



# Racial/Ethnic Income Inequality Responses to Government Maintenance Programs in the US

**MEHMET E. YAYA**

Department of Economics  
Eastern Michigan University



# [ Questions of Interest

- Does inequality of racial/ethnic cohorts of the population respond similarly to these maintenance programs?
  - Whites,
  - Blacks,
  - Hispanics?
  
- Are these results sensitive to the type of inequality measure, and type of income?
  - Gini Coefficient vs. Theil Index
  - Personal Income vs. Family Income

# [ Literature ]

- Gangl (2008)
  - investigates whether there is a link between high levels of inequality and economic mobility.
- Rupasingha et al. (2002)
  - persistent differences in economic growth rates is ethnic diversity.
- Kuznets (1955)
  - Inequality and economic development have an inverted U-shape relationship.
- Nielsen and Alderson (1997) and Gallet and Gallet (2004)
  - “U-turn” in this relationship.
- Hoover and Yaya (2010)
  - inequality disparity between racial/ethnic groups.

# [ Income Inequality Measures ]

- Two inequality measures calculated by using *personal* and *family income*

$$Gini = \frac{1}{2n^2\mu} \sum_{i=1}^n \sum_{j=1}^n |y_i - y_j|$$

$$Theil = \ln(\mu_y) - \ln(\mu_{gm}) = \ln\left(\frac{\mu_y}{\mu_{gm}}\right)$$

# [ Income Inequality Measures ]

- Gini Coefficient lies between 0 and 1,
  - Higher Gini Coefficient corresponds to a higher level of inequality.
- Theil Index always takes positive values.
  - A zero would indicate perfect equality where the geometric mean is equal to the arithmetic mean, mode, and median.
  - The higher the Theil Index the more unequal income is distributed.

# [ Income Inequality Measures ]

- Most of the human behavior follow a normal distribution; however distribution of income is generally skewed to the right.
- Theil Index has the ability to capture the skewness of the distribution.
- However, Gini Coefficient is more commonly used since it is more intuitive.

# [ Data Description ]

- Government Maintenance Program
  - Maximum combined TANF and food stamp benefit payments for a family of three across 50 states and DC.
  - Background Material and Data on the Programs within the Jurisdiction of the Committee on Ways and Means or more commonly known as “Green Book;”
  - Green Book is being published since 1981, recently in 4 year intervals;
  - We used the most recent 2 publications: 2004 and 2008.

# [ Data Description ]

- Coinciding with the Combined TANF, American Community Survey (ACS) 2004 and 2008 cohorts by Census Bureau are employed.
- Data is collected in all 3,141 US counties where total population of the area is more than 55K.
- Total number of people surveyed is approximately 3 Million.
- All the households who are citizens of the U.S. are selected in the survey due to limited access of non-citizens to the maintenance programs.
- Illegal immigrants and non-citizens are not part of this study.

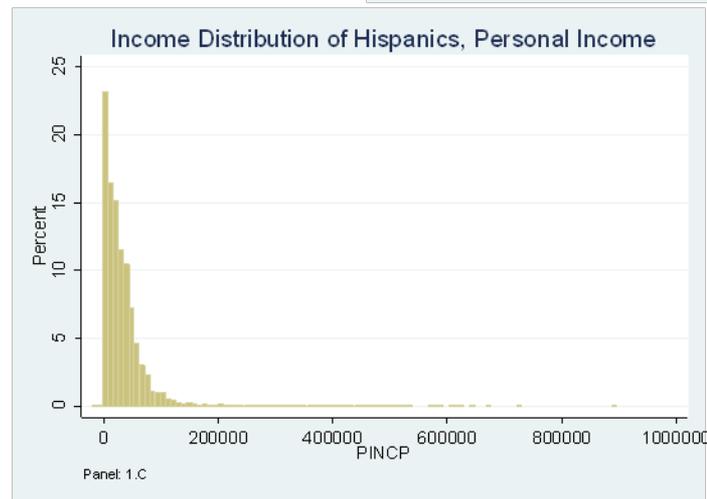
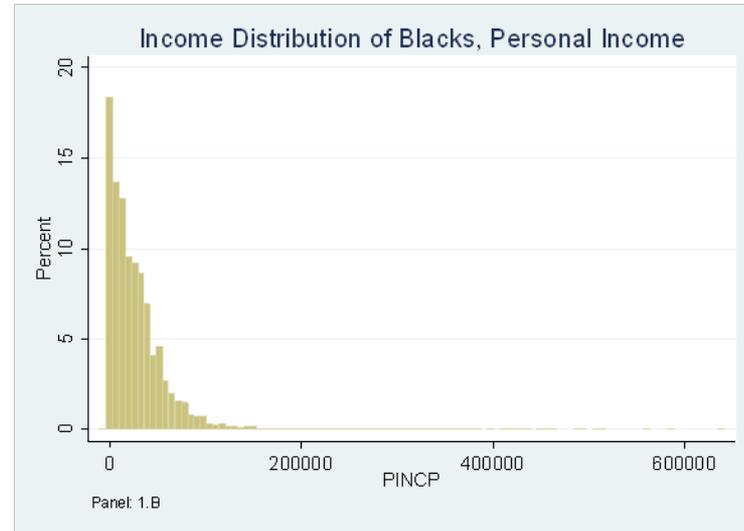
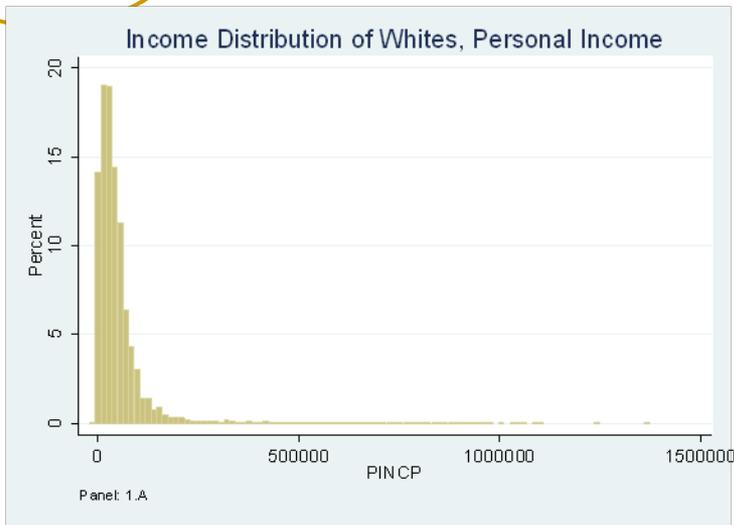
# [ Variables: Personal Income ]

- Personal income is the sum of 8 different sources of income in the ACS:
  - wage or salary income;
  - net self-employment income;
  - interest, dividends, or net rental or royalty income or income from estates and trusts;
  - social security or railroad retirement income;
  - Supplemental Security Income (SSI);
  - **public assistance or welfare payments;**
  - retirement, survivor, or disability pensions;
  - and all other income.

# [ Other Variables from ACS ]

- Family Income: Sum of all incomes of the members of a family.
- Educational attainment: Years of schooling.
- Unemployment rate;
- Age;
- Gender;

# Personal Income Distributions of Racial Groups



# Inequality of Race Groups by Year

Table 1.a: Income Inequality of Racial Groups by Year

<i>Personal Income</i>									
Variable	Year	Obs	USA	Obs	Whites	Obs	Blacks	Obs	Hispanics
Gini	Full	3,041,830	0.5594	2,419,357	0.5535	285,368	0.5387	337,105	0.5698
	2008	2,161,610	0.5617	1,695,542	0.5555	208,999	0.5380	257,069	0.5709
	2004	880,220	0.5497	723,815	0.5441	76,369	0.5378	80,036	0.5630
Theil	Full	3,041,830	0.5594	2,419,357	0.5780	285,368	0.5303	337,105	0.6168
	2008	2,161,610	0.6016	1,695,542	0.5867	208,999	0.5304	257,069	0.6218
	2004	880,220	0.5556	723,815	0.5423	76,369	0.5228	80,036	0.5918
<i>Family Income</i>									
Variable	Year	Obs	USA	Obs	Whites	Obs	Blacks	Obs	Hispanics
Gini	Full	3,041,830	0.5332	2,419,357	0.5312	285,368	0.5509	337,105	0.4915
	2008	2,161,610	0.5358	1,695,542	0.5340	208,999	0.5504	257,069	0.4925
	2004	880,220	0.5219	723,815	0.5186	76,369	0.5488	80,036	0.4835
Theil	Full	3,041,830	0.5339	2,419,357	0.5314	285,368	0.5600	337,105	0.4474
	2008	2,161,610	0.5419	1,695,542	0.5399	208,999	0.5609	257,069	0.4508
	2004	880,220	0.5018	723,815	0.4969	76,369	0.5496	80,036	0.4257

# Socio-Economic Characteristics of Race Groups by Year

**Table 1.b: Socio-Economic Characteristics of Racial Groups by Year**

		USA				Whites				Blacks				Hispanics			
Variable	Year	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max
Personal Income, \$	Full	35.61	49.38	0.00	1338.00	38.52	52.57	0.00	1338.00	25.19	30.61	0.00	819.00	23.53	32.80	0.00	941.00
(000)	2008	37.13	52.58	0.00	1338.00	40.44	56.30	0.00	1338.00	26.08	31.95	0.00	819.00	24.23	34.26	0.00	941.00
	2004	31.88	40.20	0.00	824.00	34.02	42.21	0.00	824.00	22.74	26.46	0.00	534.00	21.25	27.48	0.00	654.00
Family Income, \$	Full	66.98	77.52	0.00	2158.10	71.07	81.56	0.00	2158.10	46.34	52.78	0.00	1302.20	55.09	59.09	0.00	1774.00
(000)	2008	69.91	82.37	0.00	2158.10	74.58	87.13	0.00	2158.10	47.99	54.99	0.00	1302.20	56.96	61.78	0.00	1774.00
	2004	59.77	63.48	0.00	1165.00	62.85	66.00	0.00	1165.00	41.81	45.92	0.00	756.40	49.07	48.97	0.00	884.00
Age	Full	47.59	18.54	16.00	95.00	48.98	18.53	16.00	95.00	44.86	18.07	16.00	95.00	39.88	16.74	16.00	95.00
	2008	47.79	18.57	16.00	95.00	49.31	18.54	16.00	95.00	45.03	18.13	16.00	95.00	40.02	16.83	16.00	95.00
	2004	47.09	18.46	16.00	93.00	48.22	18.50	16.00	93.00	44.41	17.91	16.00	92.00	39.41	16.44	16.00	93.00
Education	Full	13.13	2.95	0.00	20.00	13.46	2.68	0.00	20.00	12.55	2.86	0.00	20.00	11.21	3.87	0.00	20.00
	2008	13.08	2.97	0.00	20.00	13.44	2.68	0.00	20.00	12.52	2.87	0.00	20.00	11.15	3.90	0.00	20.00
	2004	13.25	2.90	0.00	20.00	13.52	2.70	0.00	20.00	12.61	2.84	0.00	20.00	11.41	3.77	0.00	20.00

# Statistical Methodology

$$\text{Inequality}_i = \alpha_0 + \alpha_1 \text{Income}_i + \alpha_2 \text{Income}_i^2 + \alpha_3 \text{Schl}_i + \alpha_4 \text{Per\_Male}_i + \alpha_5 \text{Unempl}_i + \alpha_6 \text{TANF}_i + \varepsilon_i$$

- Dependent variable is the income inequality measure (Gini or Theil) in state  $i$  (50 states plus DC),
- Weighted Least Squares (WLS) is used to eliminate the effect of heteroscedasticity where the weights are calculated based on the size of race groups in each the state.
- We estimate this model
  - for each race (*Whites, Blacks, Hispanics*);
  - for each time period (*2004 and 2008*);
  - for the pooled observations across time.

# Statistical Methodology -

## Endogeneity

- Is there a greater need for a government maintenance program, such as TANF, in states that have higher overall inequality;
- Instrumental variable that is uncorrelated with inequality but correlated with TANF is used.
- Two-stage least square (2SLS) where government maintenance programs are instrumented with the “**absolute value of the margin of the last presidential vote**” in each state.
- Margin of the vote is significantly related to federal government spending at the state level. (Hoover and Pecorino, 2005)

# Descriptive Statistics

**Table 2.a: Descriptive Statistics of Dependent Variables for the Racial Groups by States**

Variable	Obs	USA				Whites				Blacks				Hispanics			
		Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max
<i>Personal Income</i>																	
Gini	102	0.5385	0.0240	0.4892	0.5965	0.5334	0.0213	0.4863	0.5766	0.5252	0.0282	0.3953	0.6111	0.5467	0.0332	0.4037	0.6150
Theil	102	0.5399	0.0552	0.4197	0.6773	0.5270	0.0482	0.4140	0.6553	0.5039	0.0584	0.2849	0.7024	0.5649	0.0804	0.2699	0.8196
<i>Family Income</i>																	
Gini	102	0.5183	0.0353	0.4360	0.7319	0.5154	0.0385	0.4360	0.7496	0.5446	0.0479	0.3378	0.6644	0.4987	0.0453	0.4027	0.6828
Theil	102	0.5050	0.0831	0.3478	1.0663	0.5019	0.0945	0.3479	1.1472	0.5586	0.0966	0.2183	0.8724	0.4676	0.0911	0.2953	0.8809

**Table 2.b: Descriptive Statistics of Independent Variables for the Racial Groups by States**

Variable	Obs	USA				Whites				Blacks				Hispanics			
		Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max
Personal Income, \$ (000)	102	34.02	6.53	22.07	60.52	36.77	9.91	22.07	97.47	24.97	5.76	8.28	45.52	23.07	4.62	14.43	41.85
Family Income, \$ (000)	102	62.91	11.25	42.86	100.57	66.13	14.18	22.07	107.38	43.98	10.21	20.71	75.21	50.12	9.67	30.33	75.44
Education	102	13.58	3.57	12.38	49.02	13.50	0.61	12.38	16.83	12.76	0.51	11.77	14.45	11.55	0.73	10.11	13.51
Percentage of Males	102	0.48	0.01	0.44	0.52	0.48	0.01	0.46	0.52	0.48	0.09	0.39	0.86	0.50	0.04	0.39	0.61
Unemployment Rate	102	0.06	0.01	0.02	0.09	0.05	0.01	0.02	0.08	0.12	0.04	0.00	0.23	0.08	0.02	0.00	0.15
Size	102	29.82	35.23	2.86	221.20	23.72	24.49	1.78	131.97	2.80	3.96	0.01	17.68	3.30	9.59	0.04	76.68
Combined TANF, \$	102	725.93	128.10	525.00	1191.00												
Marginal Vote	102	8.60	11.41	0.00	45.50												

# Regression Estimates for Gini Coefficient, Personal Income

**Table 3.a: 2SLS Estimation for the Income Inequality, Personal Income**

	USA			Whites			Blacks			Hispanic		
	2004	2008	Pooled	2004	2008	Pooled	2004	2008	Pooled	2004	2008	Pooled
Personal Income	0.0087 (0.84)	<b>0.0278**</b> ( <b>2.16</b> )	<b>0.0130**</b> ( <b>2.43</b> )	<b>0.0094**</b> ( <b>2.05</b> )	<b>0.0092*</b> ( <b>2.25</b> )	<b>0.0081***</b> ( <b>3.05</b> )	0.0003 (0.04)	0.0153 (0.82)	0.0117 (1.54)	0.0048 (0.44)	<b>0.0296**</b> ( <b>2.06</b> )	<b>0.0134**</b> ( <b>2.06</b> )
Income Squared	0.0000 (0.18)	<b>-0.0003*</b> ( <b>1.85</b> )	-0.0001 (1.55)	-0.0001 (1.32)	-0.0001 (1.44)	<b>-0.0001*</b> ( <b>1.80</b> )	0.0000 (0.11)	-0.0002 (0.57)	-0.0001 (1.02)	0.0000 (0.05)	-0.0004 (1.66)	-0.0002 (1.65)
Education	-0.0228 (0.72)	-0.0003 (1.11)	<b>-0.0004*</b> ( <b>1.82</b> )	0.0001 (0.01)	0.0009 (0.03)	0.0047 (0.34)	-0.0125 (0.57)	-0.0201 (0.57)	<b>-0.0308*</b> ( <b>1.97</b> )	<b>-0.0274***</b> ( <b>2.73</b> )	<b>-0.0509**</b> ( <b>2.68</b> )	<b>-0.0270***</b> ( <b>3.37</b> )
Percentage of Males	0.9428 (0.98)	0.2930 (0.26)	0.2940 (0.41)	0.5036 (0.60)	1.3151 (0.73)	0.9585 (0.99)	0.0344 (0.37)	0.0774 (0.23)	0.0906 (0.55)	<b>-0.5508***</b> ( <b>4.87</b> )	<b>-0.6721***</b> ( <b>2.72</b> )	<b>-0.4982***</b> ( <b>5.26</b> )
Unemployment Rate	<b>0.8146**</b> ( <b>2.41</b> )	-0.0162 (0.85)	-0.0077 (0.48)	<b>0.7954***</b> ( <b>2.75</b> )	<b>0.9942*</b> ( <b>1.95</b> )	<b>0.9527***</b> ( <b>2.68</b> )	<b>0.4948***</b> ( <b>4.78</b> )	0.9254 (1.36)	<b>0.6823**</b> ( <b>2.57</b> )	0.1778 (0.65)	<b>1.2980**</b> ( <b>2.15</b> )	<b>0.5803**</b> ( <b>2.33</b> )
Combined TANF	<b>-0.0003*</b> ( <b>1.89</b> )	<b>-0.0003**</b> ( <b>2.51</b> )	<b>-0.0002***</b> ( <b>3.14</b> )	<b>-0.0002*</b> ( <b>1.88</b> )	- <b>0.0003*</b> ( <b>1.81</b> )	<b>-0.0003***</b> ( <b>2.80</b> )	0.0000 (0.15)	-0.0002 (0.84)	-0.0001 (1.19)	0.0000 (0.75)	<b>-0.0002**</b> ( <b>2.14</b> )	<b>-0.0001**</b> ( <b>1.99</b> )
Constant	0.2807 (0.59)	-0.0187 (0.03)	0.2638 (0.79)	0.1835 (0.36)	-0.1989 (0.23)	-0.0612 (0.12)	<b>0.5952***</b> ( <b>3.04</b> )	<b>0.5322*</b> ( <b>1.78</b> )	<b>0.6789***</b> ( <b>4.50</b> )	<b>1.0564***</b> ( <b>9.10</b> )	<b>1.0343***</b> ( <b>3.99</b> )	<b>0.9106***</b> ( <b>10.53</b> )
Observations	51	51	102	51	51	102	51	51	102	51	51	102

Dependent Variable is Gini Coefficient. Robust t statistics in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

# Regression Estimates for Theil Index, Personal Income

Table 3.a: 2SLS Estimation for the Income Inequality, Personal Income

	USA			Whites			Blacks			Hispanic		
	2004	2008	Pooled	2004	2008	Pooled	2004	2008	Pooled	2004	2008	Pooled
Personal Income	0.0198	<b>0.0652**</b>	<b>0.0322**</b>	<b>0.0199*</b>	<b>0.0209**</b>	<b>0.0196***</b>	-0.0026	0.0353	0.0255	0.0126	<b>0.1022**</b>	<b>0.0487***</b>
	(0.94)	<b>(2.10)</b>	<b>(2.54)</b>	<b>(2.18)</b>	<b>(2.76)</b>	<b>(3.89)</b>	(0.15)	(0.87)	(1.56)	(0.48)	<b>(2.31)</b>	<b>(2.85)</b>
Income Squared	-0.0001	<b>-0.0007*</b>	-0.0003	-0.0002	<b>-0.0001*</b>	<b>-0.0001**</b>	0.0001	-0.0004	-0.0003	0.0000	<b>-0.0014**</b>	<b>-0.0007**</b>
	(0.27)	<b>(1.78)</b>	(1.65)	(1.40)	<b>(1.83)</b>	<b>(2.33)</b>	(0.28)	(0.59)	(0.99)	(0.10)	<b>(2.03)</b>	<b>(2.49)</b>
Education	-0.0491	-0.0006	-0.0008	-0.008	-0.011	-0.0176	-0.0274	-0.0752	<b>-0.0844**</b>	<b>-0.0605**</b>	<b>-0.1488**</b>	<b>-0.0707***</b>
	(0.80)	(1.15)	(1.65)	(0.20)	(0.20)	(0.64)	(0.62)	(1.00)	<b>(2.61)</b>	<b>(2.49)</b>	<b>(2.30)</b>	<b>(3.23)</b>
Percentage of Males	1.614	0.4779	0.621	0.7319	2.0115	1.6367	0.0558	0.3189	0.2901	<b>-1.1255***</b>	<b>-1.6292**</b>	<b>-1.0549***</b>
	(0.83)	(0.18)	(0.38)	(0.42)	(0.54)	(0.83)	(0.28)	(0.44)	(0.84)	<b>(4.53)</b>	<b>(2.11)</b>	<b>(3.85)</b>
Unemployment Rate	<b>1.6956**</b>	-0.0217	0.0015	<b>1.4084**</b>	<b>1.8364*</b>	<b>1.6998**</b>	<b>0.8794***</b>	2.038	<b>1.4335**</b>	0.3008	<b>3.9757*</b>	<b>1.5784**</b>
	<b>(2.35)</b>	(0.48)	(0.04)	<b>(2.36)</b>	<b>(1.83)</b>	<b>(2.48)</b>	<b>(4.10)</b>	(1.42)	<b>(2.57)</b>	(0.47)	<b>(1.99)</b>	<b>(2.25)</b>
Combined TANF	<b>-0.0005*</b>	<b>-0.0006**</b>	<b>-0.0005***</b>	<b>-0.0004*</b>	<b>-0.0006*</b>	<b>-0.0005***</b>	0.000	-0.0005	-0.0003	-0.0001	<b>-0.0007**</b>	<b>-0.0003**</b>
	<b>(1.95)</b>	<b>(2.61)</b>	<b>(3.57)</b>	<b>(1.84)</b>	<b>(1.65)</b>	<b>(2.64)</b>	(0.08)	(0.85)	(1.15)	(0.91)	<b>(2.07)</b>	<b>(2.39)</b>
Constant	0.1416	-0.6836	-0.1241	0.0391	-0.5473	-0.2653	<b>0.7182*</b>	0.7857	<b>0.9963***</b>	<b>1.6329***</b>	<b>1.6321**</b>	<b>1.2376***</b>
	(0.15)	(0.55)	(0.17)	(0.04)	(0.30)	(0.26)	<b>(1.85)</b>	(1.22)	<b>(3.18)</b>	<b>(6.08)</b>	<b>(2.09)</b>	<b>(5.15)</b>
Observations	51	51	102	51	51	102	51	51	102	51	51	102

Dependent Variable is Theil Index. Robust t statistics in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

# Regression Estimates for Gini Coefficient, Family Income

Table A1.a: 2SLS Estimation for the Income Inequality, Family Income

	USA			Whites			Blacks			Hispanic		
	2004	2008	Pooled	2004	2008	Pooled	2004	2008	Pooled	2004	2008	Pooled
Family Income	0.0013 (0.41)	<b>0.0081**</b> (2.47)	<b>0.0049***</b> (3.01)	0.0009 (0.41)	0.002 (0.64)	0.0024 (1.54)	<b>-0.0077**</b> (2.10)	0.0019 (0.21)	-0.0019 (0.64)	-0.0041 (0.54)	<b>-0.0128*</b> (1.84)	-0.003 (0.60)
Income Squared	0.0001 (0.76)	<b>-0.0001***</b> (2.71)	<b>-0.0000***</b> (3.21)	0.0001 (0.80)	0.0001 (0.75)	0.0001 (1.35)	0.0001 (1.50)	0.0001 (0.27)	0.0001 (0.15)	0.0001 (0.20)	0.0001 (1.53)	0.0001 (0.18)
Education	0.0271 (0.94)	<b>0.0004***</b> (4.08)	<b>0.0003***</b> (3.12)	<b>0.0421**</b> (2.16)	<b>0.0629***</b> (4.03)	<b>0.0239**</b> (2.24)	<b>0.0464**</b> (2.13)	0.0493 (1.61)	<b>0.0247*</b> (1.88)	<b>0.0444***</b> (4.61)	<b>0.0494**</b> (2.42)	<b>0.0388***</b> (4.02)
Percentage of Males	<b>-1.4276*</b> (1.79)	<b>-1.4827**</b> (2.31)	<b>-1.3931***</b> (2.74)	-1.6441 (1.55)	-0.9373 (0.64)	-1.4159 (1.59)	-0.2277 (0.91)	0.0344 (0.12)	-0.1344 (0.90)	0.0345 (0.15)	-0.0546 (0.18)	-0.0532 (0.26)
Unemployment Rate	<b>0.7211*</b> (1.89)	<b>0.0464***</b> (7.23)	<b>0.0523***</b> (7.39)	0.0501 (0.14)	0.7125 (1.40)	0.1512 (0.47)	0.0548 (0.27)	0.7666 (1.17)	0.0405 (0.22)	0.4931 (1.59)	-0.4343 (0.48)	<b>-0.7435*</b> (1.75)
Combined TANF	0.0001 (0.56)	0.0001 (0.71)	0.0001 (1.02)	0.0001 (0.89)	0.0000 (0.34)	0.0001 (1.00)	<b>0.0002*</b> (1.90)	-0.0001 (0.42)	<b>0.0001*</b> (1.75)	0.0000 (0.32)	0.0001 (0.69)	0.0001 (0.96)
Constant	0.7139 (1.36)	<b>0.8864**</b> (2.62)	<b>0.9546***</b> (3.96)	0.6496 (1.30)	0.0677 (0.09)	0.7147 (1.63)	0.1723 (1.17)	-0.1357 (0.35)	<b>0.2817***</b> (2.85)	0.053 (0.21)	0.3655 (1.03)	0.2018 (0.86)
Observations	51	51	102	51	51	102	51	51	102	51	51	102

Dependent Variable is Gini Coefficient. Robust t statistics in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

# Regression Estimates for Theil Index, Family Income

**Table A1.b: 2SLS Estimation for the Income Inequality, Family Income**

	USA			Whites			Blacks			Hispanic		
	2004	2008	Pooled	2004	2008	Pooled	2004	2008	Pooled	2004	2008	Pooled
Family Income	0.0004	<b>0.0167**</b>	<b>0.0108***</b>	0.0012	0.003	0.005	<b>-0.0184**</b>	0.0021	-0.006	-0.0074	-0.0218	-0.0032
	(0.07)	<b>(2.59)</b>	<b>(3.22)</b>	(0.30)	(0.42)	(1.58)	<b>(2.23)</b>	(0.12)	(0.86)	(0.51)	(1.59)	(0.33)
Income Squared	0.0000	<b>-0.0001***</b>	<b>-0.0001***</b>	0.0000	0.0000	0.0000	<b>0.0001*</b>	0.0000	0.0000	0.0000	0.0001	0.0000
	(0.49)	<b>(2.76)</b>	<b>(3.26)</b>	(0.88)	(0.60)	(1.40)	<b>(1.68)</b>	(0.15)	(0.16)	(0.18)	(1.32)	(0.08)
Education	0.0786	<b>-0.0007***</b>	<b>-0.0005***</b>	<b>0.0984**</b>	<b>0.1372***</b>	<b>0.0457*</b>	<b>0.1059**</b>	0.0975	0.0478	<b>0.0850***</b>	<b>0.0908**</b>	<b>0.0733***</b>
	(1.18)	<b>(4.56)</b>	<b>(2.97)</b>	<b>(2.25)</b>	<b>(3.66)</b>	<b>(1.79)</b>	<b>(2.06)</b>	(1.66)	(1.55)	<b>(4.54)</b>	<b>(2.29)</b>	<b>(3.96)</b>
Percentage of Males	<b>-2.9608*</b>	<b>-3.0341**</b>	<b>-2.7532**</b>	<b>-3.4224*</b>	-1.9936	-2.9752	-0.4886	0.1739	-0.2297	0.2097	-0.0645	0.0075
	<b>(1.94)</b>	<b>(2.36)</b>	<b>(2.63)</b>	<b>(1.75)</b>	(0.67)	(1.63)	(0.83)	(0.30)	(0.66)	(0.51)	(0.11)	(0.02)
Unemployment Rate	<b>1.4578*</b>	<b>0.1007***</b>	<b>0.1160***</b>	-0.0326	1.2677	0.0188	-0.0349	1.6014	-0.0347	0.8118	-0.6689	<b>-1.5078*</b>
	<b>(1.80)</b>	<b>(7.99)</b>	<b>(8.30)</b>	(0.05)	(1.25)	(0.03)	(0.07)	(1.24)	(0.08)	(1.37)	(0.37)	<b>(1.88)</b>
Combined TANF	0.0002	0.0001	0.0002	0.0002	-0.0001	0.0002	<b>0.0004**</b>	-0.0002	<b>0.0004**</b>	0.0001	0.0002	0.0002
	(0.64)	(0.85)	(1.15)	(1.08)	(0.22)	(1.33)	<b>(2.00)</b>	(0.38)	<b>(2.08)</b>	(0.35)	(0.56)	(0.92)
Constant	0.6943	<b>1.2408*</b>	<b>1.3128***</b>	0.6599	-0.4522	0.9635	-0.2867	-0.8272	0.0492	-0.4684	0.1623	-0.2135
	(0.69)	<b>(1.91)</b>	<b>(2.71)</b>	(0.70)	(0.32)	(1.09)	(0.87)	(1.10)	(0.22)	(1.03)	(0.24)	(0.48)
Observations	51	51	102	51	51	102	51	51	102	51	51	102

Dependent Variable is Theil Index. Robust t statistics in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

# [ Results ]

- States with higher income have higher inequality;
- Education decreases and unemployment increases the observed inequality;
- Combined TANF and food stamp benefits is an effective policy instrument in decreasing personal income inequality but the results are not robust to family income inequality;
- These findings are valid for Whites and Hispanics but not for Blacks.

# [ Results ]

- Hispanics have larger average family incomes than blacks and the increases in family income come from the contributions of males.
- Males significantly reduce income inequality for Hispanics but this result is not found for blacks or whites.

# [ Policy Implications/Conclusions ]

- Whites and Hispanics respond to the policy instrument in a fashion similar to the country as a whole; this is not the case for blacks.
- A single policy instrument applied uniformly to disaggregated groups will not lead to the same outcome for all.

[ Conclusion

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Questions?