDS	US GAAP	IDA Audit Committee
The Commonwealth	PSDS / EDS	IPSAS	Deloitte

ESA 95 / ESA 2010: *European System of Accounts*
EDS: *External Debt Statistics Guide for Compilers and Users*
GFSM: *Government Finance Statistics Manual*
PSDS: *Public Sector Debt Statistics*
SNA 2008 *: System of National Accounts 2008.*
UN-SOs: *United Nations System Organizations*

The Commonwealth *: The Commonwealth of Nations is a voluntary intergovernmental association of 53 member sovereign states.*

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A3. IPSAS Supporting Statements

- **IMF:** IPSAS are the only international accounting standards designed for the public sector. (January 2014)
- **EC:** IPSAS is currently the only internationally recognized set of public sector accounting standards. (June 2013)
- **WB:** As the only available international financial reporting standards for governments that are based on generally accepted accounting principles, IPSAS can contribute to greater quality, consistency, and comparability of governmental financial information within and between jurisdictions. (February 2004)
- **FEE:** International standards (IPSAS) already exist. They are the only recognized set of international standards. (March 2014)
- **IFAC:** High-quality and timely accrual-based financial reporting in the public sector can be achieved through the adoption of globally-accepted, high quality reporting standards developed specifically for the public sector, i.e., IPSASs. (April 2014)

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A4. Public Sector Accrual Accounting Sea Change 1995 to 2014 (1 of 3)

	Accrual Accounting Standards	
Major Public Sector Entities	1995	2014
Australia	No	Yes
Austria	No	Yes
Canada	No	Yes
China	No	MoF/IPSASB
Czech Republic	No	Yes, 2015
Estonia	No	Yes, 2015
European Commission	No	Yes
France	No	Yes
Germany - Hamburg	No	Yes
Germany - Hessen	No	Yes
Hong Kong	No	Yes
IMF	No	Yes

Source: CIPFA draft (June 2014).

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A4. Public Sector Accrual Accounting Sea Change 1995 to 2014 (2 of 3)

	Accrual Accounting Standards	
Major Public Sector Entities	1995	2014
Ireland	No	Yes, Progressing
Israel	No	Yes
NATO	No	Yes
New Zealand	Yes	Yes
Nigeria	No	Yes, 2016
OECD	No	Yes
Portugal	No	Yes, 2015-19
South Africa	No	Yes
Spain	No	Yes, 2015-19
Sweden	Yes	Yes
Switzerland	No	Yes
United Kingdom	No	Yes

Source: CIPFA draft (June 2014).

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A4. Public Sector Accrual Accounting Sea Change 1995 to 2014 (3 of 3)

	Accrual Accounting Standards	
Major Public Sector Entities	1995	2014
United Nations	No	Yes
USA	No	Yes
USA - States	No	Yes
USA – Major Cities	No	Yes
World Bank	Yes	Yes

Source: CIPFA draft (June 2014).

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A5. Global Accounting Benchmarks: NZ, AUS, CAN

(See NZ handouts - #2.)

- Focus on change in Net Debt and Net Worth.
- Integrity of Data – Independent standards and audits.
- Timeliness of Data – Annual (3 months) and monthly (6 weeks).
- Full Financial Statements.
- Financial Footnotes.
- Public Education and Communication.

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A6. IPSAS 29 / IAS 39 (IFRS): Highlights

No material differences between the standards on the below.

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

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

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

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

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

A7. IPSAS/IFRS Hierarchy of Valuation

-- At date of event --

1st: Market price/YTM

2nd: Market price/YTM of most comparable

3rd: Market YTM of most comparable to determine a present value (PV)

Market prices/YTMs for Greece and other program countries based on Bloomberg market data.

A8. Importance of Using Market Rate/YTM at Event Date

- Protect against corruption resulting from wealth transfers
- Avoid attempts at creating fiscal illusion
- Facilitate global comparability
- Allow for auditable verification process

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A9. Criteria and Process for Adjusting Market Prices or YTMs

Criteria to be met prior to beginning adjustment process:

1. Prices or YTMs change attributable to non-issuer events
2. No credible scenario to justify current prices or YTMs
3. Less than two or three market makers
4. Essentially no volume traded over past 30 days
5. 10% or more change in prices or YTMs in past 30 days

Process for adjusting market prices or YTMs if criteria have been satisfied:

1. Field research to confirm non-existence of credible worst case scenario
2. Attempt to isolate current market prices or YTMs outside of any published worst case scenario
3. Track market prices or YTMs over past 60 to 90 days, within quarter
4. Flexibility to use either bid or ask if spread is abnormally wide
5. Minimize adjustments to market prices and YTMs
6. Provide independently verifiable documentation to support adjustments

Note: Illustrative example.

A10. Audit Best Practices

Objective: IPSAS measurement of debt improves decision-making, increases transparency, strengthens accountability, and facilitates global comparability.

- All database access (eg. Bloomberg, Reuters, S&P IQ)
- Financial instrument valuation professionals
- Chinese wall between financial valuation and line audit professionals
- Required by code of ethics for professional accountants and auditors

A11. Debt Footnote Disclosure: Illustrative Topics

- Nominal amounts by type of debt.
- Accretion rates by type of debt.
- Initial recognition dates, prices, and YTMs.
- Substantial modification dates, prices, and YTMs.
- Debt that did and did not qualify as a substantial modification.
- Summary description of comparables.

A12. Debt Revaluation Unacceptable Practices

- Don’t use market prices/YTMs
- Don’t use most comparable prices/YTMs
- Use date(s) other than date of event
- PV not used as last alternative
- Use single rates rather than date and instrument specific
- Insufficient independently sourced market data
- Process violates independent audit verification

Caution: Do not allow the use of the so-called discount rate as it creates inevitable exposure to nefarious consequences, especially on concessional loans.

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A13. International Accounting Liabilities Standards Matrix

All four world-class accounting standards are very similar

<table>
<tr><th></th><th>IPSAS</th><th>IFRS</th><th>FASB</th></tr>
<tr><td>Initial Recognition</td><td rowspan="4">IPSAS 29 — Financial Instruments: Recognition and Measurement</td><td rowspan="3">IFRS 13 — Fair Value Measurement

IAS 39 — Financial Instruments: Recognition and Measurement (IFRS 9 Financial Instruments)</td><td>FASB 157 — Fair Value Measurements</td></tr>
<tr><td>Substantial Modification</td><td>FAS 140 — Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities</td></tr>
<tr><td>Concessionary Loans</td><td>FAS 15 — Accounting by Debtors and Creditors for Troubled Debt Restructurings</td></tr>
<tr><td>Debt Cancellation</td><td rowspan="2">FAS 140 — Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities</td></tr>
<tr><td>In-Substance Defeasance</td><td>IPSAS 28—Financial Instruments: Presentation</td><td>IAS 32 — Financial Instruments: Presentation</td></tr>
</table>

Notes

IPSAS: International Public Sector Accounting Standards
IFRS: International Financial Reporting Standard
FASB: Financial Accounting Standards Board
GASB: Governmental Accounting Standards Board
IAS: International Accounting Standards

A14. Greece Can Show the Real Debt Number, Now

- IPSAS: **Fair value** of net debt, including **rescheduled and concessionary debt**, should be reported in financials (IPSAS 29/IAS 39).
- SNA 2008: **Fair value** (3.156-157 (a)). Present value of **rescheduled debt** should be recorded in financial accounts and as a capital transfer (22.106-113) and **concessionary debt** in supplemental tables (22.123-124).
- IMF GFS: **Fair value** (3.113-115). **Refinancing** (A.3.15-16). Present value of **concessionary debt** and transfer disclosed in memo item (7.246 and Table 4A.2.).
- EC ESA 2010: **Exchange value** (1.94-95). Present value change in **rescheduled debt** is a capital transfer (20.236) and **concessional debt** is a capital transfer and memo item (20.236, 20.241-242). Present value of debt disclosed in EDP Table #4.

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A15. EDP Report 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”

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:	Market value of securities much lower than nominal value
	ii) the reasons for these differences:	Economic crisis

B. Benefits of IPSAS Framework

- Stakeholder perspective.
- Creditor perspective.

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B16. BENEFITS of IPSAS – Stakeholders

(See BENEFITS Testimonials handout - #3.)

1. **Better information** improves decision-making. 2. **Better information** increases transparency.	1. **Financing competitiveness** decreases borrowing costs. 2. **Financing competitiveness** increases global access.
1. **Economic efficiencies** through better balance sheet management. 2. **Economic efficiencies** through better cost management.	1. **Investor confidence** through comparable financial statements. 2. **Investor confidence** through credible financial management.
1. **Net debt reduction** is the top priority financial metric. 2. **Net debt reduction** summarizes financial performance.	1. **Tax relief** through better financial management. 2. **Tax relief** through economic prosperity.
1. **Education** strengthens accountability. 2. **Education** minimizes expectation gaps.	1. **Sustainable growth** through sound financial management. 2. **Sustainable growth** through minimizing risk.

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B17. Why Net Debt: Testimonials

(See Canada 20 Questions handout - #4.)

"Not boiling the ocean."

- **Canada** Public Sector Accounting Standards Board: Net debt and the change in net debt is the single most important performance metric.
- **Australia** National Audit Commission: Net debt as the main stock indicator.
- **New Zealand** Treasury: Net debt better reflects the underlying strength.
- **Austrian** Federal Ministry of Finance: Net debt is one of the ratios we discuss first and foremost.
- **Portugal** Ministry of Finance: Portugal will use net debt and not gross debt as a key performance metric.

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B18. General Government Maastricht Gross and Net Debt Ratios: 2001 - 2013

	Maastricht Gross Debt to GDP			Maastricht Net Debt to GDP		
	2001	2013	2001-2013 Δ%	2001	2013	2001-2013 Δ%
Eurozone Average	**62%**	**96%**	**55%**	**34%**	**54%**	**62%**
International Accounting Standards Benchmarks that Focus on Net Debt	**43%**	**51%**	**19%**	**31%**	**22%**	**-30%**
Outperformance by Benchmarks:			**36 percentage points**			**92 percentage points**

International Accounting Standards Benchmarks include NZ, AUS, CAN.

B19. BENEFITS of IPSAS – Creditors

- Better government financial management.
- Strengthen trust and confidence in institutions within the country.
- Fiscal discipline associated with the financial reporting process.
- Integrity of data with third party audits.
- Fully developed standards, especially with regard to net debt.
- Empower financial statement analysis by the public: e.g., change in net debt and net worth (net liabilities), pension liabilities, leases, guarantees, and detailed financial footnotes.

C. Insights from IPSAS Net Debt

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C20. Debt Measurement Frameworks (1 of 5)

(See IPSAS 29 / IFRS 39 Highlights handout - #5.)

INTERNATIONAL ACCOUNTING STANDARDS

IPSAS

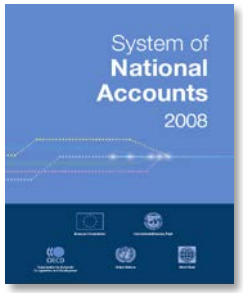
IPSAS 29 – FINANCIAL INSTRUMENTS: RECOGNITION AND MEASUREMENT

IFRS

IAS 39 – FINANCIAL INSTRUMENTS: RECOGNITION AND MEASUREMENT

INTERNATIONAL STATISTICS GUIDELINES

SNA 2008



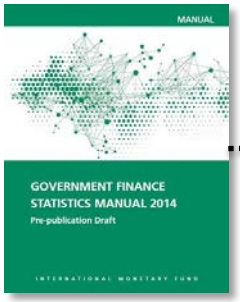
ESA 2010

MGDD

NET DEBT

INTERNATIONAL STATISTICS LENDER COVENANT GUIDELINES

GFSM 2014



PSDS

EDS

Maastricht Treaty

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C20. Debt Measurement Frameworks: Report Titles and Dates (2 of 5)

GLOBAL FRAMEWORKS

ACCOUNTING:

- IPSAS 29 – Financial Instruments: Recognition and Measurement (2010)
- IAS 39 – Financial Instruments: Recognition and Measurement (2008)

STATISTICS:

- UN System of National Accounts (SNA 2008)
- IMF Government Finance Statistics Manual (GFSM 2014)
- IMF Public Sector Debt Statistics (PSDS 2013)
- IMF External Debt Statistics (EDS 2014)

EUROPEAN STATISTICS FRAMEWORK

- Eurostat European System of Accounts (ESA 2010)
- Eurostat Manual on Government Deficit and Debt: Implementation of ESA95 (2013)
- Eurostat Measuring Net Government Debt: Theory and Practice (2014)

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C20. Debt Measurement Frameworks: IPSAS vs. Statistics - Key Traits* (3 of 5)

International Accounting

- "Double-Entry" accuracy
- Arm's length most comparable market data
- Performance decision-making
- Historical cost
- Full financials transparency
- Independent audits

Macro Statistics

- "Quadruple-Entry" symmetry
- Implementation varies based on political agendas
- Fiscal policy decision-taking
- Market price, unless
- Data output transparency
- Reliance on submitted data

**Simplification for discussion purposes.*

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C20. Debt Measurement Frameworks: IPSAS Debt Principles Summary: International Statistics and Maastricht Treaty (4 of 5)

Maastricht is a **political decision** in **direct conflict** with the debt valuation principles of both international accounting standards and international statistics reporting systems.

S/N	IPSAS Debt Principle	International Statistics	Maastricht Definition
1.	Market Value at time of Initial Recognition	YES	NO
2.	Hierarchy of Valuation	YES	NO
3.	Arm's Length Concept	YES	NO
4.	Restructured Debt Acknowledged	YES	NO
5.	Concessionary Debt Acknowledged	YES	NO
6.	Net Debt	YES	NO
7.	Ongoing Market Price Changes	Varies	NO
8.	Audit Integrity	NO	NO

International Statistics: SNA 2008, GFS, and ESA 2010. See Supplemental Details sheet.

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C20. Debt Measurement Frameworks: International Statistics Systems: Supplemental Details (5 of 5)

1. Market Value at Time of Initial Recognition: All three systems use market value for debt that is traded, including discount debt. Non-traded debt, e.g. private placements and loans varies.
2. Hierarchy of Valuation: All three use the same hierarchy of valuation, which are (1st) market prices/YTMs, (2nd) market prices/YTMs of most comparable, and (3rd) market yield-to-maturity of most comparable to determine a present value.
3. Arm's Length Concept: SNA and GFS specifically use the terms arm's length as a part of market valuation. ESA uses the phrase market transaction between two parties.
4. Restructured Debt Acknowledged: SNA is most similar to IPSAS. GFS discusses but deviates from basic principles, even citing policy exemptions. ESA cites difference in value as transfer.
5. Concessionary Debt Acknowledged: All three acknowledge and note underdeveloped status, with varying levels of supplemental disclosure.
6. Net Debt: Each recognizes the concept of net debt, but the focus and the definitions appear to be based on policy not basic principles.
7. Ongoing Market Price Changes: Unlike IPSAS, all three revalue debt that is traded at the date of each balance sheet.
8. Audit Integrity: None of the three international statistics systems require audits based on internationally recognized auditing standards.

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C21. For Debt, It's Present Value NOT Net Present Value

- **IPSAS 29/IFRS IAS 39:** Present value: 43 and 42 citations, respectively. Net present value: zero citations.
- **ESA 2010:** Present value: 29 citations. Net present value: two citations referring to mathematical models.
- **SNA 2008:** Present value: 56 citations. Net present value: seven citations relating to non-debt items such as insurance and pensions (with one exception).
- **IMF GFS Manual:** Present value: 68 citations. Net present value: Six citations relating to non-debt items such as pensions and natural resources.
- **IMF PSDS Manual:** Present value: 51 citations. Net present value: One citation referring to swap contracts.

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C22. Accounting for Concessionary/Rescheduled Liabilities

Concessionary and rescheduled liabilities result in a day one wealth transfer impacting the country's net worth.

7% Market Rate Liability

Loan	€ 100
Interest Rate	7%

Day One Post-Loan Financial Performance (Flows)

Creditor		Debtor	
Gain	€ 0	Gain	€ 0
Exp.	€ 0	Exp.	€ 0
Surplus/ (Deficit)	€ 0	Surplus/ (Deficit)	€ 0

Pre-Loan Financial Position (Stocks)

Creditor			Debtor		
Assets	Liab./NW		Assets	Liab./NW	
	Liab.			Liab.	
€ 100	€ 0		€ 0	€ 0	
	NW			NW	
	€ 100			€ 0	
€ 100	€ 100		€ 0	€ 0	

Day One Post-Loan Financial Position (Stocks)

Creditor			Debtor		
Assets	Liab./NW		Assets	Liab./NW	
	Liab.			Liab.	
€ 100	€ 0		€ 100	€ 100	
	NW			NW	
	€ 100			€ 0	
€ 100	€ 100		€ 100	€ 100	

40-Year 1% Coupon Concessionary/Rescheduled Liability

Loan	€ 100
Interest Rate	1%

Day One Post-Loan Financial Performance (Flows)

Creditor		Debtor	
Gain	€ 0	Gain	€ 80
Exp.	(€ 80)	Exp.	€ 0
Surplus/ (Deficit)	(€ 80)	Surplus/ (Deficit)	€ 80

Pre-Loan Financial Position (Stocks)

Creditor			Debtor		
Assets	Liab./NW		Assets	Liab./NW	
	Liab.			Liab.	
€ 100	€ 0		€ 0	€ 0	
	NW			NW	
	€ 100			€ 0	
€ 100	€ 100		€ 0	€ 0	

Day One Post-Loan Financial Position (Stocks)

Creditor			Debtor		
Assets	Liab./NW		Assets	Liab./NW	
	Liab.			Liab.	
€ 20	€ 0		€ 100	€ 20	
	NW			NW	
	€ 20			€ 80	
€ 20	€ 20		€ 100	€ 100	

Key:

Liab.: Liability

NW: Net Worth

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C23. €340 Billion Wealth Transfer - Greece

Greece creditors provided €340 billion in debt relief
to provide Greece extremely generous breathing space.

	Creditor Funds Provided	**Value of Funds Post Debt Relief**	**Debt Relief**
Private Investors	€ 199 Bil	€ 50 Bil	€ 149 Bil
Official Investors	€ 243 Bil	€ 52 Bil	€ 191 Bil
Total	€ 442 Bil	€ 102 Bil	**€ 340 Bil**
% of GDP			189%

GDP estimate of €180 billion.

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C24. Comparing the Future Impact of Concessionary/Rescheduled Liabilities on Net Debt

(40-year bonds with 7% market rates.)

Day one values: IPSAS is a present value based on discounted future cash flows. Non-economic accounting is a legal contract value.

	IPSAS						Non-Economic Accounting			GDP
	7% Coupon			1% Coupon			1% Coupon			*CAGR:*
	Impact	**% Change**	**Debt/GDP**	**Impact**	**% Change**	**Debt/GDP**	**Impact**	**% Change**	**Debt/GDP**	*2%*
Day One	100	-	100%	20	-	20%	100	-	100%	100
Year 10	197	97%	161%	39	97%	32%	114	14%	93%	122
Year 20	387	287%	260%	77	287%	52%	141	41%	95%	149
Year 30	761	661%	420%	152	661%	84%	194	94%	107%	181
Year 40 (Maturity)	1497	1397%	678%	300	1397%	136%	300	200%	136%	221
CAGR	7%			7%			3%			

Ratio of Debt/GDP *(1% Econ. Acct. to 7% Econ. Acct.)*	Ratio of Debt/GDP *(1% Non-Econ. Acct. to 7% Econ. Acct.)*
20%	100%
20%	58%
20%	36%
20%	26%
20%	20%

Note: Assumes government is running a fiscal deficit and must borrow to pay interest. Non-Economic Accounting CAGR varies among interim periods.

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C25. Complex Aspects of Net Debt – Greece

1. 86% of Greece debt requires **IPSAS revaluation,** much with **grant** like terms.

2. €63 billion in **modified securities**.
   - €26 billion of government bonds from PSI.
   - €37 billion of government bonds have interest and/or principal rebates.

3. €212 billion of debt has **modified/concessionary loan** terms.
   - Below market interest rates, extended maturities, and grace periods.
   - €134 billion of Greece debt pays zero cash interest for ten years.

4. €35 billion of official sector borrowings invested in **cash or publicly traded equities**.

Note: Data estimated as of December 31, 2013.

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C26. Progression of Maastricht Gross Debt to IPSAS Net Debt

(Euros, Billions; as of 31 December 2013)

SN	Type of Debt/Asset	Maastricht Debt (Face Value) 31 Dec 2013	IPSAS Adjustments (Includes Accretion) OSI #1: Loans May 2010	OSI #1: Loan Modification June 2011	OSI #2/PSI #1 Extensive Restructuring Feb/Mar 2012	OSI #3/PSI #2 Modification/Buyback December 2012	Total Adjustments	IPSAS Net Debt (Fair Value) 31 Dec 2013	SN
1.	Modified Securities	€ 62.8	€ 0.0	€ 0.0	€ 36.7	€ 5.8	€ 42.5	€ 20.3	1.
2.	Modified/Concessionary Loans	€ 212.4	€ 11.0	€ 5.7	€ 84.9	€ 51.3	€ 152.9	€ 59.5	2.
3.	Non-Revalued Debt	€ 43.5	€ 0.0	€ 0.0	€ 0.0	€ 0.0	€ 0.0	€ 43.5	3.
4.	Adjustments		€ 11.0	€ 5.7	€ 121.6	€ 57.1	€ 195.4		4.
5.	Total Gross Debt	€ 318.7	€ 307.7	€ 302.0	€ 180.4	€ 123.3		€ 123.3	5.
6.	GDP	€ 182.0						€ 182.0	6.
7.	Debt/GDP	175%						68%	7.
8.	Financial Assets Funded w/ Loans		Concessionary Terms and Modifications: Highlights					€ 33.6	8.
9.	Other Financial Assets		**EU Loans**: 3M Euribor plus 300-400 bps. Maturities: 5 yrs. Grace period: 1.5 yrs.	**EU Loans** cut to 3M Euribor plus 200-300 bps. Maturities up to 10 yrs. Grace period up to 4.5 yrs.	**EU Loans** cut to 3M Euribor plus 150bps. Maturities up to 15 yrs. Grace period up to 10 yrs.	**EU Loans** cut to 3M Euribor plus 50bps. Maturities extended to 30 yrs.		€ 57.1	9.
10.	Total Financial Assets							€ 90.7	10.
11.	Net Debt							€ 32.6	11.
12.	Net Debt/GDP							18%	12.
					EFSF Loans: Cost-of-funding plus 200-300bps. Maturities: 30 yrs.	**EFSF Loans** cut to cost-of-funding. Interest 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 extant terms.	**SMP** interest and partial principal rebate.			
					GGBs start at 2% coupon with maturities up to 30 yrs.				
			Most Comparable Debt Instrument						
			~400 bps below market YTMs.	Market prices/YTMs reflect GGB high yield status.	Market prices/YTMs reflect GGB high yield status.	Market prices/YTMs reflect GGB high yield status.			
	Maastricht Debt - Face Value Amount Adjusted		€ 70.8	€ 70.8	€ 275.2	€ 275.2			

Note: Simplification for presentation purposes.

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C27. Greece IPSAS Net Debt as a Percent of GDP is One-Third (1/3) of Peers

(€, billions; 2013 data except as noted.)

		Greece	Peer Average	Ireland	Italy	Spain	Portugal
1.	Maastricht Debt/GDP	**175%**	**120%**	124%	133%	94%	129%
2.	GDP	€ 182		€ 164	€ 1,560	€ 1,023	€ 166
3.	Maastricht Debt (EDP)	€ 319		€ 203	€ 2,069	€ 961	€ 214
	IPSAS/IFRS:						
4.	Gross Debt	€ 124		€ 189	€ 2,069	€ 940	€ 185
5.	Financial Assets	€ 91		€ 65	€ 317	€ 292	€ 69
6.	Net Debt	€ 33		€ 125	€ 1,752	€ 647	€ 116
7.	Net Debt/GDP	**18%**	**80%**	76%	112%	63%	70%
8.	IAS Impacted Debt	€ 275		€ 62	€ 0	€ 41	€ 72
9.	IAS Impacted Debt (%)	86%		31%	0%	4%	34%

GREECE IPSAS/IFRS NET DEBT HAS BEEN INDEPENDENTLY VERIFIED ON 15 AUGUST 2014.

Unique Insights into Sovereign Credit Risk using IPSAS Framework

C28. Greece Cash Interest Expense as a Percent of Revenue is One-Third (1/3) of Peers *(€, billions; as of 31 December 2013)*

		Greece	Peer Average	Ireland	Italy	Spain	Portugal
1.	Revenue	€ 80		€ 60	€ 762	€ 390	€ 76
2.	Interest Expense	€ 7.3		€ 7.7	€ 78.2	€ 34.2	€ 8.5
3.	Interest Expense % of Revenue	**9.2%**	**10.8%**	12.8%	10.3%	8.8%	11.2%
4.	EFSF Non-Cash Interest	€ 1.6					
5.	ANFA/SMP Rebates	€ 2.7					
6.	Cash Interest Payments	€ 3.0		€ 7.7	€ 78.2	€ 34.2	€ 8.5
7.	**Cash Interest Payments % of Revenue**	**3.8%**	**10.8%**	12.8%	10.3%	8.8%	11.2%
8.	Cash Interest Expense % of Debt	**0.9%**	**3.7%**	3.6%	3.8%	3.5%	3.9%

Potential Better Financial Asset Management

10.	€11 Billion Cash Buffer at 500bps above T-bills	€ 0.6
11.	€20 Billion in Bank Investments Earn 8%	€ 1.5
12.	Other Interest Income on Fin. Assets	TBD
13.	Interest Income Subtotal	€ 2.1
14.	Cash Net Interest Payments	**€ 0.9**
15.	**Cash Net Interest Payment % of Revenue**	**1.1%**

Unique Insights into Sovereign Credit Risk using IPSAS Framework

C29. Debt Ranking Comparison of Select Eurozone Countries[1]: Maastricht vs. IPSAS/IFRS

(As of 31 December 2013)

Maastricht Treaty (Legal) Gross Debt as % of GDP[2]

Rank	Country	Debt as % of GDP
1.	Slovakia	55%
2.	Slovenia	72%
3.	Netherlands	74%
4.	Austria	75%
5.	Germany	78%
6.	France	93%
7.	Spain	94%
8.	Belgium	101%
9.	Ireland	124%
10.	Portugal	129%
11.	Italy	133%
12.	Greece	175%

IPSAS/IFRS Net Debt as % of GDP[2]

Rank	Country	Net Debt as % of GDP
1.	Slovenia	17%
2.	Greece	18%
3.	Slovakia	28%
4.	Netherlands	42%
5.	Austria	42%
6.	Germany	46%
7.	Spain	63%
8.	France	65%
9.	Portugal	70%
10.	Ireland	76%
11.	Belgium	84%
12.	Italy	112%

Notes:

1. OECD Eurozone countries with debt in excess of financial assets.
2. Source: EC AMECO Online and Eurostat databases. Net Debt calculated as Maastricht debt, adjusted according to IPSAS/IFRS where required for any concessionary loans or rescheduled securities, less all financial assets (ex. receivables). IPSAS/IFRS debt adjustments include Greece, Ireland, Portugal, and Spain data. Extensive granular analysis on Greece.

Unique Insights into Sovereign Credit Risk using IPSAS Framework

C30. Unintended Consequences of Not Using IPSAS / IFRS Net Debt

- Governments making micro decision-making without understanding financial impact on net debt and net worth.
- Weaken transparency and accountability associated with wealth transfers.
- Governments can use financial assets, especially hidden equity and shares, for kleptocratic purposes.
- Reporting traded government debt at current prices can have perverse relationship between better credit/lower borrowing costs and increased net debt/decreased net worth.
- Unwise debt buybacks based on flawed accounting.
- Unfairly suffocate a country due to inaccurate credit data.

Unique Insights into Sovereign Credit Risk using IPSAS Framework

Two Findings

1. Boiling the ocean with massive data dumps cannot provide unique insights into sovereign credit risk.

2. Use careful analysis of IPSAS financial statements, especially net debt and net worth to win unique insights into sovereign credit risk.

Unique Insights into Sovereign Credit Risk using IPSAS Framework

Slide Listing

A. Overview of IPSAS Framework:

1. Goals of IPSAS
2. IPSAS/IFRS for Setters of International Statistics
3. IPSAS Supporting Statements
4. Public Sector Accrual Accounting Sea Change 1995 to 2014
5. Global Accounting Benchmarks (NZ, AUS, CAN)
6. IPSAS 29 / IAS 39 (IFRS) Highlights
7. IPSAS/IFRS Hierarchy of Valuation
8. Importance of Using Market Rate/YTM at Event Date
9. Criteria and Process for Adjusting Market Prices or YTMs
10. Audit Best Practices
11. Debt Footnote Disclosure: Illustrative Topics
12. Debt Revaluation Unacceptable Practices
13. International Accounting Liabilities Standards Matrix
14. Greece Can Show the Real Debt Number, Now
15. EDP Report Table #4, Item #4

Handouts:

1. IPSAS Q&A
2. NZ AR 2014 and 1Q 2015
3. BENEFITS Testimonials
4. CAN 20 Qs
5. IPSAS 29 / IFRS 39 Highlights

B. Benefits of IPSAS Framework:

16. BENEFITS of IPSAS – Stakeholders
17. Why Net Debt: Testimonials
18. General Government Maastricht Gross and Net Debt Ratios: 2001 – 2013
19. BENEFITS of IPSAS – Creditors

C. Insights from IPSAS Net Debt:

20. Debt Measurement Frameworks
21. For Debt, It's Present Value NOT Net Present Value
22. Accounting for Concessionary/Rescheduled Liabilities
23. €340 Billion Wealth Transfer - Greece
24. Comparing the Future Impact of Concessionary/Rescheduled Liabilities on Net Debt
25. Complex Aspects of Net Debt - Greece
26. Progression of Maastricht Gross Debt to IPSAS Net Debt
27. Greece IPSAS Net Debt as a Percent of GDP is One-Third (1/3) of Peers
28. Greece Cash Interest Expense as a Percent of Revenue is One-Third (1/3) of Peers
29. Debt Ranking Comparison of Select Eurozone Countries: Maastricht vs. IPSAS/IFRS
30. Unintended Consequences of Not Using IPSAS/IFRS Net Debt

Unique Insights into Sovereign Credit Risk using IPSAS Framework

Appendices

1. IPSAS 29 Fair Value Guidance
2. Insightful IPSAS 29: Concessionary Loan Excerpts
3. Insightful IPSAS 29: No Active Market Excerpts
4. Illustrative Examples Where Initial Book Value of Debt Differs From Face Value
5. Greece and Germany Examples: Statistics vs. Maastricht Debt
6. IMF and World Bank on Calculating Debt
7. GFSM (IMF) Box A6.1. Summary Comparison of GFS and IPSAS – Objectives
8. SNA 2008 and IPSAS
9. Debt Valuation Guidance: Ipsas, SNA 2008, ESA 2010, GFSM 2014
10. ECB's Impact on YTMs and GDP
11. Look Past Greece Government Selling Negativity
12. Ask the Right Net Debt Integrity Question

Appendix 1: IPSAS 29 Fair Value Guidance

- **Valuation Technique:** IPSAS 29.AG112: "In applying discounted cash flow analysis, an entity uses one or more discount rates equal to the prevailing rates of return for financial instruments having substantially the same terms and characteristics, including the credit quality of the instrument, the remaining term over which the contractual interest rate is fixed, the remaining term to repayment of the principal and the currency in which payments are to be made." (see also IAS 39.AG79)

- **Initial Recognition:** IPSAS 29.AG82: "fair value of a long-term loan or receivable that carries no interest can be estimated as the present value of all future cash receipts discounted using the prevailing market rate(s) of interest for a similar instrument (similar as to currency, term, type of interest rate and other factors) with a similar credit rating." (see also IAS 39.AG64)

Appendix 2: Insightful IPSAS 29: Concessionary Loan Excerpts

Some respondents to Exposure Draft 38 disagreed with the proposed treatment of concessionary loans because they do not believe that fair value is an appropriate measurement basis, while others disagreed with the proposed treatment of the off-market portion of concessionary loans as an expense. BC12

As a means of overcoming these practical differences, respondents suggested that, as an alternative to fair value, nominal cost of the lender's borrowing rate should be used as a measurement basis. BC13

The IPSASB takes the view that the use of fair value enables the most faithfully representative determination of the concession elements of a concessionary loan. Also, because the loans granted at no or low interest are not unique to the public sector, the IPSASB was not persuaded that there is a public sector specific reason to depart from the fair value principles in IAS 39. BC14.

The IPSASB was of the view that initial recognition of this subsidy as an expense on recognition of the transaction provides the most useful information for accountability purposes. BC15.

Appendix 3: Insightful IPSAS 29: No Active Market Excerpts

The objective of using a valuation technique is to establish what the transaction price would have been on the measurement date in an arm's length exchange motivated by normal operating considerations. AG107

Fair value is estimated on the basis of the results of a valuation technique that makes maximum use of market inputs, and relies as little as possible on entity-specific inputs. AG107

A valuation technique would be expected to arrive at a realistic estimate of the fair value if (a) it reasonably reflects how the market could be expected to price the instrument and (b) the inputs to the valuation technique reasonably represents market expectations and measures of the risk-return factors inherent in the financial instrument. AG107

Therefore, a valuation technique (a) incorporates all factors that market participants would consider in setting a price and (b) is consistent with accepted economic methodologies for pricing financial instruments. Periodically, an entity calibrates the valuation technique and tests it for validity using prices from an observable current market transaction in the same instrument (i.e., without modification or repacking) or based on any available market data. AG108

Appendix 4: Illustrative Examples Where Initial Book Value of Debt Differs From Face Value

If the U.S. were to report the below Brady debt examples according to Maastricht Treaty, its debt would not have been reported as $3.7 billion, but reported as $37.3 billion.

Issuer	Debt Type	Face Value	Initial Book Value	Initial Book Value as % of Face Value	Original Maturity	Initial Yield	Issue Date
U.S. Treasury	Zero-coupon bonds to Mexico for Brady Bonds	$30.0 billion	$3.0 billion	10%	30 years	7.9%	Mar-1990
U.S. Treasury	Zero-coupon bonds to Venezuela for Brady Bonds	$7.3 billion	$0.7 billion	10%	30 years	8.1%	Dec-1990
Burger King	Zero-coupon first 5 years, 11% thereafter	$685.0 million	$401.5 million	59%	8 years	11.0%	Apr-2011
Caterpillar	Zero-coupon bond	$15.0 million	$13.4 million	89%	2 years	5.7%	Jun-1998
Toyota	Zero-coupon bond	$124.5 million	$30.0 million	24%	30 years	4.8%	Mar-2008

Most T-Bills and commercial paper have similar accounting.

Appendix 5. Greece and Germany Examples: Statistics vs. Maastricht Debt

(Euros, Billions)

"Underdeveloped" statistics guidelines calculate a **counter-factual impact on Greece debt** from the OSIs/PSIs. **Germany's statistics debt is higher than Maastricht** because it trades at a premium to face value as market interest rates have declined.

		Greece			Germany	
S/N	**Data**	**2011**		**2012**	**2011**	**2012**
	Debt:					
1.	Statistics	**€211**	*March OSI-PSI and December OSI-Bond Buyback with a combined* €300+ in debt relief	**€297**	€2,240	€2,367
2.	Maastricht	€356		€305	€2,096	€2,174
3.	Difference	-€145		-€8	+€144	+€193
	% of GDP:					
4.	Statistics	**101%**		**153%**	83%	86%
5.	Maastricht	171%		157%	78%	79%
6.	Difference	**-70%**		**-4%**	5%	+7%
7.	**GDP**	€208		€194	€2,699	€2,750

OSI: Official Sector Involvement. PSI: Public Sector Involvement.
Debt relief estimate consistent with international accounting standards. Statistics debt (which excluded payables for comparability) and GDP from OECD StatExtracts. Maastricht debt from AMECO.

Appendix 6: IMF and World Bank on Calculating Debt

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

1. 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
2. This [debt] burden is best measured using the net present value (NPV) of debt to capture the concessionality of outstanding debt
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

IMF Staff Guidance Note (May 2013):

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

Appendix 7: GFSM (IMF) Box A6.1.
Summary Comparison of GFS and IPSAS - Objectives

Government Finance Statistics:

Evaluate economic impact: Government finance statistics are used to (i) analyze and evaluate the outcomes of fiscal policy decisions, (ii) determine the impact on the economy, and (iii) compare national and international outcomes. The GFS reporting framework was developed specifically for public sector input to other macroeconomic datasets.

IPSAS:

Evaluate financial performance and position: 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.

Appendix 8: SNA 2008 and IPSAS

1.70 A feature of the 2008 update of the SNA is recognition of the increasing use of international accounting standards by corporations and in the public sector. Subsequent chapters make reference to International Accounting Standards Board (IASB) and the International Public Sector Accounting Standards Board (IPSASB) norms. In several cases, notably on pension liabilities and intangible assets, the feasibility of including certain items in the SNA is dependent on the application of the international accounting standards.

A4.10 Already during the 2008 revision consultation of IASB standards and their counterpart for public accounting standards (the International Public Sector Accounting Standards Board, IPSASB) has been extremely beneficial. It is therefore desirable that a dialogue be established and maintained with the IASB with a view to amending the SNA to follow new accounting standards when appropriate.

Appendix 9: Debt Valuation Guidance: Ipsas, SNA 2008, ESA 2010, GFSM 2014 (1 of 3)

1. **Market Value at Time of Initial Recognition**
   a. Ipsas
      i. 29.45: When a financial asset or financial liability is recognized initially, an entity shall measure it at its fair value…
      ii. 29.AG82 The fair value of a financial instrument on initial recognition is normally the transaction price (i.e., the fair value of the consideration given or received…)
   b. SNA 2008
      i. 3.157a.: Fair value is a market-equivalent value.... It thus represents an estimate of what could be obtained if the creditor had sold the financial claim.
   c. ESA 2010
      i. 1.94: Market prices are, thus, the ESA's reference for valuation.
      ii. 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.
      iii. 5.21: 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 transfer value is identified with the current market value of the financial assets and/or liabilities involved.
   d. GFSM 2014
      i. 1.29: Economic flows as well as assets, liabilities, and net worth are valued at current market prices in the GFS framework. While current market prices are readily available for assets and liabilities that are traded in active markets, valuation according to market-value equivalents is used for valuing assets and liabilities that are not traded in markets, or are traded only infrequently.
      ii. 3.113: Stock positions should be valued at market value, that is, as if they were acquired in market transactions on the balance sheet reporting date (reference date). Market prices are readily available for assets and liabilities that are traded in active markets, most commonly certain financial assets and their corresponding liabilities. Market values of other assets and liabilities need to be estimated in a manner similar to nonmonetary flows…

Appendix 9: Debt Valuation Guidance: Ipsas, SNA 2008, ESA 2010, GFSM 2014 (2 of 3)

2. Hierarchy of Valuation

a. Ipsas
   i. 29.AG88: Where an entity cannot determine fair value by reference to an active market, it uses a valuation technique. Fair value using a valuation technique could be determined by discounting all future cash receipts using a market related rate of interest for a similar loan.
   ii. 29.AG106: If the market for a financial instrument is not active, an entity establishes fair value by using a valuation technique. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models. If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the entity uses that technique.

b. SNA 2008
   i. 3.156: Valuation according to market-value equivalent is needed for valuing financial assets and liabilities that are not traded in financial markets or are traded only infrequently. For these assets and liabilities, it will be necessary to estimate fair values that, in effect, approximate market prices. The present value of future cash flows can also be used as an approximation to market prices, provided an appropriate discount rate can be used.

c. ESA 2010
   i. 20.242: Concessional loans are recorded at their nominal value just as other loans, but a capital transfer is recorded as a memorandum item at the point of loan origination equal to the difference between the contract value of the debt and its present value using a relevant market discount rate. There is no single market interest rate that should be used to measure the capital transfer.

d. GFSM 2014
   i. 3.114 Valuation according to market-value equivalent is needed for valuing assets and liabilities that are not traded in markets or are traded only infrequently. For these assets and liabilities, it will be necessary to estimate values that, in effect, approximate market prices…
   ii. 3.125: It may be possible to estimate the values of transactions based on values taken from markets in which similar transactions take place under similar conditions. The value of certain stock positions, primarily financial assets, may also be estimated using market transactions involving similar assets that take place at the end of the reporting period… The value of flows and stock positions of assets may be estimated on the basis of the historic or acquisition cost of the item, adjusted for all changes that have occurred since it was purchased or produced… Assets can be valued at the discounted present value of their expected future returns… For some financial assets, the present market value is established by discounting future payments or receipts to the present, using the market interest rate.

Appendix 9: Debt Valuation Guidance: Ipsas, SNA 2008, ESA 2010, GFSM 2014 (3 of 3)

3. Arm's Length

a. Ipsas
   i. 29.AG103.: A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. Fair value is defined in terms of a price agreed by a willing buyer and a willing seller in an arm's length transaction.
   ii. 29.AG106.: Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available...
   iii. 29.51.: The objective of using a valuation technique is to establish what the transaction price would have been on the measurement date in an arm's length exchange motivated by normal operating considerations. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available…

b. SNA 2008
   i. 3.157a: Fair value is a market-equivalent value. It is defined as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

c. ESA 2010
   i. 1.94: Flows and stocks shall be measured according to their exchange value, i.e. the value at which flows and stocks are in fact, or could be, exchanged for cash.

d. GFSM 2014
   i. 3.108: Market prices for transactions are defined as amounts of money that willing buyers pay to acquire something from willing sellers; the exchanges are made between independent parties and on the basis of commercial considerations only, sometimes called "at arm's length."
   ii. 3.115: Fair value is a market-equivalent value defined as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. It thus represents an estimate of what could be obtained if the owner sold the asset or the debtor settled the liability.
   iii. A6.27: IPSASs define "fair value" as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. This is similar to the basis for market price used in the GFS.

Appendix 10: ECB's Impact on YTMs and GDP (1 of 5): ECB "40% Penalty" on Greece Collateral Compared to Peers 5%

- Potential investors need to commit 8X the collateral to buy Greek bonds compared to peers.
- Borrowing costs significantly inflated relative to peers and freezes liquidity.
- Peer collateral adjusted bond yield as more attractive (higher) than Greece bond yields.
- Banks, as big buyers of government bonds, are effectively precluded from buying GGBs.
- Suggest you read an ICMA study "Collateral is the New Cash: The Systemic Risks of Inhibiting Collateral Fluidity".

Appendix 10: ECB's Impact on YTMs and GDP (2 of 5): ICMA on Collateral Constraints: Highlights

1. Mandatory haircuts for securities financing transactions increase cost and lower liquidity.
2. The systemic risks arising out of regulation that inhibit collateral fluidity would have broad and severe repercussions, not only for the financial markets, but throughout the real economy.
3. Regulation should avoid inhibiting, and ideally seek to enhance collateral fluidity.

"Collateral is the New Cash: The Systemic Risks of Inhibiting Collateral Fluidity: An ICMA presentation for EFMLG" *International Capital Markets Association* Frankfurt 19 March 2014

(*EFMLG: European Financial Markets Lawyers Group*)

Appendix 10: ECB's Impact on YTMs and GDP (3 of 5): ECB "40% Penalty" Limits Bank Investors

Italy 34% vs. Greece 6%

(in € billions, unless otherwise stated)	ITALY	GREECE
Domestic Holders:		
Domestic MFIs	€430	€15 (Mostly T-Bills)
Domestic Pensions & Insurance	€279	€5
Domestic Sub-Total:	**€709**	**€20**
Total Debt:	**€2,069**	**€319**
Domestic Holdings as % of Total Debt:	**34%**	**6%**

Sources: ECB, IMF, EC (AMECO), Japonica.

Appendix 10: ECB's Impact on YTMs and GDP (4a of 5): Examples of Impact of ECB Haircut on Sovereign Yields

	Country	Greece	Spain
1.	Bond Maturity	2/24/2033	7/30/2032
2.	**Bond Yield**	**8.38%**	**2.45%**
3.	Market Value	€ 56.77	€ 146.60
4.	Coupon	3.65%	5.75%
5.	ECB Haircut %	40%	5%
6.	Collateral required (3)*(5)	€ 23	€ 7
7.	Borrowed Amount (3)-(6)	€ 34	€ 139
8.	Cost of capital (%)	1.5%	1.5%
9.	Cost of capital (7)*(8)	€ 0.51	€ 2.09
10.	Gross Return (2)*(3)	€ 4.8	€ 3.6
11.	Net Return (10)-(9)	€ 4.2	€ 1.5
12.	**Net Return % of Funds Invested (11)/(6)**	**18.7%**	**20.6%**

Appendix 10: ECB's Impact on YTMs and GDP (5 of 5): ECB Historical Greece Haircut for GGBs: 2008 to 2014

Date	GGB Haircut (10+ year maturities)	Regulation Title	Duration	Ratings
Jan 1, 2008 – May 5, 2010	5.5%	-	-	A1/A/A
MAY 2012 OSI				
May 6, 2010 - Dec 31, 2010	5.5%	ECB/2010/3 Decision on **Temporary Measures** Relating to the Eligibility of Marketable Debt Instruments Issued or Guaranteed by the Greek Government Continuing Eligibility as Collateral by Suspending the Credit Quality Threshold	7 Months	A3/BB+/BBB-
Jan 1, 2011 – Feb 27, 2012	10.5%	ECB Biennial Review of Risk Control Measures	14 months	Ba1/BB+/BBB-
MARCH 2012 OSI & PSI NEGOTIATIONS				
Feb 28, 2012 – Mar 7, 2012	Ineligible as Collateral at ECB	ECB/2012/2: Repealing Decision ECB/2010/3 on **Temporary Measures** Relating to the Eligibility of Marketable Debt Instruments Issued or Guaranteed by the Greek Government	<1 month	Ca/SD/C
Mar 8, 2012 – Jul 24, 2012	10.5%	ECB/2012/3: The Eligibility of Marketable Debt Instruments Issued or Fully Guaranteed by the Hellenic Republic in the Context of the Hellenic Republic's Debt Exchange Offer	4 months	C/SD/C
DECEMBER 2012 OSI NEGOTIATIONS				
Jul 25, 2012 – Dec 20, 2012	Ineligible as Collateral at ECB	ECB/2012/4: Repealing Decision ECB/2012/3 on the Eligibility of Marketable Debt Instruments Issued or Fully Guaranteed by the Hellenic Republic in the Context of the Hellenic Republic's Debt Exchange Offer	5 months	C/CCC/CCC
Dec 21, 2012 – Present	57.0%	ECB/2012/32: **Temporary Measures** Relating to the Eligibility of Marketable Debt Instruments Issued or Fully Guaranteed by the Hellenic Republic	18 months	C/B-/CCC

Greece current bond ratings as of 10 November 2014 are Caa1/B/B/B.

Appendix 11: Look Past Greece Government Selling Negativity

Examples of creating negative impressions:

1. WSJ four page government ad containing negative messages on Greece (October 10, 2014)
2. Bloomberg minister solicited interview causing market turmoil (Oct 30, 2014)
3. Countless comments on bank run and deposit flows
4. Drama scare comments
5. Rating agency and investor presentations concentrating on the political risk

Appendix 12: Ask the Right Net Debt Integrity Question

Did the Net Debt number earn the following Expert's Opinion statement by a Big Four accounting/auditing firm whose independence is beyond question?

"Nothing has come to our attention that causes us to believe that the calculations of Greece financial liabilities as reported to us as of December 31, 2013 have not been, in all material respects conducted reasonably in accordance with IAS 39 and IFRS 13, which are deemed an appropriate approximation of IPSAS 29, applicable for Greece."