

Rethinking the Lebanese economic miracle:  
The extreme concentration of income and wealth  
in Lebanon, 2005-2014

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- ⇒ **"Enigma of Inequality"** (UNDP, 2012); **"Arab Inequality Puzzle"** (World Bank, 2015)

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- ⇒ **The answer of the “Enigma” lies in a measurement error**

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## ① Household surveys

- No micro-data available, only tabulations for 2007

## ② Income tax returns

- Income tax created in 1959 : schedular, progressive and individual
- Quasi-exhaustive micro-files from 2005 to 2014 shared by the Ministry of Finance, covering the top 1%
- One observation = declaration of a taxpayer, with three sources of income reported
  - ① Business incomes (self-employment income + profits of partners in partnerships + profits of associates in S-corp)
  - ② Wages
  - ③ Housing rental income

## ③ National accounts

## ④ Wealth rankings from magazines

## Caveat on the fiscal data

Large amounts of capital income missing

- Capital income taxed under the personal income tax (movable capital including dividends, interests)
- Rental income of people living in their own dwelling
- Corporate income (retained earnings etc.)
- Tax exempt and deduced income

⇒ Biases downwards the inequality statistics

I follow a 3-step procedure :

## **Step 1 : I estimate a survey income distribution**

- I start from the 2007 survey tabulations ("before and after the war") to generate a survey distribution for 2005-2014 (adjusting for the change in price level).
- I apply generalized Pareto interpolation techniques (Blanchet et al. 2017 : non-parametric generalization of techniques used in income distribution literature) in order to generate series by income percentiles (from bottom to top).

⇒ For the bottom of the distribution, the levels are inequality are constant

### **Step 2 : I estimate a fiscal income distribution $y_f$**

I correct the top of the survey distribution using fiscal data

- I take the survey distribution for the bottom 80% of the distribution
- I take the tax data for the top 1%
- I link the two parts of the distribution assuming a linear profile

### Step 3 : I estimate a missing income distribution $y_m$

- I impute the missing amounts (including dividends, interests, imputed rent, retained earnings, corporate tax, etc.) as share of national income using national accounts and public finance reports
  - ⇒ **they represent 20% of total national income**

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- I estimate the total personal income distribution  $y_p = y_f + y_m$  using the family of Gumbel copulas, with Gumbel parameter  $\theta = 3$ .

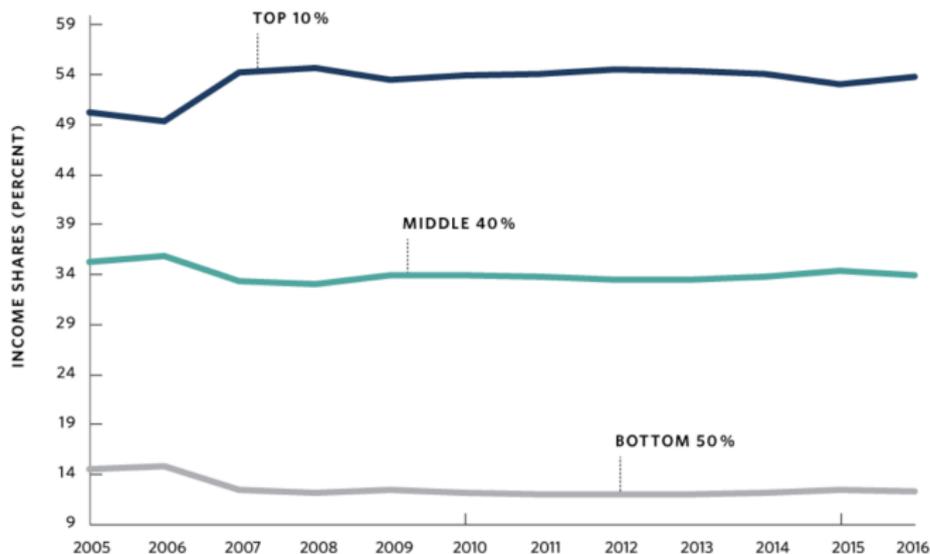
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- I upgrade all levels to match average national income of WID.world macro database

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# The extreme concentration of income

## Income Shares in Lebanon, 2005-2016

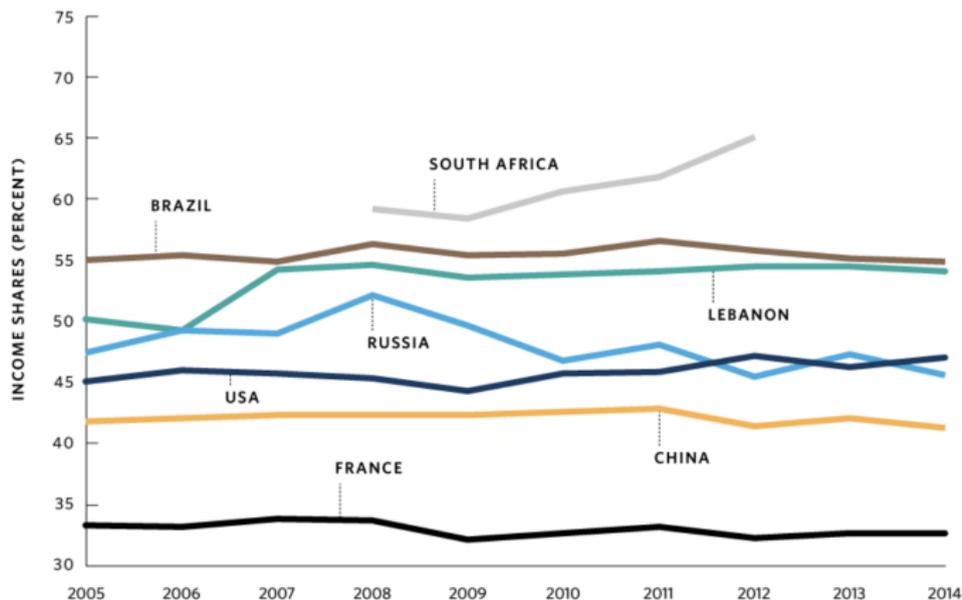


**SOURCE:** Lydia Assouad, "Rethinking the Lebanese Economic Miracle: The Extreme Concentration of Income and Wealth in Lebanon 2005-2014," WID.world working paper series number 2017/13, World Inequality Lab, September 19, 2018, <https://wid.world/document/rethinking-lebanese-economic-miracle-extreme-concentration-income-wealth-lebanon-2005-2014-wid-world-working-paper-201713>.

**NOTE:** The figure shows the distribution of national income among adults age 20 and older. Corrected estimates combine survey, fiscal, wealth, and national accounts data. They utilize an equal-split-adults series (where household income is divided by the number of adults in the household for the bottom of the distribution).

# International comparison

## Top 10 Percent Income Share in Lebanon and Selected Countries



**SOURCE:** "Data," World Inequality Lab, <https://wid.world/data>; and Lydia Assouad, "Rethinking the Lebanese Economic Miracle: The Extreme Concentration of Income and Wealth in Lebanon 2005-2014," WID.world working paper series number 2017/13, World Inequality Lab, September 19, 2018, <https://wid.world/document/rethinking-lebanese-economic-miracle-extreme-concentration-income-wealth-lebanon-2005-2014-wid-world-working-paper-201713>.

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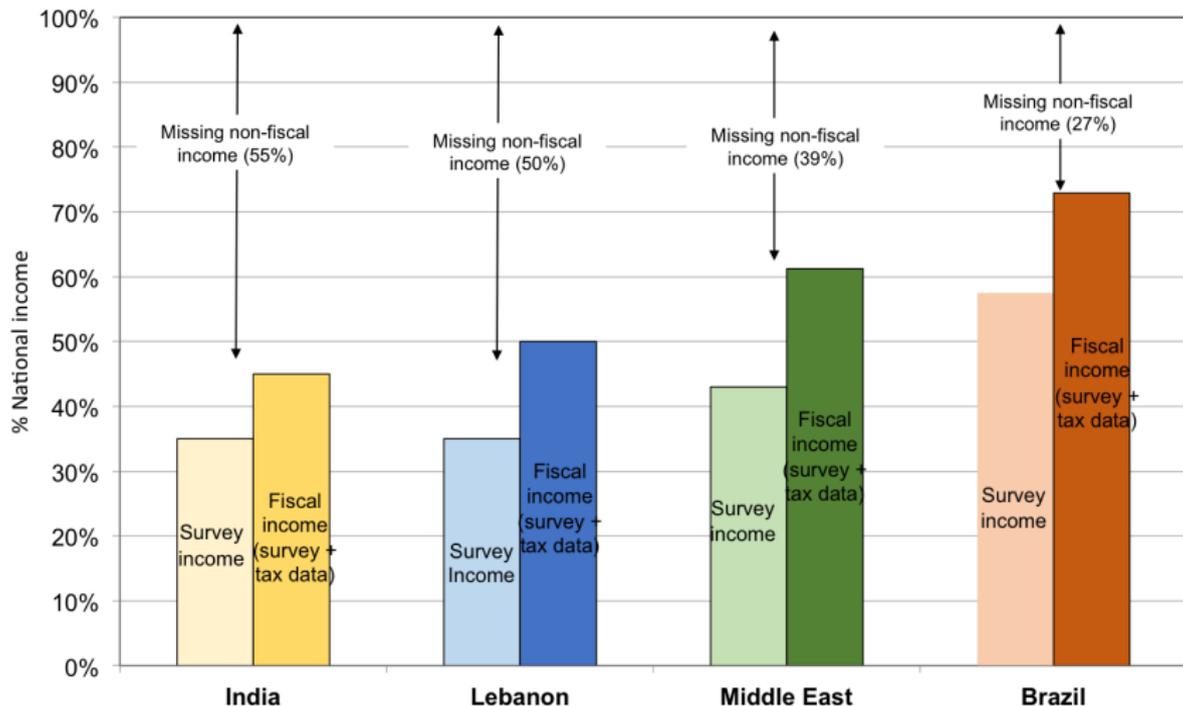
**Top 1 Percent and Bottom 50 Percent of Labor Income Shares in Lebanon, 2005-2016**



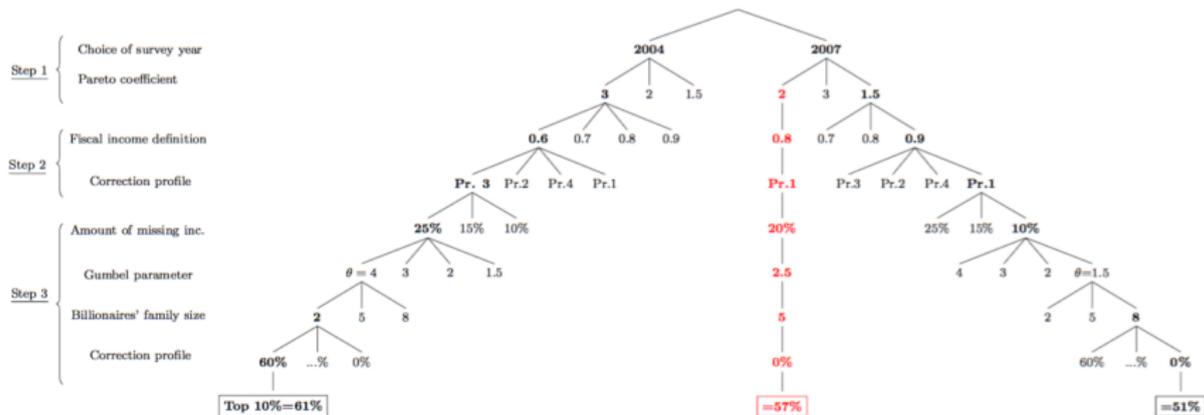
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**NOTE:** This figure shows the distribution of labor income declared by tax papers (micro-fiscal data shared by Lebanon's Ministry of Finance).

# Large uncertainty, as in other extremely unequal regions



# Robustness : Decision tree of assumptions



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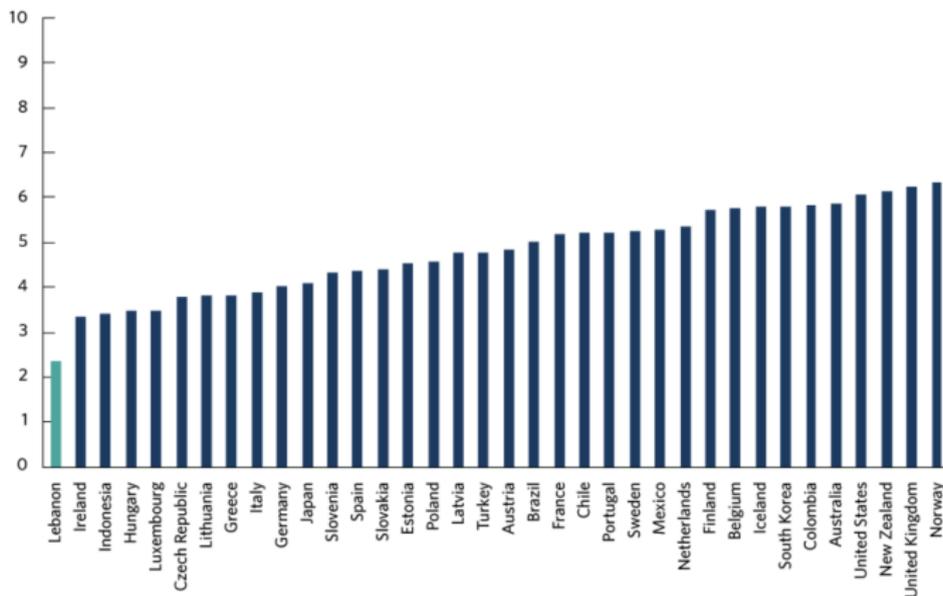
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## ③ Absence of political constraints on sectarian leaders

- ★ Major tax breaks, laissez-faire policies, and minimum state intervention
- ★ Crony capitalism and connexion with business elites

## Total Education Spending (Public and Private) as a Share of GDP, 2015

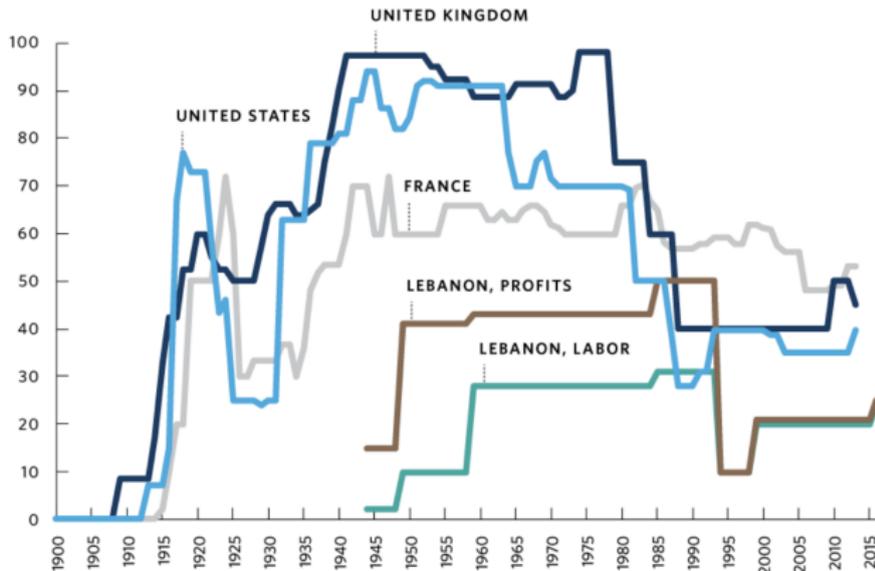


**SOURCE:** Republic of Lebanon Ministry of Finance, Public Finance Report (2015), <http://www.finance.gov.lb/en-us/Finance/Rep-Pub/DRI-MOF/PFR>; and OECD (2020), "Education spending (indicator)," accessed June 15, 2020, <https://data.oecd.org/eduresource/education-spending.htm>; doi: 10.1787/ca274bac-en.

**NOTE:** Education spending covers expenditure on schools, universities, and other public and private educational institutions. Spending includes instruction and ancillary services for students and families provided through educational institutions. Figures sum primary, secondary, and tertiary education.

# Major tax Breaks

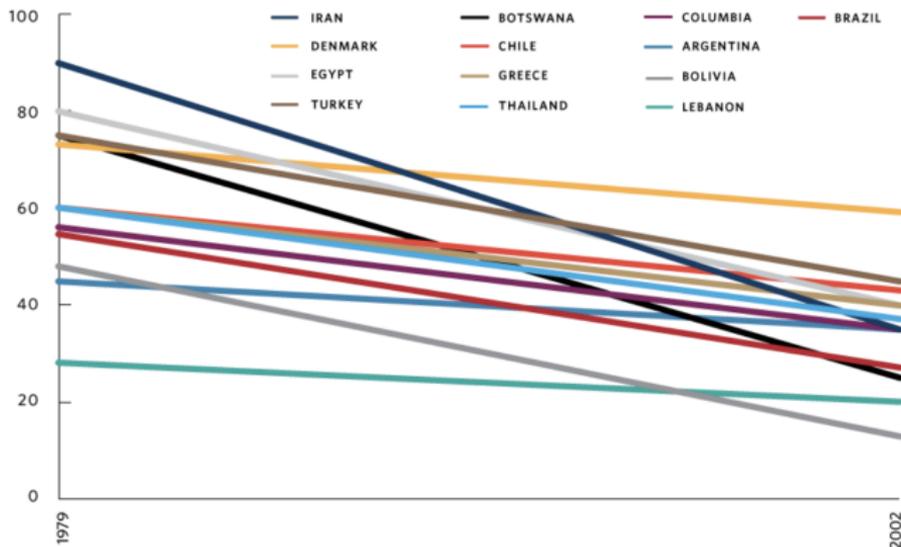
## Evolution of Top Marginal Tax Rates on Personal Income in Selected Countries



**SOURCE:** For data on Lebanon, see Carole Dagher, *Proche-Orient: Ces Hommes Qui Font La Paix* [The Near-East: The Men Who Made Peace] (FMA, 1995); Raja S. Himadeh, "The Fiscal System of Lebanon," American University of Beirut master's thesis, presented June 1953, <https://scholarworks.aub.edu.lb/bitstream/handle/10938/3323/t-119.pdf>; Karim Daher, *Les Impôts au Liban* [Taxation in Lebanon] (Beirut: Librairie Antoine, 2002); and Georges Corm, *Le Liban contemporain: Histoire et société* [Contemporary Lebanon: History and Society] (Paris: Éditions La Découverte, 2012). For data on France, Germany, the United Kingdom, and the United States, see Thomas Piketty, *Capital in the 21st Century* (Cambridge: Harvard University Press, 2014); data downloaded at <https://ourworldindata.org/grapher/top-income-tax-rates-piketty>.

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# Thank you

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