

# CEQ Quality Management



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Learning Event on the  
Commitment to Equity Methodology

Commitment to Equity Institute, Tulane University,  
and the World Bank

Washington, D.C. – February 3, 2016

# Nobody likes to lose

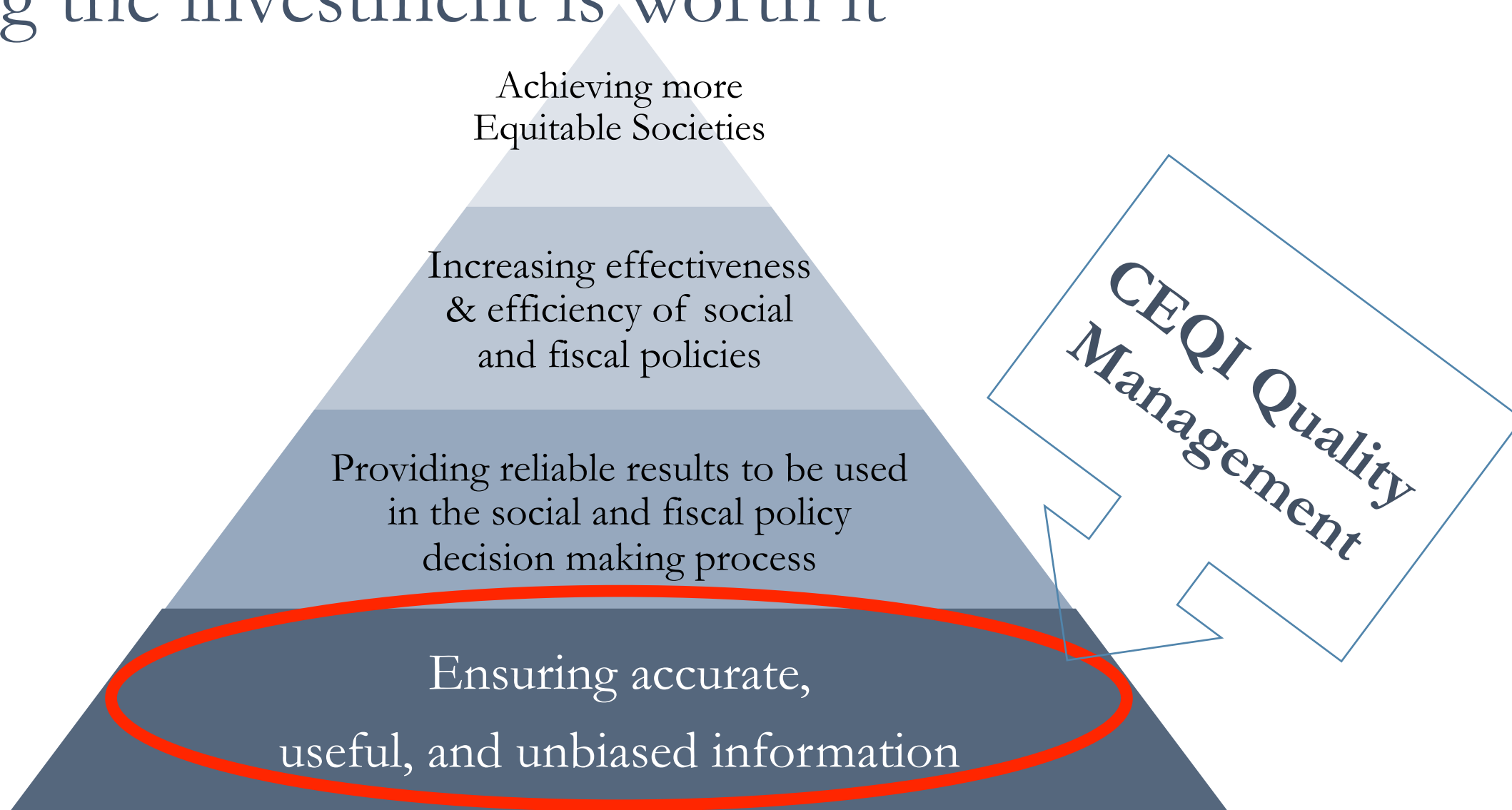
**CEQ Assessment is a big investment!**

- CEQ Institute
- Authors
- Reviewers
- Partners – WB

- CEQ Institute
- Partners – WB



# Ensuring the investment is worth it



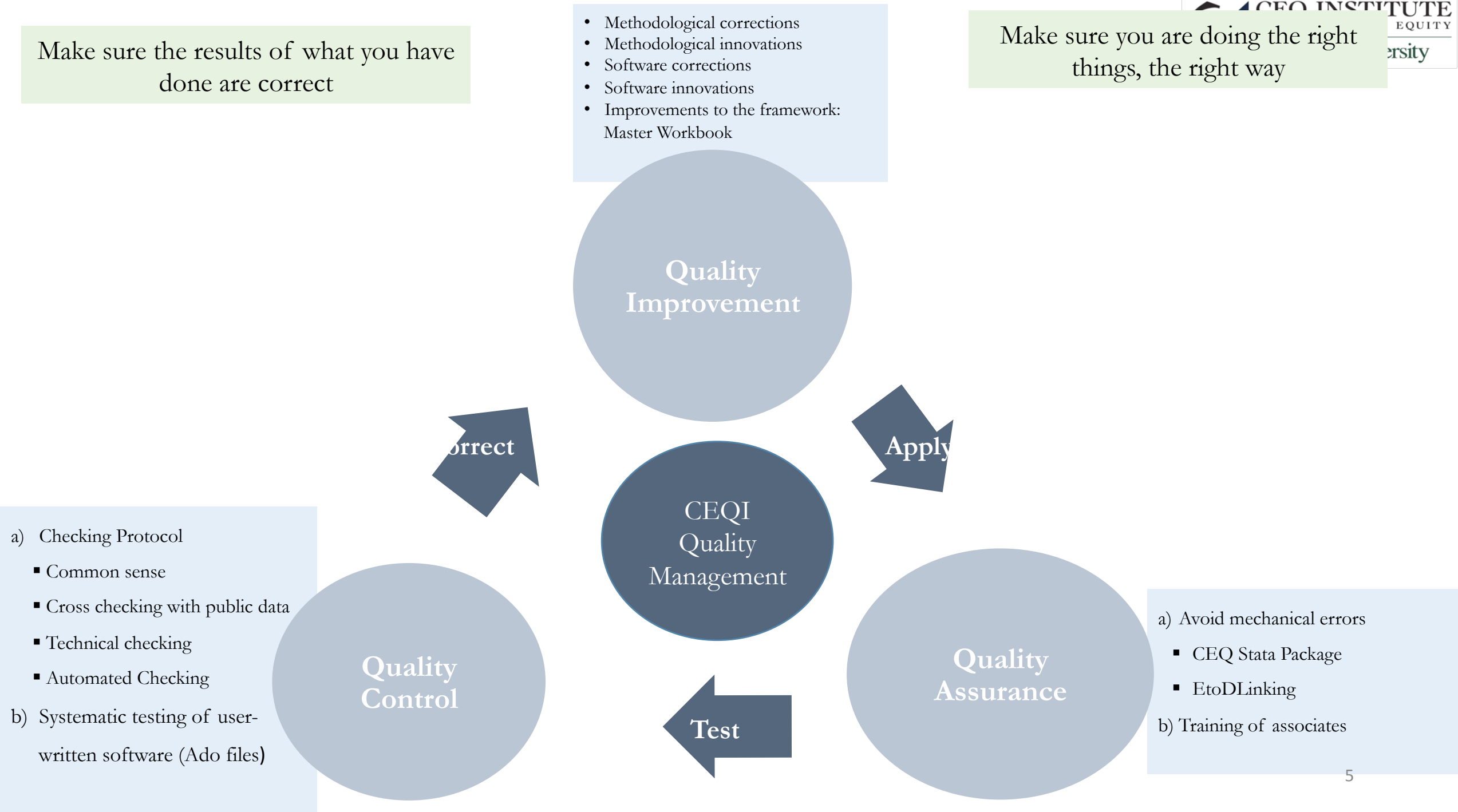
# Overview of CEQI Quality Management

- *Quality Assurance*
- Avoiding mechanical errors from copying and pasting and others (ppp conversions, for ex):
  - CEQ Stata Package: PutExcel Command to generate section E (Output Tables) of the CEQ Master Workbook
  - EtoD Linking: section D (summary of results) will be automatically populated using data from section E
- Training of associates
- *Quality Control*
  - Inspection of Product: Checking Protocol & Quick and Useful Tests to Assess Accuracy and Reliability of Results obtained in a CEQ Assessment
  - Systematic testing of user-written software (Ado files)
- *Quality Improvement*
  - Methodological corrections
  - Methodological innovations
  - Software innovations to reduce production time
  - Improvements to the framework: Master Workbook

Make sure the results of what you have done are correct

- Methodological corrections
- Methodological innovations
- Software corrections
- Software innovations
- Improvements to the framework: Master Workbook

Make sure you are doing the right things, the right way





# E to D Linking

Excel spreadsheet showing survey data for Chile, 2013. The spreadsheet includes a title page, table of contents, and descriptive statistics. The data is organized by survey year and includes columns for various indicators such as poverty status, income, and consumption. The spreadsheet is titled "NAT\_MWB2016\_Part\_II\_Output\_Tables\_Dec" and is dated 9 Dec 2015.



Excel spreadsheet showing survey data for Chile, 2015. The spreadsheet includes a title page, table of contents, and descriptive statistics. The data is organized by survey year and includes columns for various indicators such as poverty status, income, and consumption. The spreadsheet is titled "NAT\_MWB2016\_Part\_II\_Output\_Tables\_Dec" and is dated 9 Dec 2015.

**CEQ INSTITUTE**  
COMMITMENT TO EQUITY  
Tulane University



# What do I do now?



- Counterpart (WB) who received the MWB2016 PartII for the first-time
- Country author(s) who completed the E sheets for the first time



# D Section & Linking

- D Section – Summary Results (for example):
  - D1: Poverty, Inequality, and FI & FGT
  - D2: Effectiveness Indicators.
  - D3: Progressivity (Kakwani & Redistributivity Effect)
  - D4: Incidence & Net Payers/Net Beneficiaries
  - D9a, b, c, d: Coverage

Note: For full list of contents please see: [\\_MWB2016\\_BetaVersion\\_Feb2016\\_Contents](#) or [Master Workbook 2016 Beta Version Part 1 February \(1\\_MWB2016\\_Part\\_I\\_BetaVersion\\_Feb\\_2016\)](#)



# Checking Protocol

# Checking protocol

- Common sense checking
- Cross checking with publicly available data from administrative or other sources (e.g., POVCAL)
- Automated checking
- Technical checking

# Quick & Useful Tests – Common Sense and Cross Checking

- Are poverty rates and Gini for Disposable Income similar to figures in POVCAL and official figures?
- Gini and poverty rates should decrease from Market Income plus pensions to Final Income
- Incidence of Transfers and Taxes

# Quick & Useful Tests – Common Sense and Cross Checking

- Are poverty rates and Gini for Disposable Income similar to official figures? -- Crosscheck A3, D1 & E3
- Gini and poverty rates should decrease when you move from Market Income – Look at D1 or D3
- Distribution of Transfers and Taxes -- Look at D4 or E11

# Are poverty rates and Gini for Disposable Income similar to official figures?

Sheet A3

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	Sheet A3: Evolution of Inequality and Poverty															
2																
3	Instructions: To be completed by the country poverty economist using data from the most recent available work, or from secondary sources such as the World Bank's PovcalNet. Remember to include complete reference/s to source inclu (if you use webpage-based info. Remember to put date of the website info)															
4	ADD ROWS FOR THE VALUES OF THE NATIONAL POVERTY LINES IN DAILY PPP VALUES. TO CONVERT MONTHLY LINES TO DAILY MULTIPLY THE MONTHLY VALUES BY 12 AND DIVIDE BY 365. IF URBAN LINES, PLEASE REPORT BOTH. IF THERE ARE MULTIPLE LINES AND YOU WANT TO CONVERT THEM INTO ONE, TAKE THE WEIGHTED AVERAGES WITH THE POPULATION SHARES AS WEI INSTRUCTIONS ON HOW TO CONVERT POVERTY LINES IN LOCAL CURRENCY INTO PPP, PLEASE SEE HANDBOOK. IT IS VERY IMPORTANT TO READ THE INSTRUCTIONS AS THIS IS A COMMON SO															
5																SOURCES
6		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
7	INEQUALITY															
8	Gini (MDS Metodología Nueva)				nd			0.50			0.50		0.49		0.49	Ministerio de Desarrollo S
9	Gini (MDS Metodología Antigua)				nd			0.53			0.54		0.54		0.53	Ministerio de Desarrollo S
10	Gini- CEDLAC				0.55			0.52			0.52		0.51		0.50	CEDLAC
11	Theil				70.3			59.1			61.3		55.2		56.6	http://www.iadb.org/resc
12	10/10 (MDS)							20.1			19.8		17.7		17.1	Ministerio de Desarrollo S
13	90/10 (CEDLAC)				9.5			8.7			8.2		8.3		7.9	CEDLAC - Stats - Inequa
14	POVERTY															
15	Headcount \$1.25 PPP (from WB POVICAL)				1.73%			1.07%			1.28%		0.83%		nd	Indicator:Poverty headcou
16	Headcount \$2.5 PPP (from WB POVICAL)				5.9%			4.0%			3.2%		2.34%		2%	Indicator:Poverty headcou
17	Headcount \$4 PPP (from WB POVICAL)				20.6%			15.61%			11.54%		9.89%		5%	Indicator:Poverty headcou
18	Own calculations (just fill in for year of survey)															
19	Headcount \$1.25 PPP (from WB POVICAL)												0.29%			own calculation
20	Headcount \$2.5 PPP (from WB POVICAL)												1.36%			own calculation
21	Headcount \$4 PPP (from WB POVICAL)												5.3%			own calculation
22																
23	With Extreme Poverty Line															
24	Headcount National Povline - Metodología Nueva				nd			12.6%			9.9%		8.1%		4.5%	http://observatorio.minis
25	Poverty Gap National (Poverty Gap)				nd			nd			nd		nd		0.01	own calculation
26	Squared Poverty Gap National (Squared PG)				nd			nd			nd		nd		0.004	own calculation
27	Headcount National Povline: Urban CEDLAC				4.4%			3.2%			3.6%		2.7%		3.8%*	CEDLAC - *2013 own ca
28	Headcount National Povline: Rural CEDLAC				6.2%			3.5%			4.4%		3.2%		9.6%*	CEDLAC - *2013 own ca
29	Headcount own calculations (just fill in for year of survey) CEDLAC				4.7%			3.2%			3.7%		2.8%		nd	Headcount total con meto
30	Headcount National Povline- Metodología Antigua (observatorio social)				4.7%			3.2%			3.6%		3.1%		2.5%	Headcount total con meto
31	With Moderate Poverty Line															
32	Headcount National Povline- Metodología Nueva				nd			29.1%			25.3%		22.2%		14.4%	http://observatorio.minis
33	Poverty Gap National (Poverty Gap)				nd			nd			nd		nd		0.031	own calculation
A.a Macro, Poli, Socio Cntxt		A1. Country Context		A2. Sociodemographic Character.		A3. Evol Ineq Pov		A4. Evol Macro		Sec. A.b Fiscal System		A5. General Gi				

Sheet D1





A	B	C	D	E	F	G	H	I	J	K	
	Sheet D1 - Reduction in Inequality and Poverty										
	Note: PUT THE VALUES OF THE NATIONAL POVERTY LINES IN DAILY PPP VALUES UNDER THE RESPECTIVE CONCEPT BELOW. TO CONVERT MONTHLY										
	Describe Scenario: For example, which original income was used										
		Country Name	Market Income	Market Income + Contributory Pensions	Net Market Income	Gross Income	Taxable Income	Disposable Income	Consumable Income	Final Income	In f
		Normalized Fiscal Gains to the Poor per Capita			2.560	0.001		0.001	0.001	0.001	
		Normalized Fiscal Gains to the Poor per Gainer				0.763		0.763	0.691	0.766	
		Fiscal gain to the poor as proportion of pre-fisc income per gainer			-	3.251		3.251	2.913	3.279	
	National Extreme PL	Headcount Index	8.6%	6.9%	7.1%	3.8%	15.9%	3.9%	5.0%		
		Poverty Gap	3.0%	2.3%	2.4%	1.0%	7.5%	1.0%	1.3%		
		Squared Poverty Gap	1.6%	1.2%	1.2%	0.5%	4.8%	0.5%	0.6%		
		Fiscal Impoverishment Headcount (out of total population)									
		Fiscal Impoverishment Headcount (out of post-fisc poor)									
		Total Fiscal Impoverishment (PPP per day)									
		Fiscal Impoverishment per Capita									
		Fiscal Impoverishment per Impoverished									
		Normalized Fiscal Impoverishment per Capita									
		Normalized Fiscal Impoverishment per Impoverished									
		Fiscal impoverishment as proportion of pre-fisc income per impoverished									
								14			

# Are poverty rates and Gini for Disposable Income similar to official figures?

Sheet A3

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
<b>Sheet A3: Evolution of Inequality and Poverty</b>														
Instructions: To be completed by the country poverty economist using data from the most recent available work, or from secondary sources such as the World Bank's PovcalNet. Remember to include complete r (if you use webpage-based info. Remember to put date of the website info)														
ADD ROWS FOR THE VALUES OF THE NATIONAL POVERTY LINES IN DAILY PPP VALUES. TO CONVERT MONTHLY LINES TO DAILY MULTIPLY THE MONTHLY VALUES BY 12 A URBAN LINES, PLEASE REPORT BOTH. IF THERE ARE MULTIPLE LINES AND YOU WANT TO CONVERT THEM INTO ONE, TAKE THE WEIGHTED AVERAGES WITH THE POPULA INSTRUCTIONS ON HOW TO CONVERT POVERTY LINES IN LOCAL CURRENCY INTO PPP, PLEASE SEE HANDBOOK. IT IS VERY IMPORTANT TO READ THE INSTRUCTIONS AS T														
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>INEQUALITY</b>														
Gini (MDS Metodología Nueva)				nd			0.50			0.50		0.49		0.49
Gini (MDS Metodología Antigua)				nd			0.53			0.54		0.54		0.53
Gini- CEDLAC				0.55			0.52			0.52		0.51		0.50
Theil				70.3			59.1			61.3		55.2		56.6
10/10 (MDS)							20.1			19.8		17.7		17.1
90/10 (CEDLAC)				9.5			8.7			8.2		8.3		7.9
<b>POVERTY</b>														
Headcount \$1.25 PPP (from WB POVCAL)				1.73%			1.07%			1.28%		0.83%		nd
Headcount \$2.5 PPP (from WB POVCAL)				5.9%			4.0%			3.2%		2.34%		2%
Headcount \$4 PPP (from WB POVCAL)				20.6%			15.61%			11.54%		9.89%		5%
<i>Own calculations (just fill in for year of survey)</i>														
Headcount \$1.25 PPP (from WB POVCAL)														0.29%
Headcount \$2.5 PPP (from WB POVCAL)														1.36%
Headcount \$4 PPP (from WB POVCAL)														5.3%

Sheet E3

	A	B	C	D	E	F	G	H	I	J	K
											
1											
	Country	Survey Year	Author/s		Date of MWB		PPP Conversion Factor (From Base Year LCU to Base Year PPP)		Base Year of PPP		
2											
3	Chile	2013	Sandra Martínez - Eduardo Ortiz		12 Dec 2015		387.36				2005
4	Results produced by version 3.0 of ceqlorenz on 12 Dec 2015 at 08:59:00										
5											
6	Disaggregated Results: LORENZ CURVES By Centile and Income Bin										
7											
			Market Income + Contributory								
8			Market Income	Pensions	Net Market Income	Gross Income	Taxable Income	Disposable Income	Consumable Income	Final Income	
9	Mean		2958910.47	3074837.25	2914009.55	3169447.18	2507454.12	3008619.47	2659699.95	2927988.68	
10	Median		1747672.00	1848582.00	1776668.00	1946733.00	1497402.00	1865164.00	1652182.00	1944103.75	
11	Standard Deviation		5033253.73	5042770.89	4321207.04	5017336.49	4505744.67	4293431.60	3788890.19	3755566.30	
12	Gini		0.540473471	0.52351852	0.517030179	0.498876931	0.566440116	0.491260691	0.489913124	0.43798251	
13	Absolute Gini		1599212.614	1609734.249	1506630.88	1581164.081	1420322.602	1478016.483	1303021.911	1282407.81	
14	S-Gini v=1		0	0	0	0	0	0	0	0	
15	S-Gini v=1.25		0.260523549	0.247308109	0.242471804	0.232905491	0.263052341	0.22756783	0.227218048	0.20401581	
16	S-Gini v=1.5		0.403503296	0.383198146	0.377899244	0.359683528	0.409258291	0.35345059	0.352815007	0.31675101	
17	S-Gini v=2.5		0.641852709	0.609908509	0.605523976	0.567366976	0.658951496	0.561020585	0.559626303	0.50339651	
18	S-Gini v=3		0.696476278	0.661918003	0.65779276	0.613956117	0.717484371	0.607551766	0.605909098	0.54578541	
19	S-Gini v=3.5		0.735639921	0.699283712	0.695345595	0.647122713	0.759689462	0.640647423	0.63880337	0.5762161	
20	S-Gini v=4		0.765531665	0.727900134	0.724117669	0.672352723	0.791948879	0.66581468	0.66380167	0.59956861	
21	S-Gini v=5		0.808870175	0.769692771	0.766186519	0.708970185	0.838505558	0.702352889	0.700067021	0.63388061	
22	S-Gini v=6		0.839282381	0.799420597	0.796171354	0.734915287	0.870655003	0.728277715	0.725776205	0.6585811	
	Table of Contents	E1. Descriptive Statistics	E2. Population	E3. Lorenz	E5. Fisc. Impoverishment	E6. Fisc. Gains to the Poor	E10.m Concentration	E10.m+p Conc.			+



# Quick & useful Tests – Common Sense and Cross Checking

- Are poverty rates and Gini for Disposable Income similar to official figures?
- Gini and poverty rates should decrease when you move from Market Income – Look at D1 or D3
- Distribution of Transfers and Taxes – Look at D4 or E11

[illegible]

# Quick & Useful Tests – Common Sense and Cross Checking

- Are poverty rates and Gini for Disposable Income similar to official figures? -- Crosscheck A3, D1 & E3
- Gini and poverty rates should decrease when you move from Market Income
- Distribution of Transfers and Taxes – Look at D4 or E11

# Incidence of Transfers and Taxes

	A	B	C	E	F	G	AB	AR	AS	
14	DECILE			Population Share	Market Income + Pensions	Contributory Pensions	Noncontributory Pensions	Direct Taxes	Contributions to Health Insurance System	Cesario desah
15										
16	1			0.10	979,348,072,693	25,988,196,557	110,353,895,583	-	(11,478,707,083.38)	
17	2			0.10	1,778,331,353,946	59,802,545,903	70,414,625,695	(1,436,400.00)	(35,116,322,946.83)	
18	3			0.10	2,335,826,703,958	81,342,893,874	70,548,544,636	(54,119,567.95)	(70,808,403,558.80)	
19	4			0.10	2,895,827,276,128	116,018,462,949	63,222,406,373	(265,000,078.08)	(96,340,163,526.89)	
20	5			0.10	3,503,558,227,087	144,462,906,094	53,291,747,127	(966,024,947.46)	(119,506,398,289.60)	
21	6			0.10	4,251,896,674,745	198,898,563,570	41,452,747,266	(2,335,082,102.74)	(145,891,487,551.93)	
22	7			0.10	5,211,092,181,207	249,488,173,930	32,866,198,284	(7,441,018,058.54)	(175,289,939,787.12)	
23	8			0.10	6,631,821,733,513	291,777,769,634	28,241,081,166	(18,046,408,225.19)	(207,867,195,742.19)	
24	9			0.10	9,583,841,543,162	341,056,977,077	16,694,535,891	(63,044,369,577.17)	(235,557,441,893.63)	
25	10			0.10	24,429,334,466,941	491,621,436,350	9,624,418,587	(1,297,442,002,388.29)	(203,860,540,699.09)	
26	TOTAL			1.00	61,600,878,233,379	2,000,457,925,937	496,710,200,609	(1,389,595,461,345.42)	(1,301,716,601,079.43)	



Thank you!