

Measures of Polarization and Conceptualization of Middle Class

- The EGR strategy generates brackets of income classes of the income distribution observed in practice. The brackets chosen were the ones which better distinguish the 3 groups in a sense that they select the lowest possible differences inside them **(identification)** and on the other hand maximize the differences between groups **(alienation)**. We calculated the brackets of income for the case of 3 segments (AB, C e DE) .

Explanatory Power of Economic Classes Segmentation: EGR x Equal Sizes

CORTES E MEDIDAS DE DESIGUALDADE - ÍNDICE DE THEIL			
% da desigualdade explicada pelo ENTRE segmentos de renda			
	CLASSES ECONOMICAS CPS/FGV	GRUPOS % IGUAIS (1/3)	
PME 2002-2003	76.71%	59.34%	
PNAD 2003	79.71%	59.91%	
PNAD 2009	74.29%	57.96%	
POF 2008-2009	71.40%	59.29%	
Fonte: CPS/FGV a partir dos microdados do IBGE			

$$T = T_e + \sum_{h=1}^K Y_h T_h$$

T_e / T is the Contribution of economic classes brackets to inequality

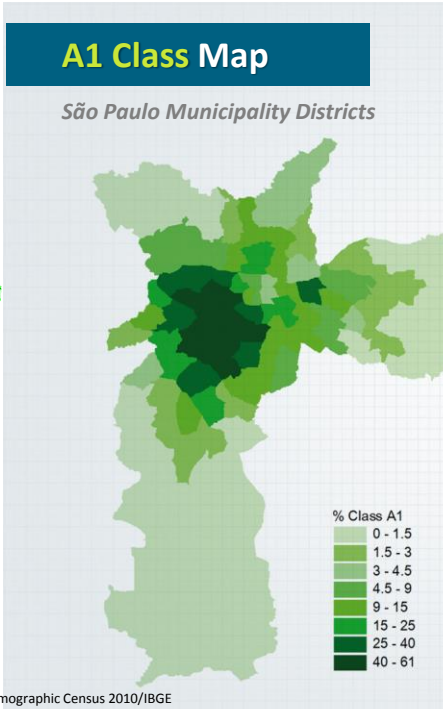
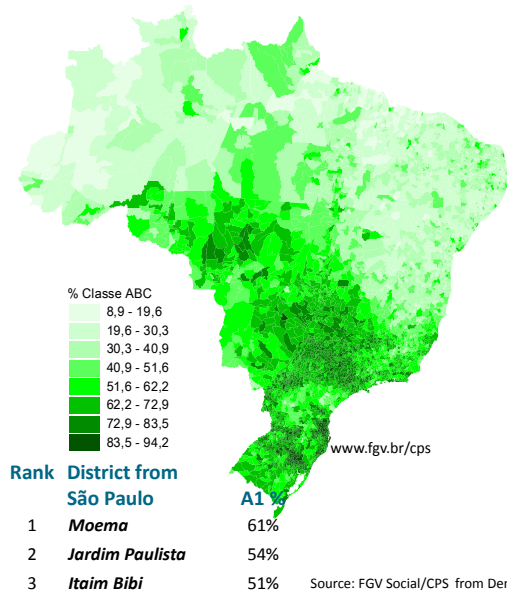
Economic Classes Defined by Total Household Income (calculated originally in per capita terms) (Monthly R\$)

			Economic Classes	Lower Limit	Upper Limit	
			Class E	0	1184	
			Class D	1184	1893	
			Class C	1893	8159	<-New Middle Class
Class B2	8159	8239	Class B	8159	10637	<-Traditional Middle Class (A+B) US style
Class B1	8239	10637				
Class A2	10637	157420	Class A	10637	-	
Class A1	157420	-				

Source: PNAD/IBGE and POF/IBGE microdata * R\$ may 2019 prices

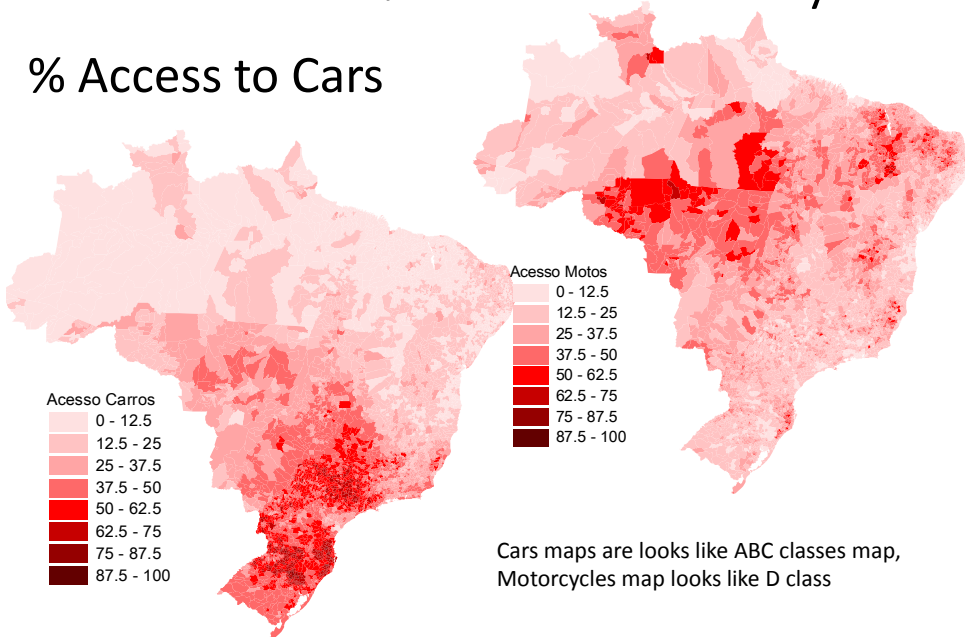
Self-perceptions on Class – in 2014 how does Brazilians ranked themselves in terms of economic class, ranging from extremely poor to the elite, passing by people who call themselves vulnerable and several middle class bands (low, medium and high). The self-perception of the whole middle class (share in ABC classes) by Brazilians is 62.76 per cent, higher than the 58.68 per cent in PNAD for 2014.

% in Class ABC - By Municipalities



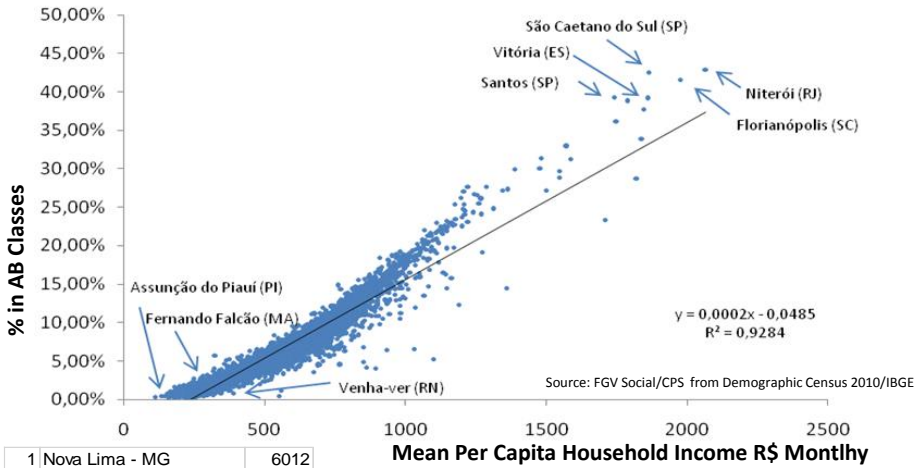
% Access to Motorcycles

% Access to Cars



Source: FGV Social/CPS from Demographic Census 2010/IBGE

% in AB Classes X Mean Per Capita Household Income



1	Nova Lima - MG	6012
2	Santana de Parnaíba - SF	5028
3	São Caetano do Sul - SP	4375
4	Niterói - RJ	4123
5	Florianópolis - SC	3827
6	Santos - SP	3657
7	Porto Alegre - RS	3605
8	Vitória - ES	3455
9	São Paulo - SP	3302
10	Vinhedo - SP	3207

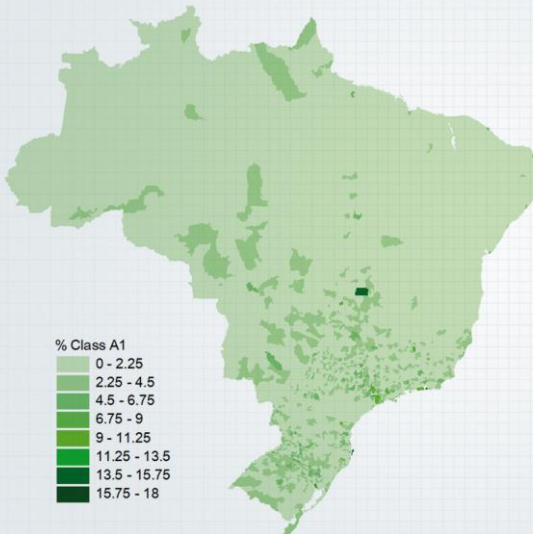
<-Ranking Individual Adult Incomes Using Personal Income Tax 2017

– among 5500 Municipalities includes those that do not declare or pay taxes (divided by the whole population)

www.fgv.br/cps/brics

A1 Class Map

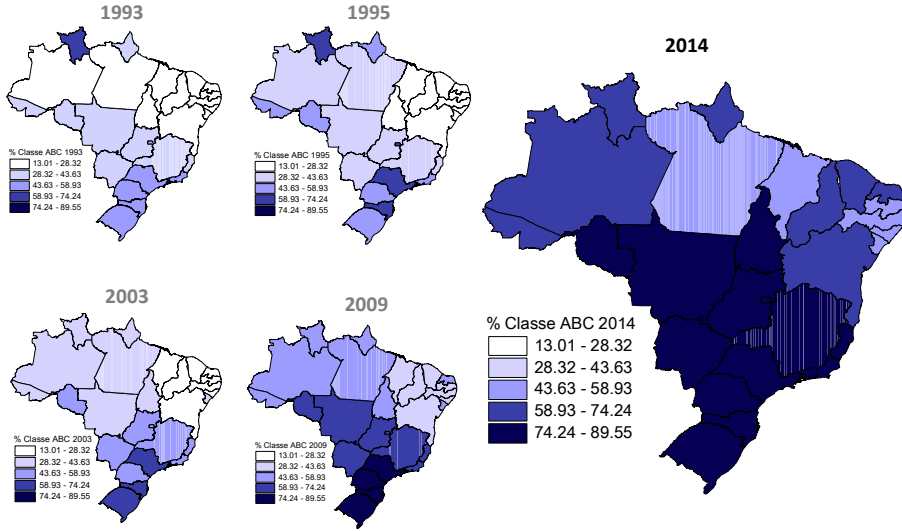
Brazilian Municipalities



Rank	Municipality	State	A1 %
1	Niterói	RJ	17.61%
2	Santana de Parnaíba	SP	16.515%
3	Vitória	ES	15.06%
4	Florianópolis	SC	14.90%
5	São Caetano do Sul	SP	14.75%
6	Brasília	DF	14.01%
7	Porto Alegre	RS	13.24%
8	Nova Lima	MG	11.64%
9	Santos	SP	11.13%
10	Balneário Camboriú	SC	10.76%
11	Belo Horizonte	MG	10.71%
12	Curitiba	PR	10.47%
13	Vinhedo	SP	10.46%
14	Presidente Castello Branco	SC	10.38%
15	Rio Fortuna	SC	10.37%
16	Rio de Janeiro	RJ	10.27%
17	Valinhos	SP	10.24%
18	São Paulo	SP	9.46%
19	Campinas	SP	9.24%
20	Holambra	SP	9.13%
21	Águas de São Pedro	SP	8.83%

Source: FGV Social/CPS from Demographic Census 2010/IBGE

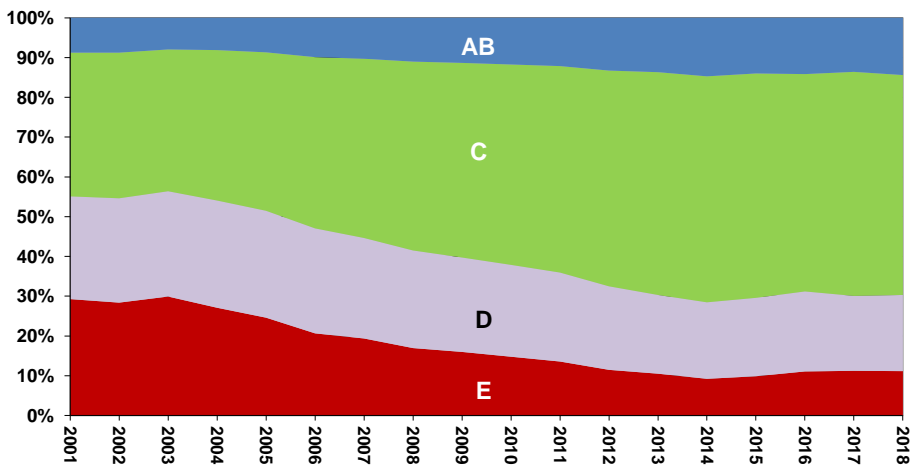
% Evolution of ABC Classes (Traditional and New Middle Classes)



Source: FGV Social/CPS from PNAD/IBGE microdata

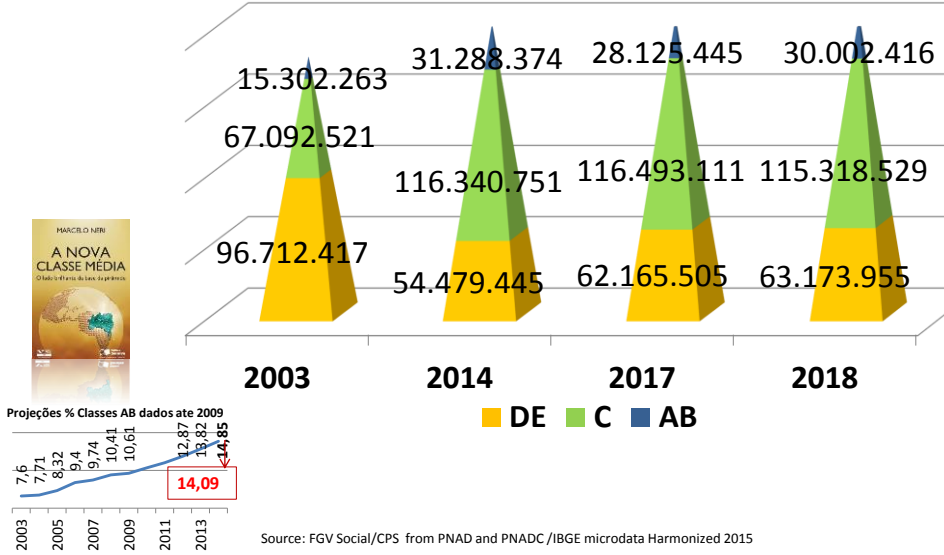
Economic Classes % Composition 1992 to 2015

Geologic Layers of Classes – Brazil

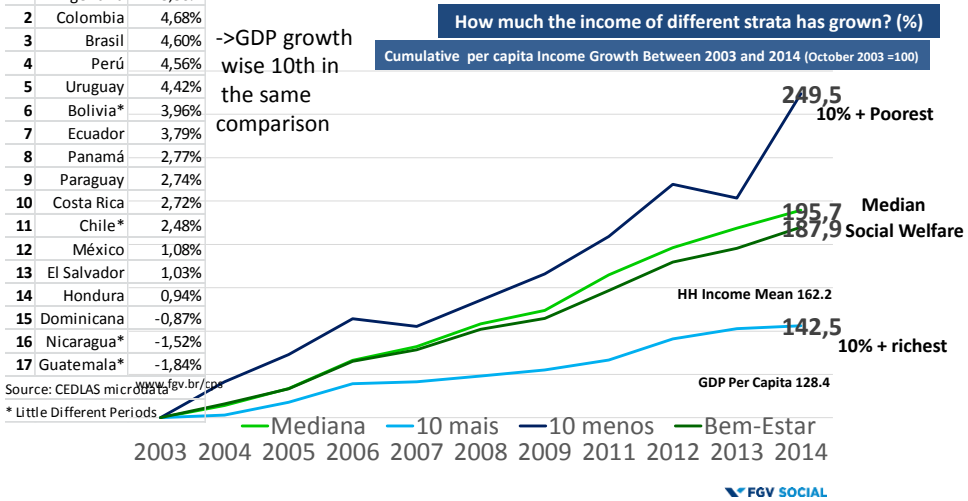


Source: FGV Social/CPS from PNAD and PNADC /IBGE microdata Harmonized 2015

Economic Classes Pyramid

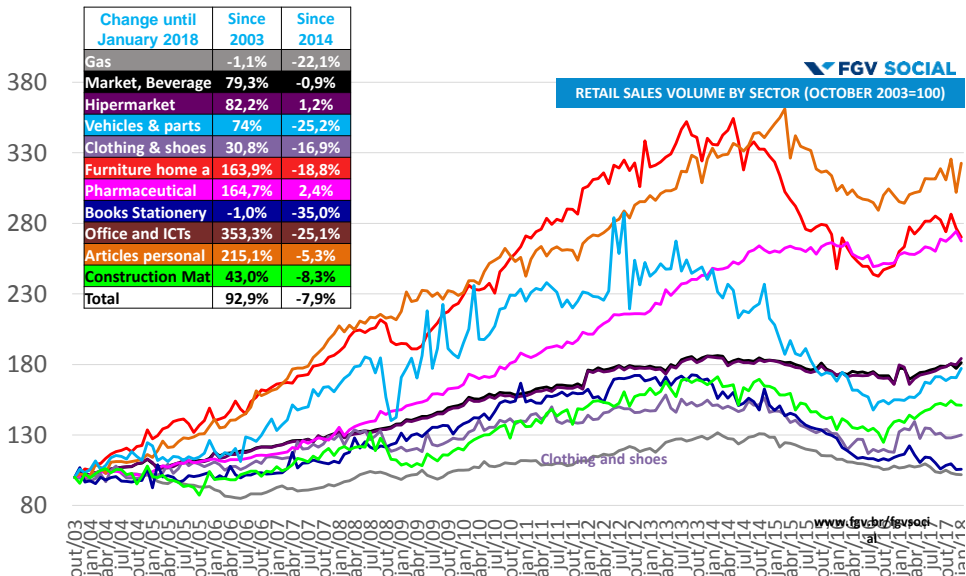
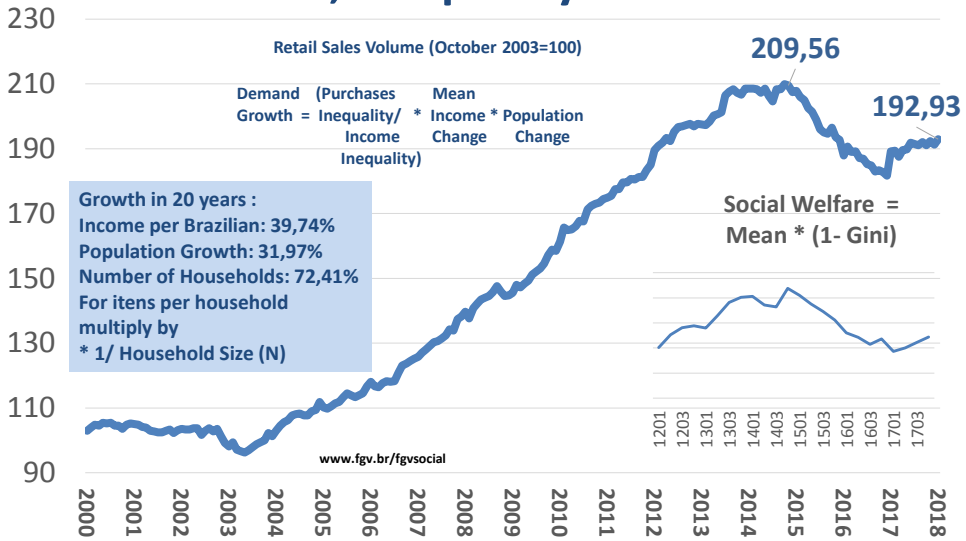


Ranking Latin America	
Annual Growth 2003-12	
Per Capita HH Income	
1	Argentina 5,50%
2	Colombia 4,68%
3	Brasil 4,60%
4	Perú 4,56%
5	Uruguay 4,42%
6	Bolivia* 3,96%
7	Ecuador 3,79%
8	Panamá 2,77%
9	Paraguay 2,74%
10	Costa Rica 2,72%
11	Chile* 2,48%
12	México 1,08%
13	El Salvador 1,03%
14	Hondura 0,94%
15	Dominicana -0,87%
16	Nicaragua* -1,52%
17	Guatemala* -1,84%



Median Cumulative Growth can be seen a relative middle class performance measure. It is close to the one for Sen Social Welfare

What Explains Sales? GDP or HH Income? Mean, Inequality or Both?

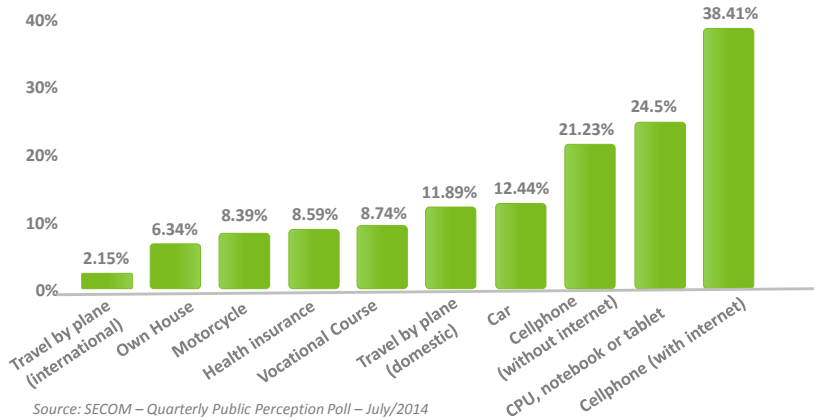


Performing a horse race (stepwise procedure) between mean income, squared income, and Economic Class to explain demand for insurance (health) the latter wins but all are significant

Highly non linear income impact at the micro level

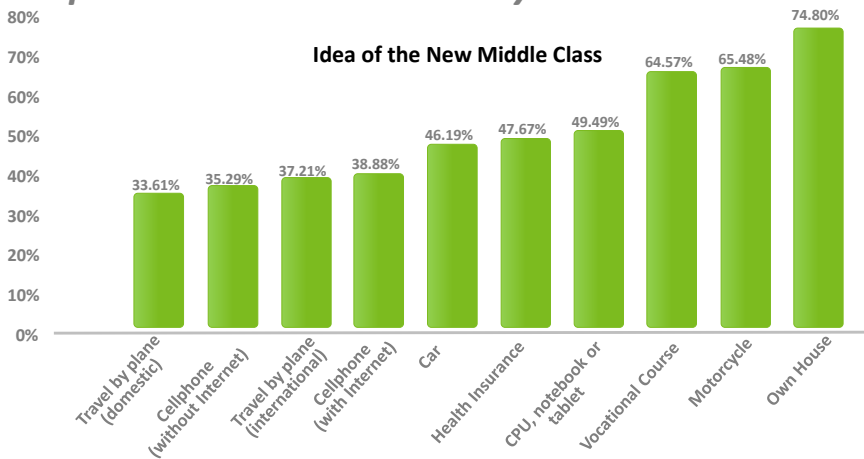
Acquisition of Goods and Services

Acquired this good or service in the last 3 years (%)?



1st Acquisition of Goods and Services

1st time acquiring goods or services: Among those who purchased it in the last 3 years



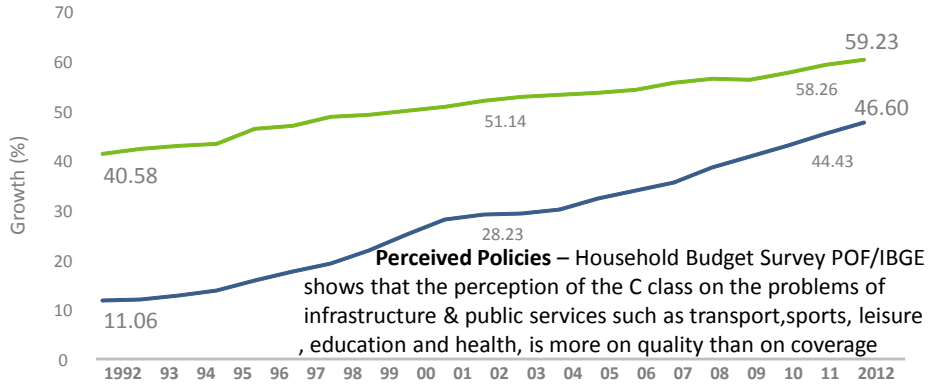
**only takes into account the ones who acquired the good or service in the last 3 years*

Source: SAE designed questions in SECOM – Quarterly Public Perception Poll – July/2014

Coverage of Basic Goods and Services

Pop. with basic set of durable goods X
Pop. with basic set of public services

Conditions in Houses improved + than public services out



Notes:

* = telephone (landline or mobile), color TV, stove with two burners or +, refrigerator, radio and washing machine
 ** = electricity, garbage collection, sewage (rede ou fossa ligada à rede), water (rede).

Source: Pnad/IBGE microdata. Excluding rural areas of the North region (except Tocantins).

Channels of Impact of Policies for the Middle Class

