

Cuentas Nacionales Distributivas (DINA)

Costa Rica: conciliación de las estimaciones de los ingresos provenientes de distintas fuentes, 2000-2020.

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Paris School of Economics & World Inequality Lab

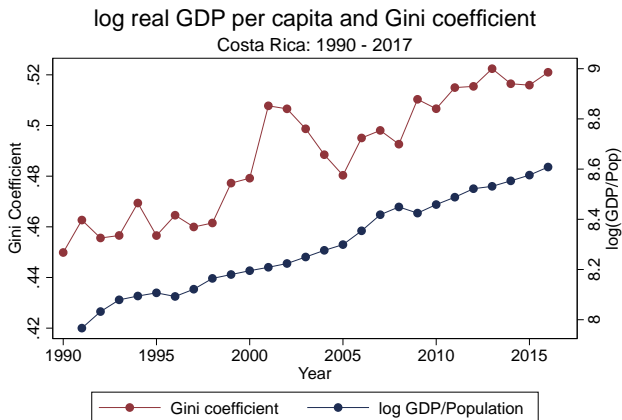
The logo for the World Inequality Lab is positioned on the right side of the slide. It features two overlapping teal circles. The text 'WORLD INEQUALITY LAB' is displayed in white, with 'WORLD' on the top line, 'INEQUALITY' in the middle, and 'LAB' on the bottom line. To the right of the text is a vertical column of white dots of varying sizes, arranged in a pattern that suggests a staircase or a data visualization. The dots are arranged in a grid-like fashion, with the top row having 10 dots, the second row having 9 dots, and so on, creating a descending staircase effect.

WORLD
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Motivación

Contexto: PIB y desigualdad crecientes

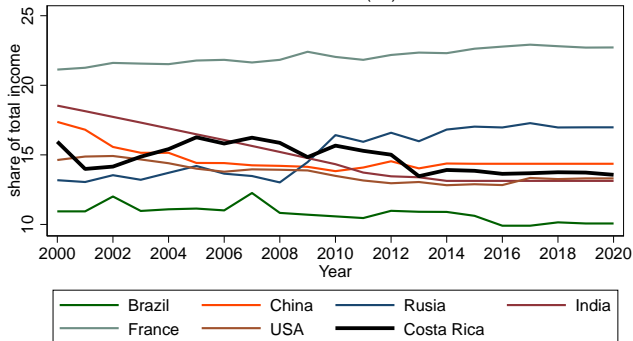
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Notes: own computation on official data from Programa Estado Nacion (PEN) and Central Bank (BCCR).

Contexto: comparación internacional (bottom 50)

Bottom 50 % income share: Costa Rica and other countries
2001-2020 (ori)

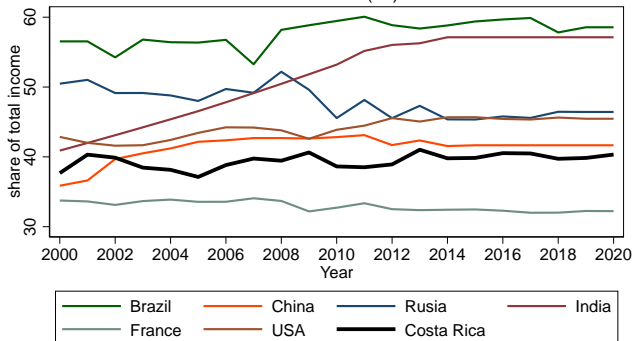


Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).
Equal-split-adults series (income of married couples divided by two).
Estimates for USA, France and China, India and Russia are from <http://wid.world/>.

Contexto: comparación internacional (top 10)

Top 10 % income share: Costa Rica and other countries

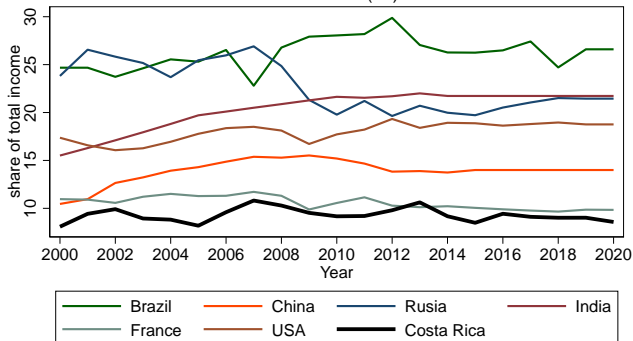
2001-2020 (ori)



Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH). Equal-split-adults series (income of married couples divided by two). Estimates for USA, France and China, India and Russia are from <http://wid.world/>.

Contexto: comparación internacional (top 1)

Top 1 % income share: Costa Rica and other countries
2001-2020 (ori)



Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).
Equal-split-adults series (income of married couples divided by two).
Estimates for USA, France and China, India and Russia are from <http://wid.world/>.

Dos grandes influencias:

- **Revolución de la medición de la desigualdad:**
 - **Obras fundamentales:** Piketty [2003] en Francia, y Piketty and Saez [2003] en los Estados Unidos, así como Atkinson and Piketty [2007], 2010, Atkinson et al. [2011], y Alvaredo et al. [2013].
 - **Contribuciones metodológicas:** Alvaredo et al. [2016], Blanchet et al. [2017], y Alvaredo et al. [2021].
 - **Desigualdad en otros países:** Chancel and Piketty [2017] en India, y Garbinti et al. [2017] en Francia.
- **Estudios de desigualdad en América Latina:**
 - López-Calva and Lustig [2010], disminución de la desigualdad en América Latina en la década de 2000; Burdín et al. [2015], and Burdín et al. [2014], participación en la renta de los percentiles superiores en Uruguay; Morgan [2017], DINA en Brazil; y los trabajos recientes de Alvaredo et al. [2022] y De Rosa et al. [2022] para diez países de América Latina.

Datos y metodología

Datos (1)

- *Administrativo*
 - Seguridad social (micro): 2001 – 2022.
 - Datos tributarios (microdatos): 2008 – (2019).
- *Encuestas y censos*
 - Censos (10 % muestra & tablas): 1984 – 2000 – 2011 – (2022).
 - Encuesta Nacional de Hogares (ENAH): 1976 – 2022.
- *Cuentas nacionales*
 - Cuentas nacionales integradas (datos detallados): 2012-2020.
 - PIB e Ingreso Nacional Disponible (datos agregados): 1991 – 2022.
- *Cruce de datos*
 - Todos los datos administrativos se pueden vincular a los censos de población a nivel de cantón/distrito.

Table 1: Summary data sources

	Source	Period	# Years	# obs. 2016
	Household surveys (micro-data)	2000 – 2022	23	37,006
	Tax administrative data (micro-data)	2008 – 2019	12	301,400
	Social security (micro-data)	2001 – 2022	22	1,729,990
	National Accounts (macro-data)	2000 – 2022	23	n.a.

Paso 1: comenzar con datos de la encuesta sobre ingresos de los hogares.

- Estimar la distribución del ingreso total.
- Estimar las distribuciones de ingreso para las diferentes categorías: ingreso total, ingreso laboral (asalariados y trabajadores independientes, formales y totales), ingreso de capital, pensionados y renta imputada. Categories

Paso 2: corregir utilizando datos de la Seguridad Social e impuestos.

- Corregir la parte de la distribución de la encuesta por encima de los umbrales específicos del año (o “puntos de fusión”).
- Corregir cada tipo de ingreso: salario, trabajo por cuenta propia, capital y pensiones (formales e informales). Wages Self-employed

Paso 3: conciliar estas estimaciones con el ingreso nacional tomando los ingresos de capital no fiscal de las cuentas nacionales e imputando sus distribuciones utilizando encuestas de hogares.

Agregados de ingresos

Table 2: Monetary aggregates (e.g. 2016)

	NA	Surveys	Social Security (SS)		Tax data	
All figures are in million USD	USD	% NA	% NA	% Surveys	% NA	% Surveys
Total labor income	22,433	105.8%				
Total labor income (formal)				94.1%		
Wage earners						
Wage earners (formal)				99.9%		
Independent workers						
Independent workers (formal)				62.8%		51.1%
Other income	11,168	48.8%				
Net property income received by households	6,447	17.6%			4.68%	26.6%
Social security benefits in cash	3,803	71.0%	34.75%	48.9%		
Imputed rent for owner-occupiers	3,407	118.7%				
Total pre-tax fiscal income	33,602	86.9%				
Total pre-tax National Income (DINA)	52,155	56.0%	40.32%	72.0%	2.79%	5.0%

Table 3: Population

	Household surveys	Social Security (SS)		Tax data	
	Pop.	Pop.	% Surveys	Pop.	% Surveys
Total active population	2,322,209				
Total formal workers	1,573,893	1,393,168	88.5%		
Wage earners	1,642,943				
Wage earners (formal)	1,243,225	1,207,113	97.1%		
Independent workers					
Independent workers (formal)	330,668	264,187	79.9%	301,400	91.1%
Other population					
Total persons with pension	333,023	61,740	18.5%		

Cuentas Nacionales Distributivas (DINA) (1)

Table: Distributional National Accounts (DINA): Costa Rica 2012 - 2015

		2012	
a	Sueldos y salarios (D11, S14)	9,125,721	41.3%
b	Excedente de explotación bruto, (B2, S14)	1,632,932	7.4%
c	Ingreso mixto bruto (B3, S14)	1,742,553	7.9%
d	Consumo de capital fijo sobre el excedente de explotación (P51c1, S14)	1,266,648	5.7%
e	Consumo de capital fijo sobre el ingreso mixto (P51c2, S14)	38,420	0.2%
f	Renta de la propiedad recibida por los hogares (D4 resources - uses, S14)	2,820,793	12.8%
g	Contribuciones y prestaciones sociales en efectivo (D621 + D622, S14)	1,613,124	7.3%
h	Renta imputada para dueños que ocupan la propiedad	1,527,861	6.9%
i	Renta distribuida de la inversión (D44, S14)	332,450	1.5%
j	Ingreso fiscal total antes de impuestos	13,769,744.42	62.3%
k	Contribuciones sociales netas (D61, S14)	3,440	0.0%
l	Componente de hogares/ISFLSH de los beneficios empresariales no distribuidos antes de impuestos (B5n, S11+S12)	3,779,462	17.1%
m	S11	3,400,515	15.4%
n	S12	378,947	1.7%
o	Renta de capital factor gobierno	2,700,583	12.2%
p	Renta nacional total antes de impuestos (DINA)	22,106,660.61	100.0%

Notes: This table reports the composition of DINA for the years with full information available in the Integrated National Accounts of Costa Rica. Own elaboration with data from the Central Bank of Costa Rica (BCCR). All figures are in millions of Colones.

- Ingreso fiscal total antes de impuestos:
 - $j = a + (b - d) + (c - e) + f + g - h - i$
- Renta nacional total antes de impuestos (DINA):
 - $p = j - k + h + i + l + o$

Cuentas Nacionales Distributivas (DINA) (2)

Table: Distributional National Accounts (DINA): Costa Rica 2012 - 2015

	2012		2013		2014		2015		Average
a	Sueldos y salarios (D11, S14)	9,125,721 41.3%	9,887,778 42.1%	10,738,533 42.0%	11,624,291 42.2%	41.9%			
b	Excedente de explotación bruto, (B2, S14)	1,632,932 7.4%	1,733,393 7.4%	1,781,916 7.0%	1,874,413 6.8%	7.1%			
c	Ingreso mixto bruto (B3, S14)	1,742,553 7.9%	1,925,132 8.2%	2,228,642 8.7%	2,391,603 8.7%	8.4%			
d	Consumo de capital fijo sobre el excedente de explotación (P51c1, S14)	1,266,648 5.7%	1,332,522 5.7%	1,416,202 5.5%	1,511,525 5.5%	5.6%			
e	Consumo de capital fijo sobre el ingreso mixto (P51c2, S14)	38,420 0.2%	39,671 0.2%	43,563 0.2%	45,338 0.2%	0.2%			
f	Renta de la propiedad recibida por los hogares (D4 resources - uses, S14)	2,820,793 12.8%	3,064,095 13.0%	3,112,633 12.2%	3,166,671 11.5%	12.4%			
g	Contribuciones y prestaciones sociales en efectivo (D621 + D622, S14)	1,613,124 7.3%	1,632,077 6.9%	1,901,327 7.4%	2,067,207 7.5%	7.3%			
h	Renta imputada para dueños que ocupan la propiedad	1,527,861 6.9%	1,621,920 6.9%	1,703,114 6.7%	1,787,133 6.5%	6.7%			
i	Renta distribuida de la inversión (D44, S14)	332,450 1.5%	359,526 1.5%	327,996 1.3%	413,585 1.5%	1.5%			
j	Ingreso fiscal total antes de impuestos	13,769,744.42 62.3%	14,888,836.05 63.3%	16,272,176.28 63.6%	17,366,605.22 63.0%	63.1%			
k	Contribuciones sociales netas (D61, S14)	3,440 0.0%	2,435 0.0%	1,665 0.0%	1,752 0.0%	0.0%			
l	Componente de hogares/ISFLSH de los beneficios empresariales no distribuidos antes de impuestos (B5n, S11+S12)	3,779,462 17.1%	3,901,281 16.6%	4,043,051 15.8%	4,926,118 17.9%	16.8%			
m	S11	3,400,515 15.4%	3,509,298 14.9%	3,626,098 14.2%	4,324,716 15.7%	15.0%			
n	S12	378,947 1.7%	391,983 1.7%	416,954 1.6%	601,402 2.2%	1.8%			
o	Renta de capital factor gobierno	2,700,583 12.2%	2,742,620 11.7%	3,227,735 12.6%	3,085,827 11.2%	11.9%			
p	Renta nacional total antes de impuestos (DINA)	22,106,660.61 100.0%	23,511,748.21 100.0%	25,572,408.38 100.0%	27,577,515.74 100.0%	100.0%			

Notes: This table reports the composition of DINA for the four years with full information available in the Integrated National Accounts of Costa Rica. It also shows average composition to be used to impute the composition of DINA for the rest of the years (2000-2017). Own elaboration with data from the Central Bank of Costa Rica (BCCR). All figures are in millions of Colones.

- Ingreso fiscal total antes de impuestos:
 - $j = a + (b - d) + (c - e) + f + g - h - i$
- Renta nacional total antes de impuestos (DINA):
 - $p = j - k + h + i + l + o$

Cuentas Nacionales Distributivas (DINA) (3)

Table. Distributional National Accounts (DINA): Costa Rica 2000 - 2017

	Total pre-tax fiscal income										Total pre-tax National Income (DINA)			
	Salaries	Gross operating surplus	Gross mixed income	Consumption of fixed capital on operating surplus	Consumption of fixed capital on mixed income	Net property income received by households	Social security benefits in cash	Imputed rent for owner-occupiers	Investment income disbursements	Total pre-tax fiscal income	Social contributions	Household/NPIS component of pre-tax undistributed corporate profits	Government factor capital income	Total pre-tax NI (DINA)
	(D11, S14)	(B2, S14)	(B3, S14)	(P51c1, S14)	(P51c2, S14)	(D4 resources - uses, S14)	(D621 + D622, S14)		(D44, S14)		(D61, S14)	(B5n, S11+612)		
2000	1,725,864	297,456	348,905	260,395	11,309	515,642	304,187	316,284	60,643	2,547,623	404	702,471	497,350	4,171,293
2001	1,992,388	336,805	395,060	295,538	10,676	583,854	344,427	355,579	48,666	2,922,074	458	795,397	563,142	4,723,094
2002	2,253,546	382,870	449,094	341,914	13,805	663,709	391,535	369,353	78,057	3,310,626	521	904,186	640,164	5,369,882
2003	2,546,772	443,647	520,383	390,207	18,363	769,066	453,687	448,014	90,448	3,786,523	603	1,047,716	741,784	6,221,369
2004	2,915,505	525,287	616,144	467,878	23,514	910,590	537,175	527,333	107,092	4,378,882	714	1,240,517	878,287	7,366,226
2005	3,400,143	616,164	722,740	554,548	27,510	1,068,127	630,109	627,377	125,620	5,102,227	838	1,455,133	1,030,235	8,640,524
2006	4,076,908	743,932	872,607	664,273	33,299	1,289,613	760,768	748,057	151,668	6,146,532	1,011	1,756,869	1,243,865	10,432,941
2007	4,866,945	884,074	1,036,988	755,122	35,692	1,532,551	904,081	857,412	180,240	7,396,173	1,202	2,087,828	1,478,184	12,397,584
2008	5,732,977	1,032,684	1,211,303	858,904	38,294	1,790,167	1,056,055	975,458	210,537	8,739,992	1,404	2,438,785	1,776,652	14,481,578
2009	6,518,586	1,144,250	1,342,166	994,992	42,844	1,983,569	1,170,146	1,075,421	333,283	9,832,177	1,556	2,702,260	1,913,202	16,046,102
2010	7,449,886	1,280,483	1,501,962	1,103,279	43,451	2,219,729	1,309,461	1,217,843	261,057	11,135,891	1,741	3,023,986	2,140,984	17,956,520
2011	8,262,559	1,390,906	1,631,485	1,216,036	39,403	2,411,149	1,422,384	1,357,607	283,570	12,221,870	1,891	3,284,762	2,325,614	19,505,019
2012	9,125,721	1,632,932	1,742,553	1,266,648	38,420	2,820,793	1,613,124	1,527,861	332,450	13,769,744	3,440	3,779,462	2,700,583	22,106,661
2013	9,887,778	1,733,393	1,925,132	1,332,522	39,671	3,064,095	1,632,077	1,621,920	359,526	14,888,836	2,435	3,901,281	2,742,620	23,511,748
2014	10,738,533	1,871,916	2,228,642	1,416,202	43,563	3,112,633	1,901,327	1,703,114	327,996	16,274,176	1,665	4,043,051	3,227,735	25,572,408
2015	11,624,281	1,874,413	2,391,603	1,515,525	45,338	3,166,671	2,087,207	1,787,133	413,585	17,866,606	1,753	4,926,118	3,685,837	27,577,516
2016	12,524,465	2,031,315	2,382,663	1,589,457	48,026	3,521,304	2,077,286	1,861,036	414,132	18,352,381	2,762	4,797,150	3,396,386	28,485,623
2017	12,324,460	2,099,032	2,462,092	1,649,565	49,839	3,638,691	2,146,535	1,936,568	427,938	18,606,900	2,854	4,957,070	3,509,609	29,435,232

% of NI 41.87% 7.13% 8.36% 5.60% 0.17% 12.36% 7.29% 6.74% 1.45% 63.05% 0.01% 16.84% 11.92% 100.00%

Notes: own computation based on data from the Central Bank of Costa Rica (BCCR). All figures are in millions of Colones.

Proporción del Ingreso Nacional en diferentes fuentes

Table. Estimation of the correction of National Income: Costa Rica 2016.

	DINA		Social Security (SS)			Surveys		
	SNA Codes	Colones	Colones	% DINA	% Surveys	Colones	% DINA	% SS
Total labor income	(D11, S14)	12,252,465				12,964,082	105.81%	
Total labor income (formal)			10,762,508.57	87.84%	94.12%	11,434,384	93.32%	106.24%
Wage earners						10,775,570	87.95%	
Wage earners (formal)			9,872,460	80.58%	99.94%	9,877,959	100.06%	
Independent workers						2,188,512	17.86%	
Independent workers (formal)			976,813	7.97%	62.76%	1,556,424	159.34%	
Other income		6,099,916				2,978,710	48.83%	
Gross operating surplus	(B2, S14)	2,031,315						
Gross mixed income	(B3, S14)	2,382,663						
Consumption of fixed capital on operating surplus	(P51c1, S14)	1,589,457						
Consumption of fixed capital on mixed income	(P51c2, S14)	48,026						
Net property income received by households	(D4 resources - uses, S14)	3,521,304						
Social security benefits in cash	(D621 + D622, S14)	2,077,286						
Imputed rent for owner-occupiers		1,861,036				-	0.00%	
Investment income disbursements	(D44, S14)	414,132						
Total pre-tax fiscal income		18,352,381				15,942,791.73	86.87%	
Social contributions	(D61, S14)	2,762						
Household/NPISH component of pre-tax undistributed corporate profits	(B5n, S11+S12)	4,797,150						
Government factor capital income		3,396,386						
Total pre-tax National Income (DINA)		28,485,623				15,942,791.73	55.97%	
Difference		-				12,542,830.94	44.03%	

Notes: own computation based on the Central Bank of Costa Rica (BCCR), Social Security Authority of Costa Rica (CCSS) and the National Institute of Statistics and Censuses (INEC).

Surveys

Social Security

Tax

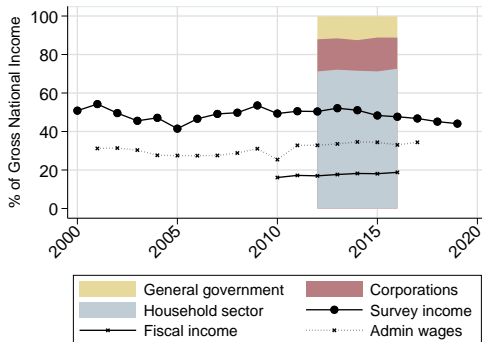
Distribución de la Renta Total, Laboral y de Capital

Table. Total, Labor and Capital Income Distribution: Costa Rica 2000-2017 (percentages)

	Total income (% national income)					Incl. labor income (% national income)				Incl. capital income (% national income)			
	SNA Net disposable National Income	DINA Total pre-tax fiscal income	ENAHO Total income surveys	Social Security total income	Tax data Total income	DINA Pretax labor income	ENAHO Labor income surveys	Social Security Labor income	Tax data Labor income	DINA Pretax Capital income	ENAHO Capital income surveys	Social Security Capital income	Tax data Capital income
2000	100%	61%	51%			66%	46%			37%	5%		
2001	100%	62%	52%	35%		67%	46%	35%		37%	6%	0%	
2002	100%	62%	50%	35%		66%	44%	35%		37%	6%	0%	
2003	100%	61%	51%	34%		65%	46%	34%		37%	6%	0%	
2004	100%	59%	47%	31%		63%	41%	31%		37%	6%	0%	
2005	100%	58%	50%	29%		63%	43%	29%		37%	7%	0%	
2006	100%	57%	48%	29%		61%	42%	29%		36%	6%	0%	
2007	100%	57%	51%	30%		60%	44%	30%		35%	7%	0%	
2008	100%	58%	50%	31%	1%	61%	43%	31%		35%	7%	0%	1%
2009	100%	61%	57%	34%	2%	64%	48%	34%		37%	9%	0%	2%
2010	100%	62%	60%	31%	2%	65%	49%	31%		37%	11%	0%	2%
2011	100%	62%	62%	36%	2%	66%	51%	36%		37%	10%	0%	2%
2012	100%	64%	61%	36%	10%	67%	50%	36%	7%	39%	11%	0%	2%
2013	100%	65%	64%	37%	10%	68%	52%	37%	8%	38%	11%	0%	2%
2014	100%	65%	60%	39%	10%	68%	49%	39%	8%	39%	11%	0%	3%
2015	100%	65%	57%	39%	10%	69%	47%	39%	8%	36%	10%	0%	3%
2016	100%	65%	57%	38%	11%	68%	46%	38%	8%	37%	11%	0%	3%
2017	100%	63%	56%	40%		68%	45%	40%	8%	37%	11%	0%	
Average	100%	61.59%	54.61%	34.91%	6.52%	65.36%	46.31%	34.91%	7.78%	36.88%	8.30%	0.00%	2.27%

Notes: own computation based on the Central Bank of Costa Rica (BCCR), Social Security Authority of Costa Rica (CCSS) and the National Institute of Statistics and Censuses (INEC).

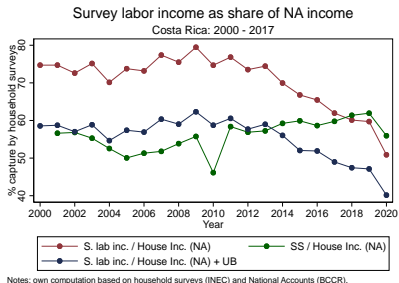
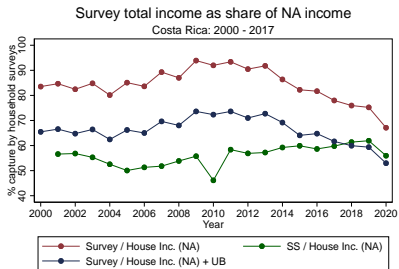
Ingreso total en diferentes fuentes



(e) Costa Rica

→ From [Alvaredo et al., 2022, p. 6]

Ingreso de la encuesta como porcentaje del ingreso nacional

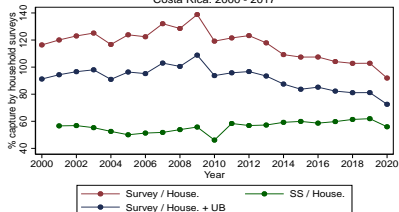


- Motivación para realizar las correcciones en las siguientes secciones.
- La Seguridad Social explica del 50 al 65 por ciento del componente total de los hogares del Ingreso Nacional.
- La participación explicada por la Seguridad Social es creciente: aumento en la formalidad o aumento en el ingreso laboral agregado total del sector formal.

Ingreso de la encuesta como porcentaje del IN (corrección)

Survey tot. as share of NA House. inc. (yearly corr.)

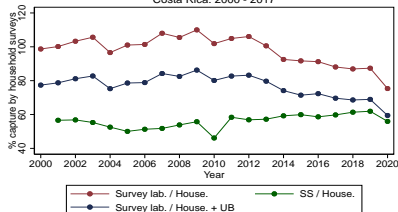
Costa Rica: 2000 - 2017



Notes: own computation based on household surveys (INEC) and National Accounts (BCCR).

Survey lab. inc. as share of NA House. inc. (yearly corr.)

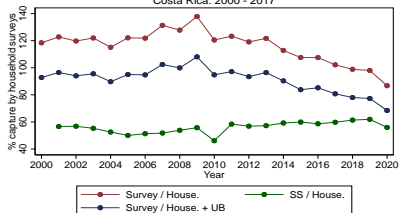
Costa Rica: 2000 - 2017



Notes: own computation based on household surveys (INEC) and National Accounts (BCCR).

Survey tot. as share of NA House. inc. (average corr.)

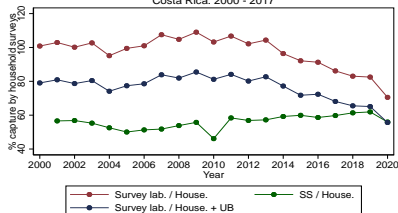
Costa Rica: 2000 - 2017



Notes: own computation based on household surveys (INEC) and National Accounts (BCCR).

Survey lab. inc. as share of NA House. inc. (average corr.)

Costa Rica: 2000 - 2017



Notes: own computation based on household surveys (INEC) and National Accounts (BCCR).

Corrección

Grupos de población con ingresos:

- Asalariados (formales e informales)
- Trabajadores por cuenta propia/independientes (formales e informales)
- Pensionistas
- Ingresos de capital

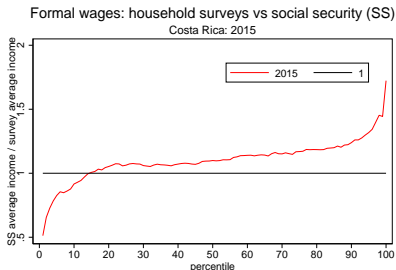
Factores de corrección:

- Factores de corrección anuales
- Factores de corrección de promedios

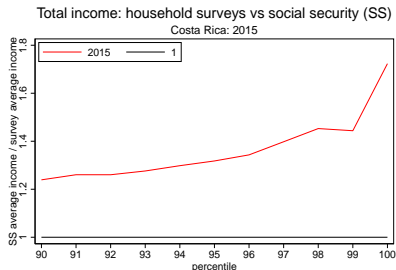
Medidas de desigualdad:

- Nivel individual
- Partición igualitaria (entre cónyuges)

Corrección de los ingresos por salarios



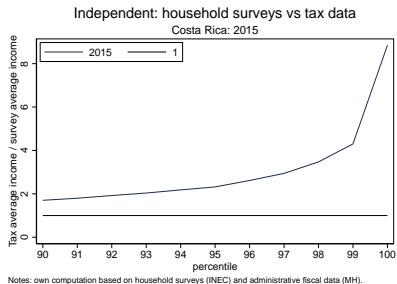
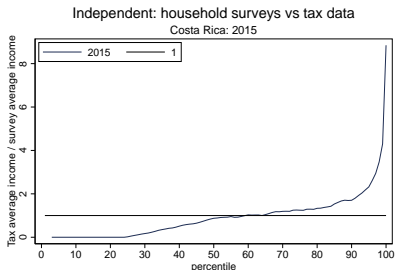
Notes: own computation based on household surveys (INEC) and Social Security administrative data (CCSS)



Notes: own computation based on household surveys (INEC) and Social Security administrative data (CCSS)

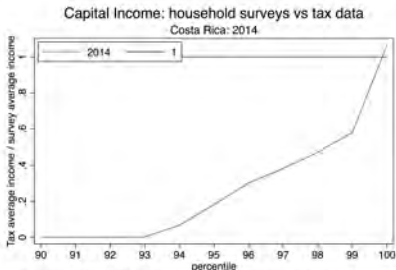
- Los registros de la SS contienen el universo de trabajadores formales.
- Sub-declaración: no es un problema, las pensiones se estiman en promedio salarios reportados de los últimos 20 años.
- La diferencia entre los ingresos reportados es más pronunciada para la parte superior percentil 99.
- Factor de corrección w_{SS}/w_{Survey}

Corrección del trabajo autónomo asalariado

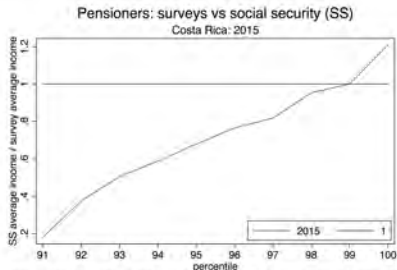


- “Agrupación” de trabajadores independientes en SS en torno a tramos de ingresos conocido como “base de contribución mínima”
- Los microdatos fiscales permiten obtener resultados mucho mejores
- Trabajadores independientes en datos fiscales representan en promedio más del 100 por ciento de el total en encuestas
- Factor de corrección w_{tax}/w_{Survey}

Corrección de pensiones y rentas de capital



Notes: own computation based on household surveys (INEC) and administrative fiscal data (MH)



Notes: own computation based on household surveys (INEC) and Social Security administrative data (CCSS)

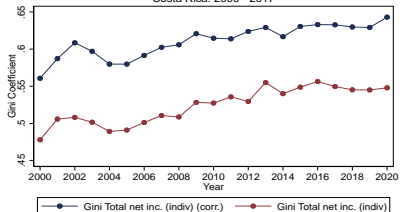
- Ingresos de capital: ingresos de la propiedad informados en los formularios de impuestos
- Pensionistas: pensionistas en microdatos de la Seguridad Social
- Asumió que estas muestras representan el 10 por ciento superior de la distribución en encuestas
- Reagrupar a los pensionistas como si fueran el 10 por ciento superior
- Los microdatos de SS se refieren únicamente a “otros regímenes”

Resultados

Medidas de desigualdad corregidas: coeficientes de Gini

Gini total income (indiv) (yearly corr.)

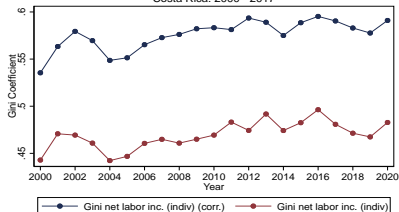
Costa Rica: 2000 - 2017



Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).

Gini labor income (indiv) (yearly corr.)

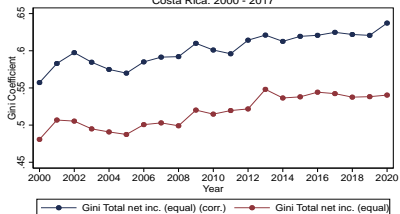
Costa Rica: 2000 - 2017



Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).

Gini total income (equal) (yearly corr.)

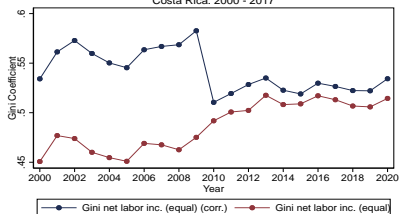
Costa Rica: 2000 - 2017



Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).

Gini labor income (equal) (yearly corr.)

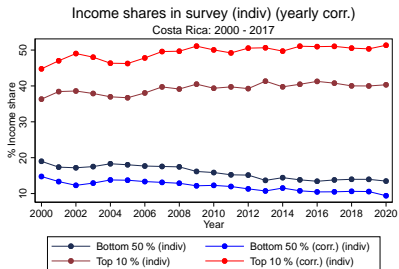
Costa Rica: 2000 - 2017



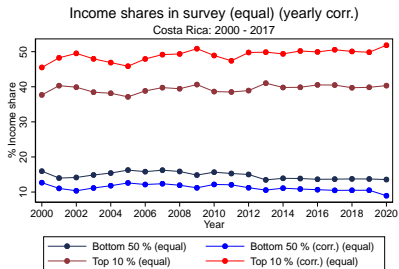
Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).

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Medidas de desigualdad corregidas: bottom 50 and top 10



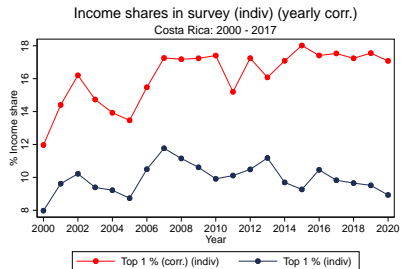
Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).



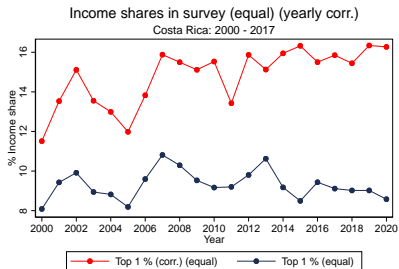
Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).

- La participación en los ingresos es inequívocamente más alta para aquellos en la parte superior y definitivamente más bajo para los de abajo
- Suave pendiente creciente de las primeras y suave pendiente decreciente para los segundos
- Deterioro de los niveles de desigualdad

Medidas de desigualdad corregidas: top 1



Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).

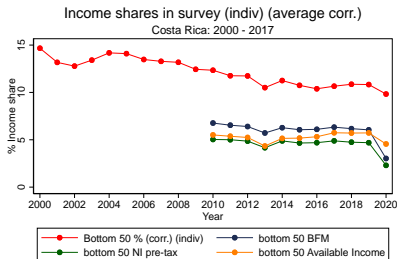


Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).

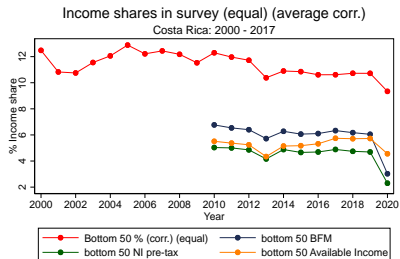
- El 1 por ciento superior se ha mantenido casi estable en el período
- Más plano con corrección media
- Es mucho mayor después de la corrección

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Resultados comparados (DFM 2022): bottom 50

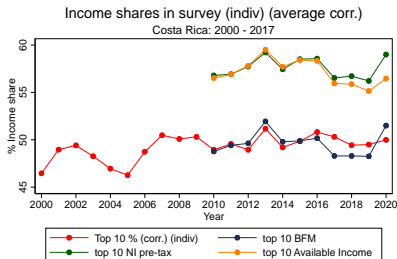


Notes: (1) own computation based on household surveys (INEC) and admin. data (CCSS and MH).
 (2) BFM, NI pre-tax & Available Income from De Rosa et al. [2022]

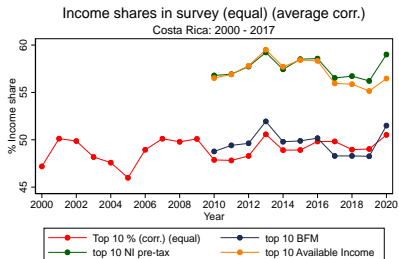


Notes: (1) own computation based on household surveys (INEC) and admin. data (CCSS and MH).
 (2) BFM, NI pre-tax & Available Income from De Rosa et al. [2022]

Resultados comparados (DFM 2022): top 10

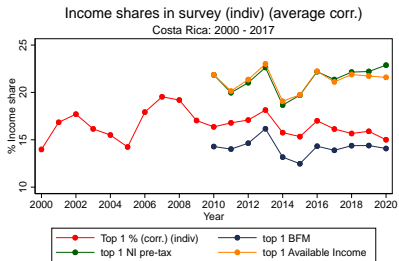


Notes: (1) own computation based on household surveys (INEC) and admin. data (CCSS and MH).
(2) BFM, NI pre-tax & Available Income from De Rosa et al. [2022]

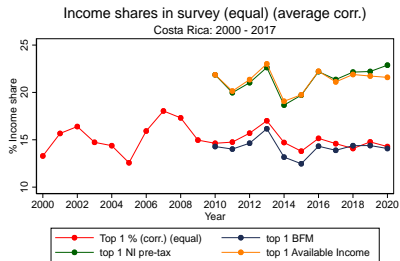


Notes: (1) own computation based on household surveys (INEC) and admin. data (CCSS and MH).
(2) BFM, NI pre-tax & Available Income from De Rosa et al. [2022]

Resultados comparados (DFM 2022): top 1



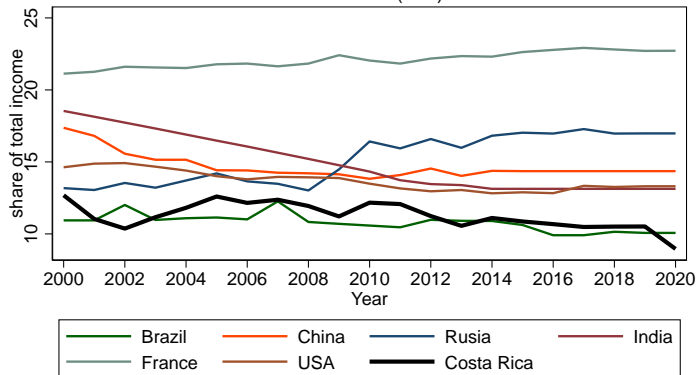
Notes: (1) own computation based on household surveys (INEC) and admin. data (CCSS and MH).
(2) BFM, NI pre-tax & Available Income from De Rosa et al. [2022]



Notes: (1) own computation based on household surveys (INEC) and admin. data (CCSS and MH).
(2) BFM, NI pre-tax & Available Income from De Rosa et al. [2022]

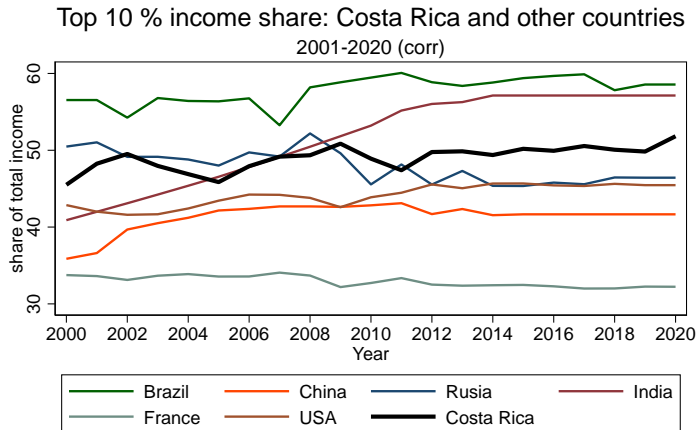
Desigualdad corregida: comparación internacional (bottom 50)

Bottom 50 % income share: Costa Rica and other countries
2001-2020 (corr)



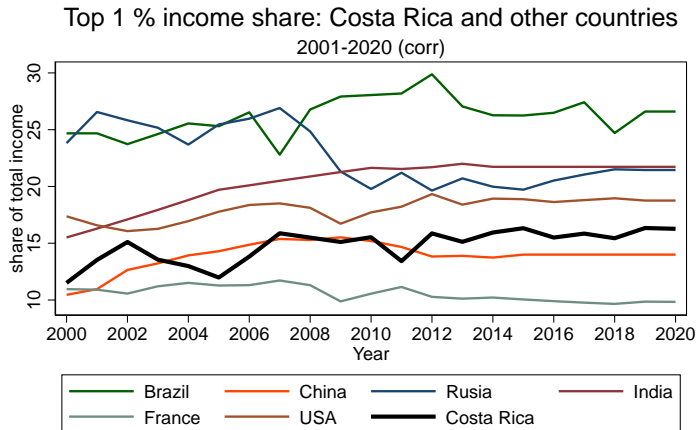
Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).
Equal-split-adults series (income of married couples divided by two).
Estimates for USA, France and China, India and Russia are from <http://wid.world/>.

Desigualdad corregida: comparación internacional (top 10)



Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).
Equal-split-adults series (income of married couples divided by two).
Estimates for USA, France and China, India and Russia are from <http://wid.world/>.

Desigualdad corregida: comparación internacional (top 1)



Notes: own computation based on household surveys (INEC) and admin. data (CCSS and MH).
Equal-split-adults series (income of married couples divided by two).
Estimates for USA, France and China, India and Russia are from <http://wid.world/>.

Conclusión

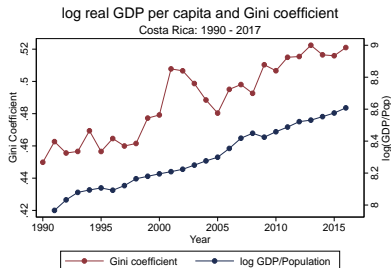
Dificultades para medir adecuadamente el 1 por ciento superior

- Explicación: todavía no captura adecuadamente las fuentes de ingresos más importantes en la parte superior de la distribución.
- El mecanismo aumenta los ingresos, pero no agrega personas en la parte superior.
- Alternativa: el país no desarrolló un modelo terrateniente de grandes explotaciones agrícolas a la manera de otros países latinoamericanos más grandes.

Mensaje de DINA Costa Rica

Average change in income distribution
Costa Rica: 2000 - 2017

	bottom 50%	middle 40%	top 10%	top 1%	Gini
2000-2004	17.9	44.5	37.6	9.3	0.4966
2013-2017	13.8	45.4	40.7	10.1	0.5500
Δ	-4.0	1.0	3.1	0.8	0.0534



- A diferencia de otros países de América Latina, la desigualdad ha ido creciendo en Costa Rica en los últimos 30 años.
- A diferencia de muchos otros países, la creciente desigualdad en Costa Rica beneficia a la clase media (percentiles 50-90), no solo a los muy altos.
- Sugiere la importancia de las habilidades/cualificaciones en lugar de los “efectos de superestrella”.

1. En proceso:

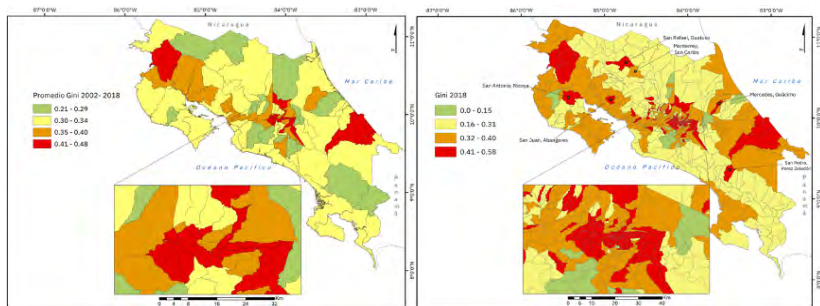
- 1.1 Medir la desigualdad a nivel local utilizando datos administrativos y cifras del PIB a nivel de cantón publicadas por el BCCR.
- 1.2 Estimar la desigualdad después de impuestos analizando las tasas impositivas efectivas en diferentes percentiles y teniendo en cuenta las transferencias del gobierno.

2. Proyectos futuros:

- 2.1 Explorar la distribución del ingresos en el siglo XX aprovechando los datos de pensiones de la Seguridad Social (antes de 2001).
- 2.2 Evaluar sistemáticamente las rentas de capital a través de la base de datos de accionistas (*Sociedades Anónimas*) del Banco Central y el Ministerio de Hacienda.
- 2.3 Evaluar la desigualdad de la riqueza utilizando datos de la base de datos de accionistas (*Sociedades Anónimas*) y otras fuentes de información.

Local level inequality measures

Inequality measures by county and district



See: Camacho (2020) & Zuniga-Cordero (2020).

- Most unequal counties and districts are in the central region, in the high-end touristic areas of the Northern Pacific (Liberia, Guanacaste) and Limon county on the Caribbean coast.

Regions and subdivisions

Ex. Central region

Ex. Other regions

Functional regions of Costa Rica

Go back

Regionalización Oficial y su conformación

(Decreto Ejecutivo 16088-PLAN)

Región Chorotega

- 501. Liberia
- 502. Nicoya
- 503. Santa Cruz
- 504. Bagaces
- 505. Carrillo
- 506. Gualac
- 507. Abangares
- 508. Tilarán
- 509. Nandayure
- 510. La Cruz
- 511. Hojancha

Región Central

- 101. San José
- 102. Escazú
- 103. Desamparados
- 104. Puriscal
- 105. Turrialba
- 106. Aserrí
- 107. Mora
- 108. Gacacaheva
- 109. Santa Ana
- 110. Alajuelita
- 111. Vázquez de Corcoado
- 112. Acosta
- 113. Tibalá
- 114. Moravia
- 115. Muebles de Oca
- 116. Turrialbas
- 117. Dota
- 118. Carmelita
- 120. León Cortés Castro
- 201. Atajucá
- 202. San Ramón
- 203. Grecia
- 205. Atenas
- 206. Maricao
- 207. Palmar
- 208. Poás
- 211. Zarcero
- 212. Valverde Vega

Región Huetar Norte

- 210. San Carlos
- 213. Uruacá
- 214. La Chorrera
- 215. Guatuzo
- 216. Río Cuarto
- 20213. Peñas Blancas (San Ramón)
- 20314. Sanapajal (Alajuela)
- 410. Sarapiquí

Región Huetar Caribe

- 701. Lirio
- 702. Pococí
- 703. Siquirres
- 704. Talamanca
- 706. Marina
- 706. Golfito

Región Pacífico Central

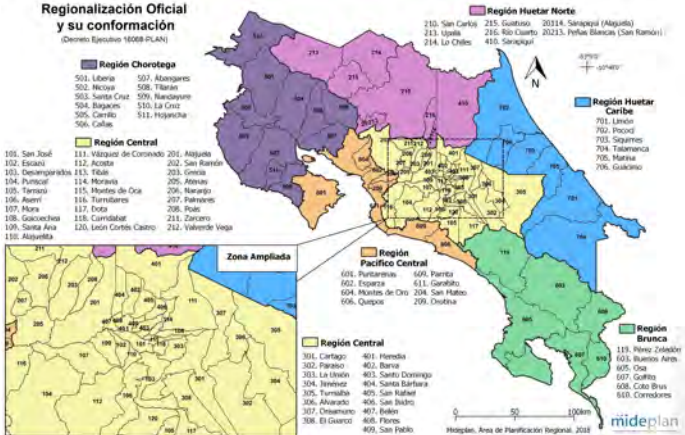
- 601. Puntarenas
- 602. Esparza
- 604. Montes de Oro
- 606. Quepos
- 609. Parícuti
- 611. Garfalo
- 204. San Mateo
- 209. Chiriquí

Región Central

- 301. Cartago
- 302. Paraiso
- 303. La Unión
- 304. Breviada
- 305. Turrialba
- 306. Alvarado
- 307. Obispono
- 308. El Guacac
- 401. Heredia
- 402. Barva
- 403. Santo Domingo
- 404. Santa Bárbara
- 405. San Rafael
- 406. San Isidro
- 407. Belén
- 408. Flores
- 409. San Pablo

Región Brunca

- 113. Puntarenas
- 603. Buenos Aires
- 605. Osa
- 607. Golfito
- 608. Coto Brus
- 610. Comederos



Example: districts in the Central Region

Go back

Table: ranking using social security Top 10 (rank_top10_SS) vs corrected Top 10 (rank_top_10_total)
Central Region

Escazú

year	district_code	num_districts	rank_gini	rank_top10_SS	rank_top_10_total
2018	ESCAZU	482	19	15	14
2018	SAN ANTONIO	482	135	116	85
2018	SAN RAFAEL	482	21	14	13

Curridabat

year	district_code	num_districts	rank_gini	rank_top10_SS	rank_top_10_total
2018	CURRIDABAT	482	38	25	22
2018	GRANADILLA	482	141	104	79
2018	SANCHEZ	482	8	3	3
2018	TIRRASES	482	169	123	91

Example: districts in the other regions

[Go back](#)

Table: ranking using social security Top 10 (rank_top10_SS) vs corrected Top 10 (rank_top_10_total)
Other Regions

Liberia

year	district_code	num_districts	rank_gini	rank_top10_SS	rank_top_10_total
2018	LIBERIA	482	111	99	317
2018	CAÑAS DULCES	482	84	149	330
2018	MAYORGA	482	44	202	348
2018	NACASCOLO	482	45	48	297
2018	CURUBANDE	482	349	224	358

Limón

year	district_code	num_districts	rank_gini	rank_top10_SS	rank_top_10_total
2018	LIMON	482	74	78	276
2018	VALLE LA ESTRELLA	482	385	417	354
2018	RIO BLANCO	482	357	318	305
2018	MATAMA	482	188	246	288

Application: inequality and turnout

Application: Inequality and turnout

Table: Effect of inequality on turnout in presidential: 2002 - 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	GLS	GLS controls	GLS FE	GLS FE	GLS FE	GLS FE	GLS FE	GLS FE	GLS FE	GLS FE	GLS FE	GLS FE
Panel A: effect of inequality on turnout in presidential elections (formal workers only)												
Top 10 SS	0.049*** (0.018)	-0.096*** (0.020)	-0.120*** (0.019)	-0.019** (0.009)	-0.074*** (0.018)	-0.120*** (0.019)	-0.118*** (0.019)	-0.030** (0.014)	-0.036** (0.014)	-0.037** (0.015)	-0.030** (0.014)	-0.034** (0.014)
Observations	2338	2325	2325	2305	2305	2324	2304	2325	2305	2305	2324	2304
r2_o	0.002	0.236	0.321	0.846	0.456	0.321	0.320	0.861	0.864	0.860	0.862	0.862
Panel B: effect of inequality on turnout in presidential elections (correcting by other sources of income)												
Top 10 corrected	0.453*** (0.017)	0.297*** (0.019)	0.301*** (0.019)	0.096*** (0.010)	0.350*** (0.017)	0.305*** (0.019)	0.306*** (0.019)	-0.089*** (0.018)	-0.118*** (0.018)	-0.090*** (0.018)	-0.081*** (0.018)	-0.088*** (0.018)
Observations	2338	2325	2325	2305	2305	2324	2304	2325	2305	2305	2324	2304
r2_o	0.156	0.262	0.375	0.852	0.539	0.376	0.376	0.862	0.867	0.862	0.863	0.863
Social Development Index (SDI)		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
log Average Income		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
turnout presidential (t-1)				YES								
vote share traditional (t-1)					YES					YES		
election closeness						YES					YES	
election closeness (t-1)							YES					YES
Year FE					YES	YES	YES					
District FE			YES	YES	YES	YES		YES	YES	YES	YES	YES

Standard errors in parentheses

$$turnout_{it} = \gamma_i + \delta_t + \beta top10_{it} + \theta X_{it} + u_{it}$$

Appendix

Explanatory power of data sources

Table 4: Total, Labor and Capital Income Distribution: Costa Rica 2000-2017
(percentages)

	Total income (% national income)				Incl. labour income (% national income)				Incl. capital income (% national income)			
	SNA National Income % NI	Surveys total income % NI	Social Security total income % NI	Tax data income % NI	SNA National Labor Income % NI	Surveys labor income % labor	Social Security labor income % labor	Tax data labor income % labor	SNA National capital income % NI	Surveys capital income % Capital	Social Security capital income % Capital	Tax data capital income % Capital
2000	100%	51%			66%	69%			37%	15%		
2001	100%	52%	35%		67%	69%	52%		37%	17%	0%	
2002	100%	50%	35%		66%	67%	53%		37%	16%	0%	
2003	100%	51%	34%		65%	70%	52%		37%	16%	0%	
2004	100%	47%	31%		63%	65%	49%		37%	16%	0%	
2005	100%	50%	29%		63%	69%	47%		37%	18%	0%	
2006	100%	48%	29%		61%	68%	48%		36%	17%	0%	
2007	100%	51%	30%		60%	73%	49%		35%	19%	0%	
2008	100%	50%	31%	1%	61%	71%	51%	27%	35%	19%	0%	2%
2009	100%	57%	34%	2%	64%	75%	53%	25%	37%	24%	0%	1%
2010	100%	60%	31%	2%	65%	75%	48%	23%	37%	29%	0%	1%
2011	100%	62%	36%	2%	66%	78%	55%	23%	37%	28%	0%	2%
2012	100%	61%	36%	10%	67%	75%	54%	23%	39%	28%	0%	1%
2013	100%	64%	37%	10%	68%	77%	55%	23%	38%	30%	0%	1%
2014	100%	60%	39%	10%	68%	72%	57%	24%	39%	28%	0%	2%
2015	100%	57%	39%	10%	69%	68%	57%	24%	36%	28%	0%	1%
2016	100%	57%	38%	11%	68%	67%	56%	25%	37%	28%	0%	2%
2017	100%	56%	40%		68%	66%	59%		37%	29%	0%	
Average	100%	54.61%	34.46%	6.52%	65.36%	70.84%	52.64%	24.05%	36.88%	22.46%	0.00%	1.37%

Notes: own computation based on the Central Bank of Costa Rica (BCCR), Social Security Authority of Costa Rica (CCSS), Ministry of Finances of Costa Rica (MH) and the National Institute of Statistics and Censuses (INEC).

Share of National Income in household surveys

Table. Household surveys: Costa Rica 2000 - 2017

	Labor income									Other income		Total income			
	Wage earners	% Total labor income	Wage earners (normal)	Independent workers	% Total labor income	Independent workers (normal)	Total labor income	Total labor income (normal)	% Total income	% of wages in SRA	% of wages in Social Security	Other income	% Total income	Total income	% of NI
2000	1,428,751	75.34%	1,235,121	487,730	24.66%	255,465	1,890,488	1,470,587	89.45%	85.61%		233,601	10.5%	2,130,089	51.13%
2001	1,605,435	73.87%	1,391,013	567,892	26.13%	292,501	2,173,327	1,683,514	88.25%	84.50%	101.77%	289,252	11.7%	2,462,578	51.96%
2002	1,763,060	73.72%	1,534,182	628,517	26.28%	319,830	2,391,577	1,854,012	88.11%	82.27%	98.55%	322,697	11.9%	2,714,274	50.46%
2003	2,101,582	74.26%	1,809,639	729,040	25.74%	369,716	2,832,622	2,179,355	88.57%	85.57%	104.09%	365,474	11.4%	3,198,096	51.42%
2004	2,315,508	75.67%	2,012,256	744,430	24.13%	382,517	3,059,938	2,399,073	87.48%	82.15%	104.09%	437,904	12.5%	3,837,862	47.46%
2005	2,907,996	77.44%	2,517,632	847,180	22.56%	436,096	3,755,185	2,952,728	86.66%	86.67%	115.66%	577,879	13.3%	4,333,064	49.62%
2006	3,370,120	75.24%	2,938,468	1,109,303	24.70%	619,368	4,479,423	3,557,836	87.48%	87.27%	112.83%	640,817	12.5%	5,120,240	47.79%
2007	4,231,370	74.90%	3,681,652	1,463,232	25.70%	819,828	5,694,602	4,500,480	86.61%	92.49%	117.52%	880,350	13.4%	6,574,952	50.84%
2008	4,853,004	73.95%	4,276,103	1,709,928	26.66%	986,561	6,562,932	5,262,463	86.71%	91.80%	111.82%	1,009,996	13.3%	7,568,328	49.96%
2009	5,879,835	75.72%	5,275,907	1,884,972	24.28%	1,097,562	7,764,807	6,373,469	84.59%	97.77%	116.50%	1,414,740	15.4%	9,179,547	56.90%
2010	7,208,565	81.11%	6,258,642	1,678,836	18.89%	984,700	8,887,401	7,243,341	82.19%	97.23%	127.55%	1,925,678	17.8%	10,813,079	59.91%
2011	8,132,896	80.74%	7,097,038	1,940,568	19.26%	1,216,428	10,073,264	8,313,466	83.27%	100.62%	116.52%	2,023,261	16.7%	12,096,525	61.74%
2012	8,797,113	80.97%	7,763,288	2,068,031	19.03%	1,059,752	10,865,145	8,819,840	82.31%	96.49%	115.63%	2,335,070	17.7%	13,200,215	61.27%
2013	9,511,023	79.96%	8,890,518	2,383,872	20.04%	1,775,388	11,896,896	10,665,906	82.17%	107.69%	125.17%	2,581,780	17.8%	14,478,676	63.54%
2014	10,008,076	81.96%	8,688,940	2,202,936	18.04%	350,495	12,211,011	9,039,435	82.06%	83.97%	93.79%	2,670,308	17.9%	14,881,319	59.82%
2015	10,267,348	82.22%	9,001,356	2,210,904	17.78%	446,764	12,487,253	9,448,120	82.31%	81.07%	90.81%	2,683,794	17.7%	15,171,046	56.81%
2016	10,775,570	83.12%	9,877,959	2,188,512	16.88%	1,556,424	12,964,082	11,434,384	81.32%	83.12%	104.24%	2,978,710	18.7%	15,942,792	56.74%
2017	10,851,490	82.15%	9,957,571	2,357,568	17.85%	1,652,232	13,209,058	11,609,803	80.82%	81.39%	98.03%	3,175,717	19.4%	16,384,775	55.66%
Average		77.87%			22.13%				85.01%	80.42%	100.03%		14.99%		54.81%

Notes: This table reports monetary aggregates from Costa Rican household surveys. Years 2000-2009 are covered by the now discontinued Multi-purpose Household Surveys (EHPM, in Spanish). Years 2010-2017 are covered by the National Household Surveys (ENAHU, in Spanish). The National Institute of Statistics and Censuses (INEC, in Spanish) conducts household surveys

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Share of National Income in social security

Table. Social Security Administrative Micro-data: Costa Rica 2001 - 2017

	Wages				Independent workers				Wage earners + independent workers			
	Total	% of wages in SNA	% of NI	% formal wages surveys	Total	% of wages in SNA	% of NI	% formal indep. income surveys	Total	% of wages in SNA	% of NI	% formal labor income surveys
2001	1,559,298	78.26%	32.90%	112.10%	111,440	5.59%	2.35%	38.10%	1,654,182	83.03%	34.90%	98.26%
2002	1,776,203	78.82%	33.02%	115.78%	124,085	5.51%	2.31%	38.80%	1,881,229	83.48%	34.98%	101.47%
2003	1,979,744	77.74%	31.83%	109.40%	135,474	5.32%	2.18%	36.64%	2,093,798	82.21%	33.66%	96.07%
2004	2,142,387	73.48%	29.03%	106.45%	179,546	6.16%	2.43%	46.94%	2,300,941	78.92%	31.18%	96.07%
2005	2,517,190	74.03%	28.83%	99.98%	70,589	2.08%	0.81%	16.19%	2,553,754	75.11%	29.24%	86.46%
2006	3,071,354	75.34%	28.67%	104.52%	121,224	2.97%	1.13%	19.57%	3,153,408	77.35%	29.43%	88.63%
2007	3,709,693	76.22%	28.68%	100.76%	166,775	3.43%	1.29%	20.34%	3,830,515	78.70%	29.62%	85.09%
2008	4,553,224	79.42%	30.05%	106.48%	209,358	3.65%	1.38%	21.22%	4,706,483	82.09%	31.06%	89.43%
2009	5,272,137	80.88%	32.68%	99.93%	262,228	4.02%	1.63%	23.89%	5,470,733	83.93%	33.91%	85.84%
2010	5,374,668	72.14%	29.78%	85.88%	362,826	4.87%	2.01%	36.85%	5,678,989	76.23%	31.46%	78.40%
2011	6,780,111	82.06%	34.61%	95.53%	430,163	5.21%	2.20%	35.36%	7,134,643	86.35%	36.42%	85.82%
2012	7,428,902	81.28%	34.48%	95.69%	484,806	5.30%	2.25%	45.92%	7,831,744	85.69%	36.35%	88.80%
2013	8,029,918	81.08%	35.24%	90.32%	576,385	5.82%	2.53%	32.47%	8,521,190	86.04%	37.39%	79.89%
2014	9,035,403	83.93%	36.32%	103.99%	695,634	6.46%	2.80%	198.47%	9,630,400	89.53%	38.74%	106.63%
2015	9,650,069	82.81%	36.14%	107.21%	846,461	7.26%	3.17%	189.47%	10,404,506	89.28%	38.96%	110.12%
2016	9,872,460	80.58%	35.14%	98.94%	976,813	7.97%	3.48%	62.76%	10,762,509	87.84%	38.30%	94.12%
2017	10,801,363	85.02%	36.70%	108.47%	1,132,298	8.91%	3.85%	68.53%	11,842,982	93.22%	40.23%	102.01%
Average		79.01%	32.59%	102.50%		5.33%	2.22%	54.79%		83.47%	34.46%	92.54%

Notes: own computation based on the Central Bank of Costa Rica (BCCR), Social Security Authority of Costa Rica (CCSS) and the National Institute of Statistics and Censuses (INEC).

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Share of National Income in tax data

Table. Tax Administrative Micro-data: Costa Rica 2008 - 2017

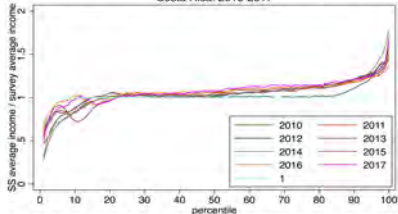
	Independent workers D101			Wage earner D103			Total income	
	Total	% of NI	% of mix income	Total	% of wages in SNA	% of NI	Total	% of NI
2000								
2001								
2002								
2003								
2004								
2005								
2006								
2007								
2008	216,168	1.43%	4.30%				216,168	1.43%
2009	296,070	1.84%	5.47%				296,070	1.84%
2010	322,327	1.79%	5.43%				322,327	1.79%
2011	446,838	2.28%	7.10%				446,838	2.28%
2012	513,380	2.38%	7.55%	1,558,280	17.05%	7.23%	2,071,660	9.62%
2013	556,130	2.44%	7.99%	1,735,640	17.52%	7.62%	2,291,770	10.06%
2014	657,915	2.64%	8.63%	1,915,550	17.79%	7.70%	2,573,465	10.34%
2015	736,274	2.76%	8.98%	2,048,480	17.58%	7.67%	2,784,754	10.43%
2016	795,516	2.83%	11.04%	2,264,150	18.48%	8.06%	3,059,666	10.89%
2017				2,473,090	19.53%	8.40%	2,473,090	8.40%
Average		2.27%	7.39%		17.99%	7.78%		6.52%

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Summary Social Security Correction I

Formal wages: household surveys vs social security (SS)

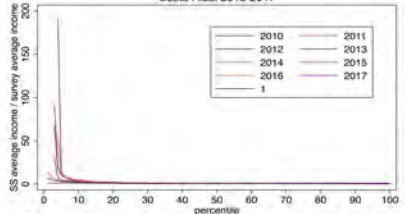
Costa Rica: 2010-2017



Notes: own computation based on household surveys (INEC) and Social Security administrative data (CCSS)

Independent: surveys vs social security (SS)

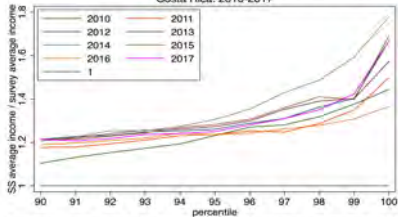
Costa Rica: 2010-2017



Notes: own computation based on household surveys (INEC) and Social Security administrative data (CCSS)

Total income: household surveys vs social security (SS)

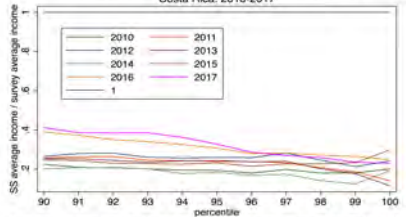
Costa Rica: 2010-2017



Notes: own computation based on household surveys (INEC) and Social Security administrative data (CCSS)

Independent: surveys vs social security (SS)

Costa Rica: 2010-2017

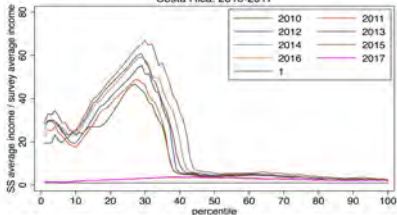


Notes: own computation based on household surveys (INEC) and Social Security administrative data (CCSS)

Summary Social Security Correction II

Pensioners: surveys vs social security (SS)

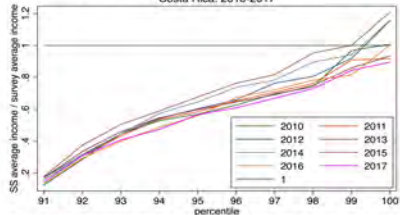
Costa Rica: 2010-2017



Notes: own computation based on household surveys (INEC) and Social Security administrative data (CCSS)

Pensioners: surveys vs social security (SS)

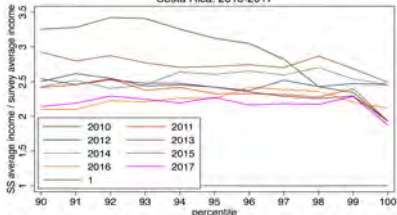
Costa Rica: 2010-2017



Notes: own computation based on household surveys (INEC) and Social Security administrative data (CCSS)

Pensioners: surveys vs social security (SS)

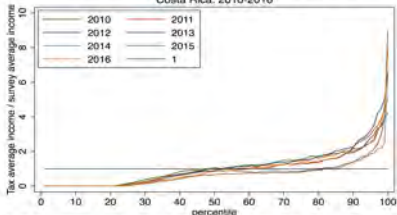
Costa Rica: 2010-2017



Notes: own computation based on household surveys (INEC) and Social Security administrative data (CCSS)

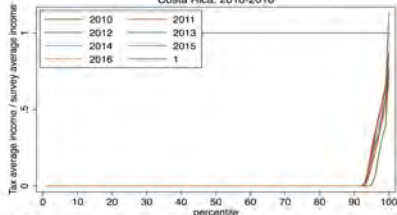
Summary Tax data Correction

Independent: household surveys vs tax data
Costa Rica: 2010-2016



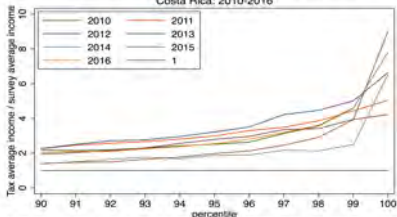
Notes: own computation based on household surveys (INEC) and administrative fiscal data (MH).

Capital Income: household surveys vs tax data
Costa Rica: 2010-2016



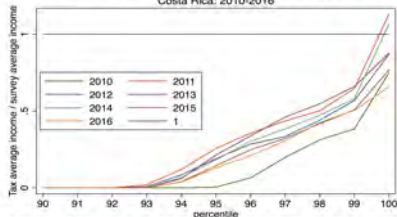
Notes: own computation based on household surveys (INEC) and administrative fiscal data (MH).

Independent: household surveys vs tax data
Costa Rica: 2010-2016



Notes: own computation based on household surveys (INEC) and administrative fiscal data (MH).

Capital Income: household surveys vs tax data
Costa Rica: 2010-2016



Notes: own computation based on household surveys (INEC) and administrative fiscal data (MH).



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