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

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Motivation

How Unequal are Arab Countries?

- Little data available
- Low estimates found

→ 2011: Gini coefficients of 0.35 for Lebanon and Egypt
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- Declining living conditions
- Access to basic services
- Corrupt and rich political class
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⇒ "Enigma of Inequality" (UNDP, 2012); "Arab Inequality Puzzle" (World Bank, 2015)
This paper

- I use new fiscal micro data, combined with survey tabulations, national accounts and wealth rankings for Lebanon following the DINA methodology (Alvaredo et al. 2017)

First estimates of income inequality in a Middle Eastern country

- The top 10% and 1% of the adult population receive approximately 55 and 25% of total national income
- Lebanon is among the countries with the highest level of inequality

Large uncertainty in the estimates, but the results are robust to sensitivity analysis

⇒ The answer of the “Enigma” lies in a measurement error
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1. Data and Methodology

2. Main Results: the extreme concentration of income and wealth in Lebanon

3. Discussion: Why is inequality so high in Lebanon?
Data and Methodology

Main Results: the extreme concentration of income and wealth in Lebanon

Discussion: Why is inequality so high in Lebanon?
Four data sources

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.
Methodology: Step 2

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

  $\Rightarrow$ 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
Data and Methodology

Main Results: the extreme concentration of income and wealth in Lebanon

Discussion: Why is inequality so high in Lebanon?
The extreme concentration of income

Income Shares in Lebanon, 2005-2016


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**

The extreme concentration of income

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


**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

Step 1
- Source to estimate the # adults per HH, by income group
  - Pareto coefficient

Step 2
- Fiscal income definition
  - Correction profile

Step 3
- Amount of missing inc.
  - Gumbel parameter
  - Billionaires' family size
  - Correction profile

2015-2020 data
- 0.6
- 0.7
- 0.8
- 0.9
- Pr. 3
- Pr. 2
- Pr. 4
- Pr. 1

2004 data
- 0.8
- 0.7
- 0.8
- 0.9
- Pr. 1
- Pr. 3
- Pr. 2
- Pr. 4
- Pr. 1

θ = 4
- 3
- 2
- 1.5
- 25%
- 15%
- 10%

θ = 2
- 4
- 3
- 2
- θ = 1.5
- 25%
- 15%
- 10%

100%
- 5
- 8
- 0%

Top 10% = 65%

= 52%

= 45%
What about wealth?

- Data even scarcer
- Billionaires’ rich list
- Statistics on offshore wealth shared (or leaked) by offshore financial centers.
  - Data from the Swiss National Bank, the Bank for International Settlements, and leaks from HSBC Switzerland (the "Swiss Leaks") and Mossack Fonseca (the "Panama Papers")
  - Disclose bilateral information on the total amount of bank deposits held by foreigners from a given country in their banks
- New micro-dataset which details the ownership of about 800,000 properties in Dubai, analyzed by Alstadsæter et al. (2022) to document cross-border real estate investments pattern and non-financial offshore wealth
Billionaires’ wealth as share of GDP (%)
Offshore financial wealth (% GDP)

World average: 9.8%

MENA average: 28%
Real Estate Held in Dubai in 2020, Relative to GDP: Top 20 Investing Countries, from (Alstadsæter et al., 2022)
Real Estate Held in Dubai in 2020, unique owners : Top 20 Investing Countries, from (Alstadsæter et al., 2022)
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Lebanon’s consociational democracy and oligarchic system

- Creation of a “party cartel” system and national unity governments
- No cohesive public policies, for the common interest
- Collusion in the matter of plundering the state, protecting their economic privileges, and preventing political competition (Parreire 2020)
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Mechanisms of elite predation and their distributional consequences

- State retrenchment and low public good provision
- Clientelistic welfare patronage
- Advantageous fiscal laws and market concentration
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Self-enforcing mechanism: the richer the elite, the more they can control politics and skew policy in their favor, and the richer they get (Stiglitz 2012, Atkinson 2015)
Major tax Breaks

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

<p>Major tax Breaks</p>

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

![Graph showing the evolution of top marginal tax rates on personal income in selected countries from 1970 to 2002.](image)

Thank you

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