

Idiosyncrasies of Intergenerational Public Transfers in Brazil

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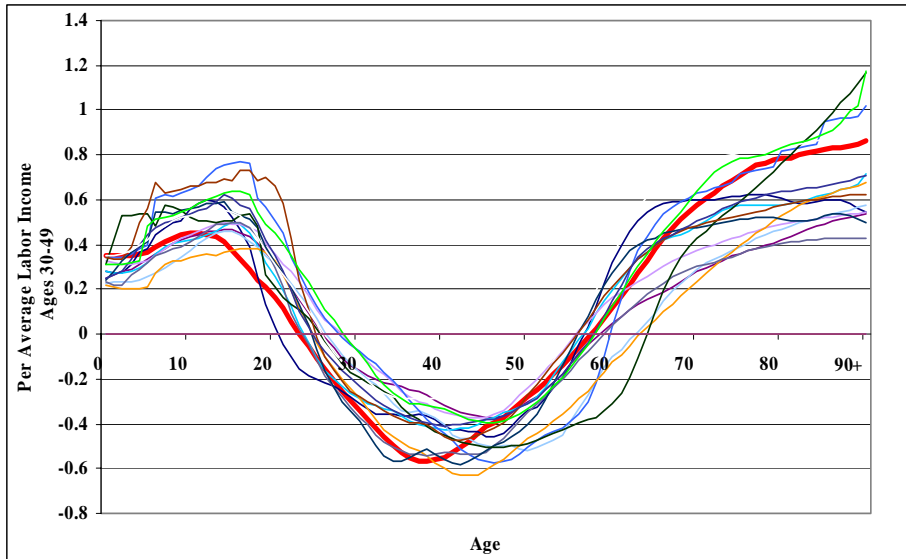
Outline

1. An overview of intergenerational transfers in Brazil: common features with other countries
2. Idiosyncrasies
 1. Elderly-biased public transfers
 2. Heterogeneity within age groups (coverage rates and SES differentials)
3. Future research

Economic Life Cycle in Brazil: common features with other populations

1. **The economic life cycle is characterized by three stages = a surplus stage interjects two stages of dependency** (like most contemporaneous societies; Lee (2003))

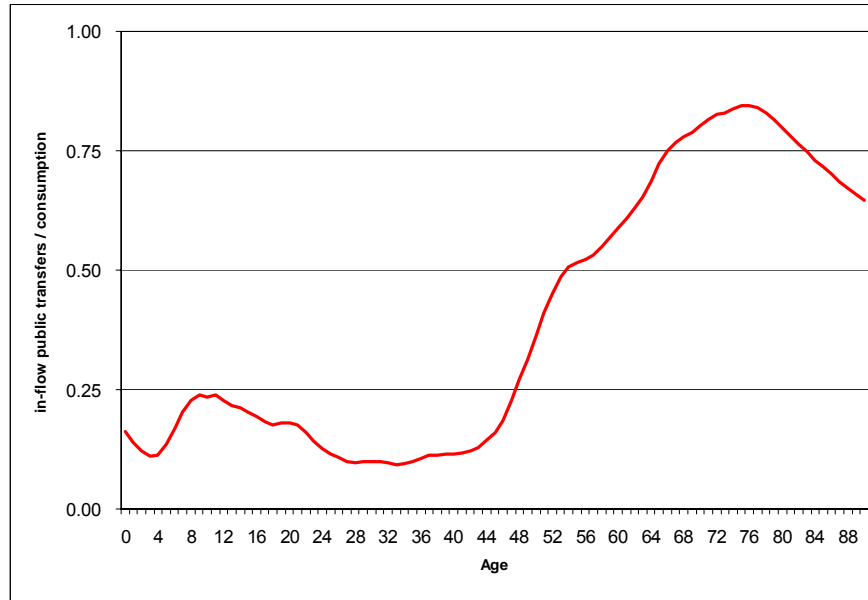
Life-cycle deficit (Brazil vs. other countries)



Economic Life Cycle in Brazil: common features with other populations

- 2. Most of the consumption at older ages are provided by public transfers**

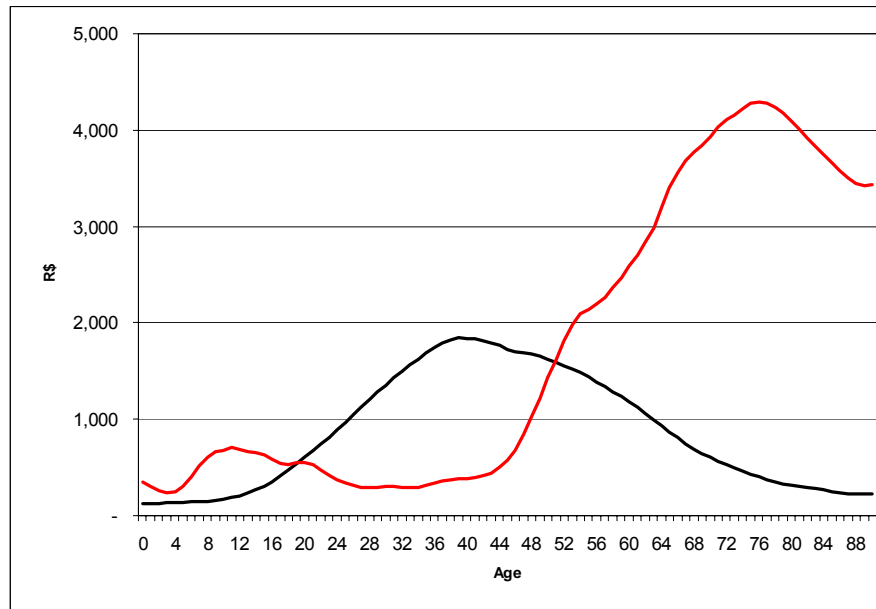
Public transfers (in-flow) as a proportion of total consumption



Economic Life Cycle in Brazil: common features with other populations

- 3. Most of out-transfers in the public sector come from the working age population**

Public Transfers Age Profiles (Out- and In-flows)
Brazil 1996



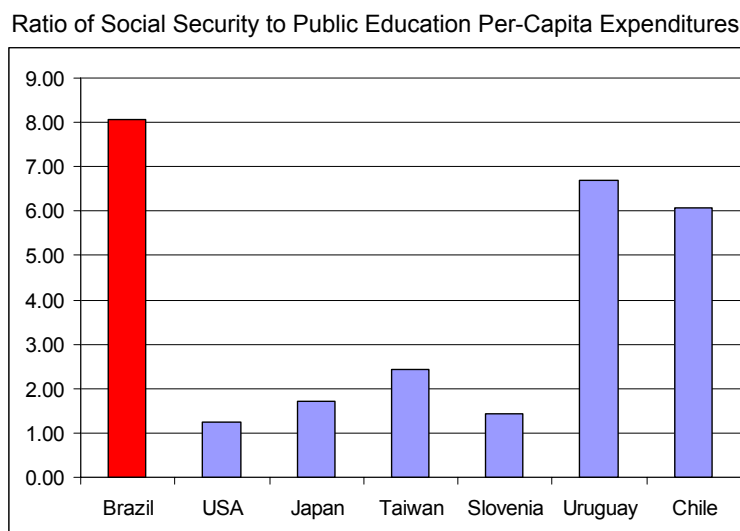
Economic Life Cycle in Brazil: common features with other populations

- 4. Most of the consumption among children is provided by private (familial) transfers**

First Idiosyncrasy: Elderly-biased public transfers

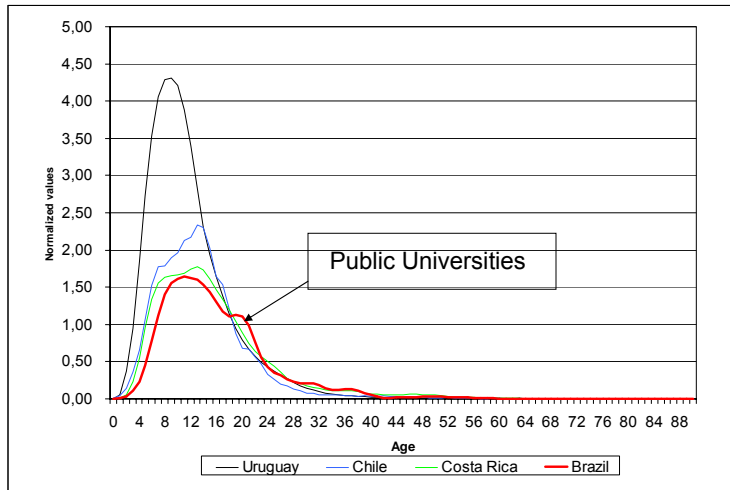
Shouldn't a developing country with young age structure and low levels of human capital have larger flows of public transfers directed to children?

Compared to other countries, Brazil has larger flows directed to the elderly relative to children

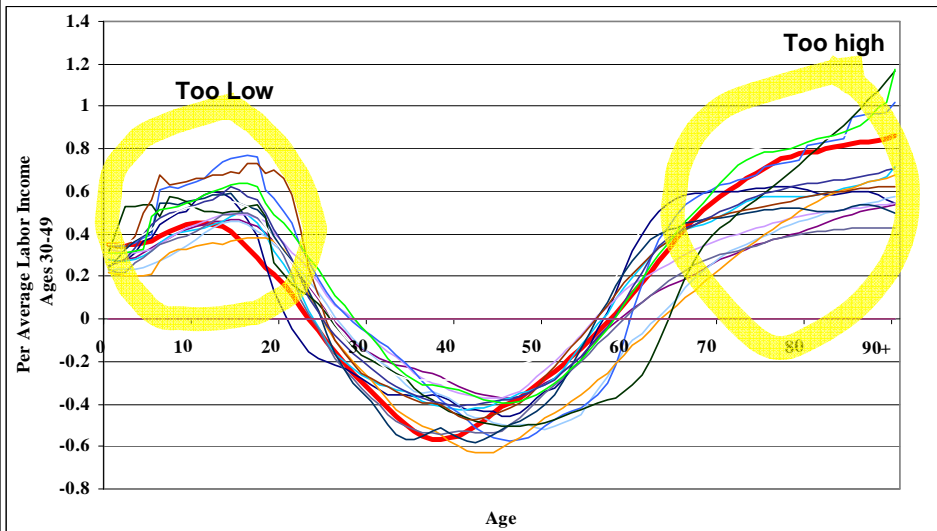


A clear underinvestment in public education compared to other Latin American countries

Public Education Per-Capita Expenditures (normalized ages 15-24)

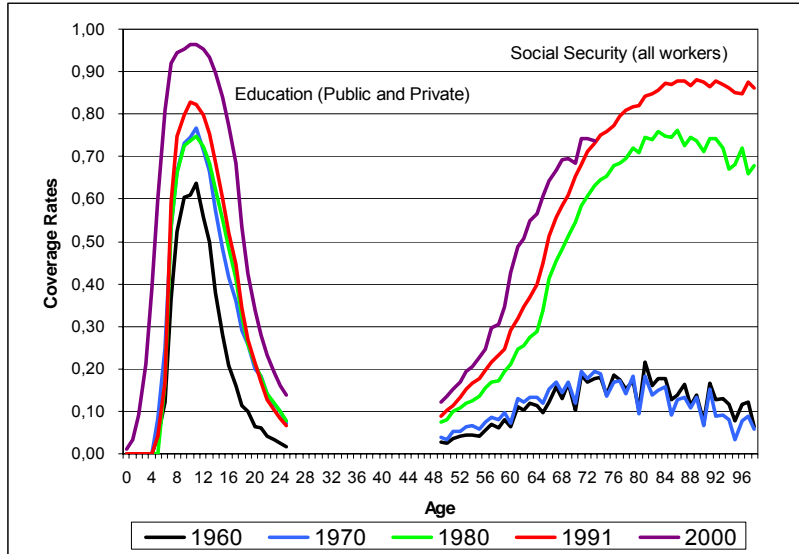


Indeed the Brazilian life cycle deficit is not that similar to those from other countries...



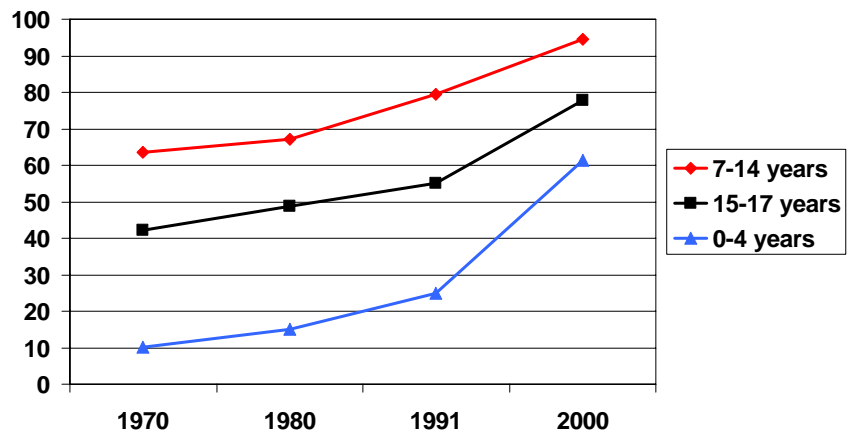
Part of the answer lies on how social insurance programs were historically established in Brazil

Coverage Rates, Education and Social Security, Brazil (Census Data)



Part of the answer lies on how social insurance programs were historically established in Brazil

Coverage Rates, Education, Brazil, 1970-2000



Part of the answer lies on how social insurance programs were historically established in Brazil

Public Expenditures, % of GDP

Year	Education	Social Security Private Workers	Social Security Public Servants
1980	2.71	3.47	2.48
1985	2.92	3.44	2.48
1990	4.21	3.26	4.54
1995	3.90	5.64	4.10
2000	3.09	6.06	4.75

10.81

Why has the social security system been developed before the expansion of the educational system?

1. Becker and Murphy's Efficiency Hypothesis: it seems not to work in Brazil since the social security expansion preceded larger investments in education
2. Intergenerational Conflict Hypothesis: poorer children lost political conflict to wealthier children and the elderly. It depends heavily on the validity of the median vote model.
3. Industrial-bias / Urban-bias Explanation (Filgueira-Draibe): the dual system of social states favored the urban middle class in the formal sector. Urban middle-class provided the needed skilled labor force for the economy and got protection at older ages (social security).

The development of recent cash-transfer programs confirms elderly biased policies

Bolsa-Familia (Main Features)

- Target: poor families (per capita income from R\$60,01 to R\$120,00) and extremely poor families (below R\$60,00);
- Aim: reduce poverty and break poverty cycle;
- Cash transfers varies from R\$15,00 to R\$95,00, depending on per capita income and family size;
- Conditional on health care and school attendance;
- About 11 million families (45 million beneficiaries) in 2006;
- Expenditure: 0.36% of GDP in 2005

The development of recent cash-transfer programs confirms elderly biased policies

Benefício de Prestação Continuada (Main Features)

- Cash assistance for poor elderly (65 and over) and person with disability with family per capita income below $\frac{1}{4}$ of the minimum wage; pays minimum wage
- Benefit is independent of previous social security contribution and is not subject to any conditionality;
- It is not a family benefit, 2 persons in the same family can receive the benefit;
- Beneficiaries: 2 million individuals (about 50% elderly);
- Expenditures: 0.46% of GDP in 2005;
- BPC is larger than any other social assistance program in Brazil

The development of recent cash-transfer programs confirms elderly biased policies

Social Security for Rural Workers (1988 Reform)

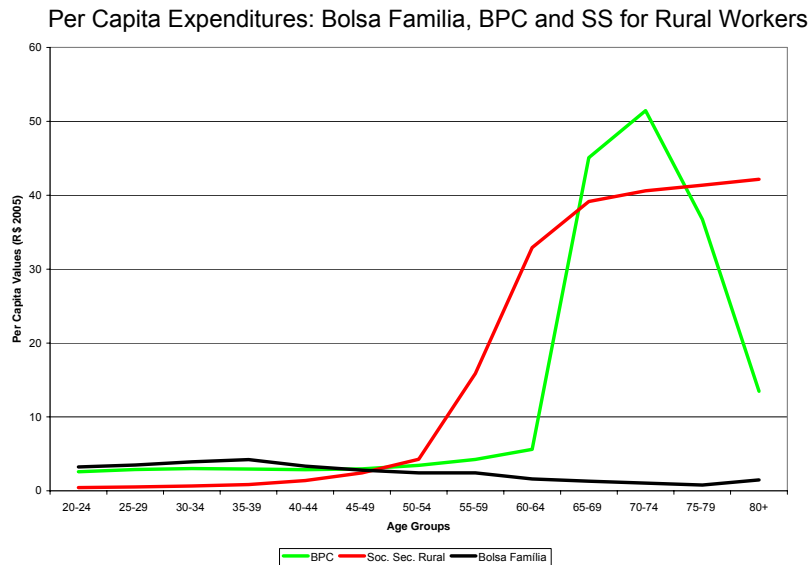
- Normal retirement age: 60 for males and 55 for females (5 years less than urban workers), before 1988 normal age was 65 for males and females;
- Minimum benefit equals 1 minimum wage (R\$ 380,00), early law limited to ½ of minimum wage;
- Until 1988 only head of household was eligible to receive the benefit, after 1988 all members of household are eligible;
- Up to 1991 no previous social security contribution was required, after that 2% of primary agricultural product sales;
- About 6 million beneficiaries in 2004;
- Expenditures: about 0.7% of GDP in 2004.

The development of recent cash-transfer programs confirms elderly biased policies

Comparing Bolsa-Familia with BPC and Social Security for Rural Workers

- Social assistance programs directed to the elderly do not have any conditionality;
- Programs to the elderly require very little (or none) contribution during working ages;
- Cash transfer to the elderly are smaller in number of beneficiaries but larger in terms of expenditures;
- Some evidence they create disincentives for low income young workers to contribute to the social security system.

The development of recent cash-transfer programs confirms elderly biased policies



Second Idiosyncrasy:

High Heterogeneity within age groups

Changes in the mean values and direction of public transfers depend not only on changes in the age structure but also on changes in the economic age profiles. In Brazil, there is still room for coverage rates to vary over time, with implications for the demographic dividends

Decomposing the heterogeneity of public transfers

$$g_j = \sum g_{ji} \times \alpha_i = \sum \Pi_{ji} \times \rho_{ji} \times \alpha_i$$

g_j = Per capita expenditure on the provision of service j to the population

g_{ji} = Per capita expenditure on the provision of service j to the age group i

ρ_{ji} = Per capita expenditure among the beneficiary population

Π_{ji} = Proportion of the beneficiary population of service j at age group i

α_i = Proportional age distribution

Ex.: Coverage rates in education are changing over time with implications for the age profiles

(not weighted by the population age structure)

	1960	1970	1980	1991	2000
Average coverage rate (ages 4-17)	35%	49%	50%	58%	83%
Mean Age	12.29	13.28	13.55	13.72	12.62
Standard Deviation	3.75	4.52	4.43	4.29	5.19

Also If we stratify the population by SES, then we may have heterogeneity stemming from both per capita expenditures and coverage rates

Public Transfer System & Level of Education of Household Head	Per Capita Flows (R\$)		
	Taxes Paid	Transfers Received	
Education			
0-4 years	285	313	↓
5-8 years	493	267	
9-11 years	878	297	
12+ years	2,178	637	
Health			
0-4 years	163	226	↑
5-8 years	286	195	
9-11 years	721	137	
12+ years	2,183	47	
Social Security			
0-4 years	414	1,682	↓
5-8 years	715	4,241	
9-11 years	2,226	5,742	
12+ years	7,264	14,087	

Future Research

1. Public transfers in Brazil and in many other Latin American countries seem to be biased towards the elderly. A more systematic analysis of historical data for the region is necessary to identify causes and implications of this pattern. Do we still have time left to “untie the knot”, improve human capital while keeping social security sustainable in the future?

Future Research

2. Downward private transfers, from the elderly to adults and children, may have increased over time in Brazil due to the significant growth of the social security system. If so, what are the implications for the wellbeing of younger people? Shouldn't we increase flows of public transfers to the children? Wouldn't this be a more efficient strategy?

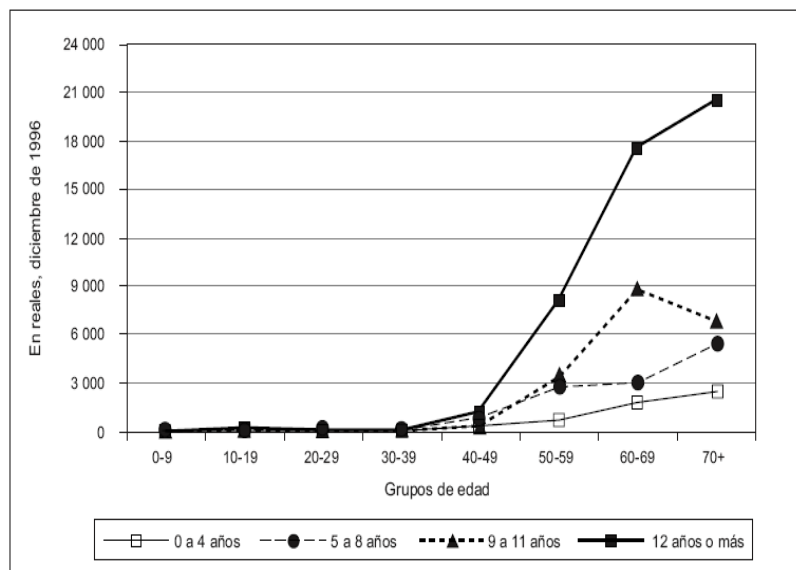
Future Research

3. We have been witnessing an increase in non-contributory social insurance programs in Brazil. What would be the implications of these systems for intergenerational equity in the future?

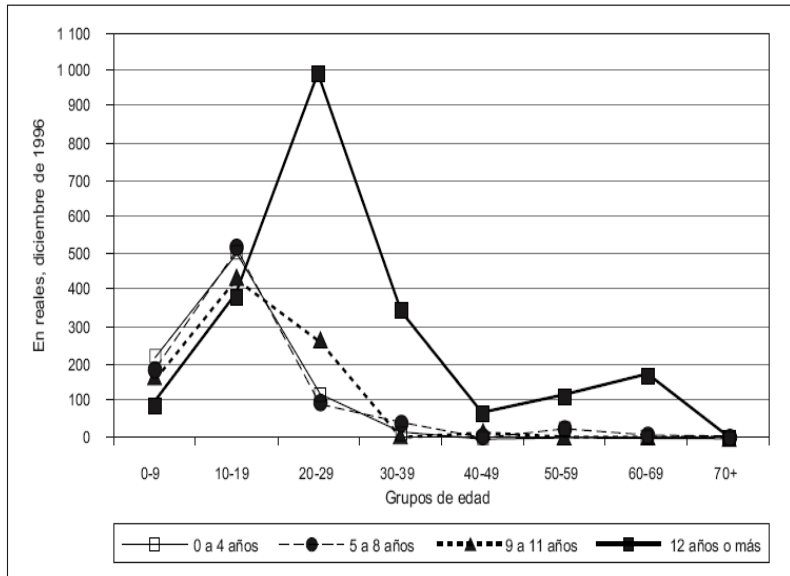
Future Research

4. Brazil is a very heterogeneous country. Decomposing the mean inter-age transfers (arrow diagrams) according to changes in age structure, coverage and participation rates, and mean values, would cast light on the importance of each component for intergenerational re-allocations. Also, adding the socioeconomic dimension uncovers another important source of variance.

Nominal



Nominal



Nominal

