Justice and remuneration in Modern Capitalism

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RANE

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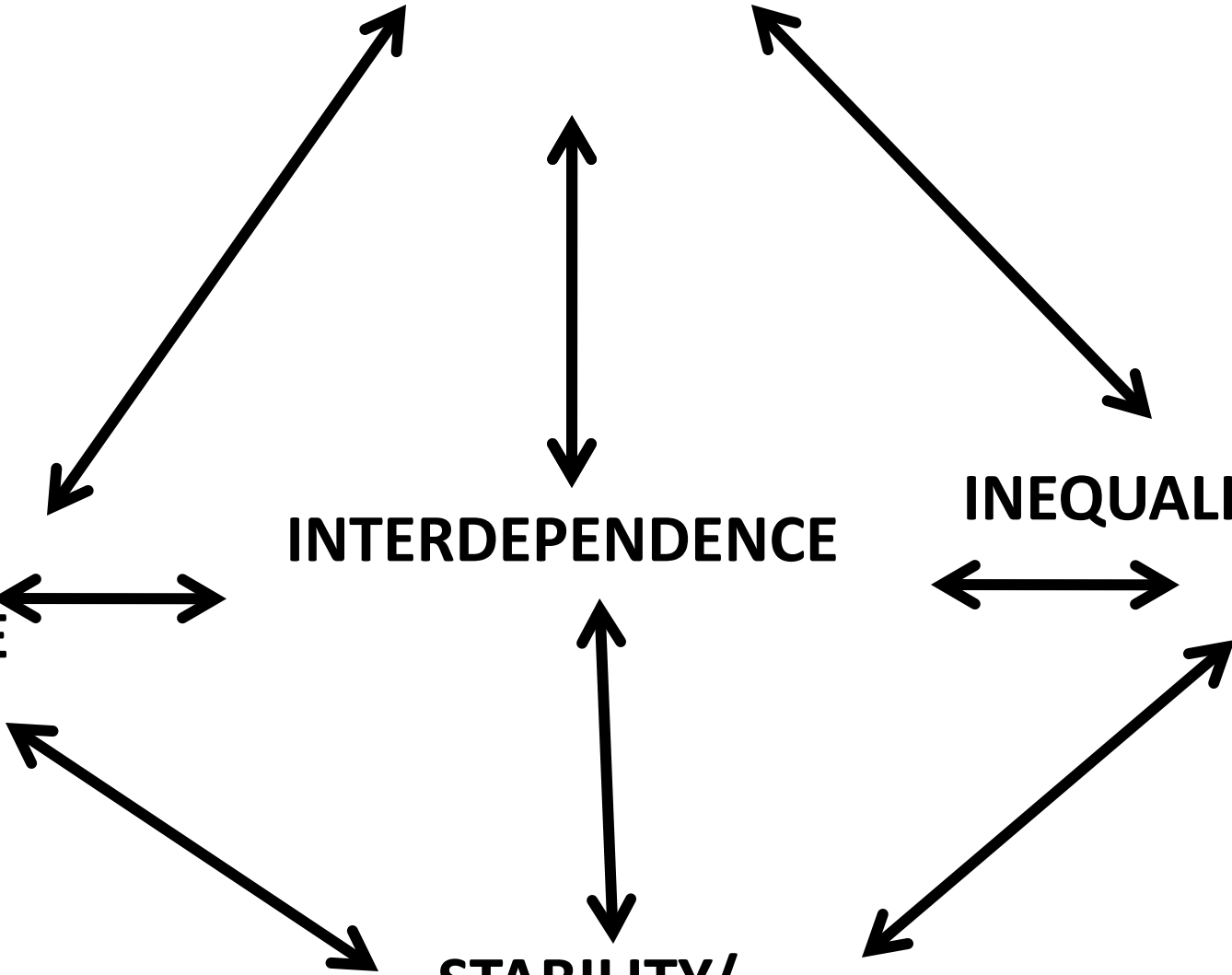
INCOME/WEALTH

# INTERDEPENDENCE

INEQUALITY

JUSTICE

STABILITY/ MOTIVATION

**Estimates NEF and RM
Source: A BIT RICH: New Economics Foundation December 2009

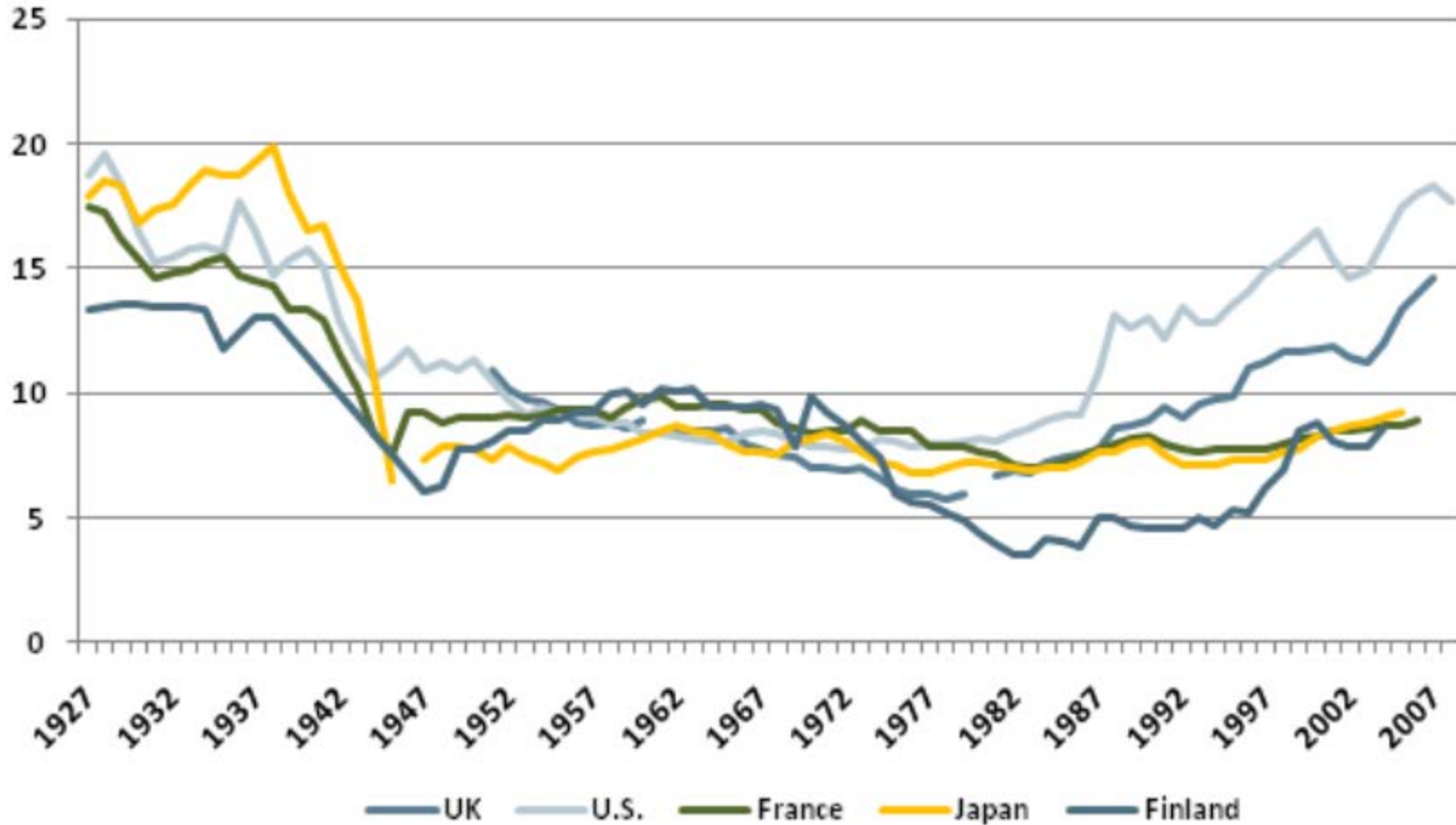| Profession	Social Value Created per £	Salary Range £ thousand*
City Bankers	Minus £7	£(55-10,000)
Child Care Workers	Plus £(7-9.50)	£(12-16)**
Adverting Executives	Minus £11	£(50-12,000)
Hospital Cleaners	Plus £10	£(11-14)**
Tax Accountants	Minus £47	£(75-200)
Recycling Workers	Plus £12	£(15-20**

INCOME INEQUALITY IN USA
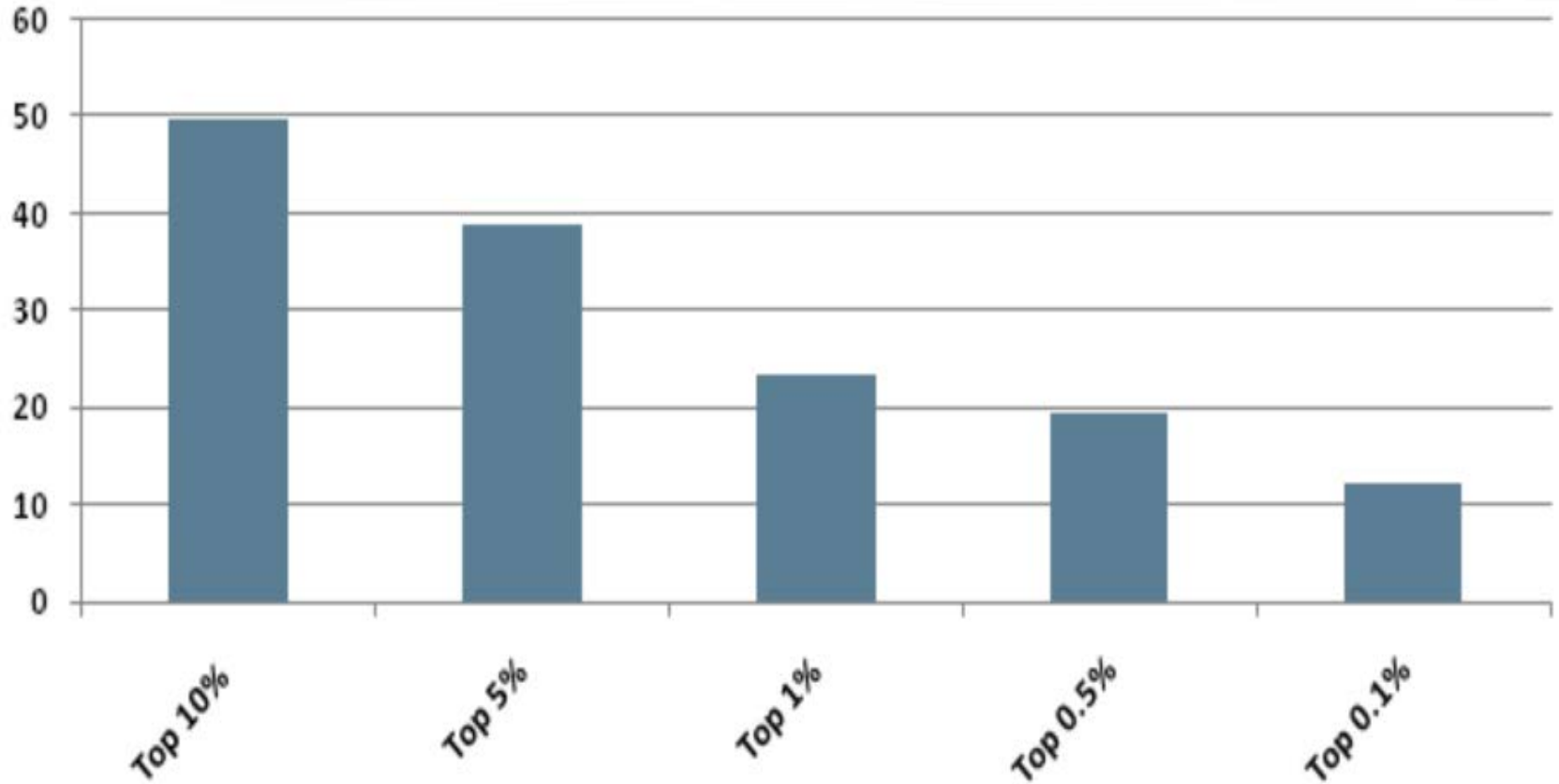
Source: Paris School of Economics and RGE Monitor 2011

TOP 1% SHARE OF INCOME

Source: Paris School of Economics and RGE Monitor 2011
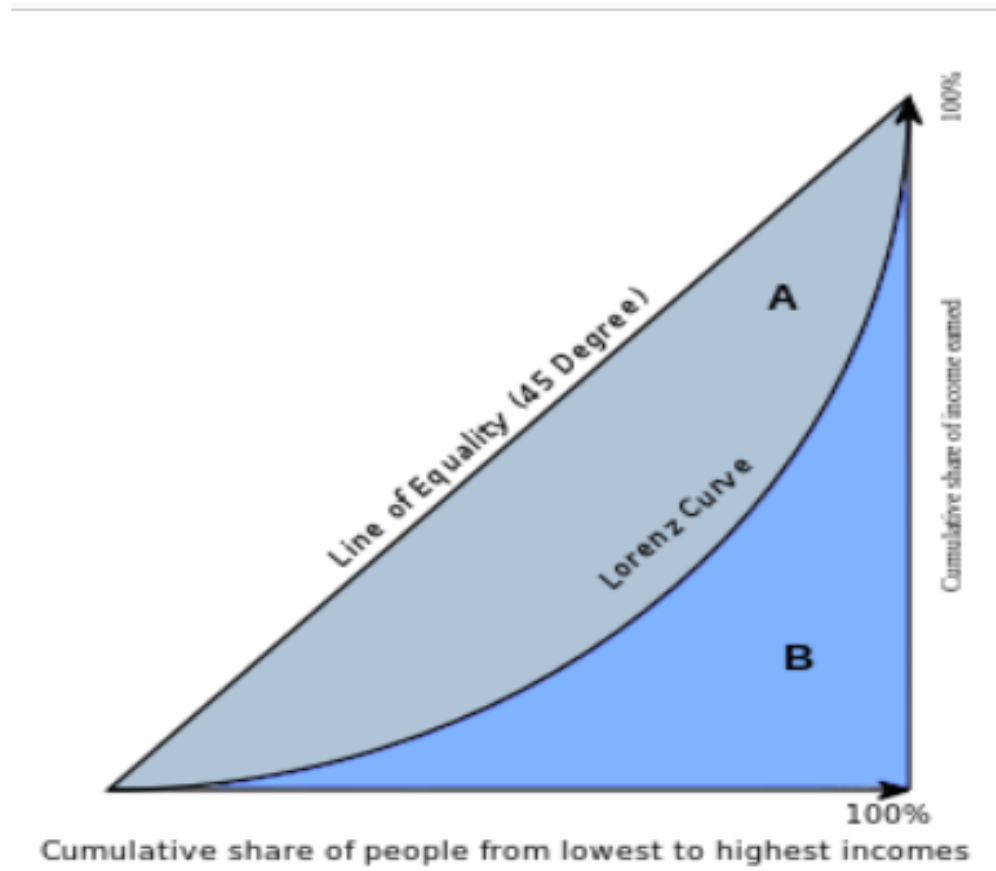
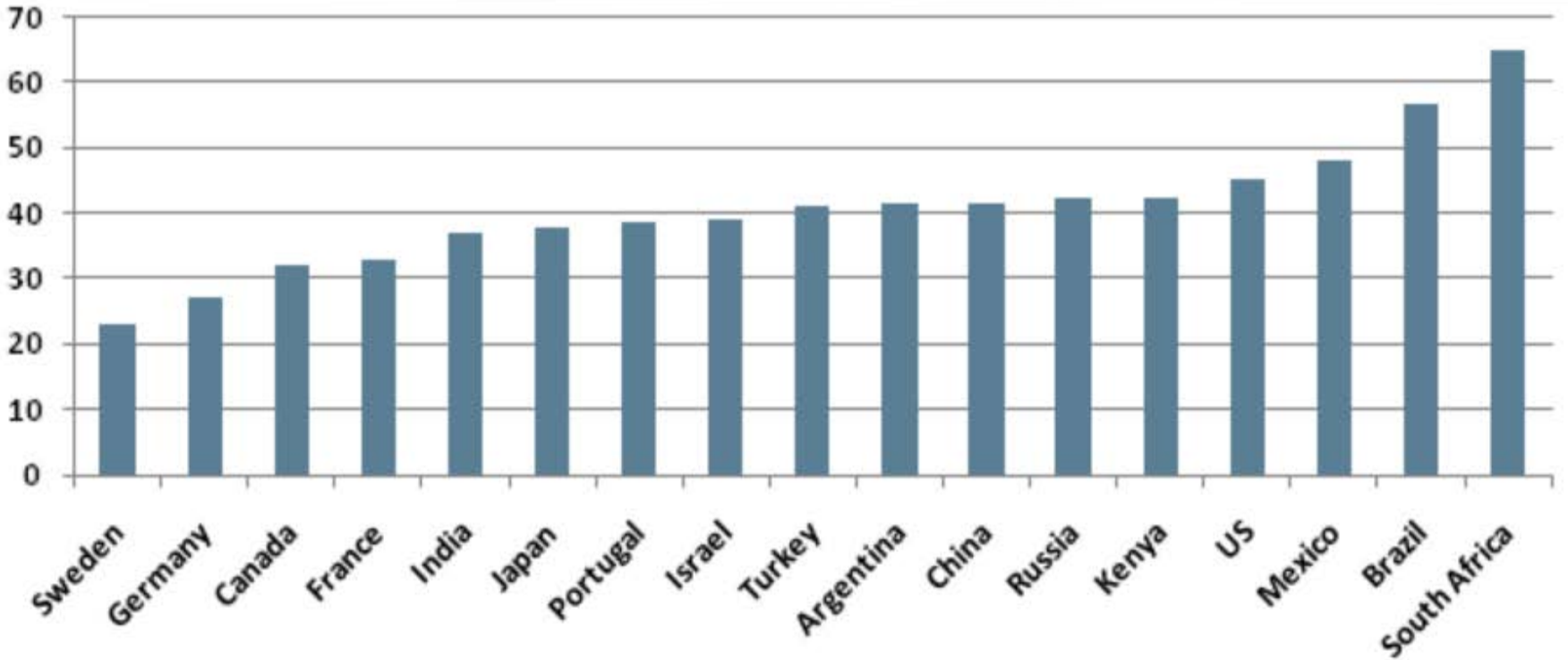Graphical representation of the Gini coefficient

The graph shows that the Gini coefficient is equal to the area marked *A* divided by the sum of the areas marked *A* and *B*. that is, Gini = *A* / (*A* + *B*). It is also equal to 2*A due to the fact that *A* + *B* = 0.5 (since the axes scale from 0 to 1).

Source Wikipedia

GINI COEFFICIENTS 2006 - 2008

SOURCE: World Bank, CIA RGE monitor

Elusive curves

Inequality has risen in most countries but only Brazil has seen the eventual fall in inequality predicted by the inverted-U-shaped Kuznets curve.

(Gini coefficient)

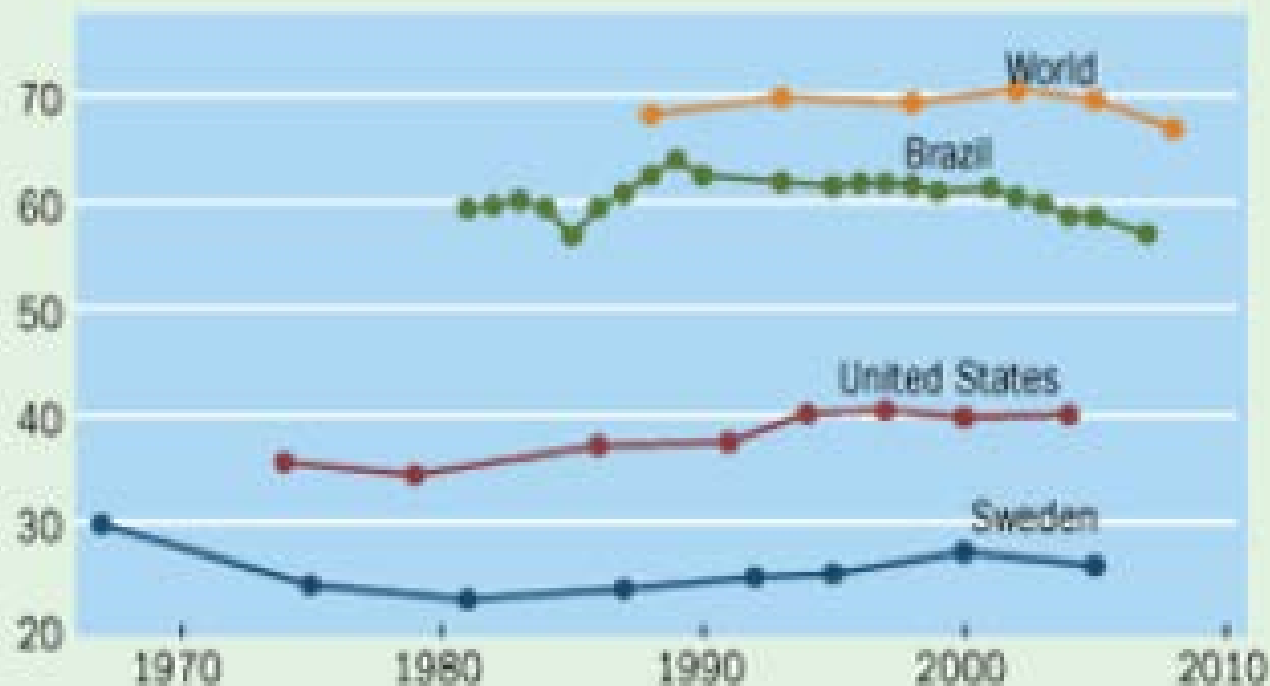Source: World Income Distribution database.
Note: China (1964-2005), United States (1950-2008), Brazil (1960-2007), Russia (1992-2005).

Chart 1

Worldwide gaps

Global inequality–between world citizens–is higher than inequality within even the most unequal individual countries.

(Gini coefficient)

Sources: For United States and Sweden, Luxembourg Income Survey database; for Brazil, Socio-Economic Database for Latin America and the Caribbean (SEDLAC); for the world, Milanovic (forthcoming). The 2008 world Gini is a preliminary estimate.

Note: Gini based on disposable income.

Figure 1

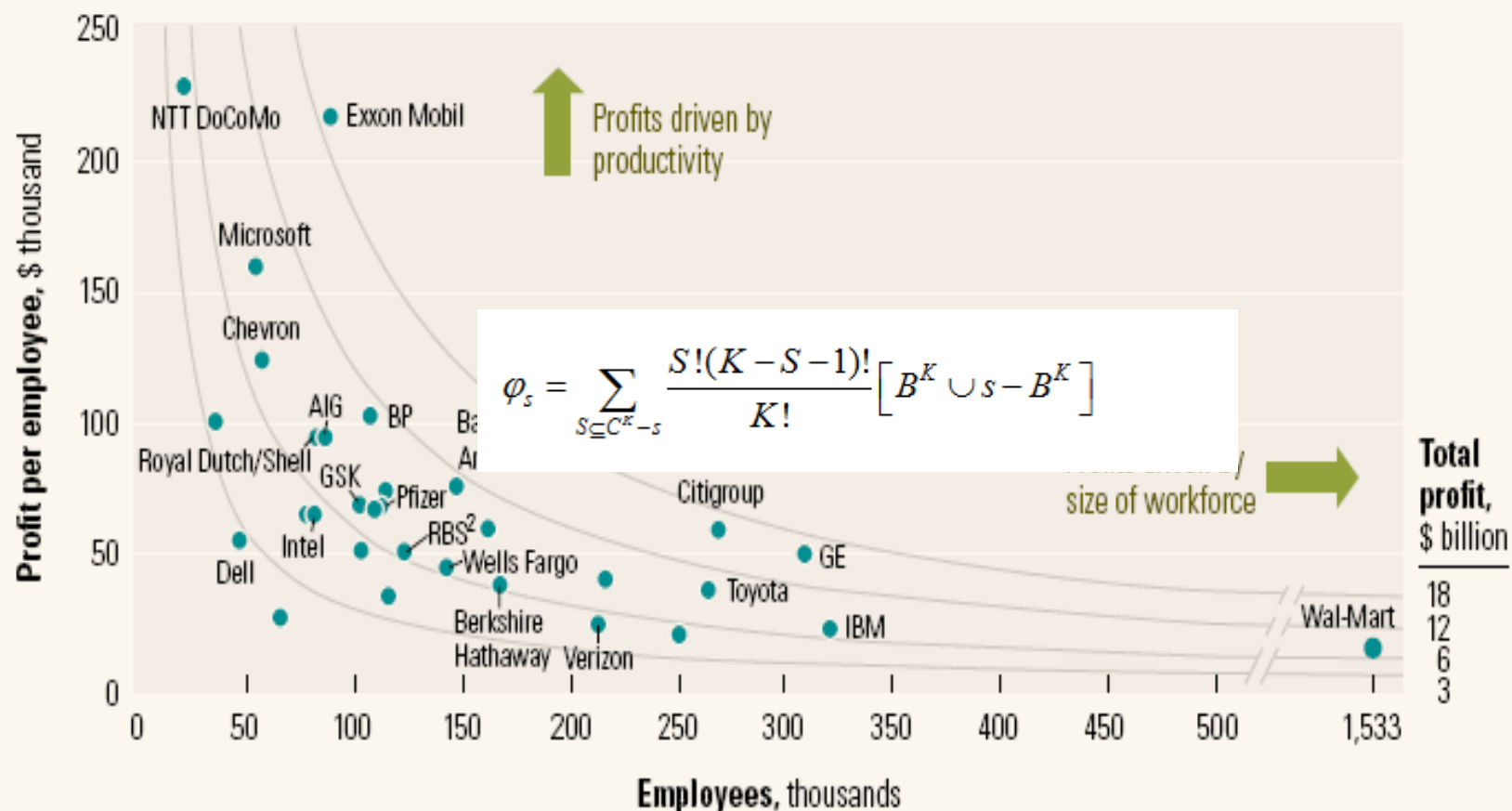### AFTER-TAX RATE OF RETURN VS. GROWTH RATE AT THE WORLD LEVEL, FROM ANTIQUITY UNTIL 2100
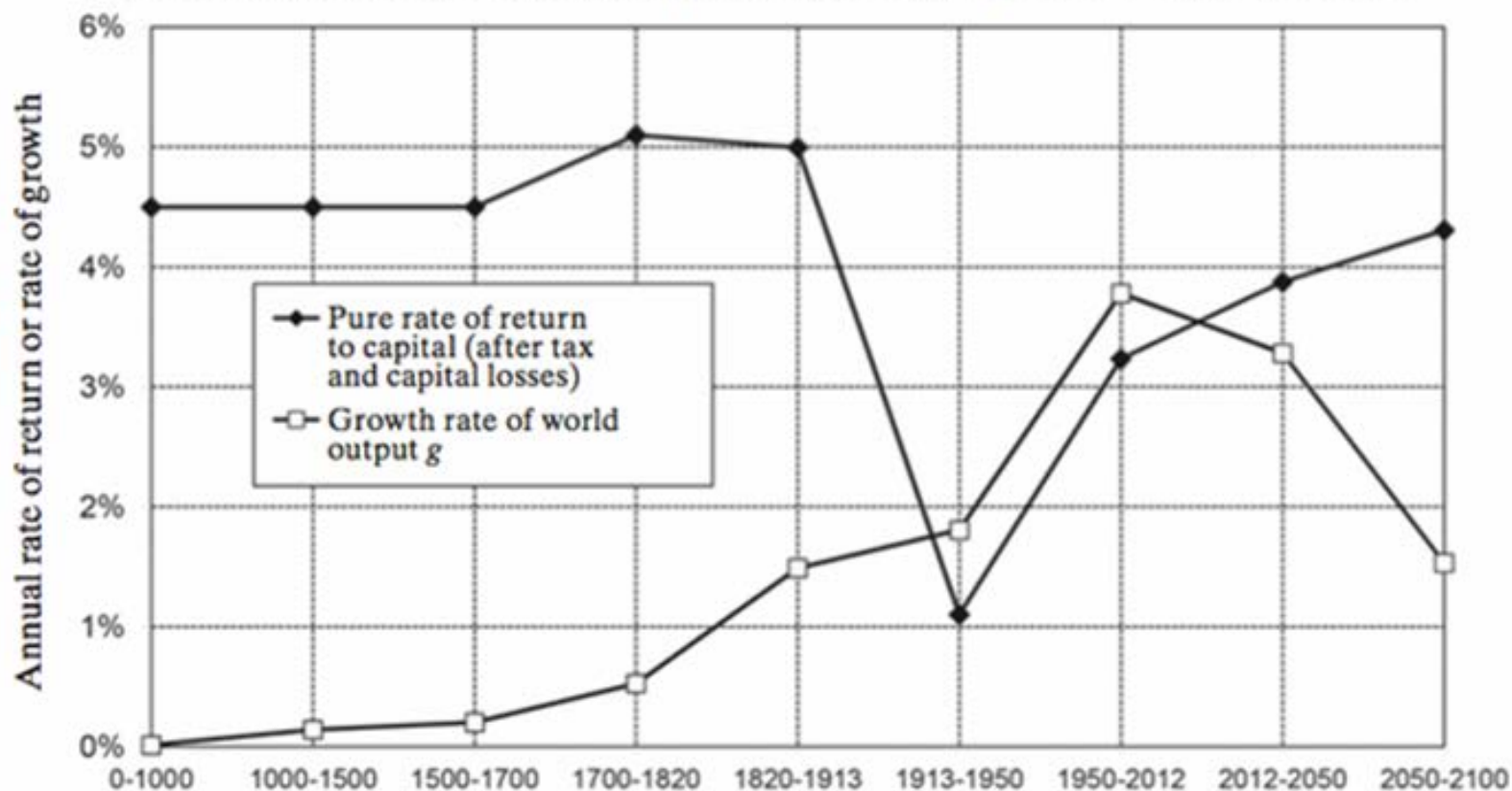
The rate of return to capital (after tax and capital losses) fell below the growth rate during the twentieth century, and may again surpass it in the twenty-first century.

Sources and series: See piketty.pse.ens.fr/capital21c

EXHIBIT 2

# Talent as profit driver

Drivers of profit for 30 largest companies,[1] 2002–04 (average)

Profit per employee, $ thousand

250
200
150
100
50
0

NTT DoCoMo

Microsoft

Chevron

AIG · BP

Royal Dutch/Shell GSK · Pfizer

Intel

Dell

RBS[2]

Wells Fargo

Berkshire Hathaway Verizon

· Exxon Mobil

Ba...

A...

Citigroup

· GE

· Toyota

· IBM

Profits driven by productivity

$$\varphi_s = \sum_{S \subseteq C^K - s} \frac{S!(K-S-1)!}{K!}\left[B^K \cup s - B^K\right]$$

size of workforce

Wal-Mart

Total profit, $ billion

18
12
6
3

0   50   100   150   200   250   300   350   400   450   500   1,533

Employees, thousands

[1]US and foreign companies by American depositary receipts, top 30 by market capitalization in 2004; excludes outliers and companies with negative net incomes.
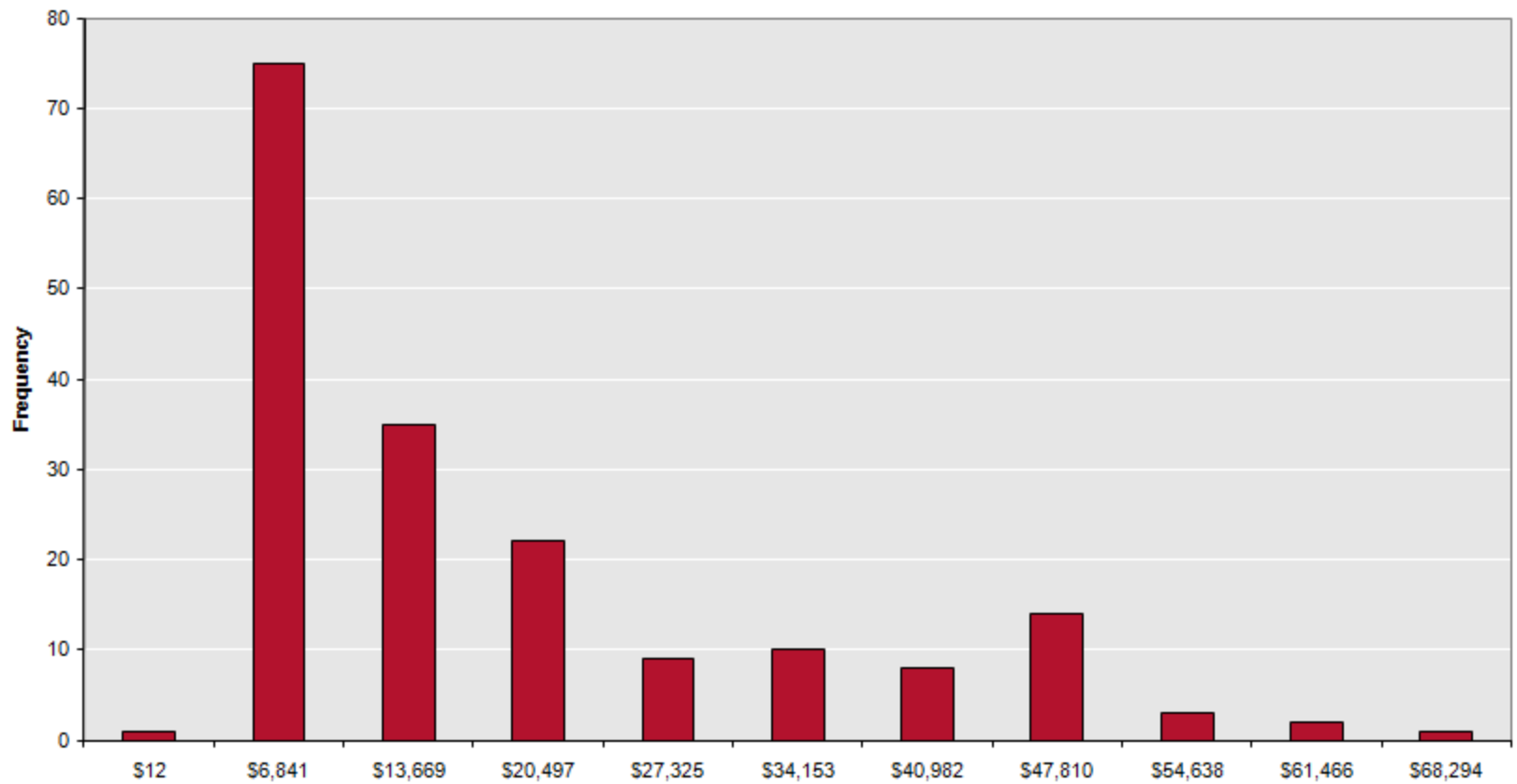
[2]Royal Bank of Scotland.

A histogram of per-capita income distributions in 2005
182 countries
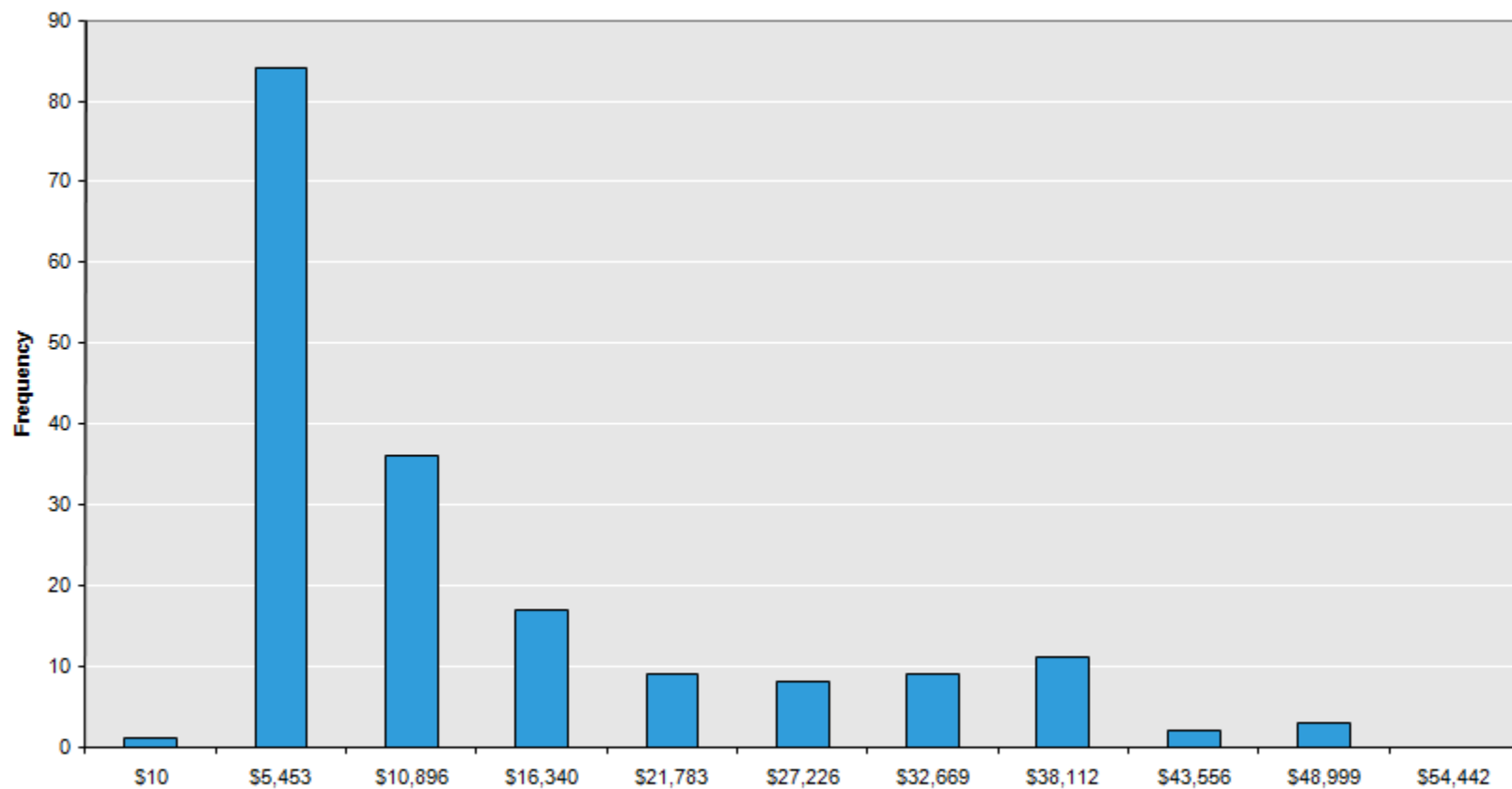
Source: IMF; News N Economics

A histogram of per-capita income distributions in 2014
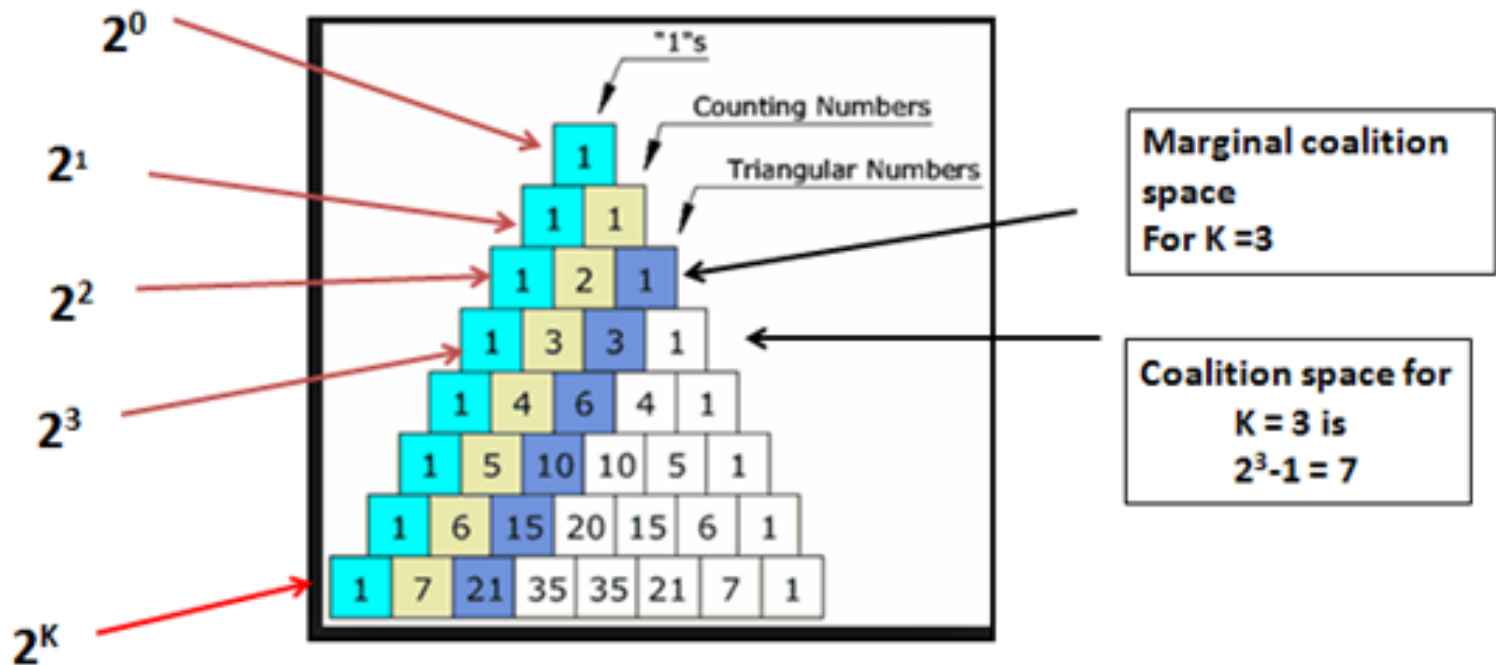182 countries

Source: IMF; News N Economics

$$\varphi_s = \sum_{S \subseteq C^K - s} \frac{S!(K - S - 1)!}{K!} \left[B^K \cup s - B^K \right]$$

SHAPLEY VALUE

THE MARGINAL CONTRIBUTION TO A COALITION

X

THE PROBABILITY OF THAT COALITION ARISING

For K activities coalition space is 2^K-1
(null coalition excluded)
Marginal coalition space is 2^{K-1}

Simplistic Organization Matrix

- **V(a) + V(b) + V(c) = 15**

$$\begin{array}{c} \\ a \\ \\ b \\ \\ c \end{array} \begin{array}{ccc} a & b & c \\ \left[\begin{array}{ccc} 1 & & \\ & 5 & \\ & & 9 \end{array}\right] \end{array}$$

- V(a,b,c) = 45
-   a   b   c
- a
- b
- c

$$\begin{array}{ccc} a & b & c \\ \left[\begin{array}{ccc} 1 & 2 & 3 \\ 6 & 5 & 4 \\ 7 & 8 & 9 \end{array}\right] \end{array}$$

AGGREGATE COALITIONS				MARGINAL COALITIONS			WEIGHT
Members [1]	Size [2] C^K	Number [3]	Value [4] B^K	Members [5]	Number [6]	Value [7]	[8]
{abc}	3	1	45	{(a)bc} {(b)ac} {(c)ab}	3	19 25 31	$1/3 = \dfrac{2!0!}{3!}$
{ab} {ac} {bc}	2	3	14 20 26	{(a)b} {(a)c} {(b)a} {(b)c} {(c)a} {(c)b}	6	9 11 13 17 21 19	$1/6 = \dfrac{1!1!}{3!}$
{a} {b} {c}	1	3	1 5 9	{(a)0} {(b)0} {(c)0}	3	1 5 9	$1/3 = \dfrac{0!2!}{3!}$
{0}	Dummy						