# Elite Incomes Around the World: Command over Tradables, Nontradables, and People

Paul Segal

Michail Moatsos

We define elites as the top 1% in each country, for simplicity and comparability. Two sets of questions:

1. The inequality and living standards questions: how have elite incomes evolved in recent decades? How do their incomes compare against each other across countries?

2. The conceptual question: how should we conceptualize and measure elite incomes? What do different measures tell us?

### International comparisons of real income

We consider three measures of real income:

- 1. PPP incomes: based on real purchasing power across all consumption goods and services. (Weightings across different consumption sectors depend on the PPP method.)
- 2. FX incomes: based on market exchange rates.
- 3. Entitlements over labour (Segal 2021): based on the cost of employing a median worker in your country of residence.

### International comparisons using PPP vx. FX

#### The Balassa-Samuelson effect:

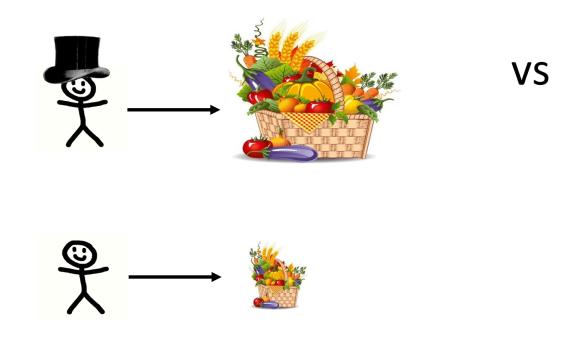
- A. Productivity growth is higher in tradables than in non-tradables.
- B. Therefore the productivity gap between high-income countries and low-income countries is higher in the tradable sector than the non-tradable sector.
- C. Therefore the relative price of tradables to non-tradables is lower in high-income countries that in low-income countries.
- D. FX exchange rates equalize the cross-country prices of tradables (subject to transport and other costs.
- ⇒ International comparisons of real income using FX will *overstate* inequality because they ignore the fact that non-tradables are cheaper in poorer countries.

#### **Entitlements over labour**

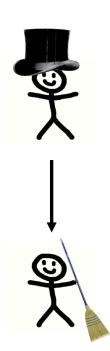
EL takes the cost of employing a median wage worker as numeraire; it measures the affordability to the rich of commanding the labour of others for their *personal* ends (Segal 2021, building on Atkinson 2007, Milanovic 2010, Smith, Rousseau).

- ELs are a measure of real income
- Applied to top income groups (top 1%, 5%, 10% etc.) ELs are a measure of inequality, relating economic inequality to social inequality
- Not to be conflated with capitalists employing workers in the production process different interpersonal relationship and different vector of conflict for political economy analysis

Inequality as command over goods and services



Inequality as command over people



As a normative inequality measure, ELs of top income groups are not welfarist à *la* Dalton-Atkinson. Instead they reflect:

- 1. Interpersonal relations of *domination*: one person gets to command another for their personal ends. This implies *unfreedom* in the sense of republican political theorists: one person is subject to arbitrary control by another (Pettit 1999).
- 2. *Social status hierarchies*. The ability of one (rich) person to command another (non-rich) person implies "a hierarchy of human beings", with "superior and inferior persons" (Anderson 1999, 2017)

#### **Entitlements over labour and the Balassa-Samuelson effect**

- The Balassa-Samuelson effect is based on the fact that tradables are relatively intensive in the employment of capital and resources. That's why productivity growth is higher.
- The complement to this is that tradables are relatively intensive in the employment of labour.
- ⇒ ELs should provide a complement to FX comparisons.

**Hypothesis**: inequality between elites across countries will be highest when measured using FX exchange rates, intermediate using PPP exchange rates, and lowest using ELs.

#### **Data**

#### We need three data series:

- 1. Top 1% incomes in all countres in \$PPP
- 2. Top 1% incomes in all countris in FX\$
- 3. Median wages + social security costs in all countries

#### **Estimating top one-percenters**

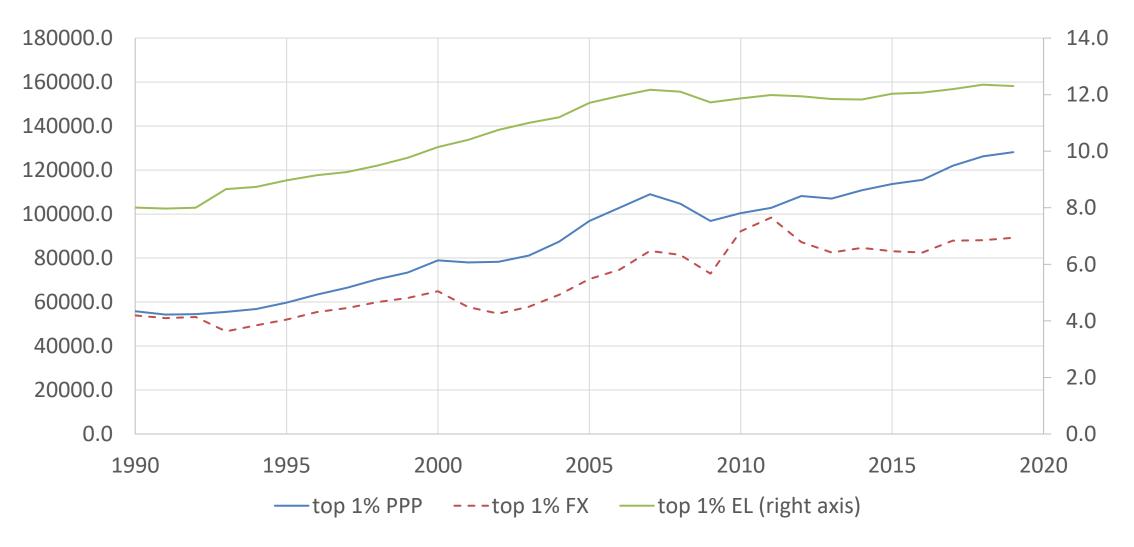
For 1 and 2 we follow Anand and Segal (2015, 2017) in combining survey and administrative data. WID has *unimputed* data on top 1% shares for 42 countries (using 'fiscal income'). We then:

- Regress these shares on top 10% share from surveys, mean income from surveys surveys, government consumption share and time trend, and impute for all countries with no years of top 1% data. N=586,  $R^2 = 0.58$
- For countries with *some* WID top 1% data, we (a) interpolate top 1% data following the growth trend of the top 10% shares and (b) extrapolate using top 10 percent shares from surveys and the latest available Pareto coefficient calculated from top 1 percent and top 10 percent shares.
- We then multiply these income shares by mean household income from World Bank surveys, respectively in PPP\$ and FX\$.

#### Estimating median wages around the world

- Start with LIS median wages for 28 countries and Segal (2021) median wages for 2 more.
- Regress these on median income from surveys, top 10% share from surveys, and government expenditure share of GDP. N = 340,  $R^2 = 0.90$
- For countries without any LIS/Segal wages, impute using this regression.
- For countries with any years of wage data, interpolate/extrapolate using median income from surveys per capita growth rates.
- Add social security costs from KPMG only for high-income countries.

## Real incomes of global elites

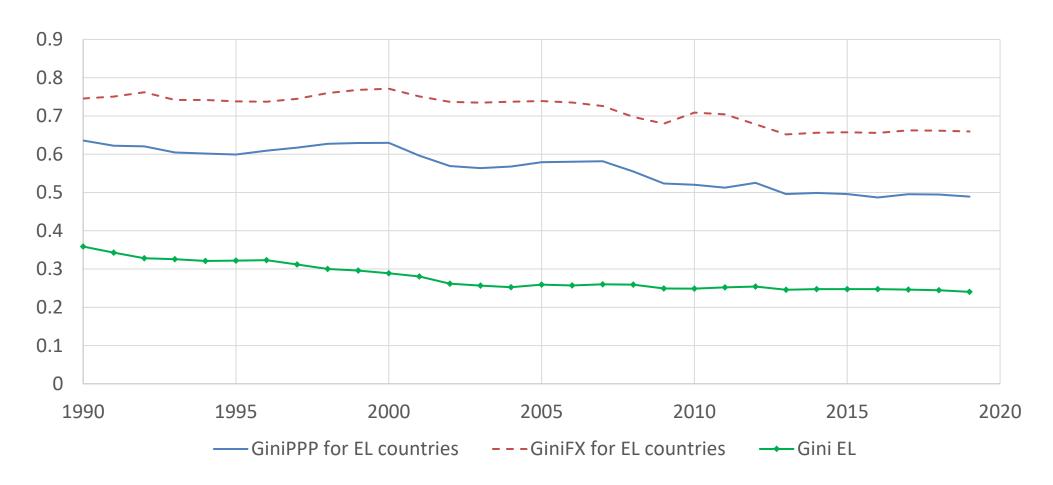


## Growth rates of global elites, and global averages

	Global elite incomes, PPP\$, %	Global elite incomes, FX\$, %	Global elite ELs, %	wages,	Global per capita GDP, PPP\$, %
1990-2000	3.5	1.9	2.4	0.4	1.2
2000-2010	2.4	3.6	1.6	1.8	2.3
2010-2019	2.7	-0.4	0.4	1.8	2.2
1990-2019	2.9	1.8	1.5	1.3	1.9

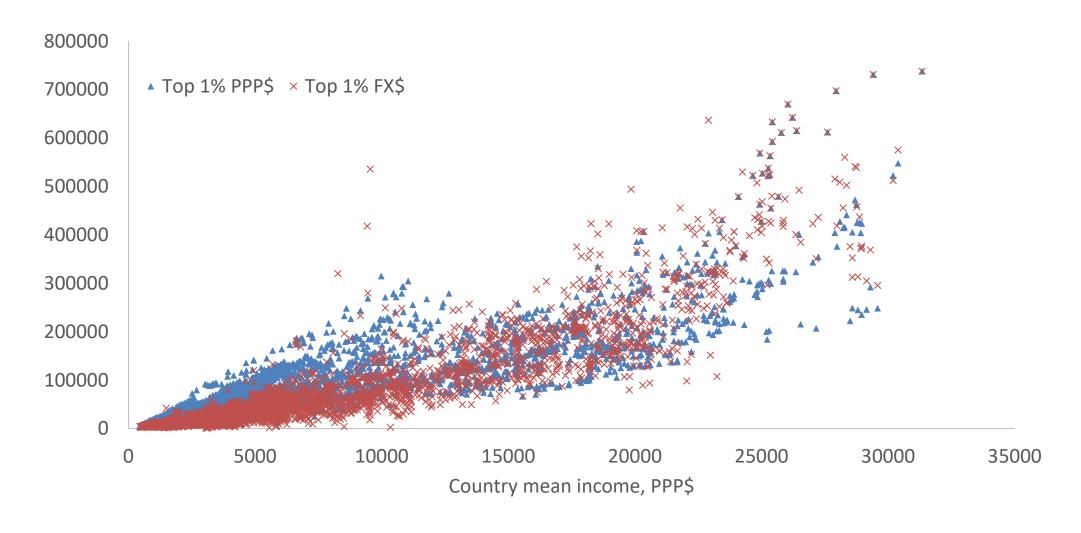
Note: population-weighted averages. We have estimates for 140 countries

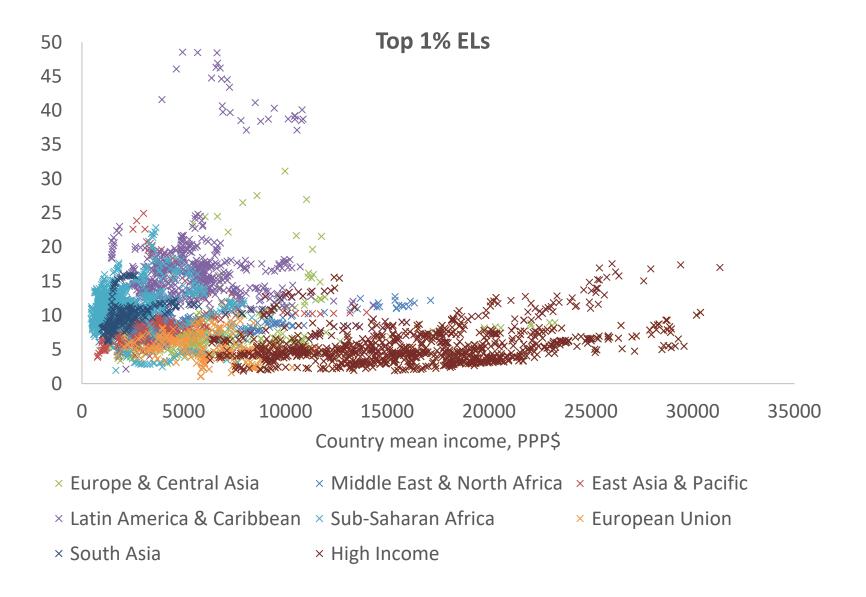
## Global inequality between national elites in PPP\$, FX\$ and ELs



**Result**: our hypothesis is supported.

#### National mean incomes and elite incomes



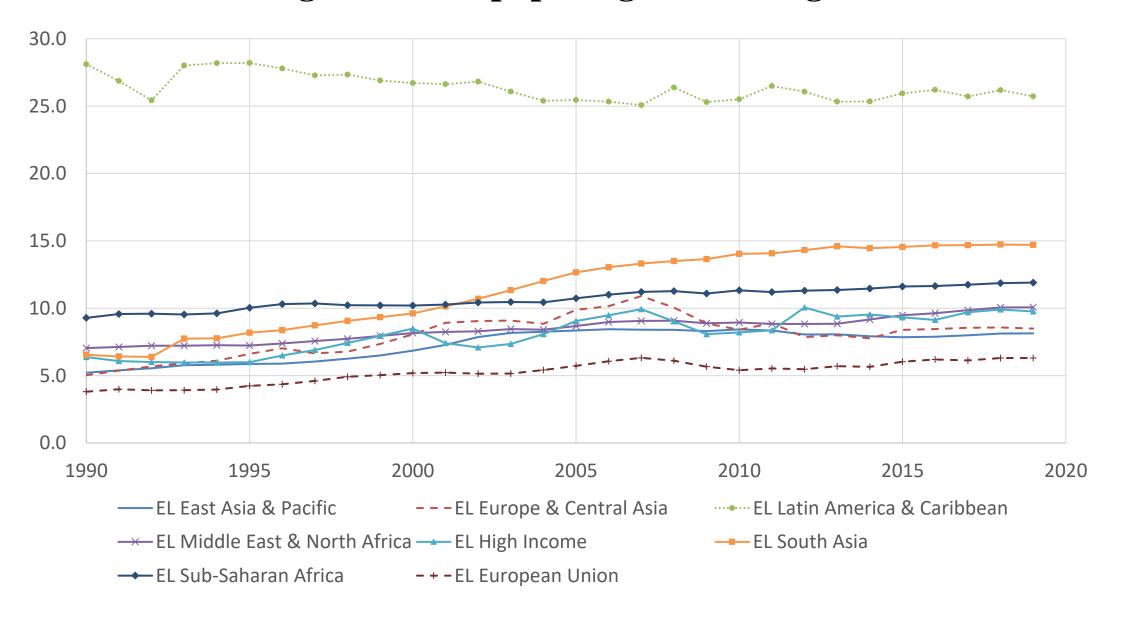


Simple correlation between country mean PPP income and top 1% ELs = -0.28

Consider the latest year, 2019, and compare the 81 poorest countries with national survey mean incomes below PPP\$20/day, compared with the 27 richest countries with national survey mean incomes above PPP\$40/day.

	Richer	Poorer	
	countries'	countries'	ratio
	elites	elites	high/low
PPP\$	\$266,000	\$62,700	4.2
ELs	6.9	11.9	1.7

## Regional ELs (pop-weighted averages)



Consider the 10 highest and 10 lowest EL countries in 1990 and 2019. In almost all cases, these countries's top 1 percenters are neither the richest nor the poorest in PPP\$. Just two exceptions:

- Brazil has the highest EL in both years, and ranks 7 and 10 for PPP incomes in 1990 and 2019, respectively.
- In 2019, the USA is close to Brazil's mirror image: it ranks 1 in PPP incomes of the top 1 percent and 8 in ELs.

Among the countries with the lowest ELs, none is in either the top or bottom 10 in terms of PPP\$ incomes.

## **Highest EL countries**

1990					2019				
	Top	Top 1%			To	p Top 1%			
	1%	PPP\$	EL	PPP\$	1%	6 PPP\$	EL	PPP\$	
country	EL	income	rank	rank	country EL	income	rank	rank	
Brazil	50.1	141002	1	7	Brazil 38	.7 292646	1	10	
Thailand	22.6	72511	2	27	Mexico 23	.0 128987	2	48	
Chile	21.1	109894	3	13	Colombia 19	.6 135199	3	45	
Namibia	20.9	41991	4	58	Costa Rica 18	.2 226517	4	18	
Guatemala	20.1	43363	5	57	Guatemala 17	.4 95705	5	65	
Mexico	17.1	74932	6	25	Jamaica 17	.4 138339	6	42	
Bolivia	16.4	73181	7	26	Peru 17 United	7.2 128258	7	49	
Honduras Dominican	15.6	31873	8	72	States 17	7.0 737918	8	1	
Republic Sierra	13.6	47745	9	51	Zambia 17	.0 35298	9	116	
Leone	13.6	12614	10	102	Paraguay 16	.9 177602	10	30	

## **Lowest EL countries**

1990					2019				
	Top	Top 1%			To	ор	Top 1%		
	1%	PPP\$	EL	PPP\$	19	%	PPP\$	EL	PPP\$
country	EL	income	rank	rank	country El	L	income	rank	rank
Czech									
Republic	2.7	35956	108	66	Mauritius	4.3	43198	127	107
Denmark	2.6	84028	109	23	Sweden	4.0	207111	128	23
Norway	2.4	66650	110	34	Croatia	4.0	79608	129	74
Finland	2.4	71923	111	28	Netherlands	3.8	158797	130	37
Slovenia	2.4	48467	112	49	Finland	3.8	155016	131	38
Belarus	2.3	39521	113	60	France	3.5	173550	132	32
Greece	2.3	39325	114	61	Denmark	3.3	137390	133	43
Netherlands	2.1	92625	115	20	Belgium	3.2	174656	134	31
Sweden	2.0	70658	116	30	Slovenia	2.9	102773	135	62
Slovak									
Republic	1.6	25075	117	80	Greece	2.1	66382	136	85

#### **Conclusion**

- Since 1990, national elite incomes around the world have grown faster than per capita GDP and median wages, consistent with standard findings on the top 1%.
- Our hypothesis based on Balassa-Samuelson is sustained: inequality between elites around the world is highest in FX, intermediate in PPP, lowest in EL.
- But this is not because ELs imply a *convergence* of incomes between national elites, but because in terms of ELs elites in poorer countries *leapfrog* or *overshoot* elites in richer countries due to higher inequality in poorer countries.