

# NTA Costa Rican case

Luis Rosero-Bixby

University of Costa Rica

# Outline

- Provide background information
- Show some peculiarities
- Some comparisons over time

# Costa Rica

QuickTime™ and a  
TIFF (LZW) decompressor  
are needed to see this picture.



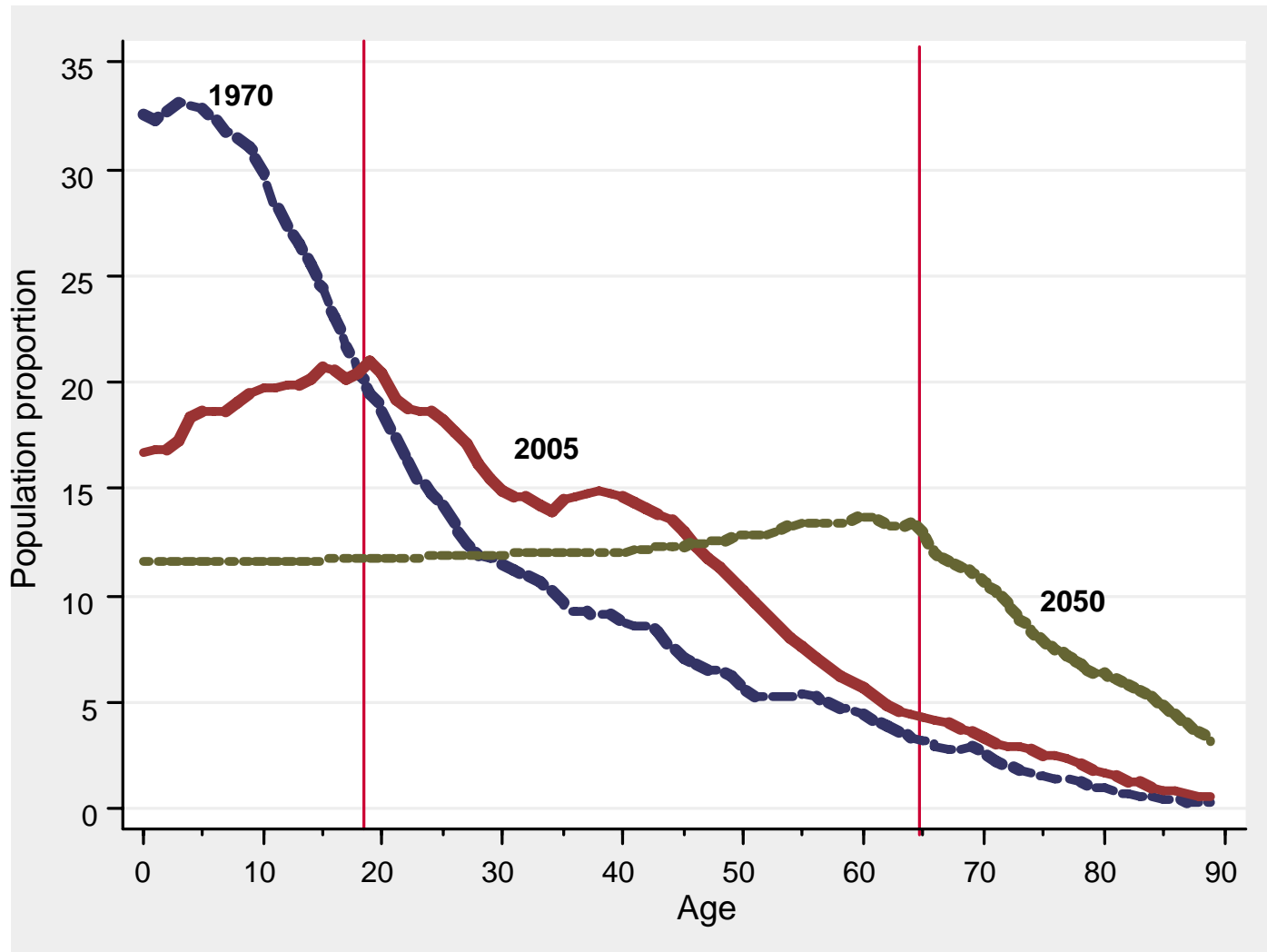
## A middle income country with high social development and a strong public sector

Indicator	CR	Mexico	USA
GNI per capita, Atlas method (US\$)	4,470	6,930	41,440
School enrollment, tertiary (% gross)	25.3	23.4	82.4
Health expenditure per capita (\$)	305	372	5,711
Public health expenditure (% of health expenditures)	78.8	46.4	44.6
Seniors with health insurance (% of population 65+)	96	62	100
Seniors with a pension (% of population 65+)	63	...	...
Military expenditure (% of GDP)	0.0	0.4	4.0

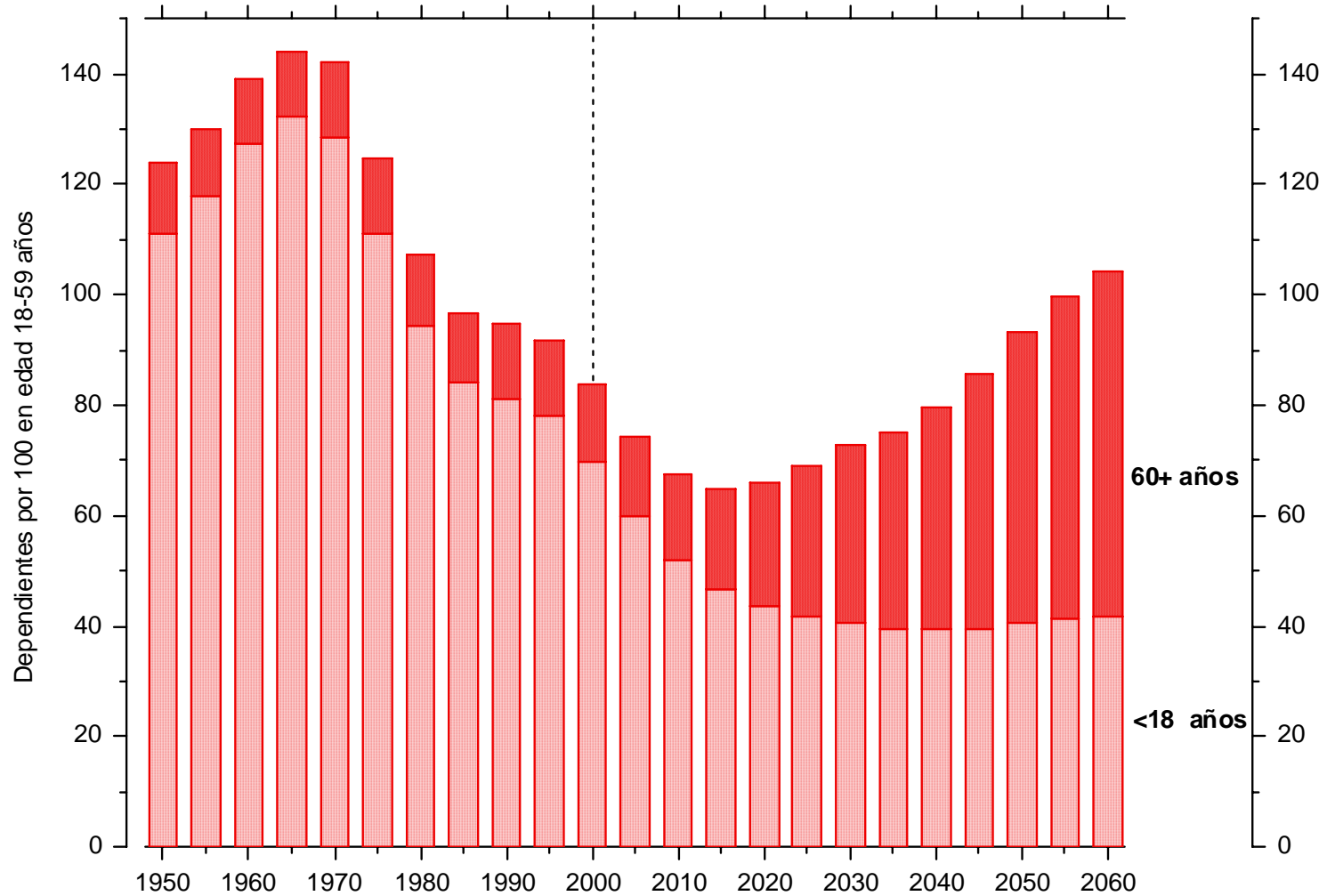
# Advanced, but recent, demographic transition

Indicator	CR	Mexico	USA
Life expectancy at birth, total (years)	78.7	75.1	77.4
Fertility rate, total (births per woman)	2.00	2.20	2.04
International migrant stock (% total pop.)	10.2	0.6	12.9
Population ages 65+ (% total population)	5.6	5.1	12.3

# Dramatic change in age structure



# Favorable dependency ratio



## Strong family networks (living arrangements of the elderly in three countries)

	CR	Spain	England
<b>Coresidence</b>			
Alone	10%	23%	33%
With spouse only	18	42	53
With spouse and others (including children)	40	21	8
With children, no spouse	22	9	4
With others (no children or spouse)	9	5	2
<b>Contact with children</b>			
Weekly	87	77	57
<b>Receipt of help (ADL/IADL)</b>	34	22	29



# Data for estimating the NTA

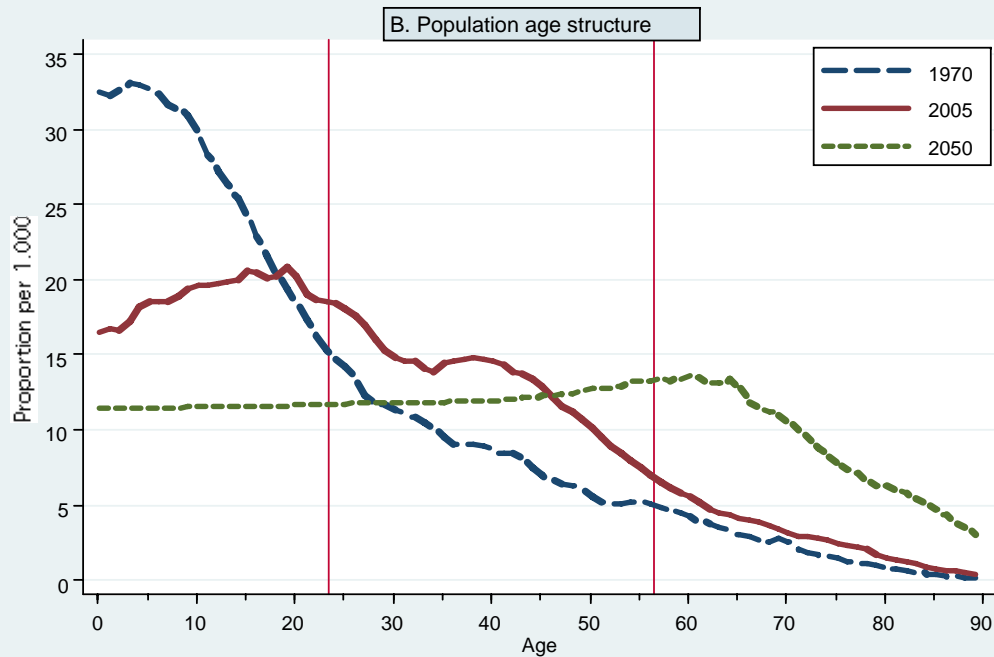
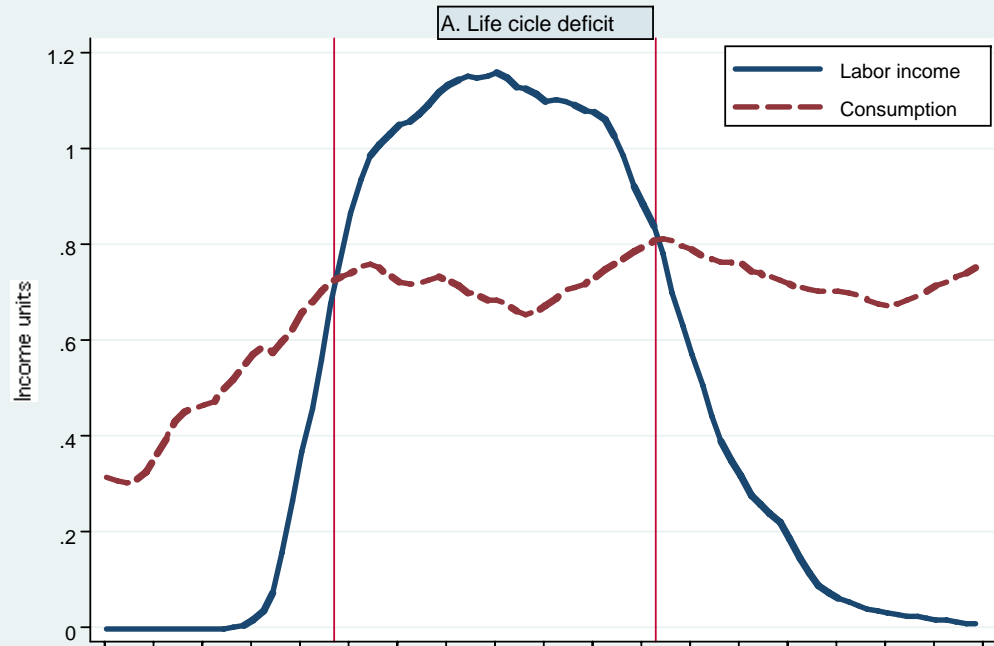
- For age profiles: HH income and expenditure surveys 2004 and 1988, ~4K HH, 16K people
- Totals adjusted to National Income and Product accounts by the Central Bank and population by single ages.
- Government expenditures
- Average cost of public health and education services
- Demographic data: mortality, population

# Methods

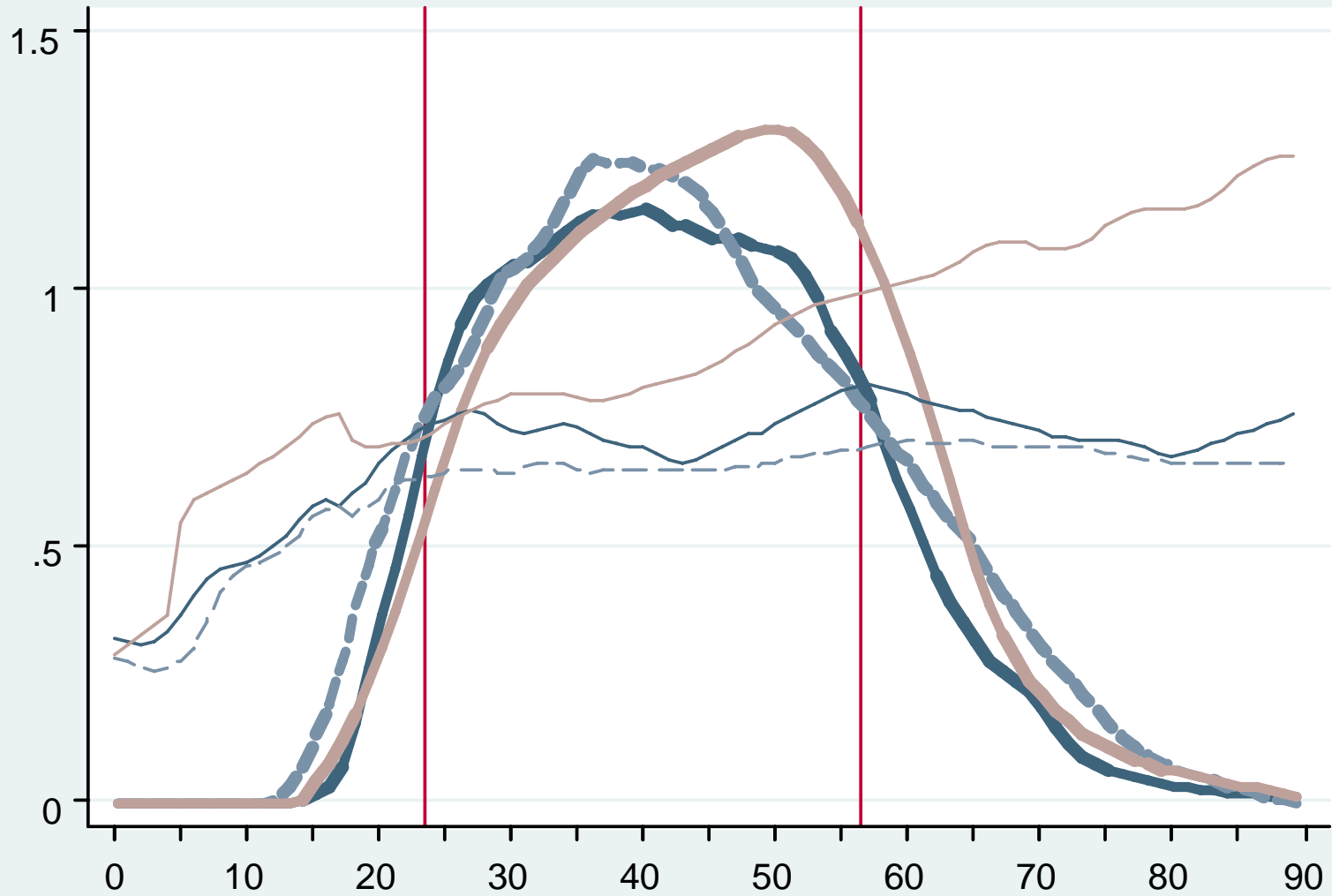
- Guidelines by the NTA project, except:
- Bequests: deaths with Monte-carlo simulation, and inheritances go proportionally to co-resident HH members (to the cohort 27 year younger if living alone)
- Indirect taxes: sale tax paid by consumers, import and other taxes paid by producers.
- Economic HH head (instead of hierarchical)

The life cycle deficit in 2004

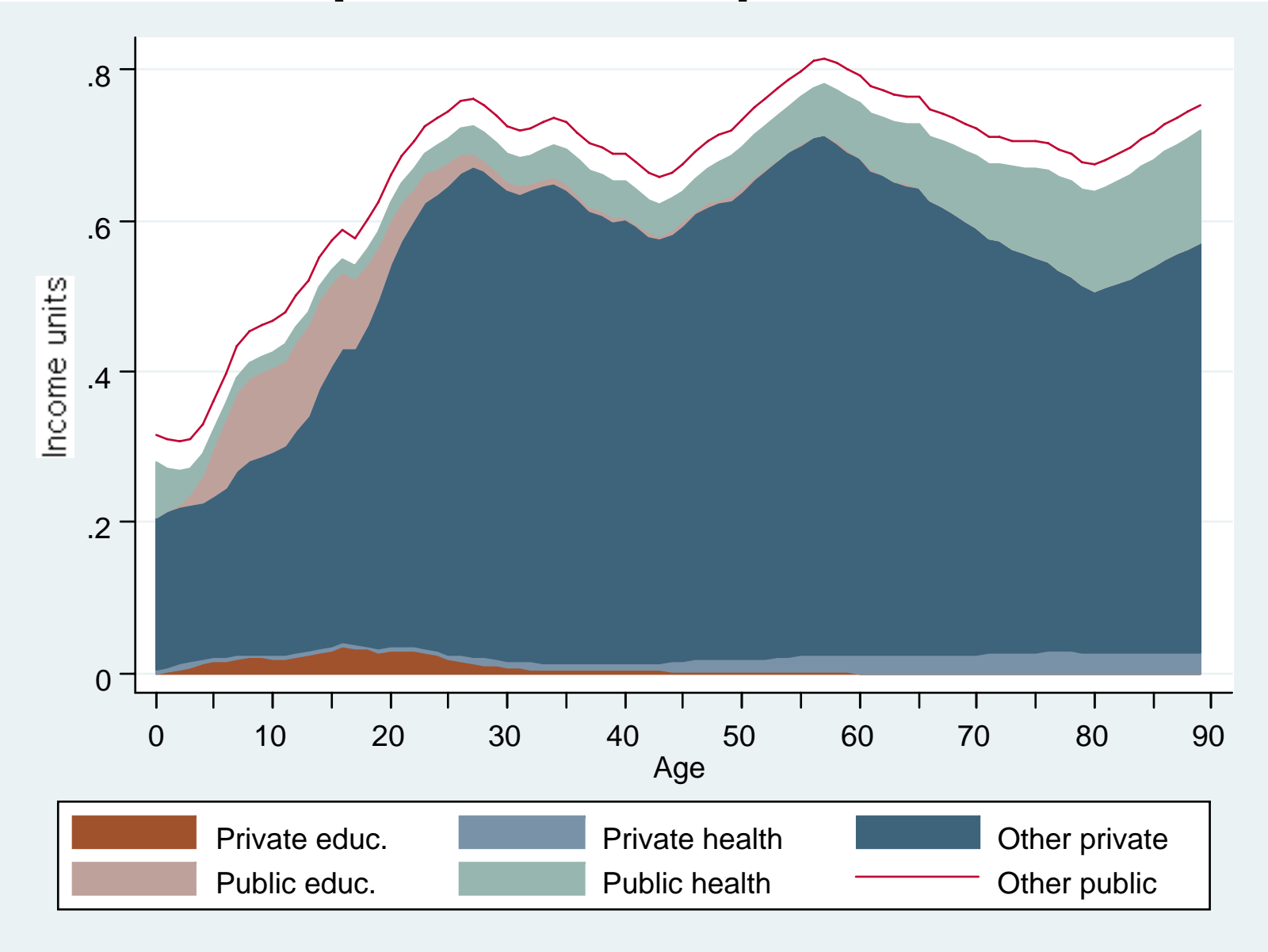
and the changing population age



# LCD comparisons



# Consumption components 2004



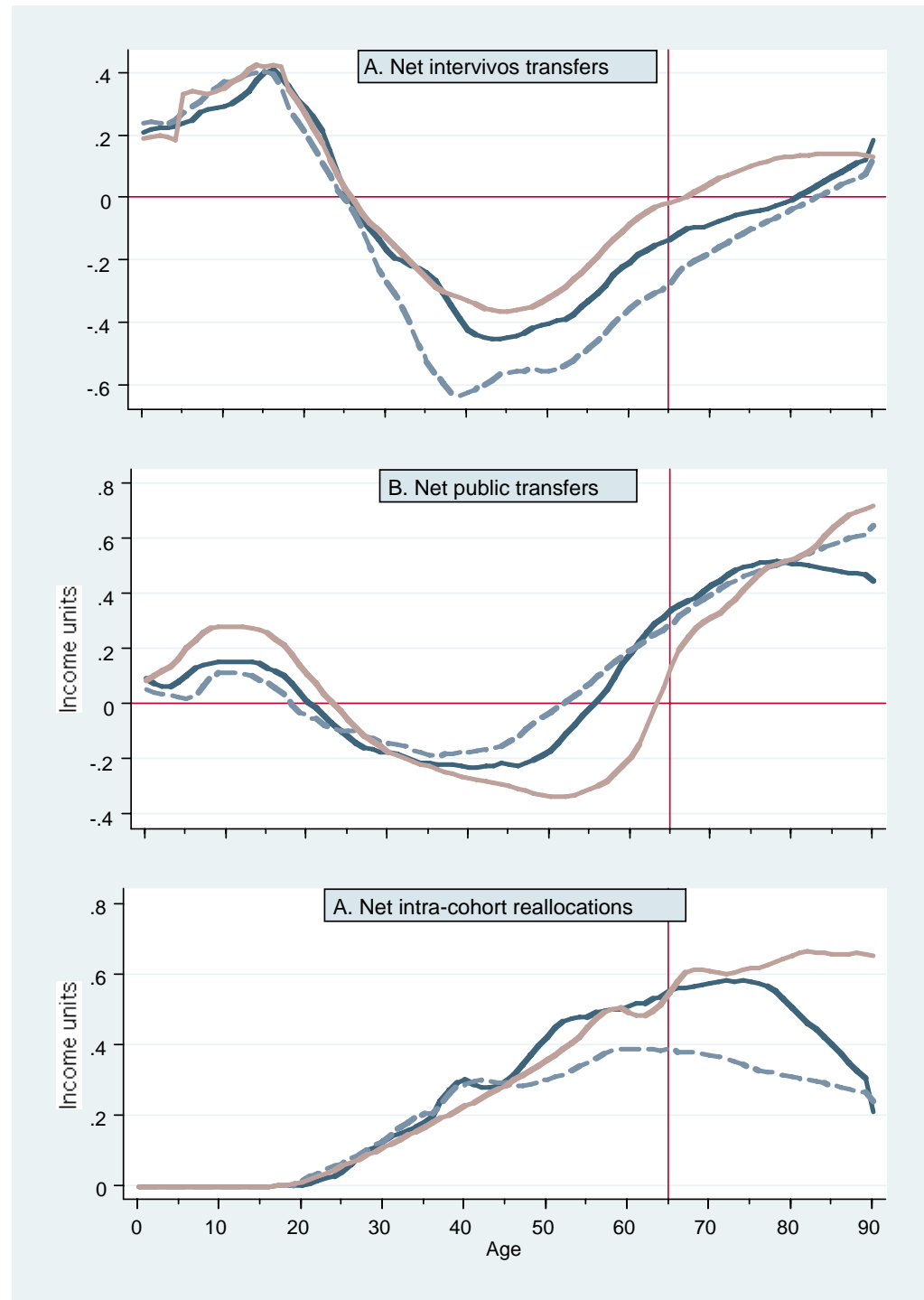
# Consumption funding at ages 65+

---

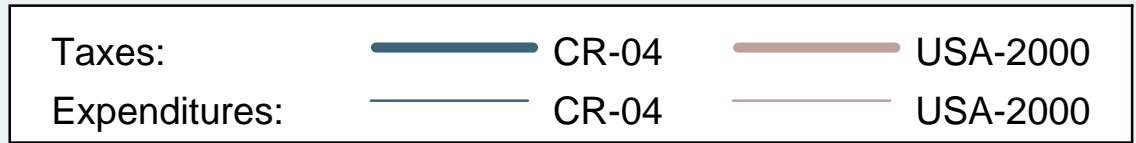
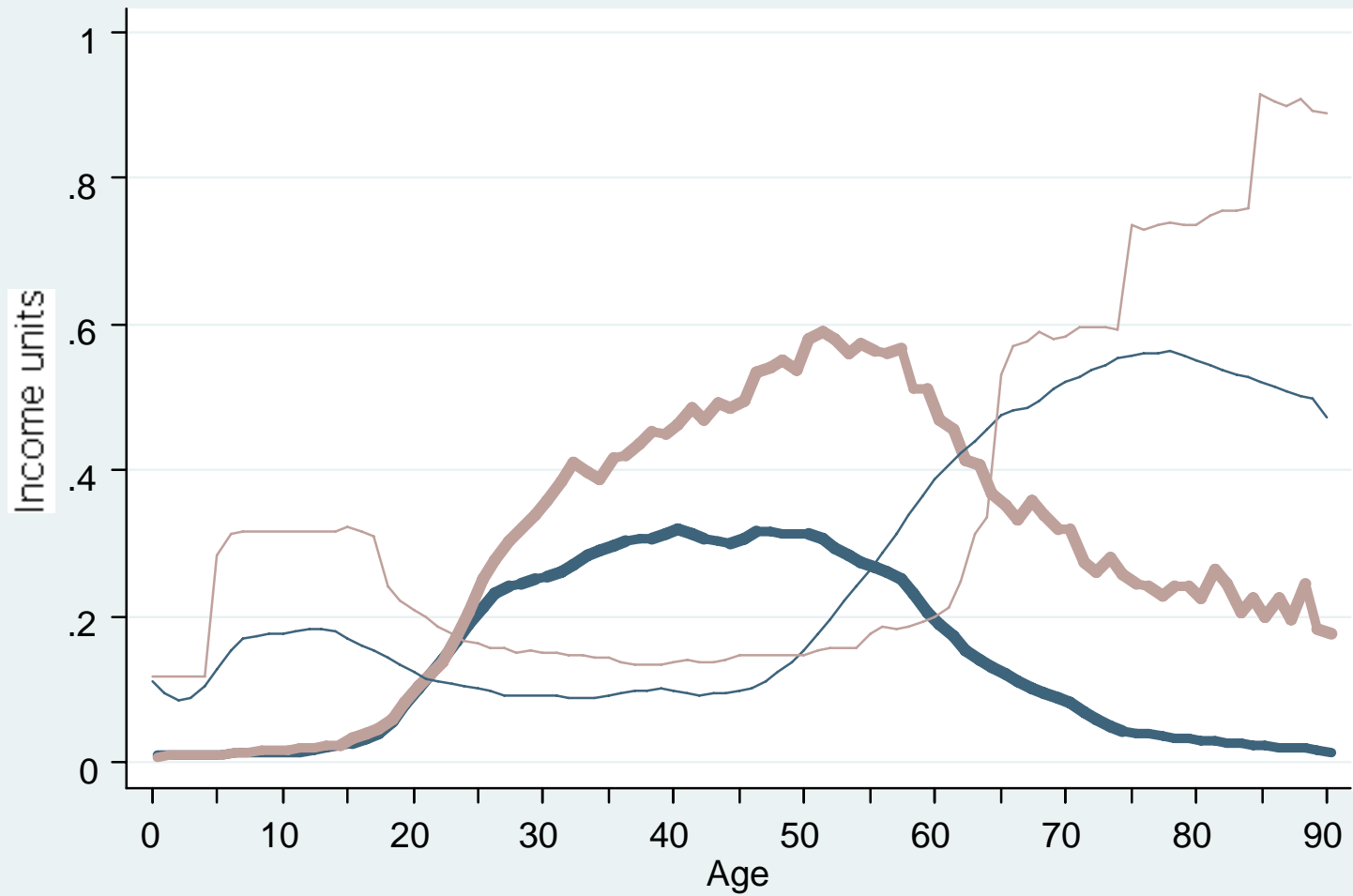
		Taiwan	USA
Consumption funding	CR 2004	1998	2000
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
Labor	19	12	15
Asset reallocation	37	31	55
Public transfers	57	29	37
Intervivos transfers	2	39	7
Bequests	-15	-12	-15

---

# Net transfers: Inter-vivos Public Intra-cohort

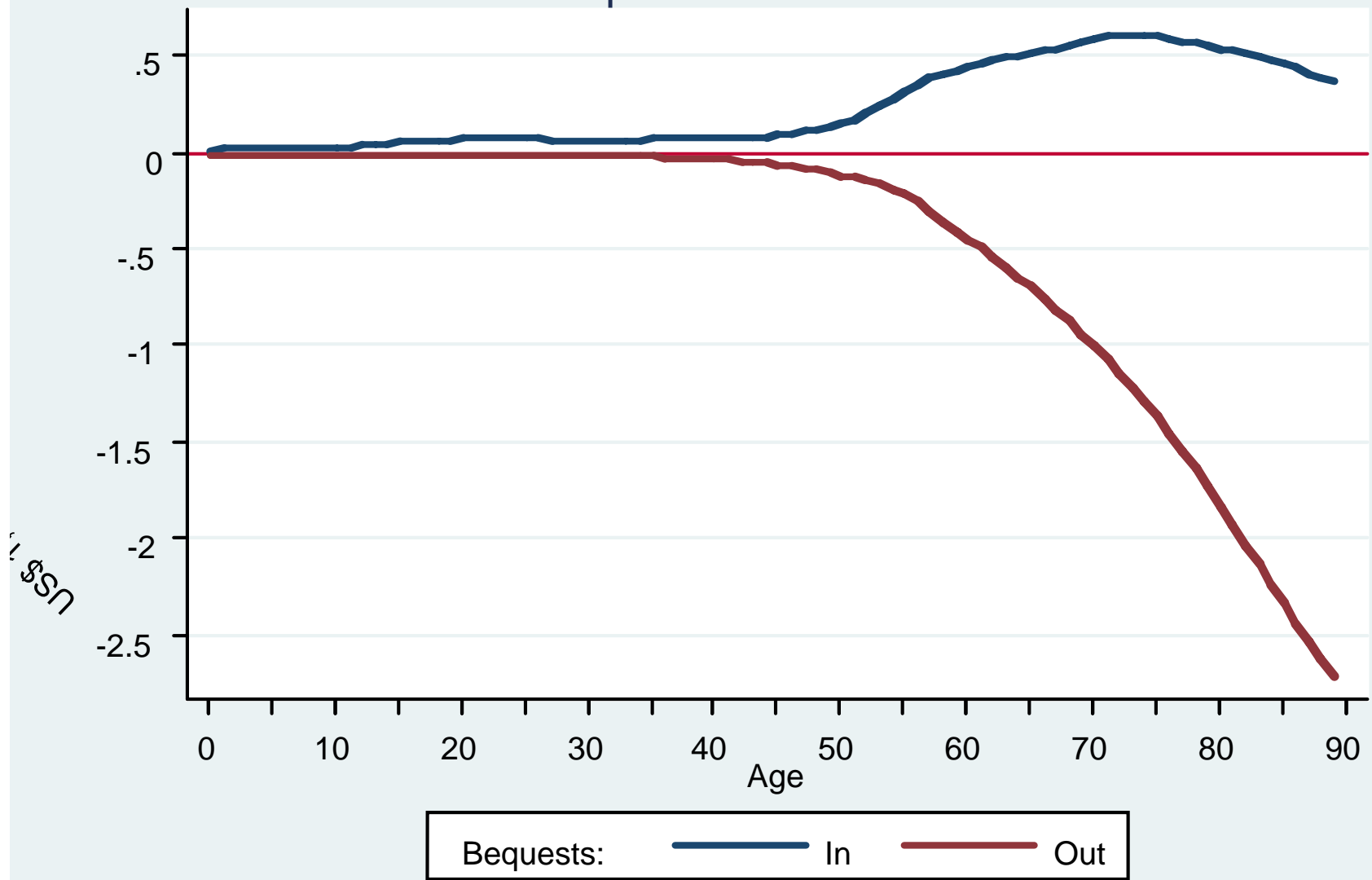


# Public transfers in CR and the USA

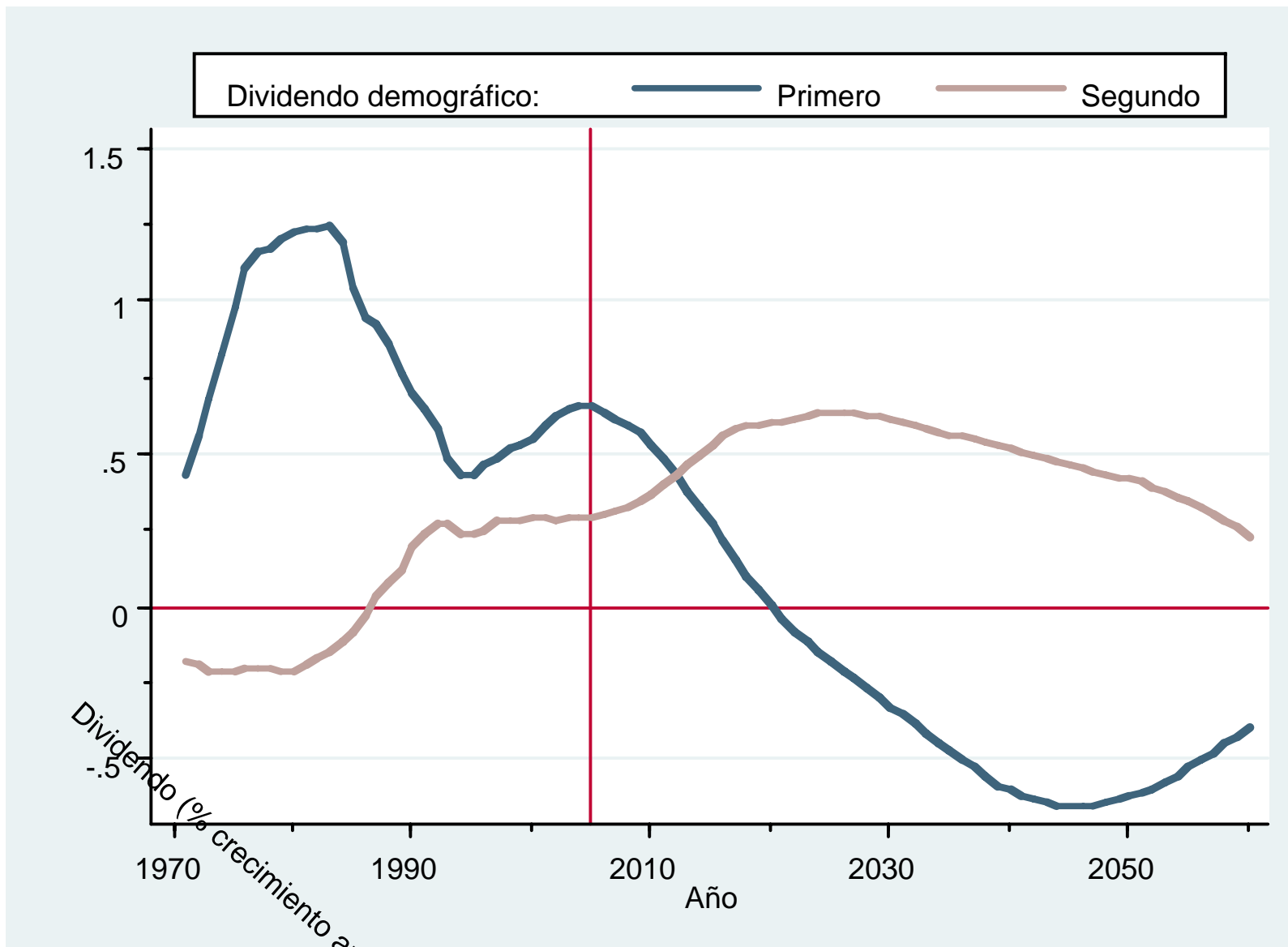




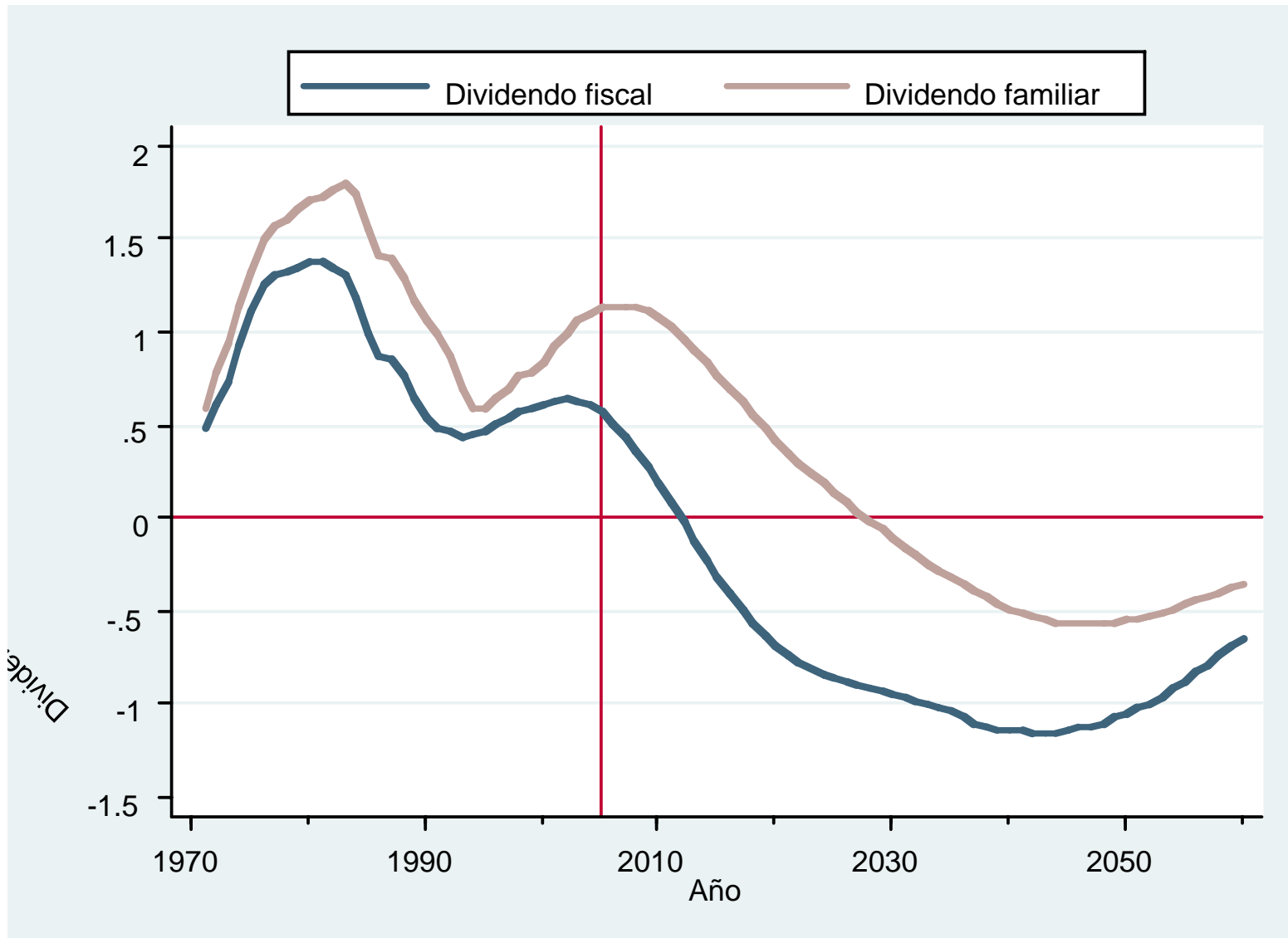
# Transfer bequests. Costa Rica 2004



# Los dos bonos demográficos



# Componentes del primer bono



# Crecimiento económico de los bonos

Dividendos demográficos	Tasa anual (%)		Todo el periodo (%)	
	1980-2005	2005-30	1980-2005	2005-30
Primer dividendo	0.72	0.14	20	4
Dividendo fiscal	0.71	-0.40	19	-9
Dividendo familiar	1.08	0.55	31	14
Segundo dividendo	0.15	0.52	4	15
Crecimiento observado o deseado	0.85	3.00	24	109

Gracias!