*Problem Set on Broad and Policy Issues*

*Question I Public Policies – 1) Write a two page essay on Brazil public policy tackling one of the following related topic using the material given in class. Pick empirical facts & discuss policy proposals: a) Income Policies  
  b) Education  
  c) Productive Inclusion  
  d) MicroFinance  
2) *Develop a connection between the policy topic chosen and one of the other 3 topics. (one page)*  
3) *Choose a specific public policy program and analyze it using concepts seen in the course (one page)*

*Question II – Empirical Techniques:*  
Besides a)*Standard mincerian regressions to study income inequality and returns to education and b) discrete binomial logistic regression (in the case of poverty), We have also applied: c)*Difference in Difference estimators in various occasions (for example comparing the performance of beneficiaries and non beneficiaries of CCTs), d)*Cohort effects (applied to self-reported race), e)**Markovian regression (applied to intergenerational transmission of education), f)*Principal Components Analysis (applied to the choice of subjective variables in the PHDI), g)*Various estimation biases in the context of mincerian regressions: i. attenuation; ii. omitted variable; iii. selectivity. Plus: h) **Field Experiments; i) **Quantile Regressions; j) **Regression Discontinuity Design. k) *Stepwise procedure. l) *Externality Effects.  
1) Describe briefly four of the microeconometric techniques (or empirical problems) posed above, explaining their intuition and trying to relate with concrete applications seen in class.

*Question III – Broad Framing Questions (examples):*  
1) *Ends (Results) Approach* - Similarly to what we have done to CCTs, discuss the impact of high school policies on end results (prosperity, equality, sustainability and sensibility). Explore the relationship between students motivations to evade high-school and returns to education.  
2) *Means (Input) Approach* - Discuss, from a generic model of aggregation between different individuals and moments of time/states of nature, as well as schemes seen along the course, the channels (intermediate variables) through which public policies such as education, conditional cash transfer (CCTs) policies, and microcredit may impact the level of social welfare in a society over time. (choose 1)  
3) *Social Tensions (Atkinson’s Approach)* - Discuss the application of extracting social indicators from their respective Social Welfare Functions: *Inequality, Polarization (Alienation and Identification),

*Question IV – Discursive questions (choose 2):*  
1) *Subjective Data:* Explore an example of how subjective data can help Brazilian social policy.  
2) *Middle Class Issues:* a) Discuss the concepts of alienation and identification. b) Derive them plus polarization from a Social Welfare Function. c) What is the strategy of dividing the population into absolute income classes (choose income brackets) using the between and within groups components?  
3) *Mobility issues:* a)**Discuss the concepts of volatility from inequality (Shorrock’s approach). b) *Discuss the intergeneration transmission of education in Brazil. How can it be addressed empirically?  
*What are the stylized facts in the Brazilian case of c)** *the relationship between income mobility and educational choices. d)*Migration c)*Immigration e)*Youth challenges. f)*Top incomes measurement.  
4) *Shared Productivity (optional policy topic)* – i) Discuss the relationship between GDP growth and mean household income growth in Brazil and their possible causes and consequences. ii) Organize and discuss policies that may generate shared productivity. iii) Discuss policies that deal with informality.