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Greece's New Agreement with Europe: Is This Time Different?

The correct understanding of Greece's debt can only be obtained by using international accrual accounting standards rather than the cash-basis face value definition. Changing the terms of debt changes the value of the debt in financial statements correctly prepared according to internationally promulgated accounting statistics rules. This article provides some detailed answers on the rules for measuring debt and debt relief and the application to Greece.

In the July/August *Intereconomics* Editorial on Greece's accord with the European creditors, Sebastian Dullien argues that "it is difficult to find anyone who honestly believes that the country's problems will be solved with this package". He also emphasises the critical issue of debt relief to help Greece to recover.[1]

In particular, he raises the issue of efficiency and effectiveness of the government "at getting reform legislation passed and implemented" and argues that "the agreement would most likely lead to failure", in line with the German media, which "has mostly focused on potential failures of the Greek government".[2]

On the debt issue, he emphasises that

> as a number of economists have been pointing out for quite a while, and as the IMF underlined in the debt sustainability analysis it published shortly before the Greek referendum in early July, the Greek public debt is not sustainable. In other words: Greece is insolvent.[3]

Dullien puts his toe in the water on the issue of the net present value of the Greek debt and concludes rather parochially that "without a turnaround in private investment, economic growth will not pick up and the debt level will grow even more unsustainable. Greece will thus never be able to repay the loans now disbursed."[4]

In the same issue of *Intereconomics*, Mark Weisbrot, in a bold statement, asserts that "[i]t is now clear that the European authorities do not intend to let the Greek economy recover any time in the foreseeable future."[5]

An August paper by William Cline of the Peterson Institute comments that Greece's headline gross debt number is overstated given its concessionary terms and the optical illusion of debt increases from investments in financial assets.[6] Cline comes close to making the connection that Greek debt is not correctly measured at face value and that changing the terms of debt changes the value of the debt in financial statements correctly prepared according to internationally promulgated accounting or economic statistics rules.

As is evident in the recently released lender projections for Greece, many continue to use gross debt numbers at face value and ignore the impact of debt relief on the financial statements and the existence of financial assets. Below,

* We wish to thank Christopher Magarian and the many multi-disciplinary professionals who provided valuable insights during the research, analysis and preparation of this article.

1 S. Dullien: How to Turn the Greek Deal into a Success, in: Intereconomics, Vol. 50, No. 4, pp. 174-175, here p. 174.

2 Ibid.

3 Ibid.

4 Ibid.

5 M. Weisbrot: Despite Pressure from Washington, Greek Bailout Increases Grexit Odds, in: Intereconomics, Vol. 50, No. 4, pp. 235-236, here p. 235.

6 W. Cline: Back from the brink: Policy reform and debt relief in Greece, voxeu.org, 24 August 2015.

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we analyse the above views not from a siloed macroeconomic perspective but from the necessary multi-disciplinary, analytical perspective and discuss seven considerations. Further, this article provides more detailed answers on the rules for measuring debt and debt relief and the application to Greece and its member state peers.

A multi-disciplinary perspective: seven considerations

As far as the possibility of the programme to solve Greece's economic structural problems and spur growth, there is some truth in Weisbrot's view that economists and analysts around the world, believing a Grexit almost inevitable just a month ago, now insist that the proposed deal between the Greek government and the creditors is only a band-aid solution for the Greek economy and will not work. Some of them emphasise the unwillingness of Greece to reform, but Greece is usually identified as a country suffocating under a mountain of unsustainable debt.

After five years of depression, the new programme, which includes a loan of up to €86 billion, might seem to lead to a sense of déjà vu as far as the prospects of success are concerned. However, this time it seems that preconditions for a viable solution, debt included, are well in place from a multi-disciplinary political, governmental, economic, financial, accounting, legal, historical, investment and management perspective.

Voters: The Greeks now understand that there are no easy or viable policy alternatives to a deal. Thus, any negative reactions to the agreement are expected to be rather mild. Voters do not recognise the last five months as a disaster for the economy, instead believing that Prime Minister Alexis Tsipras did his best to negotiate effectively with the creditors. Many feel that if Tsipras cannot deliver a better deal, nobody can.

New government: The Europeans now understand that only Tsipras – a left-leaning, highly popular prime minister – can pass the bills of the new agreement and, more importantly, guarantee implementation with minimum social unrest. Some commentators will caution that Tsipras openly expresses doubts about the agreement and questions its "social fairness", but what should one expect a politician to tell voters? That he is enthusiastic about difficult measures?

Reforms: The Europeans this time seem to be determined to use the "carrot and stick" method. The carrot is called "reforms for money", with significant additional debt relief in the latest programme. This includes borrowing costs of approximately one per cent, maturities extending to 50 years, reduced primary balance targets and hopefully continuation of the Agreement on Net Financial Assets and Securities Market Programme rebates. If the creditors show wisdom, the programme should deliver results this time. The stick is called "a temporary Grexit" and will be used to convince not only the government but also the domestic political system as a whole that it must comply with the rules. Hopefully, the reforms will focus on improving the management of government operations to create value.

The Greek government's track record since joining the EU has been poor and must be improved. For example, Greek GDP has grown a mere 15 per cent of the increase in government debt since 2001. Greece's peers – Ireland, Spain, Portugal and Italy – are compared to peers in the 40 to 50 per cent range, and newer entrants into the EU have GDPs that have grown more than 100 per cent of their increase in debt.[7]

Environment: This time the external environment is much better than it was a few years ago. For example, at the time of the March 2012 restructuring, the Portuguese government's 10-year borrowing cost was over 11 per cent, whereas today it is slightly over two per cent. Eurozone growth rates are steadily improving, the ECB's quantitative easing programme continues to mutualise the eurozone's debt (which should include Greek bonds), and French President Francois Hollande's proposals[8] regarding the urgent need for a "eurozone government" show that European leaders now understand that the multiple deficits – institutional, democratic and financial – of the euro have to be addressed immediately and substantially. Delays in effecting such changes will only favour the extreme political forces seeking to dismantle the eurozone and even break up the entire EU.

Debt relief: Greek debt has already undergone three major debt restructuring programmes: May 2010, March 2012 and December 2012. Cumulatively, Greece has restructured over €400 billion of debt, with debt relief estimated at €340 billion, which should be correctly accounted for on its balance sheet. The impact of the debt relief can be seen in a comparison of the effective interest rate on Greek debt.

7 Also, Greek GDP per capita has declined from 192 per cent of the average of the bottom half of EU countries to only 119 per cent, which is an annual growth rate of only one per cent. The issue for Greece is poor management by the government. Macroeconomic reforms can set the foundation for creating and redistributing value, but it is good management of resources that creates value and GDP growth. Government mismanagement can have a major economic impact by destroying the value of both government assets and private wealth. For example, over the past 12 months, government financial assets have declined in value by tens of billions of euros, billions of euros have been lost in the profits upon which future tax revenues are based, and the value of Greek stocks and fixed-income investments have declined by tens of billions of euros.

8 See www.bloomberg.com/news/articles/2015-07-19/france-s-hollande-proposes-creation-of-euro-zone-government.

Greece's effective interest rate has fallen from the second highest among EU member states in 2011, at 4.5 per cent, to one of the lowest levels, at less than 2.5 per cent.[9] If Greece had financial statements prepared under international accounting standards, the rebates on interest and principal payments by Greece from the ECB and national central banks would result in an even lower rate.[10]

There is a confluence of positive events surrounding Greece's ubiquitous government debt. From a political perspective, Tsipras now has the hard-earned right to claim that he has won €64.6 billion in debt relief with the new agreement and over €10 billion in reduced austerity.[11]

Debt relief resulting from Greek debt restructuring is discussed and estimated in the latest European Stability Mechanism annual report. Other sources discussing the importance of measuring Greek debt more accurately include the International Federation of Accountants (IFAC),[12] the Chartered Institute of Public Finance & Accounting (CIPFA),[13] the International Public Sector Accounting Standards (IPSAS) Board,[14] the Institute for International Finance,[15] the German CDU Economic Council,[16] as well as numerous articles and case studies.[17]

Table 1

IPSAS net debt vs. gross debt at face value, 2013

in % of GDP

Government	IPSAS net debt	Gross debt at face value
Greece	18	175
Ireland	76	124
Spain	63	94
Portugal	70	129
Italy	112	133
Greece peer government average	80	120
Greece as % of average	22	146

Source: XXx.

Combining the current and prior debt relief, Greece net debt, correctly calculated at year end 2013, was 18 per cent of GDP, 22 per cent of peer government average versus a misleading gross debt ratio at face value of 146 per cent of peer government average. This lower debt level is a huge competitive advantage waiting for capable government management to communicate (see Table 1).

Sustainability: The large illiquidity issues that the government faced in 2015 resulted in no small part from unexpected structural changes in the financing of the programme in the range of €20 billion, which is sizeable compared to a projected annual debt net service cost in the range of €5 to €10 billion.[18]

As for interpretations of the IMF views on the sustainability of Greek debt, a recent IMF statement reiterates its conclusion that Greek debt is unsustainable. However, it also states that "[a]bout a year ago, if program policies had been implemented as agreed, no further debt relief would have been needed".[19]

The IMF debt sustainability analysis (DSA) has made progress but continues to struggle with measuring and analysing Greece's financial position and performance. In an enlightened step forward, the IMF acknowledges in its June 2015 Greece DSA that "[g]iven the extraordinarily

9 AMECO data, see T. Pelagidis, M. Mitsopoulos: Who's to Blame for Greece?, London, Palgrave MacMillan, forthcoming.

10 Another benefit of the debt relief is seen in the estimated average maturity of Greek debt, which will be more than 20 years, almost twice its peers, resulting in average annual principal payments of €7 billion over the next 40 plus years to 2057. This is only four per cent of GDP in 2016, with the percentage declining as GDP grows.

11 The figures here are based on the latest publicly available information. The quantification of the newly won debt relief allows for the measurement of debt relief won in prior restructurings, the impact of which will show Greece as having one of the lower debt burdens in the European Union. See supporting debt relief model available at: http://mostimportantreform.info/2015_ESM_Programme_Debt_Relief_Model.xlsx. €64.6 billion in debt relief, which can be verified under international accounting standards, is a major victory and allows for much needed macro-level reforms. From a management performance perspective, the quantification of the debt relief requires financial statements prepared under international accounting standards, which is a globally recognised process to build trust, confidence and economic growth.

12 Sovereign Debt Crises – Accounting Matters, IFAC, 20 July 2015.

13 CIPFA urges Greek government to use IPSAS to correct overstatement of debt, CIPFA, 11 August 2015.

14 Accounting for Sovereign Debt Restructurings under IPSAS, IPSASB, 20 May 2015.

15 Debt Restructuring: Drawing the Right Lessons, IIF Capital Markets Monitor, July/August 2015.

16 No Permanent Provision for Greece, CDU Economic Council, 24 February 2015.

17 See J. Schumacher, B. Weder di Mauro: Debt sustainability puzzles: Implications for Greece, voxeu.org, 12 July 2015; P. De Grauwe: Greece is Solvent but Illiquid: Policy Implications, voxeu.org, 3 July 2015; D. Gros: Can the Greek State Pay for Itself?, CEPS Commentary, 5 June 2015; G. Serafeim: Greece's Debt: Sustainable?, Harvard Business School Case Study, 16 June 2015; I. Ball: Debate: Would IPSAS help Greece?, in: Public Money & Management, Vol. 35, No. 6, 2015, pp. 397-398; J. Soll: Greece Owes Less Than Europe Says, Politico, 2 July 2015; V. Truglia: Greece and the Eurozone at a Tipping Point, Clear and Candid, 7 February 2015.

18 Specifically, the March 2012 programme had assumed that the Greek government bonds held by national central banks would have been rolled over at maturity, and they were not. The creditors required that the government agree to use over €10 billion of its back-up financing facility to buy back its bonds in order to reduce a debt-to-GDP ratio calculated using face value. Also, the ANFA/SMP rebates were suspended. The 2014-2015 liquidity crunch was visible well over two years ago, but other issues took priority.

19 The creditor debt projections have changed so massively and so quickly that their credibility cannot avoid being questioned. In the past year, both the projected 2017 gross debt-to-GDP ratio (at face value) and the IMF 2022 debt-to-GDP projection increased by almost 50 percentage points.

concessional terms that now apply to the bulk of Greece's debt, the debt/GDP ratio is not a very meaningful proxy for the forward-looking debt burden".[20]

Without the benefit of financial statements prepared according to international accounting standards, the IMF struggles and is forced to rely on a "not very meaningful" debt number and a confusing new Rube Goldberg-like metric labelled "gross financing needs" (GFN).[21]

Table 2 shows how a very low debt service ratio can be transformed into a GFN ratio that gives the false impression that debt is the issue, when in fact the management of government resources should be the focus. For example, the Greek 2016 debt service ratio, is very low, at just 47 per cent of the peer government average. Conversely, the IMF shows a GFN for Greece that is 123 per cent of the peer government average. The IMF has yet to disclose the calculations it uses for Greece or peer DSAs.

Of note, the IMF has a debt sustainability framework called the Low-Income Country DSA that uses the present value of debt, rather than its face value, but has not utilised or even discussed its existence in the context of Greece.[22]

The IMF has a widely reported metric called net debt, defined as gross debt less financial assets, but has chosen to focus on gross debt in the Greek programme. The significance of gross debt versus net debt for Greece is not apparent, as the IMF recognises only six per cent of Greece's financial assets but recognises 94 per cent of Spain's and 79 per cent of Italy's financial assets based on a subjective assessment of high liquidity.

Table 2
Debt service ratio vs. GFN, 2016 estimation
in %

Government	Debt service ratio	GFN ratio
Greece	6	19
Ireland	10	9
Spain	13	17
Portugal	11	20
Italy	15	17
Greece peer government average	12	15
Greece as % of average	47	123

Source: XXx.

Management: The final and arguably most important consideration is the potential that the Greek government will use international financial statements to build trust and confidence by better managing its financial resources. Greece recently announced its intention to implement IPSAS-based accounting, which would provide the information necessary for better management. Given the Greek government's chequered accounting track record, it is quite surprising that the government still continues to be run on a cash-basis accounting system.[23]

In a major change from the past, Greek stakeholders are strongly encouraging the government to staff the finance ministry with global leadership which has expertise in finance, accounting and turnaround management and skills in measuring, analysing, creating value and communicating. Stakeholders are also pushing for the prompt publication of a 100-day plan with key goals. These stakeholders believe that Greece's senior finance leadership must be among the world's best experts in understanding the rules and respected for complying with their form and spirit.[24] Overall, these stakeholders are en-

20 International Monetary Fund: Preliminary Draft Debt Sustainability Analysis, Greece: IMF Country Report No. 15/165, 26 June 2015, p. 11, point 7. Yet the DSA continues to use the same not very meaningful ratio, as noted on p. 10, point 5.

21 The creditors have recently added another metric to their debt concern about Greece, called annual gross funding needs, with 15 per cent being the warning sign for Greece in the "decades" beyond 2030. The importance of the GFN metric is in part based on the expectation that the equation represents a debt service formula, which it does not. The GFN metric aggregates data not only from debt service but also from assumptions about the fiscal balance, privatisations, cash buffers and other programme expectations. Furthermore, the GFN repeats in each projected year the maturity of government Treasury bills, thus allowing a nation with massive longer-term debt and no Treasury bills to show a very low GFN, while a nation with very low debt but a high level of Treasury bills has a very high GFN.

22 The IMF has worked with other countries (including Portugal, Ireland, Spain and Iceland) facing fiscal or financial challenges to implement IPSAS-based accounting and has commented positively on the use of international accounting standards for government financials, but it has left Greece (the country most in need of trustworthy financial information) outside this key reform. For supporting documents on these IMF topics, see the IMF GFSM Appendix 6 for IPSAS comments, the DSA framework on low-income countries for present value guidelines, and the fiscal transparency assessments for IPSAS progress in Portugal, Iceland and Ireland.

23 We have been told that the Greek government understands the importance of promptly producing a balance sheet based on international accounting standards, which would include a net worth number and allow the government to swiftly capture the low-hanging fruit from past underperformance. The Greek government has attempted to implement international accounting standards in the past without success. To put the importance of better management of the government in perspective, consider the following. The government is almost half the entire country's GDP, with approximately €80 billion in annual spending, over €75 billion in annual revenues, approximately €500 billion in liabilities at IPSAS valuation, €90 billion in financial assets at year end 2013 and approximately 650,000 employees.

24 Stakeholders also expect that the 30-60-100 day goals will include IPSAS balance sheet numbers, €7 billion of newly issued Greek Government bonds, a reduction in government borrowing costs by seven percentage points, a credit rating upgrade to BB, IMF DSA modifications using IPSAS net debt, and an ECB Greek government bond collateral haircut reduced to ten per cent or lower, which would be comparable to peers from the current ineligible-for-collateral status.

couraging the government to make its number one goal to build trust and confidence.[25] To do so, Greek ministers must make transparency and accountability of government finances their most important reform. The starting point for transparency and accountability in Greece is accurate government financial information obtained through international public sector accounting standards and audits.

Measuring debt and debt relief

The correct understanding of Greece's debt can only be obtained by using international accrual accounting standards (informally referred to herein as "rules") rather than the cash-basis face value definition. Accrual accounting initially measures debt by using its original market issue price or its present value using market comparable yield-to-maturities of all three streams of cash flows (interest payments, interest on interest and principal payments) at the time of borrowing. It only changes the value of the debt upon significant restructuring or if accretion is required. Cash-basis debt measurement simplistically shows the face value of the debt, ignoring any of the terms or market relevant information.

Accrual accounting is clearly dominant, with 88 per cent of all OECD (non-Asia) government and public company expenditures measured, managed and reported under accrual accounting standards (70 per cent of governments and 100 per cent of international publicly traded companies). While accrual accounting has been the preferred accounting method for public companies for almost 100 years, accrual accounting for governments has accelerated in recent decades to become the dominant choice and the global best practice.

The use of the market value of government securities, which for developed nations is almost all their debt, can be seen with the OECD's System of National Accounts (SNA) net worth number for Greece of negative 73 per cent of GDP in 2011. This compares to a value of negative 143 per cent of GDP when calculated using face value (see Table 3). Net debt is a similar number to what is called financial net worth, but with a change of sign. The absence of correct calculations under these rules for complex debt structures, such as for Greece post-restructuring, results in the OECD data showing that Greece's financial net worth-to-GDP ratio decreased from negative 73 per cent before the 2012 restructurings to negative 101 per cent after the 2012 restructurings, despite over €290 billion of creditor losses resulting from the restructurings. The SNA rules used by the OECD, which require government bonds to be accounted for at ongoing market values, result in little difference between the OECD SNA financial net worth value and the corresponding face value number for 2012. This is because Greece had only approximately €26 billion in bonds (at face value) trading in the public market, and SNA rules on debt reorganisation are not correctly followed.

Debt measurement frameworks

There are international frameworks to measure and report government debt relief from debt restructurings. The reports depict the effect on the balance sheet as well as the statements of financial performance and cash flows. The debt restructuring rules are remarkably consistent worldwide and based on similarly compelling public policy rationale.

There are three international accounting frameworks (non-creditor related) under which Greece should/could measure its restructured debt and debt relief:

- Within the European Union, the statistics rules are found in the European System of National and Regional Accounts (ESA), adopted in the form of a regulation by the European Parliament;
- Globally, the statistics rules are found in the SNA, which was produced under the auspices of and signed by the United Nations, the European Commission, the OECD, the IMF and the World Bank Group;
- Globally, there is only one accounting framework for the public sector: IPSAS.

IPSAS is the public sector version of International Financial Reporting Standards (IFRS) used by companies, and both have been developed under an extensive, transparent and international due process, which allows them to have, amongst the international measurement systems, the unique advantage of producing audited financial statements. IPSAS/IFRS has been adopted by many public sector entities that want the credibility of having the global best practice in accounting standards. Both the Maastricht Treaty and the IMF measurement of loans use face value and are therefore not considered to be comparable to independent accounting frameworks.

25 In the past few months, the measurement of debt at face value (also known as nominal value) has increasingly come into focus as creditor member states seek to avoid having to recognise the cost of providing Greece concessionary loans and restructuring of the debt. The use of form over substance debt measurement has become so prominent that the EC's recent debt sustainability paper repeats that economic changes of the terms of the Greek debt are a possibility but that it must be "without the need for a nominal haircut".

Table 3

OECD statistics: Greece's government balance sheet impact of 2012 debt relief restructurings

in billions of euros

<table>
<tr><th></th><th></th><th>2011 YE</th><th></th><th>2012 YE</th><th>Change</th></tr>
<tr><td>1.</td><td>Financial assets</td><td>€ 78</td><td rowspan="11">March and December 2012 debt relief restructurings with more than €290 billion in creditor losses*</td><td>€ 124</td><td>€ 46</td></tr>
<tr><td>2.</td><td>Liabilities</td><td>€ 230</td><td>€ 321</td><td>€ 91</td></tr>
<tr><td>3.</td><td>Financial net worth</td><td>-€ 152</td><td>-€ 197</td><td>-€ 45</td></tr>
<tr><td>4.</td><td>Financial net worth as % of GDP</td><td>-73%</td><td>-101%</td><td>30%</td></tr>
<tr><td>5.</td><td>Liabilities as % of GDP</td><td>111%</td><td>165%</td><td>55%</td></tr>
<tr><td>6.</td><td>Accounts payable</td><td>€ 19</td><td>€ 21</td><td>€ 2</td></tr>
<tr><td>7.</td><td>Government debt (AMECO)</td><td>€ 356</td><td>€ 305</td><td>-€ 51</td></tr>
<tr><td>8.</td><td>Total liabilities (face value)</td><td>€ 375</td><td>€ 326</td><td>-€ 49</td></tr>
<tr><td>9.</td><td>Financial net worth (face value)</td><td>-€ 297</td><td>-€ 202</td><td>€ 96</td></tr>
<tr><td>10.</td><td>Financial net worth (face value) as % of GDP</td><td>-143%</td><td>-104%</td><td>39%</td></tr>
<tr><td>11.</td><td>GDP (OECD/IMF/EC AMECO)</td><td>€ 208</td><td>€ 194</td><td>-€ 14</td></tr>
</table>

* As measured under international accounting standards IPSAS and IFRS.

Source: OECD Financial balance sheets – consolidated; General government (except as otherwise indicated).

Debt measurement rules

There are three components of the statistics rules that are relevant to Greece in calculating restructured or rescheduled debt and debt relief:

- the rules specify that the debt is considered extinguished and replaced by a new debt instrument with the new terms and conditions;[26]
- the rules specify that the debt is to be valued at the time of transaction using comparable market values under commercial considerations;[27]
- the rules specify that the creditor record a loss (known as a capital transfer) upon the extinguishment of the debt and the new debt at a lower value.[28]

The rationale supporting these rules is solid from both the lender and borrower perspectives. From the lender's perspective, the rules are designed to provide accurate transparency to and accountability by stakeholders. From the borrower's perspective, the rules are designed to protect the borrower from abusive and predatory lending. Importantly, they allow borrowers to show the restructured debt number on their balance sheets. Since this number will be lower than the original face value, it provides debtors with a fair opportunity to recover and prosper. From a balanced social equity perspective, the rules prevent lenders from forcing debtors to keep inflated debt numbers on their books in order to push the debtors back into default and take their assets.

The USA's detailed accounting rules for creditor assets and debtor liabilities following a reorganisation are widely known by the informal name "fresh start" accounting, which signifies how their goal is to allow debtors to show the new lower debt value on their balance sheets in order to have a fresh start opportunity.

Measuring Greek and peer debt by international rules

Greece is unique in the amount of restructured debt it has compared to other programme countries, but some ad-

26 See ESA, Section 20.236; and SNA, Section 22.110.

27 See ESA, Section 20.221 and Chapter 5; and SNA, Sections 22.113 and 2.60.

28 See ESA, Sections 20.221 and 20.236; and SNA, Section 22.110. IPSAS 29 and IAS (IFRS) 39 provide extraordinarily professional material on accounting for financial liabilities as a category at fair value to avoid the pitfalls of artificially distinguishing between public securities and loans.

Table 4
Greek vs. peer debt comparison
in billions of euros as of year end 2013

		Greece	Peer average	Post-programme countries Ireland	Spain	Portugal	Italy
1.	Maastricht debt/GDP	175%	120%	124%	94%	129%	133%
2.	GDP	€ 182		€ 164	€ 1023	€ 166	€ 1560
3.	Maastricht debt (EDP)	€ 319		€ 203	€ 961	€ 214	€ 2069
	IPSAS/IFRS:						
4.	Gross debt	€ 124		€ 189	€ 940	€ 185	€ 2069
5.	Gross debt/GDP	68%		115%	92%	112%	133%
6.	Financial assets	€ 91		€ 65	€ 292	€ 69	€ 317
7.	Net debt	€ 33		€ 125	€ 647	€ 116	€ 1752
8.	Net debt/ GDP	18%	80%	76%	63%	70%	112%
9.	IPSAS/ IFRS impacted debt	€ 275		€ 62	€ 41	€ 72	€ 0
10.	IPSAS/ IFRS impacted debt (%)	86%		31%	4%	34%	0%

Note: Greece's IPSAS/IFRS net debt was independently verified by KPMG on 15 August 2014.

Source: XXX.

Table 5
Greek debt comparison: face value vs. international rules
in billions of euros as of year end 2013

SN	Balance sheet item	Face value	International rules
1.	Loans	€ 212	€ 60
2.	Bonds	€ 63	€ 20
3.	Other	€ 44	€ 44
4.	Gross debt	€ 319	€ 124
5.	Financial assets	€ 91	€ 91
6.	Net debt	€ 228	€ 33
7.	Gross debt/GDP	175%	68%
8.	Net debt/GDP	125%	18%

Note: GDP: €182 billion; international rules: IPSAS/IFRS.

Source: XXX.

justments are required to the other countries to achieve an appropriate comparison (see Table 5). The numbers for Greece were independently verified under IPSAS and IFRS in August 2014 by the accounting/auditing firm KPMG, which was retained by an investor in Greece securities, Japonica Partners.

Table 4 highlights the importance of focusing on both IPSAS gross and net debt, which is consistent with the recommendations of governments considered to be the global benchmarks in financial management. Three of the many good reasons for the focus on net debt are: the importance of assessing and incentivising for better management of government financial assets; not penalising governments that raise debt to build cash buffers, invest in private sector entities, or engage in other prudent fiscal management exercises such as repaying repos with entities under the general government umbrella; and combating corruption. Greece's net debt-to-GDP ratio was 18 per cent at year end 2013, which is a quarter of the peer average. This ratio confirms the financial challenges facing Greece are not the scapegoat debt but government financial management.

The major classes of Greek debt and the impact of the international rules are shown in Table 5. The impact of the rules varies by class of debt, with certain loans and bonds being impacted significantly and other non-restructured debt seeing no impact.[29]

Source of confusion

A source of the confusion in calculating Greece restructured debt at face value is a Eurostat manual in need of immediate correction. The Manual on Government Deficit and Debt provides guidance on ESA and SNA that is contrary to the primary source documents. This conclusion, along with descriptions of the necessary changes, has been presented without challenge at events organised by the OECD, S&P, CESifo, CIPFA and IFAC. In sum, the manual misinterprets the primary sources and omits critical guidance on the extinguishment of restructured debt and valuation at time of transaction based on market valuation hierarchy or yield-to-maturities.

The flaws in using face value for debt are manifold, and they have major consequences. Poor kownledge of the correct accounting for debt leads to wrong-headed

29 Presentations containing further details on the rules can be found at www.mostimportantreform.info.

soundbites such as that debt restructuring is nothing more than “kicking the can down the road” or “they will never be able to pay it back”.

One sign of a lack of understanding or even the existence of respect for rules is the use of the single discount rate to calculate the present value of debt. This is such an egregious error that section 20.242 of ESA explicitly states, “There is no single market interest rate that should be used to measure the capital transfer.” To be clear, the harmonisation among international accounting and economic statistics requires the use of a three-step sequence hierarchy of valuation to value debt: first, market prices; second, market prices of comparables; and third, the yield-to-maturities of comparable debt.

The flaws of using a single non-market discount rate, in addition to violating the accounting and economic statistics rules, include producing fake debt numbers and interest expense numbers, hiding the economic reality of transactions, creating perverse measurement outputs such as showing initial increases and decreases in net worth that never happened, and creating chronically flawed projections with incorrect financials. Two final points of clarification: First, the IMF’s Government Finance Statistics Manual, in sections 3.113-115, contains harmonised hierarchy of valuation language. Second, as a semantic clarification, the term “net present value” is not used in accounting or economic statistics rules to describe the current value of debt: the correct term is “present value”.

Conclusion

From a multi-disciplinary perspective, there are three key takeaways:

- Having financial statements based on international accounting standards is the first step to building trust and confidence.
- There are international accounting standards and economic statistics rules for measuring debt and debt relief, and they are harmonised.
- The calculations of debt relief immediately impact the financial statements, including the balance sheet debt numbers.