Opportunities for Knowledge and Management of Government Balance Sheets to Improve Financial Performance and Risk

Balance Sheet Task Force
Improving Fiscal Performance: Assessment & Transparency
How Better Managing Governments' Balance Sheets Can Enhance Productivity and Growth
Centre for European Policy Studies
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Section I: Overview

Overview Summary

#1: There are trillions of Euros in opportunities for increasing net worth and GDP by closing government balance sheet management performance gaps.

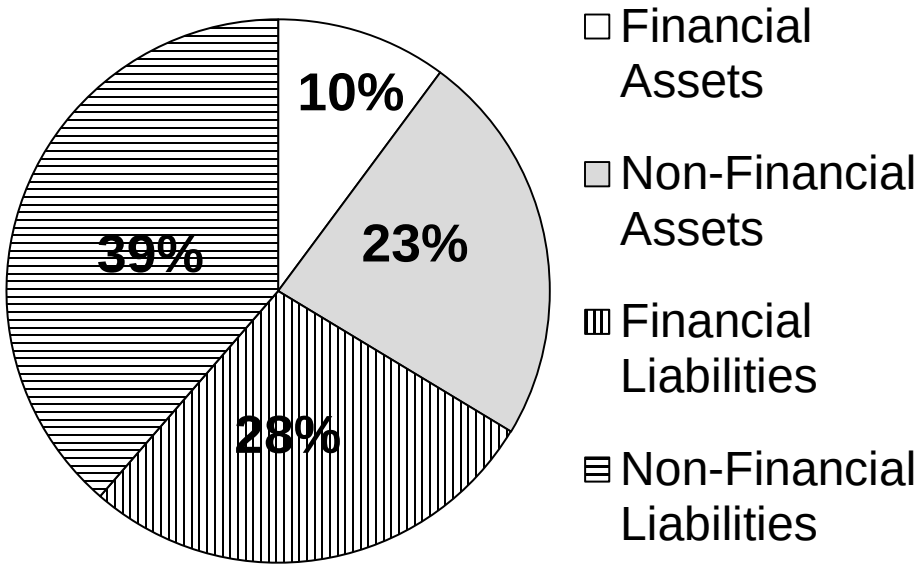
#2: First step is to improve knowledge of financial performance and risk using government consolidated financial statements, especially the balance sheet.

#3: Second step is for capable management to use the knowledge to improve government financial performance and risk management.

EU Governments have an Estimated €45 Trillion in Assets and Liabilities, €88,354 per Citizen (1 of 2)

(31 December 2015; €, billions)

SN	Balance Sheet Item	Amount
1.	Financial Assets	€ 4,569
2.	Non-Financial Assets	€ 10,576
3.	Total Assets	€ 15,145
4.	Financial Liabilities	€ 12,484
5.	Non-Financial Liabilities	€ 17,390
6.	Total Liabilities	€ 29,874
7.	Net Worth (Taxpayer's Equity)	-€ 14,729



Notes: Working draft balance sheet. Financial Assets from Eurostat database (accessed 6 July 2015) as of year end 2014 (latest available); excludes accounts receivable. Financial Liabilities from EC AMECO data (accessed 6 July 2016) adjusted according to international accounting standards. Non-Financial Assets and Liabilities based on average of UK (2015 WGA financial statements adjusted to include local infrastructure assets), and Portugal (2012 as reported by the IMF) as a percentage of relevant GDP (EC AMECO data accessed 6 July 2016).

EU Governments have an Estimated €45 Trillion in Assets and Liabilities, €88,354 per Citizen (2 of 2)

(31 December 2015; €, billions)

SN	Balance Sheet Item	Amount	% of Total Assets and Liabilities Combined	% of GDP
1.	Financial Assets	€ 4,569	10%	31%
2.	Non-Financial Assets	€ 10,576	23%	72%
3.	Total Assets	€ 15,145	33%	103%
4.	Financial Liabilities	€ 12,484	28%	85%
5.	Non-Financial Liabilities	€ 17,390	39%	119%
6.	Total Liabilities	€ 29,874	67%	204%
7.	Net Worth (Taxpayer's Equity)	-€ 14,729		-101%
8.	GDP			€ 14,635

Notes: Working draft balance sheet; see page 7 Notes for details.

Over the Past Ten Years, Total Capital Formation Decreased 1% while Other Primary Expenditures Increased 24%

SN		2007 to 2016 Change		2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
		(%)	*(Euros)*										
1.	Fixed Consumption	1%	€ 4	€ 421	€ 428	€ 409	€ 402	€ 411	€ 430	€ 449	€ 455	€ 445	€ 417
2.	Other Fixed	-8%	-€ 11	€ 123	€ 149	€ 148	€ 148	€ 200	€ 148	€ 203	€ 175	€ 184	€ 134
3.	Total Fixed	**-1%**	-€ 7	€ 544	€ 577	€ 557	€ 550	€ 611	€ 578	€ 653	€ 630	€ 629	€ 551
4.	Total Revenue	17%	€ 973	€ 6,657	€ 6,593	€ 6,315	€ 6,145	€ 6,014	€ 5,807	€ 5,574	€ 5,348	€ 5,725	€ 5,684
5.	Total Fixed as % of Total Revenue	-1.5%		8.2%	8.8%	8.8%	8.9%	10.2%	10.0%	11.7%	11.8%	11.0%	9.7%
6.	Primary Expenditure	22%	€ 1,192	€ 6,652	€ 6,609	€ 6,376	€ 6,225	€ 6,201	€ 6,024	€ 6,054	€ 5,852	€ 5,692	€ 5,460
7.	Primary Expenditure as % of Revenue	3.9%		99.9%	100.2%	101.0%	101.3%	103.1%	103.7%	108.6%	109.4%	99.4%	96.1%
8.	Primary Expenditure less Total Fixed	**24%**	€ 1,199	€ 6,108	€ 6,032	€ 5,820	€ 5,675	€ 5,590	€ 5,446	€ 5,402	€ 5,222	€ 5,063	€ 4,909
9.	Primary Expenditure less Total Fixed as % of Revenue	5.4%		91.8%	91.5%	92.2%	92.4%	92.9%	93.8%	96.9%	97.6%	88.4%	86.4%
10.	Interest Expense	-6%	-€ 19	€ 322	€ 335	€ 354	€ 365	€ 386	€ 381	€ 342	€ 317	€ 351	€ 341
11.	Interest Expense as % of Revenue	-1.2%		4.8%	5.1%	5.6%	5.9%	6.4%	6.6%	6.1%	5.9%	6.1%	6.0%

Notes: EC AMECO data accessed 28 July 2016. Fixed Consumption is "Gross fixed capital formation"; Primary Expenditure is "Total expenditure excluding interest".

EU Annual Accounts – 2011 to 2015 (1 of 2)

(€, millions)

Financial information as audited by the European Court of Auditors.

SN		2015	2014	2013	2012	2011	Avg. % Change	Total Change
1.	Net Assets	-72,442	-58,006	-45,852	-40,416	-33,850		-38,592
2.	Annual % Change	-25%	-27%	-13%	-19%		-21%	
3.	Annual Euro Change	-14,436	-12,154	-5,436	-6,566			
4.	Total Assets and Liabilities	379,835	383,454	355,576	348,432	308,874		70,961
5.	Annual % Change	-1%	8%	2%	13%		5%	
6.	ROA	-9%	-7%	-4%	-4%		-6%	
7.	Financial Assets (Incl. Cash)	93,913	85,794	74,925	74,966	66,328		27,585
8.	Non-Financial Assets	59,783	76,930	79,937	79,042	71,184		-11,401
9.	Total Assets	153,696	162,724	154,862	154,008	137,512		16,184
10.	Annual % Change	-6%	5%	1%	12%		3%	
11.	Annual Euro Change	-9,028	7,862	854	16,496			
12.	Financial Liabilities	59,703	60,679	59,532	57,247	41,230		18,473
13.	Non-Financial Liabilities	166,436	160,051	141,182	137,177	130,132		36,304
14.	Total Liabilities	226,139	220,730	200,714	194,424	171,362		54,777
15.	Annual % Change	2%	10%	3%	13%		7%	
16.	Annual Euro Change	5,409	20,016	6,290	23,062			

Notes: Consolidated Annual Accounts of the European Union: 2012, 2013, 2014, and 2015. GNI from EC AMECO database accessed 2 August 2016. See next page.

EU Annual Accounts – 2011 to 2015 (2 of 2)

(€, millions)

Financial information as audited by the European Court of Auditors.

SN		2015	2014	2013	2012	2011	Avg. % Change	Cumulative Change
17.	Economic Result of the Year	-13,033	-11,280	-4,365	-5,329	-1,789		-35,796
18.	Annual % Change	-16%	-158%	18%	-198%			
19.	Annual Euro Change	-1,753	-6,915	964	-3,540			
20.	Net Cash Flow	4,126	8,035	-1,164	-8,261	-3,128		-392
21.	Annual % Change	-49%	790%	86%	-164%			
22.	Annual Euro Change	-3,909	9,199	7,097	-5,133			
								Total Change
23.	Revenue	142,886	153,989	151,693	137,745	130,053		12,833
24.	Annual % Change	-7%	2%	10%	6%		3%	
25.	Expenses	155,919	165,269	156,058	133,953	132,754		23,165
26.	Annual % Change	-6%	6%	17%	1%		4%	
27.	EU GNI	14,621,000	13,972,000	13,576,000	13,477,000	13,237,000		1,384,000
28.	Annual % Change	5%	3%	1%	2%		3%	

Notes: Consolidated Annual Accounts of the European Union: 2012, 2013, 2014, and 2015. GNI from EC AMECO database accessed 2 August 2016.

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

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

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

Government Balance Sheet Status in the EU

1. Consolidated balance sheets are the exception not the rule.
2. Single-entry accounting (in contrast to double-entry) is the most common.
3. Knowledge of consolidated financial statements as a management tool to improve performance and minimize risk is almost non-existent.
4. Limited management capability exists to realize better balance sheet performance.
5. Significant performance gaps exist between potential balance sheet performance and current status.

A Framework to Understand How Knowledge and Management of a Government Balance Sheet Improves Financial Performance and Risk

	Financial Performance	Risk
Knowledge	To have true and fair internationally comparable knowledge of government financial performance, the balance sheet, the supporting consolidated financial statements, and notes are the starting point for decision-making and accountability.	The balance sheet at the core of consolidated financial statements provides standardized and quantified knowledge of risks (especially large, complex, and expanding liabilities) and helps expose masking of financial risks.
Management	Capable management using three balance sheet related decision-making tools (T-accounts, financial statements, and performance gaps) can improve financial performance and changes in net worth, and minimize errant decisions.	Early risk management of potential asset impairment or opaque liabilities is an effective process to reduce costs by limiting or avoiding the materialization of these risks and strengthens accountability.

Do professionally trained and experienced managers have a place in government?

1. **Management Skills:** Is management training a credible skill?
2. **Management Track Record:** Is a track record of successful management essential in appointing senior government officials?
3. **Financial Impact:** Is understanding the financial impact of decisions important in government decision making?
4. **True & Fair Financial Statements:** Are financial statements that faithfully reflect economic reality critical to build trust and confidence?
5. **Transparency:** Is transparency of government major financial decisions a cornerstone of Western democracy?
6. **IPSAS:** Is IPSAS a top priority for institutional building?

Understand Key Stakeholders Current Position Regarding: “Better Measurement Empowers Better Management of Government Balance Sheets"

Type A. - Currently understand and want to realize society-wide benefits.

Type B. - Honestly want to realize society-wide benefits but lack education/training.

Type C. - Vested interests in opposing government financial transparency and accountability.

Section II: Large performance gaps in balance sheet management among governments signals a major opportunity to improve government's contribution to economic growth and prosperity as well as protect against economic risks/shocks.

Building a Framework to Project the Impact of Closing the Performance Gap

Performance gap based on comparable peers provides a quantification of potential improvements for the European Union:

- GDP: Potential Increase in GDP growth rate from improving Value Creation Ratio: 352 bps (€516 billion based on 2015 EU GDP)
- Net Worth: Potential annual increase in Net Worth from increase in ROA: 3% (€454 billion based on 2015 estimated EU net worth)

Notes: Based on EU 2015 GDP of €14.6 billion (data from EC AMECO database), EU net worth estimate of –€14.7 billion, EU assets estimate of €15.1 billion historical Value Creation ratio of 0.3x improving to target of 0.8x, and historical ROA of -8% increasing to target of -5%.

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

Value Creation Ratio (VCR):

- Definition: change in GDP per unit change in Net Worth start point to end point.
- Goals: increase GDP and/or reduce cost of generating GDP.
- Meaning: value for money.
- Sources of Improvement: GDP growth and balance sheet management.

Return on Assets (ROA):

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

Note: Annual flows not cited above considered as largely a politically based decision-making process.

EU Aggregated Member States Balance Sheet Related Financial Information (Page 1 of 2)

(€, Millions)

Taxpayers' Equity is declining at almost seven times the growth rate of GNI.

SN		2011 to 2015		2015	2014	2013	2012	2011
	Taxpayers' Equity:	**Annual Average Change**	**Total Change**					
1	Based on EU CFS	-21%	-€ 7,846,575	-€ 14,729,000	-€ 11,793,854	-€ 9,322,687	-€ 8,217,433	-€ 6,882,425
2	Based on UK/FRA Average	-12%	-€ 5,501,310	-€ 14,729,000	-€ 13,513,311	-€ 11,778,114	-€ 10,884,942	-€ 9,227,690
3	Average	**-17%**						
	Taxpayers' Equity as % of GNI:	**% Points Change**						
3	Based on EU CFS	-49%		-101%	-84%	-69%	-61%	-52%
4	Based on UK/FRA Average	-31%		-101%	-97%	-87%	-81%	-70%
5	Average	**-40%**						
	Value Creation Ratio (VCR):	**Average Annual**		*Change in GNI divided by Change in Taxpayers' Equity*				
6	Based on EU CFS	0.2x		0.2x	0.2x	0.1x	0.2x	
7	Based on UK/FRA Average	0.3x		0.5x	0.2x	0.1x	0.1x	
8	Average	**0.2x**						
	Return on Assets (ROA):	**Average Annual**		*Change in Taxpayers' Equity Divided by Year-End Total Assets*				
9	Based on EU CFS	-14%		-19%	-17%	-8%	-10%	
10	Based on UK/FRA Average	-9%		-8%	-12%	-6%	-12%	
11	Average	**-12%**						
	Total Assets:	**Annual Average Change**	**Total Change**					
12	Based on EU CFS	4%	€ 2,361,811	€ 15,145,000	€ 14,677,985	€ 13,346,459	€ 13,106,713	€ 12,783,189
13	Based on UK/FRA Average	3%	€ 1,690,077	€ 15,145,000	€ 14,935,576	€ 14,126,117	€ 13,844,293	€ 13,454,923
14	Average	**4%**						
	GNI:							
15	Amount	€ 1,384,570		€ 14,621,150	€ 13,971,500	€ 13,575,840	€ 13,477,350	€ 13,236,580
16	Annual Change	2.5%						

Notes: See next page.

EU Aggregated Member States Balance Sheet Related Financial Information (Page 2 of 2)

Notes:

1. Balance sheet data based on dual extrapolation methodology. Dual extrapolation methodology is based on CFS framework using internationally agreed upon accounting standards IPSAS and IFRS. Methodology one is based on EU Annual Accounts (also referred to as EU consolidated financial statements) and methodology two is based on an average of the only two EU member states that produce five years of CFS based on international accounting standards.
2. CFS is an abbreviation for consolidated financial statements.
3. Return on Assets (ROA) is annual change in Taxpayers' Equity divided by year-end Total Assets.
4. Taxpayers' Equity is total assets minus total liabilities. Taxpayers' Equity is also known as Net Worth, Net Assets, Equity, and Net Liabilities.
5. Value Creation Ratio (VCR) is change in gross national income divided by change in Taxpayers' Equity, which reflects the increase in GNI for each one-Euro cost to the Taxpayers' account with the government.

Key Balance Sheet Metrics for Global Benchmarks Highlight Wide Performance Gap

(2001 to 2015)

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

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

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

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

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

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

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

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

Value Creation Ratio:

Increase in GDP per Citizen as % of Change 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 70% of GDP**	25,000	Increased 17,609	2001
Swiss Confederation	**Net Worth Increased 4% of GDP**	6,543	Increased 247	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**	5,132	-13,132	2010
France, Republic of	**0.3x**	5,180	-20,407	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 Ratio (ROA)

(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	**0.46%**	**0.52%**
Canada, Government of	**-1%**	**-6%**
Australia, Commonwealth of	**-4%**	**-13%**
United Kingdom *(Whole of Government)*	**-11%**	**-10%**
Israel, Government of the State of	**-16%**	**-23%**
France, Republic of	**-17%**	**-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	-6%
Australia, Commonwealth of	-19%
Canada, Government of	-31%
United States Government *(Whole of Government)*	-101%
United Kingdom	-102%
France, Republic of	-133%
Israel, Government of the State of	-158%

Notes: Latest available (2014 or 2015) data. Nominal GDP from EC AMECO and IMF World Economic Outlook 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.

Net Worth Annual Percentage Change

SN	Global Benchmark	Historical Average	2011-2014 Average
1	New Zealand, Government of	19%	-2%
2	Australia, Commonwealth of	14%	-62%
3	Swiss Confederation	1%	1%
4	Canada, Government of	-1%	-4%
5	Israel, Government of the State of	-6%	-8%
6	France, Republic of	-7%	-8%
7	United States Government	-8%	-7%
8	United Kingdom *(Whole of Government)*	-13%	-13%

Notes: 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. Historical average from oldest available data point (since 2001) to newest data point: Australia 2001-2015, Canada 2001-2015, France 2006-2015, Israel 2006-2014, NZ 2001-2015, Switzerland 2010-2015, UK 2011-2015, US 2001-2015.

GDP Change to Debt Change Ratio

GDP increase as a % of debt increase.

		Historical
		2001 -
SN	Global Benchmark	2015
1	Swiss Confederation	651%
2	New Zealand, Government of	281%
3	Israel, Government of the State of	212%
4	Australia, Commonwealth of	199%
5	Canada, Government of	95%
6	United Kingdom *(Whole of Government)*	62%
7	United States Government	55%
8	France, Republic of	53%

Notes: EC and IMF data accessed as of 28 Jun 2016.

Net Debt % of GDP - Latest

SN	Benchmark	Balance Sheet Net Debt / GDP	Debt	Financial Assets	Net Debt	GDP	Financial Statement Date
1	Australia, Commonwealth of	**3%**	430.3	386.3	44.0	1,637.3	30 Jun 2015
2	New Zealand, Government of	**4%**	112.6	103.6	9.0	240.6	30 June 2015
3	Swiss Confederation	**7%**	87.6	42.6	44.9	639.7	31 Dec 2015
4	Canada, Government of	**17%**	665.2	336.7	328.5	1,974.8	31 Mar 2015
5	United Kingdom	**43%**	1,174.5	392.3	782.2	1,817.2	31 Mar 2015
6	France, Republic of	**58%**	1,602.0	325.0	1,277.0	2,183.6	31 Dec 2015
7	United States Government	**64%**	13,172.5	1,731.8	11,440.7	17,968.2	30 Sep 2015
8	Israel, Government of the State of	**64%**	795.7	97.3	698.4	1,093.7	31 Dec 2014

Notes: Latest period end net debt (debt less financial assets) derived from respective government balance sheets divided by corresponding year GDP. Data from respective government financial statements and EC AMECO and IMF World Economic Outlook databases. Canada and United Kingdom as a percentage of prior year GDP due to 31 March fiscal year end.

Net Worth Change Comparison: Select Sovereigns 2011 - 2014/15

1. Greece Net Worth increased 43% from 2011 to 2015 compared to Benchmark Median decrease of 23%.
2. Greece Net Worth as a % of GDP increased 66 percentage points compared to Benchmark Median decrease of 7 percentage points.

		Greece	Benchmark Median	Australia	Canada	France	Israel	New Zealand	Swiss	UK	US
1.	Net Worth - 2011	-415		-103	-550	-2,149	-1401	81	-40	-986	-14,785
2.	Net Worth - 2014/15	-237		-309	-612	-2,838	-1727	92	-38	-1,859	-18,222
3.	Net Worth % Change	43%	-23%	-200%	-11%	-32%	-23%	14%	5%	-89%	-23%
4.	Net Worth % of GDP - 2011	-200%		-7%	-33%	-104%	-150%	39%	-6.4%	-57%	-95%
5.	Net Worth % of GDP - 2014/15	-135%		-19%	-31%	-130%	-158%	38%	-5.8%	-102%	-102%
6.	NW/GDP % Point Change	66	-7	-12	2	-26	-8	-1	0.6	-45	-6

Notes: Data from respective government financial statements, EC AMECO, Eurostat, and IMF. France and Switzerland Net Worth adjusted for pension commitments. UK Net Worth adjusted for undervaluation of infrastructure assets. UK and Canada GDP data is prior year due to 31 March fiscal year end. For back-up on 2015 Greece government working draft balance sheet, see USC Global Leadership Summit presentation titled "Greece Government Working Draft Balance Sheet and Analysis of Third Programme Debt Relief" (mostimportantreform.info/uscsummit.html). Greece 2011 figures are backwards developed estimates, which is an economics methodology (not a methodology based on international accounting or audit standards).

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

	Best Practice	Worst Practice
	Financial Assets:	
1.	Internal cost of capital allocation.	Ignore existence of working capital and its cost.
2.	Benchmarking to achieve top quartile performance.	Bottom quartile performance or no benchmarking or management of financial assets.
3.	Better returns and minimized risk exposure on politically influenced loans.	Opacity and large losses on politically influenced loans.
4.	Full disclosure of financial assistance to and returns on SOEs.	Hidden SOE economic burden and risk.
	Non-Financial Assets:	
5.	Optimal re-investment in and use of real estate assets.	Chronic mismanagement of potentially high value commercial real estate assets.
6.	Low and declining single digit percentage fraud in accounts receivable.	Double digit percentage fraud in accounts receivable payments.
7.	Projects built based on lowest cost to financial metrics.	Public private partnerships with private party has required double digit rate of return, including sale-and-leasebacks.
8.	Concessions that both maximize long term value creation and improve value for the money in delivery of services.	Front-end load inflows to fund exiting (or even worse, new promises) annually recurring operating expenditures.
9.	Asset depreciable lives that encourage high ROI program maintenance.	Unrealistically long depreciation lives that short change program maintenance and create larger replacement costs in the future.
10.	Measure and report real estate tax basis appreciation in areas surrounding government infrastructure investments.	Ignore reporting and accountability for impact of infrastructure investments.
11.	Annual impairment reviews of tangible and intangible assets create discipline to protect asset value.	No balance sheet and/or no proper annual review hides asset value destruction.

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

	Best Practice	Worst Practice
	Financial Liabilities:	
12.	International standards and audits.	Incorrectly calculating balance sheet debt.
13.	Report pro-forma impact on financial statements.	Ignoring quantification of debt relief impact on net worth.
14.	Use all three tools to understand economic impact of liability management exercises.	Liability management without consideration of financial statement impact.
	Non-Financial Liabilities:	
15.	Payables paid on exact date due.	Incur and not report interest penalties on arrears.
16.	Disclose impact on financial statements of change in government employee pension terms.	Non-quantification of balance sheet impact of change in government employee pension terms.
17.	Quantifies and proactively manages litigation risk.	Ad hoc post-event handling.

Infrastructure Investor ROIs Average in the Teens

SN	Investor Name	Country	Date	Allocation to Infrastructure	Infra-structure Assets	Rate of Return	Average Annual Return
				(%)	(USD, bn)	(%)	(%)
1	Alberta Investment Management Corporation – AIMCo	Canada	31/12/2014	9.5	9.2	13.2	13.8 (since 2010)
2	Canada Pension Plan – CPP	Canada	31/03/2015	5.7	11.9	16.5	
3	Ontario Teachers' Pension Plan	Canada	31/12/2015	9.2	12.3	21.4	
4	OMERS	Canada	31/12/2015	16.4	11.8	17.3	
5	Ontario Pension Board– OPB	Canada	31/12/2014	3.4	0.7	9.8	
6	OPTrust	Canada	31/12/2015	12.8	1.8	7	17.5 (since 2006)
7	PSP	Canada	31/03/2015	6.3	5.5	10.4	6.9 (since 2006)
8	Alberta Heritage Savings Trust Fund - AHSTF	Canada	31/03/2015	7.3	1.0	13	7.7 (5-year return)
9	Irish National Pension Reserve Fund	Ireland	21/12/2014	5.1	0.5	25	
10	Alaska Permanent Fund Corporation - APFC	USA	Fiscal Year 2015	4	1.5	4.7	5.9 (since 2006)
11	Brookfield Infrastructure Partners	Global	16/6/2016	100	7.9	6	15 (since inception)

Section III: Improvement in financial reporting is a cornerstone of western democracy governments building trust and confidence.

Why focus on managing government balance sheets?

- Transparency and accountability.
- Performance improvement and assessment.
- Global comparability.
- Top priority for institution building.

Government Consolidated Financial Statements

- Components: Extensive granularity and comprehensive disclosure.
- Internationally comparable: benchmark to best-in-class.
- Integration: Four fully integrated financial statements.
- Verification: independent audit verification.
- Transparency/accountability: plain language and public friendly.

Foundations of Balance Sheet Management

1. Accrual vs. Cash.
2. Double entry vs. single entry autonomous ledgers.
3. International accounting standards to reflect economic reality vs. politically determined rules.
4. Independently audit under international rules vs. expense audits.
5. Used during decision-making and reporting vs. reporting only.

What is Net Worth?
(Also know as Taxpayers' Equity)

Total Assets less Total Debts = Net Worth

(Governments do have a net worth, which is a measure of Taxpayers' Equity, and it changes over time.)

Governments Have A Net Worth

	Australia, Commonwealth of	Canada, Government of	France, Republic of	Israel, Government of the State of
Total Assets	$532	$411	€ 982	₪ 503
Total Debts	$841	$1,024	€ 3,820	₪ 2,229
	-$309	-$612	-€ 2,838	-₪ 1,727
	Net Worth	**Accumulated Deficit**	**Net Worth**	**Equity**
GDP	$1,637	$1,975	€ 2,184	₪ 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 106	£1,699	$3,230
Total Debts	$187	CHF 144	£3,559	$21,452
	$92	-CHF 38	-£1,859	-$18,222
	Net Worth	**Equity**	**Taxpayers' Equity**	**Net Position**
GDP	$241	CHF 640	£1,817	$17,968
Net Worth / GDP	38%	-6%	-102%	-101%

Focus on Financial Statements and Not Only the Headline Numbers

Question: Why is a focus on only headline numbers a worst practice?

Answer: A single number allows for too easy gaming the number at the expense of other equally important numbers. A focus on all four financial statements is the best practice to increase integrity of understanding and prevent misrepresentations.

Examples to Improve Performance Through Transparency and Accountability

1. Concessional loans
2. PPPs
3. Sale and leasebacks
4. Government employee pensions
5. Impaired financial and fixed assets
6. Primary balance illusions
7. Delayed payments on asset procurement of defense assets
8. Excluding capital grants from expenses
9. Excluding new borrowing to fund “temporary” investments

Misguided Excuses for Opposing Government Financial Transparency

- More transparency of the [government] budget is only desirable at very low levels of budget transparency, as governments tend to let the budget fluctuate too much. At high levels of transparency, a further increase of [government] transparency would hinder the working of automatic stabilizers too much and therefore not optional.
- Creative accounting is more likely as the economic cost of sticking to the rules increases.

Section IV: Three basic tools exist to improve management performance of government balance sheets.

Three Basic Decision-Making Tools

1. Modified T-Accounts
2. Financial Statements (Four)
   - Balance Sheet
   - Performance Statement
   - Cash Flow Statement
   - Statement of Changes in Net Worth (Taxpayers' Equity)
3. Performance Gap

How do these tools improve performance?

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

Top Down, Not Bottom Up

Senior managers should prioritize and rank decisions to be evaluated using the tools rather than starting at the bottom, planning out ten years, and ignoring billions of euros of key decisions during this period.

Examples of Financial Decisions Benefiting from Understanding Financial Statement Impact

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

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

Tool 1: Modified T-Account

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

Tool 2:
Financial Statement Impact Summary

Balance Sheet	**Performance Statement**
Cash Flow Statement	**Statement of Changes in Net Worth (Taxpayers' Equity)**

Greece December 2012 GGB Buyback

1. GGB initial recognition value of 25% of face value.
2. Greece reports GGBs at face value.
3. Greece's announces buyback of GGBs (2% coupon with 10 to 29 year maturities) at approximately 30% of face value.
4. Greece uses €11 billion back-up line of credit to buy back GGBs.
5. Greece owns average of ~70% of systemic banks at cost of ~€30 billion.
6. Greece requires systemic banks to sell almost all of their GGBs (~€14 billion) in buyback.
7. Greece 2013 Debt (FFV)/GDP was 175% and Balance Sheet Net Debt/GDP was 18%.
8. GGB market price increases to 65% of face with in two years.
9. Banks fail stress test requiring new equity and reducing government ownership to value of ~€3 billion.

Example - Debt Buy Back from Captive Banks: T-Account

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

Example - Debt Buy Back from Captive Banks: Financials

Balance Sheet	Performance Statement
Cash Flow Statement	Statement of Changes in Net Worth (Taxpayers' Equity)

Tool 3 - Performance Gap Framework: EU Summary

(€, billions)

	Value Creation KPI		Return on Asset (ROA) KPI	
	Ratio	**GDP Increase**	**Ratio**	**Net Worth Change**
EU Current (Est.)	0.3x	€ 309	-8%	-€ 1,212
Benchmark KPI	0.8x	€ 825	-5%	-€ 757
Performance Gap	0.5x	€ 516	3%	€ 454
Perfomance Gap % of GDP		4%		3%

Notes: see subsequent sheets for EU calculations.

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

EU estimate based on benchmarks.

SN	Metric	Amount	% of GDP
1.	Net Worth (2015)	-€ 14,729	
2.	Currently Estimated Annual % Change in Net Worth	-7%	
3.	Expected Change in Net Worth *(SN1*SN2)*	€ 1,031	
4.	Benchmark Value Creation Ratio	0.8x	
5.	Currently Estimated Value Creation Ratio	0.3x	
6.	VCR Performance Gap (Multiple) *(SN4-SN5)*	0.5x	
7.	VCR Performance Gap *(€) (SN3*SN6)*	€ 516	4%

Notes: Benchmarks include AUS, CAN, FRA, ISR, NZL, CHE, GBR, USA. EU 2015 GDP of €14,635 billion (EC AMECO accessed 15 Jun 2016).

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

EU estimate based on benchmarks.

SN	Metric	Amount	% of GDP
1.	Total Assets (2015)	€ 15,145	
2.	Currently Expected Return on Assets	-8%	
3.	Expected Change in Net Worth *(SN1*SN2)*	-€ 1,212	-8%
4.	Benchmark Return on Assets Ratio	-5%	
5.	ROA Performance Gap (%) *(SN4-SN2)*	3%	
6.	ROA Performance Gap (€) *(SN1*SN5)*	€ 454	3%

Notes: Benchmarks include AUS, CAN, FRA, ISR, NZL, CHE, GBR, USA. EU 2015 GDP of €14,635 billion (EC AMECO accessed 15 Jun 2016).

Tool 3 - Performance Gap Framework: Greece Summary

(€, billions)

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

Notes: see subsequent sheets for Greece calculations.

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

Greece estimate based on benchmarks.

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

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

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

Greece estimate based on benchmarks.

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

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

Section V: Standards of International management and reporting for governments to are ready and available now.

International Accounting Rules and Government Benchmarks

International Accounting Rules (Standards):

- International Public Sector Accounting Standards (IPSAS) are the only international standards developed over the past decade.
- International Financial Reporting Standards (IFRS) the predecessor of IPSAS.

Government Benchmarks: Australia, Austria, Canada, France, Hamburg, Hesse, Israel, New Zealand, North-Rhine-Westphalia, South Africa, Switzerland, United Kingdom, and the United States.

Public Sector Organization Benchmarks: European Union, IMF, OECD, United Nations, and World Bank.

In-process Examples: Brazil, Chile, China, Estonia, Portugal, Russia, Spain, UAE, and the Vatican.

Shared Principles of International Accounting Standards and Economics

1. Time value of money
2. Opportunity cost and opportunity cost of capital
3. Arm’s length market values and rates
4. Numbers that reflect economic reality
5. International and historical comparability

IMF Recommendation to Use IPSAS (IFRS) Financial Statements for Decision Making

IPSAS [Public Sector Version of IFRS]:

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

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

Government Finance Statistics:

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

Government Reporting Commercial Property at Highest and Best Use

1. **Scope:** Whole of government property (central, local, and extra-governmental) should be within the scope of the financial statements.
2. **Property**: Qualifying property should be based on control of property and not on structures designed to hide economic reality.
3. **Valuation:** Highest and best use should be based on what is legally practical and net of cost of development if any.
4. **Appraisals:** Independent appraisers using international standards should provide valuations.
5. **Balance sheet:** Value should be reflected on the asset side of the balance sheet and increase net worth, without prior year restatement.
6. **Disclosure:** The difference between current value and highest and best use value should be disclosed in the notes.
7. **Income/Expense:** Income streams below highest and best use should be reflected as an expense on the performance statement.

Debt Measurement by International Standards/Guidelines

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

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

Appendices

Appendix A: UK Whole of Government Performance Indictor Analysis

Appendix B: Greece Government Case Study Materials

Appendix C: Other Materials

Appendix A: UK Whole of Government Performance Indicator Analysis

UK WGA 5 Year Key Performance Metrics: Sample Disclosure

(GBP, billions)

Assumes 100% of GDP increase generated by government management of its balance sheet.

SN		2015	2014	2013	2012	2011
	KPIs:		*(Restated)*	*(Restated)*	*(Restated)*	*(Restated)*
1.	Value Creation Ratio	0.3x	0.4x	0.4x	0.4x	NW Increase
2.	Return on Assets (ROA)	-15%	-12%	-18%	-11%	3%
3.	Net Worth (Taxpayer's Equity) % of GDP	-102%	-93%	-85%	-71%	-63%
4.	Annual Change in Net Worth (Taxpayer's Equity)	-16%	-14%	-23%	-16%	4%
5.	GDP Change / Debt Change	89%	45%	35%	47%	50%
6.	Net Debt / GDP	73%	71%	70%	64%	58%

Notes: Financial data for UK WGA fiscal year end 31 March. GDP from EC AMECO database (accessed 15 June 2016) as of closest 31 December. Balance sheet data adjusted for Local Infrastructure as stated of £244 billion (2015), £232 billion (2014), £218 billion (2013), and £200 billion (2011-12).Value Creation Ratio is the change in GDP as a % of change in Net Worth. Restatements made for only the prior year.

UK WGA 5 Year Key Performance Metrics

(GBP, billions)

Assumes 100% of GDP increase generated by government management of its balance sheet.

SN		2015	2014	2013	2012	2011	
	KPIs:		*(Restated)*	*(Restated)*	*(Restated)*	*(Restated)*	
1.	Value Creation Ratio	0.3x	0.4x	0.4x	0.4x	NW Increase	
2.	Return on Assets (ROA)	-15%	-12%	-18%	-11%	3%	
3.	Net Worth (Taxpayer's Equity) % of GDP	-102%	-93%	-85%	-71%	-63%	
4.	Annual Change in Net Worth	-16%	-14%	-23%	-16%	4%	
5.	GDP Change / Debt Change	89%	45%	35%	47%	50%	
6.	Net Debt / GDP	73%	71%	70%	64%	58%	
	Data:						
							2010
							(Restated)
7.	Net Worth (Taxpayer's Equity)	-£1,859	-£1,609	-£1,412	-£1,147	-£986	-£1,028
8.	Assets	£1,699	£1,647	£1,482	£1,468	£1,434	£1,450
9.	Financial Debt	£1,717	£1,625	£1,469	£1,339	£1,204	£1,063
10.	Financial Assets	£392	£386	£305	£309	£305	£328
11.	Net Debt	£1,325	£1,239	£1,164	£1,030	£899	£735
12.	GDP	£1,817	£1,735	£1,665	£1,620	£1,556	£1,486
	Supplemental:						
13.	Local Infrastructure	£244	£232	£218	£200	£200	£200
14.	Gen. Govt. Gross Debt (ESA)	£1,602	£1,496	£1,421	£1,324	£1,191	£976
15.	GDP Change / Gross Debt (ESA) Change	77%	93%	47%	48%	32%	
16.	Accounting Officer	Julian Kelly	Julian Kelly	Sharon White	Sharon White	Sharon White	Andrew Hudson

Notes: Financial data for UK WGA fiscal year end 31 March. GDP and Gen. Govt. Gross Debt from EC AMECO database (accessed 15 June 2016) as of closest 31 December. Balance sheet data adjusted for Local Infrastructure as stated in SN 13. Value Creation Ratio is the change in GDP as a % of change in Net Worth. Restatements made for only the prior year.

UK Summary Balance Sheet

(GBP, Millions; Adjusted)

	Balance Sheet Item	March 31 2015	March 31 2014
1.	Financial Assets	£392	£386
2.	Non-Financial Assets	£1,307	£1,261
3.	Total Assets	£1,699	£1,647
4.	Financial Liabilities	£1,717	£1,625
5.	Non-Financial Liabilities	£1,842	£1,631
6.	Total Liabilities	£3,559	£3,256
7.	Net Worth (Taxpayer's Equity)	-£1,859	-£1,609
8.	GDP (Prior YE; EC AMECO)	£1,817	£1,735

Notes: UK net worth adjusted for undervaluation of infrastructure assets by GBP244 in 2015 and GBP232 million in 2014. UK GDP data is prior year end due to 31 March fiscal year end.

UK Simplified Balance Sheet
Key Performance Indictors (KPIs)

(GBP, Millions; Adjusted)

		March 31
	Performance Metric	**2015**
1.	Net Worth / GDP	
2.	Net Worth % Change	
3.	ROA: Δ in Net Worth / Total Assets	
4.	Value Creation Ratio: Δ in GDP / Δ in Net Worth	

UK Simplified Balance Sheet
Key Performance Indictors (KPIs)

(GBP, Millions; Adjusted)

1. Net Worth / GDP

Net Worth		**GDP**		
-£1,859	/	£1,817	=	-102%

UK Simplified Balance Sheet
Key Performance Indictors (KPIs)

(GBP, Millions; Adjusted)

2. Net Worth Percent Change

	2015		2014		2014		
	Net Worth		**Net Worth**		**Net Worth**		
(	-£1,859	-	-£1,609	) /	-£1,609	=	16%
							[Adjust Sign]
							-16%

UK Simplified Balance Sheet
Key Performance Indictors (KPIs)

(GBP, Millions; Adjusted)

3. ROA: Δ in Net Worth / Total Assets

	2015		2014		2015		
	Net Worth		**Net Worth**		**Assets**		
(	-£1,859	-	-£1,609	) /	£1,699	=	-15%

UK Simplified Balance Sheet
Key Performance Indictors (KPIs)

(GBP, Millions; Adjusted)

4. Value Creation Ratio:
Δ in GDP / Δ in Net Worth

	2015		2014		2015		2014		
	GDP		GDP		Net Worth		Net Worth		
(	£1,817	-	£1,735	) / (	-£1,859	-	-£1,609	) =	-0.3x
									[Adjust Sign]
									0.3x

UK Simplified Balance Sheet
Key Performance Indictors (KPIs)

(GBP, Millions; Adjusted)

		March 31
	Performance Metric	**2015**
1.	Net Worth / GDP	-102%
2.	Net Worth % Change	-16%
3.	ROA: Δ in Net Worth / Total Assets	-15%
4.	Value Creation Ratio: Δ in GDP / Δ in Net Worth	0.3x

UK Balance Sheet

As at 31 March 2015

ASSETS	2014-15 £bn
Non-current assets	
Property, plant and equipment	1091.8
Investment property	14.9
Intangible assets	32.4
Trade and other receivables	12.7
Equity investment in the public sector banks	44.2
Other financial assets	172.4
Total non-current assets	**1,368.4**
Current assets	
Inventories	11.3
Trade and other receivables	133.2
Cash and cash equivalents	26.8
Gold holdings	8.0
Assets held for sale	2.7
Other financial assets	148.9
Total current assets	**330.9**
TOTAL ASSETS	**1,699.3**

LIABILITIES & EQUITY	2014-15 £bn
Current liabilities	
Trade and other payables	(108.8)
Government borrowing and financing	(235.2)
Provisions for liabilities and charges	(14.9)
Other financial liabilities	(444.2)
Total current liabilities	**(803.1)**
Net current liabilities	**(472.2)**
Total assets less current liabilities	**896.2**
Non-current liabilities	
Trade and other payables	(64.1)
Government borrowing and financing	(939.3)
Provisions for liabilities and charges	(160.4)
Net public sector pension liability	(1,493.3)
Other financial liabilities	(98.3)
Total non-current liabilities	**(2,755.4)**
Net liabilities	**(1,859.2)**
Financed by Taxpayers' Equity:	
Liabilities to be funded by future revenues	
General reserve	2,137.5
Revaluation reserve	(274.8)
Other reserves	(3.5)
Total liabilities to be funded by future revenues	**1,859.2**

Notes: UK HM Treasury, Whole of Government Accounts, 2014-2015, pages 37-38; Non-Current PPE adjusted to include £244 billion of infrastructure assets noted on page 81.

United Kingdom Annual Performance Results Comparison

As at 31 March 2015

- Net Worth (WGA) change is best measurement of the total change in assets and liabilities.
- Revenues less Expenditures (WGA) measures annual flows with a more narrow scope of the balance sheet changes.
- Fiscal Balance (National Accounts) is significantly a politically determined number and should not be relied upon to reflect economic reality.

		2014-15		2013-14		2012-13	
		Amount	% of GDP	Amount	% of GDP	Amount	% of GDP
1.	Net Worth Change (WGA)	-£250	-14%	-£197	-11%	-£265	-16%
2.	Revenues less Expenditures (WGA)	-£152	-8%	-£145	-8%	-£179	-11%
3.	Fiscal Balance (National Accounts)	-£57	-3%	-£71	-4%	-£84	-5%
4.	GDP (EC AMECO)	£1,817		£1,735		£1,665	

Notes: EC AMECO database accessed 15 June 2016; GDP data is prior year due to 31 March year end.

Appendix B: Greece Government Case Study Materials

From 2001 to 2015, Greece Added Only 10 Cents in GDP for Each Additional Euro of Debt, Compared to EZ Peer Average 45 Cents

(€, Billions)

			Peer	*Peer Countries*			
SN	**GDP Increase / Debt Increase**	**Greece**	**Average**	**Ireland**	**Italy**	**Spain**	**Portugal**
1	Historical (2001 - 2015)	**10%**	**45%**	58%	42%	55%	27%
2	Forecast (2015 - 2017)	**42%**	**184%**	365%	90%	95%	187%
3	Forecast / Historical	428%	406%	633%	217%	173%	680%

SN	Metric	PSI Adjusted 2001-15 Delta	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
1	GDP	23.8	176.0	177.6	180.4	191.2	207.0	226.0	237.5	242.0	232.7	217.9	199.2	193.7	178.9	163.5	152.2
2	Gross Debt - EDP FFV	243.3	311.5	319.7	320.5	305.1	356.3	330.6	301.1	264.8	239.9	225.6	214.0	199.3	181.5	171.4	163.0
3	GDP Δ / Debt Δ (Annual)		19%	NM	-70%	NM	-74%	-39%	-12%	37%	104%	161%	38%	83%	153%	134%	93%
4	GDP Δ / Debt Δ (Cumulative)	**10%**	16%	16%	18%	27%	28%	44%	62%	88%	105%	105%	92%	114%	144%	134%	

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

An Inverse Relationship between the Level of Government Capital Expenditures and Changes in GDP Brings into Question the Quality of Management

(€, billions)

		EU	Greece	Portugal	Spain	Italy	Ireland
		(2011-2015 totals except as indicated otherwise.)					
1.	**Gross Fixed Capital Formation**	€ 2,081	€ 29	€ 21	€ 137	€ 199	€ 19
2.	**Other Capital Expenditures**	€ 792	€ 50	€ 15	€ 86	€ 112	€ 15
3.	**Total Capital Expenditures**	€ 2,872	**€ 79**	€ 37	€ 222	€ 311	**€ 34**
4.	**GDP Δ** *(2010 to 2015)*	€ 1,842	-€ 50	-€ 1	€ 0	€ 32	€ 48
5.	**GDP Δ / Total Capital Expenditures**	64%	**-63%**	-1%	0%	10%	**143%**
6.	**GDP** *(2015)*	€ 14,635	€ 176	€ 179	€ 1,081	€ 1,636	€ 215
7.	**Total Capital Expenditures / GDP**	20%	**45%**	20%	21%	19%	**16%**
8.	**2016 Total Capital Expenditures as a % of Revenue**	8%	11%	5%	8%	8%	8%

Note: EC AMECO general government data accessed 8 July 2016.

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

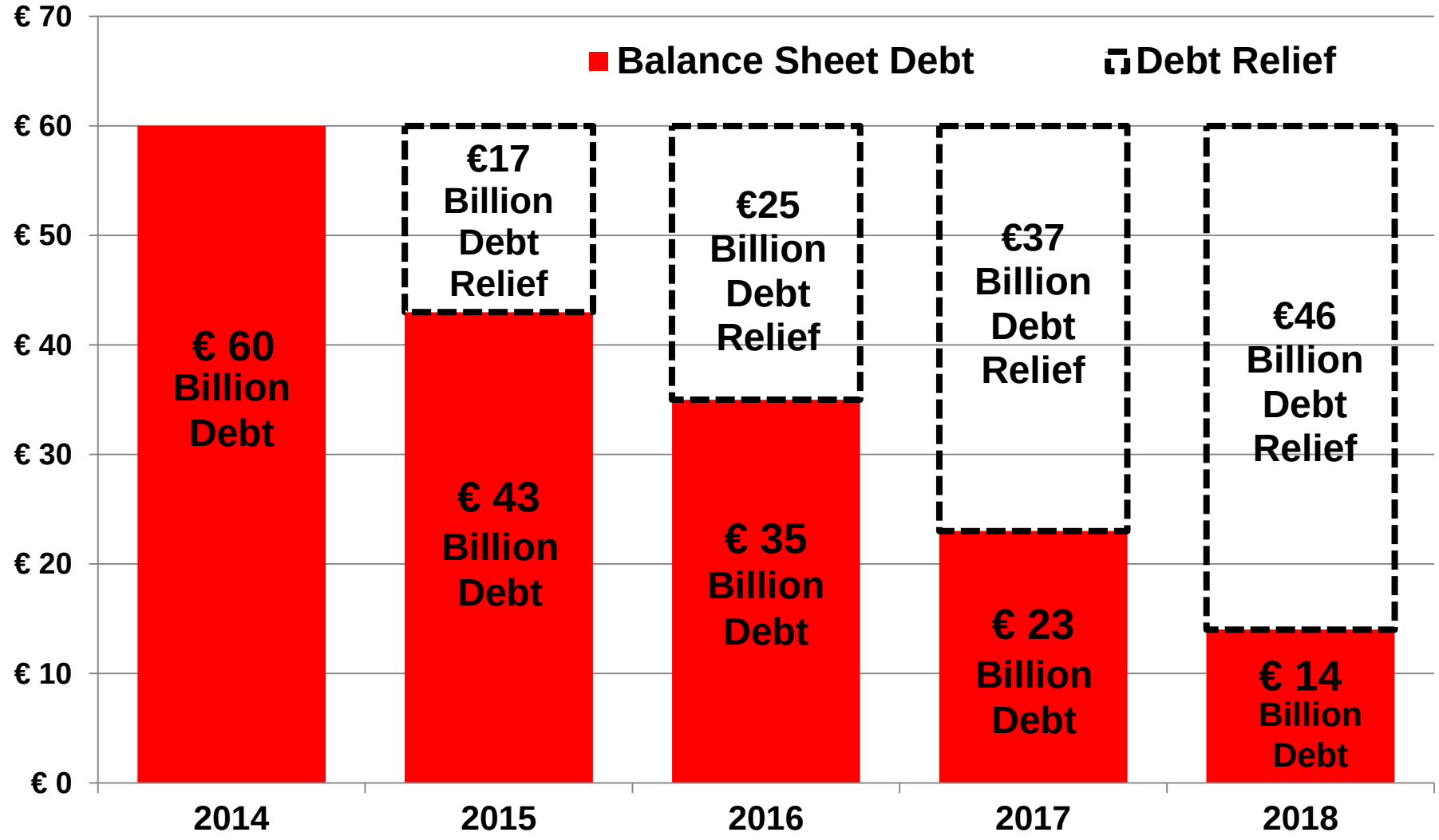
During 2015, ESM made five concessionary loans to the CCC-rated Greece government for a total of €21.4 billion. The loans have an interest rate equal to AAA/Aa1-rated ESM cost of funds, which is less than 1%, not the yield-to-maturity of 7% to 8% on the longest maturity publicly traded Greece government 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.

ESM 3rd Programme Debt Relief Increased Greece Net Worth by €46 Billion

(€, Billions)



Note: Estimate as of 31 December 2015.

BOG Head June 2016 Comments on 3rd Programme Debt Relief

Financial Times 13 June 2016 Letter

1.“At the same, our European partners have yet to deliver on their commitment to provide further debt relief.”

2.“The same [no debt relief] happened on May 24 this year…”

3.“It should be stressed that the Eurogroup postponed the decision for debt relief in spite of the following: that the Greek government had honored its commitments…”

4.“Lower final fiscal targets and debt relief are the incentives that will keep the Greek economy and society going.”

5.“a rather moderate debt relief that does not inflict losses on lenders” [maturity extensions and capitalized interest deferment installments].

Kathimerini 27 June 2016 Article

“Varoufakis’s negotiating strategy cost Greece 86 billion euros”, says BOG head. The 86 billion euros to which the BOG head in referring is the 86 billion euro envelope of the extraordinarily concessional loans in the 3rd programme. Therefore, not only does the 3rd programme contain no debt relief, it also cost the Greek government 86 billion euros.

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

	Greece and Peer 2015 Data:								
		Greece	**Greece % of Peer Avg.**	**Peer Average**	**Portugal**	**Ireland**	**Spain**	**Italy**	
1.	Balance Sheet Debt	€ 125			€ 208	€ 190	€ 1,054	€ 2,175	
2.	Financial Assets	€ 52			€ 64	€ 75	€ 304	€ 329	
3.	**Balance Sheet Net Debt**	**€ 72**			**€ 144**	**€ 115**	**€ 749**	**€ 1,846**	
4.	GDP	€ 176			€ 179	€ 215	€ 1,081	€ 1,636	
5.	Balance Sheet Debt / GDP	71%	65%	109%	116%	88%	97%	133%	
6.	Financial Assets / GDP	30%	100%	30%	36%	35%	28%	20%	
7.	Balance Sheet Net Debt / GDP	**41%**	**52%**	**79%**	**80%**	**54%**	**69%**	**113%**	
8.	Future Face Value of Debt	€ 312			€ 231	€ 201	€ 1,072	€ 2,172	
9.	Future Face Value / GDP	177%	156%	114%	129%	94%	99%	133%	
	Greece Historical Data:								
		2013	**2013 Revised**	**2014**	**2015**		**2013 Revised - 2015**		
							Delta	*% Change*	
10.	Balance Sheet Debt	€ 124	€ 124	€ 124	€ 125		€ 0	0%	
11.	Financial Assets	€ 91	€ 97	€ 71	€ 52		-€ 45	-46%	
12.	**Balance Sheet Net Debt**	**€ 33**	**€ 27**	**€ 53**	**€ 72**		€ 45	167%	
13.	GDP	€ 182	€ 180	€ 178	€ 176		-€ 4	-2%	
14.	**Balance Sheet Debt / GDP**	**68%**	**69%**	**70%**	**70.8%**		2%		
15.	Financial Assets / GDP	50%	54%	40%	30%		-24%		
16.	**Balance Sheet Net Debt / GDP**	**18%**	**15%**	**30%**	**41%**		**26%**		
17.	Future Face Value of Debt	€ 319	€ 319	€ 317	€ 312		-€ 8	-2%	
18.	Future Face Value / GDP	175%	177%	179%	177%		0%		

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

Notes: Estimate as of August 2016.

Greece YE 2015 Correctly Calculated in Accordance with the European System of Accounts (ESA 2010) under the Treaty on the Functioning of the European Union (TFEU)

S/N	Debt Type	Amount		% of GDP
1.	GLF	€ 18,320		
2.	EFSF	€ 19,474		
3.	ESM	€ 21,430		
4.	IMF	€ 16,151		
5.	SMP/ANFA	€ 18,300		
6.	GGBs (PSI)	€ 13,014		
7.	GGBs (2014)	€ 4,139		
8.	GGB Holdouts	€ 1,725		
9.	T-Bills	€ 12,039		
10.	Other	€ 29,915		
11.	Total Debt	€ 154,508		88%
12.	Financial Assets	€ 52,243		
13.	Net Debt	€ 102,265		58%
14.	GDP			€ 176,000

Notes: Preliminary estimate. ESA 2010 Sections 5.19-21, 7.67, 20.221, and 20.236. Financial Assets (excluding receivables) and GDP from EC AMECO database accessed 22 June 2016.

Clarification on The European System of Accounts (ESA 2010) Debt Measurement Rules

- **TFEU:** ESA 2010 promulgated to achieve objectives of the Treaty on the Functioning of the European Union (TFEU).
- **European Parliament:** ESA 2010 was adopted in the form of a regulation to by the European Parliament to give it a solid legal basis. From the Forward page iii.
- **EC No. 479/2009, EC Article 17:** Amendments to ESA provided for to modify treaty. 25 May 2009.
- **ESA 2010, Sections 20.221 and 20.236:** Debt rescheduling is considered extinguished and replaced at new transaction value.
- **ESA 2010, Section 5.19 – 5.21:** Transactions valued at market value on basis of commercial considerations.
- **ESA 2010, Section 7.67:** Debt securities are recorded at market value.
- **EC 479/2009 "Whereas (4)":** "The definition of 'debt' laid down in the Protocol on the excessive deficit procedure (EDP) needs to be amplified by a reference to the classification codes of ESA 95" [amended as ESA 2010].

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 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.

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.

Greece 2015 YE Balance Sheet Net Debt, Correctly Calculated in Accordance with International Accounting or Statistics Rules is 41% and 58% of GDP, Respectively: Summary

(€, Billions)

1.	Rules:	International Accounting Standards (IPSAS/IFRS)	2008 System of National Accounts (2008 SNA)	European System of Accounts 2010 (ESA 2010)	IMF Debt Sustainability Analysis (DSA)	Lisbon Treaty Excessive Deficit Procedure* (EDP)
2.	**Gross Debt**	€ 125	€ 155	€ 155	€ 203	€ 311
3.	**Gross Debt % of GDP**	71%	88%	88%	116%	177%
4.	**Net Debt**	€ 72	€ 102	€ 102	€ 183	NA
5.	**Net Debt % of GDP**	**41%**	**58%**	**58%**	**104%**	NA
6.	**Net Debt % of EDP Gross Debt**	**23%**	**33%**	**33%**	**59%**	NA

Debt metrics for Greece EZ member state peers are not reduced under ESA 2010, 2008 SNA, or IMF DSA as there is no qualifying concessional or reorganized debt; and under IPSAS/IFRS, Portugal, Spain, and Ireland would report lower debt by approximately €23 billion, €18 billion, and €12 billion respectively.

Notes: *EC 479/2009 "Whereas (4)" states "The definition of 'debt' laid down in the Protocol on the excessive deficit procedure needs to be amplified by a reference to the classification codes of ESA 95". Japonica Partners collaborative analysis. 2015 GDP of €176 billion from EC AMECO database and financial asset data from Eurostat (accessed 19 July 2016).

Greece 2015 YE Balance Sheet Net Debt, Correctly Calculated in Accordance with International Accounting or Statistics Rules is 41% and 58% of GDP, Respectively: Details

(€, Billions)

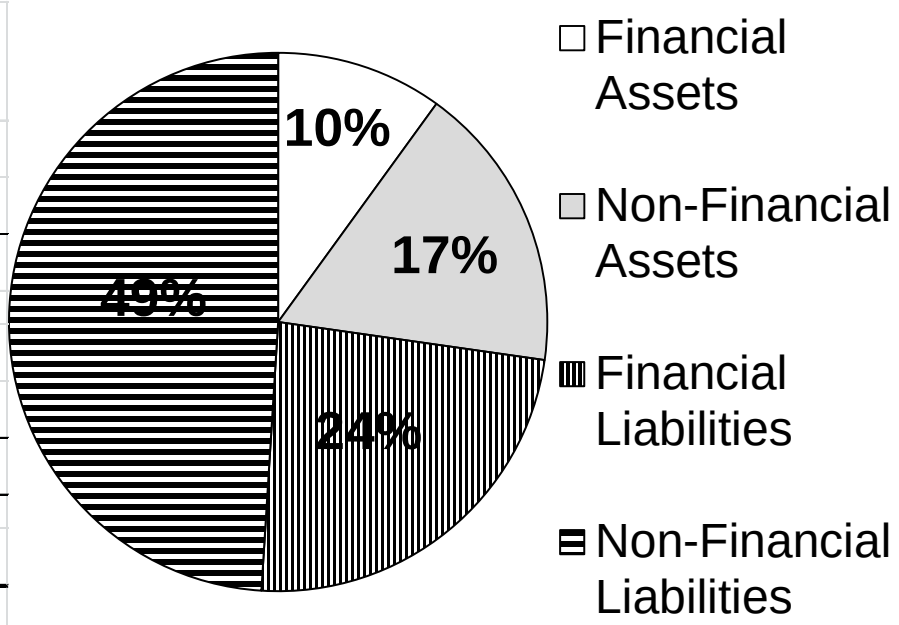
	Rules:	International Accounting Standards (IPSAS/IFRS)	2008 System of National Accounts (2008 SNA)	European System of Accounts 2010 (ESA 2010)	IMF Debt Sustainability Analysis (DSA)	Lisbon Treaty Excessive Deficit Procedure* (EDP)
2.	**Authority and Benchmarks:**	Produced by independent and professional accounting standards boards. Utilised by leading governments globally including the UK, Switzerland, New Zealand, France, and Israel. Debt standards are IPSAS 29 and IFRS 39 and 9. Utilized by all major international publicly traded companies.	Produced and released under the auspices of the United Nations, the European Commission, the OECD, IMF, and the World Bank Group. All countries encouraged to report under 2008 SNA as soon as possible. 2008 SNA Sections 13.59 and 22.106-113.	ESA 2010 was promulgated to achieve the objectives set by the Treaty on the Functioning of the European Union (TFEU) and adopted in the form of a regulation of the European Parliament and of the Council dated 21 May 2013 to give a solid legal basis for Member States. ESA 2010 Sections 5.19-21, 7.67, 20.221 and 20.236.	Series of IMF Staff Guidance Notes and papers from 2007 to 2015. Topics include: public debt limits (effective date June 30, 2015), DSA-LIC frameworks and excel model, unification of discount rates, and Greece DSAs.	Debt definition is in Lisbon Treaty (2007) attached as Protocol 12 on Excessive Deficit Procedure* (EDP). Operative metric is the 60% debt to GDP for Member States. Of note, at year end 2015, the EU average D/GDP was 87% and the EZ average was 93%.
3.	**Type of Debt Recalculated from (Future) Face Value:**	All debt	Debt reorganizations and debt securities	Debt restructurings and debt securities	Concessional debt	None
4.	**Framework:**	Reflect economic reality and provide most meaningful information for decision-making and accountability.	Statistical framework that provides macroeconomic accounts for policymaking, analysis, and research purposes. Of note, politically influenced rules and application provide numbers that reflect public policy preferences.	To achieve the objective of the Treaty on the Functioning of the EU (TFEU). To provide a set of harmonized and reliable statistics on which to base decisions and policy advice. Of note, politically influenced rules and application provide numbers that reflect public policy preferences.	The present value (PV) of debt is a more relevant indicator as it takes into account the concessionality of debt. For countries where official external financing on concessional terms is a key source of public external financing or has become a normality.	Legal compliance with the Treaty on the Functioning of European Union (TFEU) and Stability and Growth Pact with debt measured at face value.
5.	**Debt Valuation Reference Points:**	Market at initial recognition or substantial modification and then at amortized cost.	Debt reorganizations based on market (PV) at time of transaction, securities at market, and other debt at nominal value.	Debt reorganizations based on market (PV) at time of transaction, securities at market, and other debt at nominal value.	Concessional debt at 5% unification discount rate and other debt at nominal value. Requires grant element of at least 35% to qualify for PV.	Face value.
6.	**Consolidated Sectors**	Controlled entities	Central, EBF, local, SSFs, and non-market SOEs	Central, EBF, local, SSFs, and non-market SOEs	Central, EBF, local, SSFs, and non-market SOEs; and as designated	Central, EBF, local, SSFs, and non-market SOEs
7.	**Gross Debt**	€ 125	€ 155	€ 155	€ 203	€ 311
8.	**Gross Debt % of GDP**	71%	88%	88%	116%	177%
9.	**Financial Assets**	All financial assets	All financial assets including receivables	All financial assets including receivables	Financial assets corresponding to debt instruments	NA
10.	**Net Debt (7. less 9.)**	€ 72	€ 102	€ 102	€ 183	NA
11.	**Net Debt % of GDP**	41%	58%	58%	104%	NA

Notes: *EC 479/2009 "Whereas (4)" states "The definition of 'debt' laid down in the Protocol on the excessive deficit procedure needs to be amplified by a reference to the classification codes of ESA 95". Japonica Partners collaborative analysis. 2015 GDP of €176 billion from EC AMECO database and financial asset data from Eurostat (accessed 19 July 2016).

At Year-End 2015, the Greece Government had Over ½ Trillion Euros in Assets and Liabilities to Manage or Mismanage, which is €48,060 per Citizen (1 of 2)

(€, Billions; as of 31 December 2015)

SN	Balance Sheet Item	Amount
1.	Financial Assets	€ 52
2.	Non-Financial Assets	€ 90
3.	Total Assets	€ 142
4.	Financial Liabilities	€ 125
5.	Non-Financial Liabilities	€ 255
6.	Total Liabilities	€ 380
7.	Net Worth	-€ 238
8.	Total Assets and Liabilities	€ 522



Notes: Japonica Partners collaborative analysis. Working draft balance sheet. For additional details, see Japonica Partners 30 April 2016 USC Global Leadership Summit presentation: mostimportantreform.info/MAGARIAN_USC_20160430.pdf.

At Year-End 2015, the Greece Government had Over ½ Trillion Euros in Assets and Liabilities to Manage or Mismanage, which is €48,060 per Citizen (2 of 2)

(€, Billions; as of 31 December 2015)

SN	Balance Sheet Item	Amount	% of Total Assets and Liabilities Combined	% of GDP
1.	Financial Assets	€ 52	10%	30%
2.	Non-Financial Assets	€ 90	17%	51%
3.	Total Assets	€ 142	27%	81%
4.	Financial Liabilities	€ 125	24%	71%
5.	Non-Financial Liabilities	€ 255	49%	145%
6.	Total Liabilities	€ 380	73%	216%
7.	Net Worth	-€ 238	-46%	-135%
8.	Total Assets and Liabilities	€ 522	100%	
9.	GDP			€ 176

Notes: Japonica Partners collaborative analysis. Working draft balance sheet. For additional details, see Japonica Partners 30 April 2016 USC Global Leadership Summit presentation: mostimportantreform.info/MAGARIAN_USC_20160430.pdf.

Greece Government: National Wealth Methodology versus Reported Numbers

		National Wealth Methodology[1]			Reported[2]		Difference
1.	Financial Assets	€ 295		Financial Assets	€ 106		€ 189
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.

Greece Asset Values Have the Potential to Increase over 100% when Government Bond Yields Decline to Portugal, Reducing NPLs

Illustrative Example:

Recent Value	€ 147,000
Annual Income	€ 16,000

	10-Year Gov't Bond Yields	Risk Premium	Cost of Capital	Asset Value	% Increase from Current Value
Recent Value	**7.87%**	**3%**	**10.87%**	**€ 147,000**	**NA**
	7%	3%	10%	€ 160,000	9%
	6%	3%	9%	€ 178,000	21%
	5%	3%	8%	€ 200,000	36%
	4%	3%	7%	€ 229,000	56%
Portugal	**3.06%**	**2%**	**5.06%**	**€ 316,000**	**115%**
	3%	2%	5%	€ 320,000	118%
	2%	2%	4%	€ 400,000	172%

Note: Asset Value is Annual Income divided by Cost of Capital. Yields as of 8 July 2016.

Appendix C: Other Materials

New Zealand 5 Year Key Performance Metrics

(NZD, billions)

Assumes 100% of GDP increase generated by government management of its balance sheet.

SN		2015	2014	2013	2012	2011	
	KPIs:						
1.	Value Creation Ratio	NW Increase	NW Increase	NW Increase	0.4x	0.6x	
2.	Return on Assets (ROA)	4%	4%	4%	-9%	-6%	
3.	Net Worth % of GDP	38%	34%	32%	28%	40%	
4.	Annual Change in Net Worth	14%	15%	17%	-26%	-15%	
5.	GDP Change / Debt Change	71%	523%	Debt Decrease	83%	41%	
6.	Net Debt / GDP	4%	5%	7%	8%	4%	
	Data:						
							2010
7.	Net Worth	$92	$81	$70	$60	$81	$95
8.	Assets	$279	$257	$244	$240	$245	$223
9.	Financial Debt	$113	$103	$100	$101	$90	$70
10.	Financial Assets	$104	$91	$86	$83	$82	$73
11.	Net Debt	$9	$12	$14	$18	$8	-$3
12.	GDP	$241	$234	$217	$212	$204	$195
	Supplemental:						
13.	Gen. Govt. Gross Debt (GFSM)	$75	$73	$70	$69	$67	$54
14.	GDP Change / Gross Debt (GFSM) Change	468%	499%	696%	328%	67%	
15.	Secretary of Treasury	Gabriel Makhlouf	Gabriel Makhlouf	Gabriel Makhlouf	Gabriel Makhlouf	Gabriel Makhlouf	John Whitehead

Notes: Financial data for New Zealand fiscal year end 30 June. Net Worth includes minority interests. GDP from New Zealand financial statements. Gen. Govt. Gross Debt from IMF WEO Database (April 2016) accessed 15 June 2016; calendar year. Value Creation Ratio is the change in GDP as a % of change in Net Worth.

Gross National Income vs. GDP Comparison

(National Currency, Billions; 2016 data)

The comparison highlights an important point of consideration regarding GDP related metrics. Of note, Ireland's GDP increased from €189 billion in 2014 to €215 billion in 2015 to in €229 billion 2016.

	GNI	GDP	GNI/GDP
EU	14,847	14,862	100%
France	2,277	2,234	102%
Germany	3,199	3,131	102%
Greece	176	175	101%
Ireland	188	229	82%
Italy	1,666	1,668	100%
Portugal	181	185	98%
Spain	1,119	1,120	100%
UK	1,898	1,929	98%

Notes: EC AMECO data accessed 19 July.

Proposed Adding a 20% Weighting to a Sovereign Financial Management Index

Total Ranking: 0-20 (Poor), 20-30 (Fair), 30-40 (Good), 40+ (High)

IPSAS is a Top Priority for Institution Building.

		Weighting	Ranking
Qualitative Factors		50%	
	Rankings: 0 (Worst), 1 (Poor), 2 (Fair), 3 (Good), 4 (Best)		
1.1	Accounting Principles	7%	
1.2	Audit	7%	
1.3	Budget	7%	
1.4	Financial Statements	7%	
1.5	Fiscal Management	7%	
1.6	Fiscal Oversight	7%	
1.7	Human Capital	7%	
Quantitative Factors		50%	
	Quartile Rankings: 1 (Bottom), 2 (Second), 3 (Third), 4 (Top)		
2.1	Net Worth Value Creation Ratio	8%	
2.2	Net Worth Return on Asset Ratio	8%	
2.3	Net Worth % of GDP - Latest	8%	
2.4	Net Worth Annual % Change	8%	
2.5	GDP Change to Debt Change Ratio	8%	
2.6	Net Debt % of GDP - Latest	8%	
Total:		100%	