Bringing Western Democracy Government Financial Transparency to Greece

Presentation by:
Paul B. Kazarian
Chairman and CEO
JAPONICA PARTNERS

29-30 April 2016
University of Southern California
Los Angeles, California

Draft v.3.4

Changing Opacity to Transparency and Accountability

Background Introduction

1. 2015 to 2018 Debt Relief
2. Annual Debt Service Metrics
3. Balance Sheet Net Debt (IAS and Statistics)
4. Greece Government Working Draft Balance Sheet
5. Human Capital and Performance Gap Metrics

Background Introduction

What is Western Democracy Government Financial Transparency?

Western democracy government financial **transparency** is about giving your voting citizens the necessary financial information on a timely basis in order for there to be **accountability** for government officials financial actions.

Goals of Western Democracy Government Financial Transparency

1. Build trust and confidence
2. Better use of taxpayers money
3. Combat corruption
4. Global comparability and consistency
5. Reflect economic reality
6. Accuracy and auditability
7. Citizen friendly

Why a Government Balance Sheet

1. Provides transparency and accountability.
2. Builds trust and confidence.
3. Improves decision-making to create and protect value, especially on mega financial decisions.
4. Combats corruption.

What is a Balance Sheet

Total Assets

less Total Debts

equals Net Worth.

Too many people do not know that there are international accounting rules to construct a balance sheet and believe they can create their own. They cannot and should not.

Examples of Government Mega Transactions that Would Benefit from Transparency and Accountability (1 of 3)

1. **Asset sales:** Sell assets below fair value to favored party.
2. **Bank investments:** Force majority owned banks to sell potential equity increasing bonds back to government.
3. **Concession manipulation:** Manipulate terms of concession agreements with opacity to rearrange cash flows.
4. **Debt buyback:** Use 15 billion of cash buffer to buy back low interest debt due in 30 years.
5. **Defer payables:** Extent billion of payables to favored service providers?
6. **Delaying payment:** Delaying payments to create fiscal illusion and hiding penalties.
7. **Depreciation:** Depreciation incentivizes program maintenance, which has huge ROA and exposes future costs.
8. **Environmental:** Assume billions of a company's environmental liabilities to keep jobs.

Examples of Government Mega Transactions that Would Benefit from Transparency and Accountability (2 of 3)

8. **Investment:** Invest billions in way below market to access private capital.
9. **Financial asset management:** Allow comparison of return on financial assets.
10. **Financial asset losses:** Financial assets losses required timely recognition as an expense.
11. **Loans:** Make billion in targeted group loans with most probable 50% recover.
12. **Mismanaged assets:** Hide losses on mismanaged asset by not having to record impairment or decline in value
13. **Net worth:** Provide single number assessment of financial management.
14. **NPLs:** Overpay for NPLs to protect politically connected banks.

Examples of Government Mega Transactions that Would Benefit from Transparency and Accountability (3 of 3)

16. **Pensions:** Assume industry wide billions of pension liabilities to make company (especially SOE and PPP) financials more sustainable.
17. **Pensions fund liability comparison:** Allow comparison of pension liability by pension group.
18. **Pension modifications:** Expose total future costs of pensions fund terms changes.
19. **Probable expenses:** Requires timely recognition of probable expenses such a litigation claims.
20. **Sale and leaseback scams:** Sell assets to generate cash without recognizing the expensive future liabilities.
21. **Tax receivables:** Reduce tax receivables to favored party without recording loss on asset.

Three Accounting Standards of Western Democracy Financial Transparency

1. **IPSAS:** International Public Sector Accounting Standards
2. **IFRS:** International Financial Reporting Standards
3. **US GAAP:** United States Generally Accepted Accounting Principles

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

European Union
IPSAS

European Financial Stability Facility
EFSF
IFRS

IFRS

WORLD BANK
US GAAP

OECD
IPSAS

UNDP
IPSAS

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

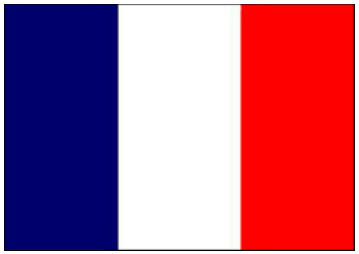
US

US GAAP

UK

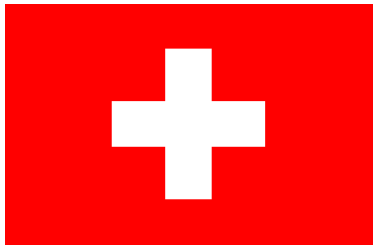
IFRS

FR



IPSAS/IFRS

CH



IPSAS

AU

IFRS-like

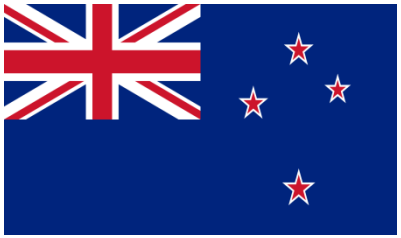
CA

IPSAS-like

IL

IPSAS

NZ



IPSAS

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

The Leading Stock Exchanges with Companies that Must Use Financial Statements Prepared in Accordance with International Accounting Rules

IFRS/US GAAP

US GAAP/IFRS

US GAAP/IFRS

MGDD vs SNA: Rescheduling

Manual on Government Deficit and Debt
Implementation of ESA 2010

VII.3.3.2 Rescheduling of a loan

22. There is no real guideline for trea0ing such a case in ESA 2010. Mention is only made of debt restructuring in ESA 2010 20.236 which states the same principle related to the difference in value (without specifying that it is in nominal terms). It is mentioned in 2008 SNA but in a rather descriptive way indicating only in 20.107 b that it "may or may not result in a reduction in present value terms" whereas there is no mention of a possible capital transfer. Therefore, this manual brings a necessary clarification and in useful practical guidance for national accountants.

≠

System of National Accounts 2008

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.

MGDD vs ESA: Rescheduling

Manual on Government Deficit and Debt

Implementation of ESA 2010

VII.3.3.2 Rescheduling of a loan

22. There is no real guideline for treaOing such a case in ESA 2010. Mention is only made of debt restructuring in ESA 2010 20.236 which states the same principle related to the difference in value (without specifying that it is in nominal terms). It is mentioned in 2008 SNA but in a rather descriptive way indicating only in 20.107 b that it "may or may not result in a reduction in present value terms" whereas there is no mention of a possible capital transfer. Therefore, this manual brings a necessary clarification and in useful practical guidance for national accountants.

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.

≠

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.

MGDD vs ESA: Concessional Loans

Manual on Government Deficit and Debt

Implementation of ESA 2010

V.6.1 Background of the issue

1. As a part of public policy activities, governments provide loans at a lower interest rate than the market rate observed at the time of loan issuance (sometimes called "concessional loans").

V.6.2 Recording of low interest rate loans at inception

6. In this context, the interest has to be recorded on the basis of the contractually agreed interest rate. Consequently, no implicit benefit for the debtor is recorded in national accounts.

≠

ESA 2010

20.241 Debt issued on concessional terms. There is no precise definition of concessional loans, but it is generally accepted that they occur when units of the general government sector lend to other units in such a way that the contractual interest rate is intentionally set below the market interest rate that otherwise would apply. The degree of concessionality can be enhanced with grace periods, frequencies of payments, and a maturity period favourable to the debtor. Since the terms of a concessional loan are more favourable to the debtor than market conditions would otherwise permit, concessional loans effectively include a transfer from the creditor to the debtor.

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. The commercial interest reference rate published by the OECD may be applicable when the loan is issued by one of its member countries.

MGDD vs SNA: Concessional Loans

Manual on Government Deficit and Debt

Implementation of ESA 2010

MGDD 2014 Comment on SNA 2008: **[**Contains no comment on SNA.**]**

≠

System of **National Accounts** 2008

22.123 *Debt issued on concessional terms.* There is no precise definition of concessional loans, but it is generally accepted that they occur when units lend to other units and the contractual interest rate is intentionally set below the market interest rate that would otherwise apply. The degree of concessionality can be enhanced with grace periods, frequencies of payments and a maturity period favourable to the debtor. Since the terms of a concessional loan are more favourable to the debtor than market conditions would otherwise permit, concessional loans effectively include a transfer from the creditor to the debtor.

22.124 Loans with concessional interest rates to a foreign government could be seen as providing a current transfer equal to the difference between the actual interest and the market equivalent interest. If such a transfer were recognized, it would usually be recorded as current international cooperation, and the interest recorded would be adjusted by the same amount. However, the means of incorporating the impact within the SNA and international accounts have not been fully developed, although various alternatives have been advanced. Accordingly, until the appropriate treatment of concessional debt is agreed, information on concessional debt should be provided in supplementary tables.

Changing the Balance Sheet Value of Debt in Accordance with International Accounting Rules

Example: €120,000 loan

Current: 100% of future face value

- 10% interest
- Principal must be paid down annually
- All must be paid off within three years

After Restructuring: 16% of future face value

- 1% interest
- Principal payments don’t start for 20 years
- Final payment not until 40 years from today

Balance Sheet Net Debt is More Meaningful Than Gross Debt

Borrower A borrows 120,000 and wastes all the money .
Borrower B borrows 120,000 and puts money in savings account.

	Borrower A		Borrower B
Gross Debt	120,000		120,000
Financial Assets	0		120,000
Balance Sheet Net Debt	120,000		0

Non-Transparency of Negative Interest Rates

Example of One Year 120,000 Loan with 10% Interest Rate

	Day One	**Year End**
Borrower A:		
Principal:	120,000 inflow	120,000 outflow
Interest:		12,000 outflow
Interest rate:		12,000 / 120,000 = 10%
Borrower B:		
Principal:	120,000 inflow	120,000 outflow
Principal Rebate:		40,000 inflow
Interest:		12,000 outflow
Interest Rebate:		12,000 inflow
Interest Rate:		**-40,000 / 120,000 = -33%**

2015 to 2018 Debt Relief

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

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

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

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

Balance Sheet Net Debt from Total Greece Third Programme Debt Relief would be ~14%

- **Greece Credit Rating:** CCC credit.
- **Total Third Programme size:** €86 billion.
- **Total Debt Relief:** €68 billion with corresponding increase in government net worth.
- **Balance Sheet Net Debt: €12 billion (14% of Total Third Programme).**
- **Terms:** Interest expense currently approximately 1% with maturities up to 44 years, and grace periods of 18 years.
- **Measurement Rules:** International macroeconomic rules 2008 SNA and ESA 2010 and international accounting rules IPSAS/IFRS.
- **Disbursements to Date:** €21.4 billion (Dec 2015).

Note: Data updated as 4 Feb 2016. Debt proceeds other than €5.4 for bank recaps are assumed to pay down debt.

Annual Debt Service Metrics

Greece 2016 Net Interest Payments are 25% of Peers

(€, Billions)

			Greece	Peer	Post-Programme Countries			
		Greece	% of Peers	Average	Portugal	Ireland	Spain	Italy
1.	Revenue	€ 81.5			€ 81.4	€ 71.4	€ 432.8	€ 791.7
2.	Interest Expense	€ 7.0			€ 8.3	€ 6.6	€ 33.1	€ 69.4
3.	Interest Expense % of Revenue	**8.6%**		**9.0%**	10.2%	9.2%	7.6%	8.8%
4.	EFSF Non-Cash Interest	€ 1.3						
5.	SMP/ANFA Rebates - Projected	€ 1.7						
6.	ANFA/SMP Rebates - Due from Prior Years	€ 1.8						
7.	Interest Received (2015 CoCo Investment)	€ 0.3						
8.	T-Bills Interest Savings	€ 0.2						
9.	Refinancing Interest Savings	€ 0.1						
10.	Net Interest Payments	€ 1.5			€ 8.3	€ 6.6	€ 33.1	€ 69.4
11.	**Net Interest Payments % of Revenue**	**1.9%**	**21%**	**9.0%**	10.2%	9.2%	7.6%	8.8%
12.	GDP	€ 172			€ 184	€ 218	€ 1,120	€ 1,675
	Net Interest Payments % of GDP	**0.9%**	**25%**	**3.7%**	4.5%	3.0%	3.0%	4.1%

Notes: 2016 estimates based on EC and EFSF data.

€ 1.8 Billion SMP 2015 Rebate

Bank of Greece Document

21/09/2015 - **Balance of Payments: July 2015**

Balance of Payments: July 2015 (1) **Current account** In July 2015, the current account showed a surplus of €4.3 billion, up by 3 billion year-on-year. This is mainly attributable to an inflow of €1.8 billion due to SMP (Securities Market Program, 2014) returns. The relevant inflow, which contributed to a significant improvement in the secondary income account, was followed by the transfer of the funds to a Greek government account held with the ECB (recorded under other investment as an increase in assets), as cash collateral for the disbursement by the European Financial Stabilization Mechanism (EFSM) of €7.2 billion under a bridge financing agreement. Moreover, in July 2015, the goods and services surplus rose by €1.2 billion, mainly due to a large decrease (of 40.7%) in imports. More specifically, the deficit

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

SN		Euros	% of GFN	Notes
1.	IMF Gross Financing Needs (GFN)	€ 34.6	100%	SN 2 times SN 18.
2.	IMF GFN % of GDP	19%		Source: IMF Greece DSA (June 26, 2015) Figure 1, p.19.
	Annual Debt Service:			
3.	Interest Payments	€ 7.1	20%	Derived based on IMF Greece DSA (June 26, 2015) Figure 1, p.19 data.
4.	Bond and Loan Principal Payments	€ 7.4	21%	Source: IMF Greece Fifth Review (June 2014).
5.	Deferred Interest	-€ 1.3	-4%	Deferred interest on non-financed EFSF loans at rate of 1.4%.
6.	SMP/ANFA Rebates	-€ 3.5	-10%	Rebates of interest and principal on ECB and NCB bond holdings.
7.	Other	-€ 0.8	-2%	Japonica estimate includes interest income, lower principal payments, and third programme/T-bill savings.
8.	Annual Debt Service	€ 8.8	**26%**	
9.	Annual Debt Service % of GDP	5%		
	Non-Annual Debt Service Reconciling Adjustments:			
10.	Overall Balance	€ 6.5	19%	Source: IMF WEO Database (October 2015) accessed 30 Jan 2015.
11.	T-Bills	€ 14.8	43%	Bloomberg and PMDA bulletin.
12.	Arrears	€ 5.3	15%	Source: IMF Greece DSA (June 26, 2015) Table 1, p.7. Estimate of 75% of IMF projection.
13.	Cash Buffer for Deposit Build-up	€ 1.5	4%	IMF email 9 February 2016.
14.	Net Privatization Proceeds	-€ 0.5	-1%	IMF email 9 February 2016.
15.	SMP/ANFA Rebates	€ 1.9	5%	IMF email 9 February 2016 difference between total due and IMF projection.
16.	To Be Reconciled	-€ 3.7	-11%	In process of reconciling.
17.	Adjustments Subtotal	€ 25.8	**75%**	
18.	Total Annual Debt Service and Adjustments	€ 34.6	100%	Sum of SN 8 and SN 16.
19.	GDP	€ 182		Derived based on IMF Greece DSA (June 26, 2015) Figure 1, p.19 Nominal GDP Growth data and IMF WEO reported 2014 GDP.

2022 Debt Hump Excel Error

Year	TBills	ANFA	Bonds excl SMP, ANFA, Hold, Sec/n	HOLD	Securitisation	SMP	Swaps	BOG LOANS	EIB LOANS	Private Sector	EFSF	GLF	IMF	REPO	new loans	Total
2015	322,131,434	344,188,797	836,417,679	108,074,021	480,798	1,035,487,932	736,392,224	41,523,732	316,761,359	-124,608,927	585,585,580	283,796,881	881,524,653	437,339,295		
2016	297,166,730	283,560,447	1,155,356,129	100,078,165	370,924	772,361,739	711,850,718	24,091,543	301,328,100	-130,056,592	733,027,574	302,287,669	1,180,833,704	482,743,833	170,603,901	6,385,604,584
2017	296,874,600	254,000,845	1,155,731,763	74,605,068	337,456	718,814,916	666,506,125	30,921,942	287,647,837	-146,723,626	833,997,396	400,734,763	1,251,823,521	340,282,028	0	6,165,554,634
2018	296,874,600	181,533,686	1,087,567,087	54,738,211	358,670	544,678,392	598,365,700	30,037,788	277,402,200	-154,924,503	931,601,291	550,812,258	1,322,150,224	327,181,944	109,415,371	6,157,792,919
2019	308,162,231	154,414,935	1,089,971,785	55,015,798	161,411	486,366,978	576,978,124	31,829,940	267,931,960	-159,638,171	1,014,580,938	736,809,323	1,321,457,818	327,181,944	29,185,199	6,240,410,213
2020	350,783,796	91,872,622	887,479,106	53,549,823		191,820,385	535,634,429	31,334,886	256,986,799	-164,505,026	1,085,597,825	932,613,718	1,203,894,051	328,078,333	172,902,444	5,958,043,191
2021	384,494,586	77,302,706	1,079,741,846	53,902,717		121,052,435	537,113,298	26,976,013	243,272,407	-169,526,432	1,135,549,562	1,050,494,209	944,888,787	327,181,944	151,051,828	5,963,494,906
2022	417,953,651	77,364,209	1,272,004,586	54,296,739		121,056,818	537,049,506	20,113,153	225,959,566	-174,713,951	17,840,124,015	1,121,929,129	680,004,761	327,181,944	199,703,486	22,720,027,612
2023	441,581,726	32,124,355	1,271,891,974	54,735,132		89,242,994	537,167,540	10,844,106	207,282,280	-180,072,568	8,739,799,292	1,150,875,775	407,339,450	327,181,944	655,642,209	13,735,636,209
2024	452,806,664	32,196,982	1,194,816,375	55,200,415		89,248,169	603,966,304		188,160,579	-185,607,098	7,532,651,747	1,123,354,368	188,475,745	328,078,333	1,059,090,966	12,662,439,549

Debt Hump 2022/2023: Analysis

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

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

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

Balance Sheet Net Debt (IAS and Statistics)

Greece and Peer Balance Sheet Debt and Net Debt: 2013-2015

(1 of 2)

	Greece Historical Data:							
		2013	**2013 Revised**	**2014**	**2015**		**2013 Revised - 2015**	
							Delta	*% Change*
1.	Balance Sheet Debt	€ 124	€ 124	€ 124	€ 118		-€ 6	-5%
2.	Financial Assets	€ 91	€ 97	€ 71	€ 50		-€ 47	-48%
3.	**Balance Sheet Net Debt**	**€ 33**	**€ 27**	**€ 53**	**€ 68**		€ 41	155%
4.	GDP	€ 182	€ 180	€ 178	€ 173		-€ 7	-4%
5.	**Balance Sheet Debt / GDP**	**68%**	**69%**	**70%**	**68.4%**		0%	
6.	Financial Assets / GDP	50%	54%	40%	29%		-25%	
7.	**Balance Sheet Net Debt / GDP**	**18%**	**15%**	**30%**	**39%**		**25%**	
8.	Future Face Value of Debt	€ 319	€ 319	€ 317	€ 309		-€ 11	-3%
9.	Future Face Value / GDP	175%	177%	179%	178%		1%	
	Greece and Peer 2015 Data:							
		Greece	**Greece % of Peer Avg.**	**Peer Average**	**Portugal**	**Ireland**	**Spain**	**Italy**
10.	Balance Sheet Debt	€ 118			€ 206	€ 192	€ 1,070	€ 2,175
11.	Financial Assets	€ 50			€ 63	€ 76	€ 267	€ 390
12.	**Balance Sheet Net Debt**	**€ 68**			**€ 144**	**€ 116**	**€ 803**	**€ 1,786**
13.	GDP	€ 173			€ 179	€ 205	€ 1,079	€ 1,635
14.	Balance Sheet Debt / GDP	68%	62%	110%	115%	94%	99%	133%
15.	Financial Assets / GDP	29%	96%	30%	35%	37%	25%	24%
16.	Balance Sheet Net Debt / GDP	**39%**	**49%**	**80%**	**80%**	**57%**	**74%**	**109%**
17.	Future Face Value of Debt	€ 309			€ 229	€ 204	€ 1,088	€ 2,175
18.	Future Face Value / GDP	178%			128%	100%	101%	133%

GREECE 2013 BALANCE SHEET NET DEBT WAS INDEPENDENTLY VERIFIED BY A BIG-FOUR ACCOUNTING FIRM ON 15 AUGUST 2014.

Notes: Page 2.

Growing Recognition on Present Value as Correct Measure of Greece Debt: International Comments

1. **Germany Deputy Minister of Finance Jens Spahn**: Debt burden should be assessed based on "net present value of debt" and "how much in fact does Greece have to pay per year". (Bloomberg, 2 Sep 2015)
2. **European Stability Mechanism Managing Director Klaus Regling**: Greece debt ratio is meaningless (WSJ, 26 Sep 2013) given very generous concessional terms on the debt and the debt relief should be measured using net present value (ESM Annual Report, 18 Jun 2015).
3. **Germany Chancellor Angela Merkel**: "It is rightful that we don't 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) and 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)

Greece Government Working Draft Balance Sheet

Greece Government Working Draft Balance Sheet

(31 December 2015; €, billions)

SN	Balance Sheet Item	Amount	% of GDP
1.	Financial Assets	€ 52	30%
2.	Non-Financial Assets	€ 90	51%
3.	Total Assets	€ 142	81%
4.	Financial Liabilities	€ 118	67%
5.	Non-Financial Liabilities	€ 255	145%
6.	Total Liabilities	€ 373	212%
7.	Net Worth	-€ 231	-131%
Note:			
	GDP	€ 176	

Human Capital and Performance Gap Metrics

Accounting Failed Attempts History

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

1: 1992 – Greek Ministry of Economy pushes for accrual accounting

2: 1998 – Presidential Decree for double-entry accounting systems for public bodies and institutions.

2003 – Public hospitals in Greece to implement accrual accounting

3: 2005 – Greece law passed for public entities to use IAS (IFRS)

2006 – SEV publicly supports adoption of IPSAS

2008 – EC recommends, unofficially, that Greece implement IPSAS

4: 2009 (March) – Greece self-reports to OECD that it has full accrual based financial statements

2009 – Greece big four accounting firms plus locals form IPSAS committee

2010 – IPSAS Greece government training of low level employees started (not Minister or MP level)

2011 – IPSAS Greece government training stopped prior to certification exams

5: 2011/12 – IPSAS Greece projects started

2012 (April) – IPSAS conference in Athens

2013 – IPSAS Greece projects stopped with expiration of funds

2014 (June) – Public tender for computer accrual accounting systems pending

6: 2014 (December) – For the fifth time, Government again promises to adopt IPSAS “next year” ignoring that implementation could start today

7: 2015 (May) – MoF announces intension to adopt IPSAS, forms committee, but no tangible results.

World-Class ETM Experiences

10+ Years Successful Track Record

Globally Recognized Impeccable Integrity

Successful Growth Turnarounds

Unparalleled Knowledge of Greece Government Financials

100-Day Plan Skills

Skills to Produce Best Practice Balance Sheet ASAP

Executive Turnaround Management

Trust and Confidence of Sovereign Wealth Funds

Rating Agency Framework and successes

Capital Markets Broad Knowledge

Managed Over 5,000 Employees

Pro Bono Compensation

Appendices

Greece has Better Important Debt Metrics than Investment Grade Peers but Much Lower Credit Ratings and Much Higher Borrowing Costs

(% of GDP, except as otherwise indicated)

	April 2016 Credit Ratings *(M/S&P/F/D)*	2015 Balance Sheet Net Debt	2016 Annual Debt Service	2016 Net Interest Payments	Next 5-Years Unfunded Debt Service	2-Year Government Bond Yields
Greece	Caa3/**B-**/ CCC/CCCH	39%	5%	0.9%	14%	11.07%
Ireland	**A+**/ A/AH	57%	9%	3.0%	49%	-0.33%
Spain	Baa2/BBB+/ BBB+/**AL**	74%	13%	3.0%	58%	-0.05%
Italy	Baa2/BBB-/ BBB+/**AL**	109%	15%	4.1%	75%	-0.03%
Portugal	Ba1/BB+/ BB+/**BBBL**	80%	11%	4.5%	61%	0.24%

Future Face Value of Debt (Maastricht) as a percentage of GDP: Greece 179%, Ireland 98%, Spain 101%, Italy 133%, Portugal 129% (EC AMECO data accessed 7 April 2016).

Sources: EC AMECO, Eurostat, IMF, Member State MOFs, Bloomberg, MostImportantReform.info.

Public Sector Balance Sheet Global Benchmarks: Assets and Liabilities Overview

SN	Assets Line Item	Global Benchmark Largest Data Point as a % of GDP
1	Cash & Cash Equivalents	18%
2	Receivables	8%
3	Marketable Securities	22%
4	Share Investments	15%
5	Advances	11%
6	Loans	16%
7	Inventory	2%
8	PP&E	56%
9	Equity Accounted Investments	5%
10	Intangible Assets and Goodwill	2%
11	Other Assets	2%
12	**TOTAL ASSETS**	**114%**

SN	Liabilities Line Item	Global Benchmark Largest Data Point as a % of GDP
13	Issued Currency	4%
14	Payables	9%
15	Deferred Revenue	1%
16	Borrowings	89%
17	Insurance Liabilities	15%
18	Retirement Plan Liabilities	109%
19	Provisions	13%
20	Other Liabilities	14%
21	**TOTAL LIABILITIES**	**204%**
22	**NET WORTH**	**-158% / 38%**

Net Worth, which is total assets less total liabilities, is also referred to as Federal Debt (Canada), Net assets/equity (Israel, Switzerland), Net Liabilities (UK), and Net Position (United States).

Notes: Public Sector Balance Sheet Global Benchmarks include Australia, Canada, France, Israel, New Zealand, , Swiss, UK, and USA.

Governments Have Stewardship Responsibility over Massive Balance Sheets

Benchmark	Total Assets and Total Liabilities % of GDP	Total Assets % of GDP	Total Liabilities % of GDP	Latest Fiscal Year End
Australia, Commonwealth of	84%	33%	51%	30 Jun 2015
Canada, Government of	73%	21%	52%	31 Mar 2015
France, Republic of *(FN Pensions)*	223%	46%	176%	31 Dec 2014
Israel, Government of the State of	250%	46%	204%	31 Dec 2014
New Zealand, Government of	191%	114%	77%	30 Jun 2015
Swiss Confederation *(FN Pensions)*	38%	16%	22%	31 Dec 2014
United Kingdom *(Whole of Government; w/ note 13.1)*	274%	90%	184%	31 Mar 2014
United States Government	137%	18%	119%	30 Sep 2015

Notes: Nominal GDP from EC AMECO and IMF World Economic Outlook (Oct 2015) databases. Asset and liability data from respective government financial statements. France and Swiss liabilities adjusted for pension commitments. UK assets adjusted for undervaluation of infrastructure assets. Canada and United Kingdom as a percentage of prior year GDP due to 31 March fiscal year end.

Governments Have A Net Worth

	Australia, Commonwealth of	Canada, Government of	France, Republic of	Israel, Government of the State of
Total Assets	$532	$411	€ 989	₪ 503
Total Debts	$841	$1,024	€ 3,759	₪ 2,229
	-$309	-$612	-€ 2,770	-₪ 1,727
	Net Worth	**Accumulated Deficit**	**Net Worth**	**Equity**
GDP	$1,637	$1,975	€ 2,132	₪ 1,094
Net Worth / GDP	-19%	-31%	-130%	-158%
	New Zealand, Government of	**Swiss Confederation**	**United Kingdom** *(Whole of Government)*	**United States Government**
Total Assets	$279	CHF 105	£1,569	$3,230
Total Debts	$187	CHF 139	£3,189	$21,452
	$92	-CHF 35	-£1,620	-$18,222
	Net Worth	**Equity**	**Net Worth**	**Net Position**
GDP	$244	CHF 645	£1,735	$17,968
Net Worth / GDP	38%	-5%	-93%	-101%

Government Net Worth Per Citizen

(Local currency converted to Euros)

Country	Latest Net Worth per Citizen (EUR)	5-Year Change per Citizen (EUR)
New Zealand, Government of	€ 12,579	-€ 410
Swiss Confederation	-€ 3,971	€ 567
Australia, Commonwealth of	-€ 8,787	-€ 7,252
Canada, Government of	-€ 11,493	-€ 1,746
United Kingdom *(Whole of Government)*	-€ 33,907	-€ 21,740
France, Republic of	-€ 43,349	-€ 14,585
Israel, Government of the State of	-€ 49,815	-€ 16,384
United States Government	-€ 52,536	-€ 13,692

Notes: Net Worth data from respective government financial statements. Based on 2014 population data from IMF accessed 19 April 2016. Exchange rate data from Bloomberg as of 31 Dec 2015 19 April 2016.

Government Financial Ratios Progressing Forward

The status quo: Debt to GDP is an end point stock number over an annualized flow number. Fiscal balance to GDP is an annualized flow number over an stock number.

Simple steps forward: Change in GDP over change in debt, which shows the relationship over a period of time between the two numbers. And, a more comprehensive ratio is change in GDP over change in total liabilities.

A major leap forward is two ratios that combine statistics with consolidated financial statements:

1. Change in net GDP over change in financial statement net worth.
2. Change in financial statement annual net worth over end point total assets.

Value Creation Ratio Rationale

- Politicians and technocrats claim and want credit for their country’s or union’s increase in GDP for their time in authority.
- At the same time, politicians and technocrats should be transparent and held accountable for the change (mostly decreases) in their government's net worth.
- There is not a claim of correlation or causality, but the ratio between what those in authority claim credit for in the numerator and the financial fact for which they should be held accountable in the denominator.
- Gives government the credit for entire increase in GDP.

Value Creation Ratio:

Increase in GDP per Citizen as % of Decrease in Net Worth per Citizen

(Local Currency, Billions)

Global Benchmark	Value Creation Ratio	Increase in GDP per Citizen	Decrease in Net Worth per Citizen	Beginning Year
New Zealand, Government of	**Net Worth Increased 69% of GDP**	25,652	Increased 17,609	2001
Swiss Confederation	**Net Worth Increased 9% of GDP**	7,160	Increased 617	2009
Canada, Government of	**10.1x**	24,704	-2,451	2001
Australia, Commonwealth of	**3.3x**	38,559	-11,568	2001
Israel, Government of the State of	**0.6x**	49,512	-77,317	2006
United States Government	**0.6x**	23,021	-36,863	2001
United Kingdom *(Whole of Government)*	**0.4x**	3,860	-9,426	2010
France, Republic of	**0.2x**	4,366	-19,343	2006

Notes: Nominal GDP from EC AMECO and IMF World Economic Outlook (Oct 2015) databases. Net worth data from respective government financial statements. France and Swiss liabilities adjusted for pension commitments. UK assets adjusted for undervaluation of infrastructure assets. Canada and United Kingdom based on prior year GDP due to 31 March fiscal year end.

Return on Assets Rationale

- Governments continue to increase the size and diversity of their assets.
- Change in net worth is the most comprehensive financial number to measuring change in annual financial performance.
- Using the two financial statement numbers to measure return on assets is a centuries old performance measurement tool.

Return on Assets Ratio

(Change in Net Worth as a Percentage of Assets)

There is a wide performance gap on net worth return of assets ratios.

Global Benchmark	Historical Average	2011-2014 Average
New Zealand, Government of	**4%**	**-2%**
Swiss Confederation	**1%**	**0.3%**
Canada, Government of	**-1%**	**-6%**
Australia, Commonwealth of	**-4%**	**-13%**
United Kingdom *(Whole of Government)*	**-10%**	**-10%**
Israel, Government of the State of	**-16%**	**-23%**
France, Republic of	**-18%**	**-18%**
United States Government	**-38%**	**-37%**

Notes: Net worth and asset data from respective government financial statements. France and Swiss Net Worth adjusted for pension commitments. UK net worth adjusted for undervaluation of infrastructure assets. Historical average from oldest available data point (since 2001) to newest data point: Australia 2001-2015, Canada 2001-2015, France 2006-2014, Israel 2006-2014, NZ 2001-2015, Switzerland 2010-2014, UK 2011-2014, US 2001-2015.

Net Worth as a Percentage of GDP

Global Benchmark	Latest
New Zealand, Government of	38%
Swiss Confederation	-5%
Australia, Commonwealth of	-19%
Canada, Government of	-31%
United Kingdom *(Whole of Government)*	-93%
United States Government	-101%
France, Republic of	-130%
Israel, Government of the State of	-158%

Notes: Latest available (2014 or 2015) data. Nominal GDP from EC AMECO and IMF World Economic Outlook (Oct 2015) databases. Net worth data from respective government financial statements. France and Swiss Net Worth adjusted for pension commitments. UK net worth adjusted for undervaluation of infrastructure assets. Canada and United Kingdom as a percentage of prior year GDP due to 31 March fiscal year end.

Increase in GDP from Net Worth Value Creation: Performance Gap Analysis

Greece estimate based on benchmarks.

SN	Metric	Amount	% of GDP
1.	Greece Net Worth (2015)	-€ 231	
2.	France Avg. Annual Change in Net Worth, % (2006-2014)	-8%	
3.	Greece Expected Annual Change in Net Worth *(SN1*SN2)*	-€ 18	
4.	France Value Creation Ratio (2006-2014)	23%	
5.	Benchmark Median Value Creation Ratio	199%	
6.	France to Benchmark Median Delta *(SN5-SN4)*	176%	
7.	Greece to Benchmark Median Expected Increase in GDP *(SN6*SN3)*	€ 33	18%
8.	Greece GDP (2015)	€ 176	

Notes: Benchmarks include AUS, CAN, FRA, ISR, NZL, CHE, GBR, USA. France ranks last amongst benchmarks.

Increase in Net Worth from Return on Assets: Performance Gap Analysis

Greece estimate based on benchmarks.

SN	Metric	Amount	% of GDP
1.	Greece Total Assets (2015)	€ 142	
2.	France Net Worth Return on Assets Ratio (2006-2014)	-18%	
3.	Expected Change in Net Worth *(SN1*SN2)*	-€ 26	-15%
4.	Benchmark Median Net Worth Return on Assets Ratio	-7%	
5.	France to Benchmark Median Delta *(SN4-SN2)*	11%	
6.	Greece Expected Change in Net Worth Delta *(SN1*SN5)*	€ 16	9%
7.	Greece Expected Change in Net Worth *(SN3+SN6)*	-€ 10	-6%
8.	Greece GDP (2015)	€ 176	

Notes: Benchmarks include AUS, CAN, FRA, ISR, NZL, CHE, GBR, USA. France ranks second to last amongst benchmarks.

UK WGA versus ONS Public Sector Balance Sheet Metric Comparison

	WGA vs ONS Public Sector Delta:					
1.	*Financial Assets*	*£310*	*£345*	*£317*	*£321*	*£176*
2.	*Other Assets*	*-£1,210*	*-£1,157*	*-£1,158*	*-£1,129*	*-£1,122*
3.	*Total Assets*	*-£900*	*-£812*	*-£841*	*-£808*	*-£946*
4.	*Total Liabilities*	*-£1,159*	*-£901*	*-£710*	*-£800*	*-£1,087*
5.	*Net Worth*	*£259*	*£88*	*-£131*	*-£8*	*£142*
	UK WGA Metrics (Audited Financial Statements):					
		31-Mar-14	**31-Mar-13**	**31-Mar-12**	**31-Mar-11**	**31-Mar-10**
6.	Financial Assets	£359	£341	£313	£305	£328
7.	Other Assets	£1,210	£1,157	£1,158	£1,129	£1,122
8.	Total Assets	£1,569	£1,498	£1,471	£1,434	£1,450
9.	Total Liabilities	£3,189	£2,925	£2,618	£2,420	£2,477
10.	Net Worth	-£1,620	-£1,428	-£1,147	-£986	-£1,028
	ONS National Balance Sheet Estimates - Public Sector (Statistics):					
		YE 2013	**YE 2012**	**YE 2011**	**YE 2010**	**YE 2009**
11.	Financial Assets	£669	£685	£629	£626	£504
12.	Other Assets	£0	£0	£0	£0	£0
13.	Total Assets	£669	£685	£629	£626	£504
14.	Total *Financial* Liabilities	£2,030	£2,025	£1,908	£1,620	£1,390
15.	*Financial* Net Worth	-£1,361	-£1,340	-£1,278	-£994	-£886

Greece Government: National Wealth Methodology versus Reported Numbers

		National Wealth Methodology[1]			Reported[2]		Difference
1.	Financial Assets	€ 295		Financial Assets	€ 106		€ 190
2.	Non-Financial Assets	€ 225		Non-Financial Assets	NA		--
3.	Total Assets	€ 520		Total Assets	NA		--
4.	Liabilities	€ 404		Financial Liabilities	€ 301		€ 103
5.	Non-Financial Liabilities	€ 0		Non-Financial Liabilities	NA		--
6.	Government Wealth	€ 116		Net Worth	NA		--
7.	GNI / GDP	€ 192		GDP	--		--
8.	Government Wealth / GNI	60%		Net Worth / GDP	NA		--

Notes: 1. “Towards a Theory on the Causes of the Greek Depression: An Investigation of National Balance Sheet Data (1974-2014)”. Hyppolite, Paul-Adrien. Ecole normale superieure (Paris). Graduate paper produced with "valuable guidance all throughout the preparation of the paper by" Thomas Piketty and Gabriel Zucman. March 2016. 2. Eurostat data accessed 10 April 2016. Financial Assets and Liabilities data excludes Other Accounts Payable.