DRIVERS OF INEQUALITY

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Setting the scene

The income inequality in the Arab region tend to be moderate as compared to other regions (Bibi and Nabli 2010). However, there are debates about the measures of inequality (or what to measure) and their evolution in the Arab region (ESCWA 2014; Alvaredo and Piketty 2014; Ianchovichina et al. 2015). Multidimensional inequality is another complicated measure.

Some evidences:

1. Economic growth in the region have not translated to creation of decent jobs and poverty reduction, as one would expect to happen (ILO and UNDP report 2013; Sarangi 2015).

2. The deprivation in education attainment has the highest contribution to Arab multidimensional poverty index (Arab MPI report 2017).

3. Wealth is subject to great urban–rural and educated-uneducated gaps in Arab countries (Hlasny and AlAzzawi 2017). Individual’s area of birth and father’s education have the largest impact on earnings inequality (Hassine 2012).

What drives inequality (and between whom?) is a much more complex question than we have answers.

We looked into three key issues: Real wages or labour share in the growth process; effectiveness of fiscal policy (redistributive impact); initial structural conditions (pre-existing inequality) and their correlates with other characteristics.
1. Economic growth processes
## Income inequality

### Gini coefficient, consumption share by population deciles

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Gini</th>
<th>Consumption share by lowest decile (%)</th>
<th>Consumption share by highest decile (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>2015</td>
<td>31.82</td>
<td>3.92</td>
<td>27.78</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>31.85</td>
<td>3.87</td>
<td>27.44</td>
</tr>
<tr>
<td>Iraq</td>
<td>2012</td>
<td>29.54</td>
<td>3.68</td>
<td>23.7</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>28.6</td>
<td>3.95</td>
<td>23.63</td>
</tr>
<tr>
<td>Jordan</td>
<td>2010</td>
<td>33.66</td>
<td>3.45</td>
<td>27.45</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>36.95</td>
<td>2.98</td>
<td>29.51</td>
</tr>
<tr>
<td>Morocco</td>
<td>2013</td>
<td>39.55</td>
<td>2.7</td>
<td>31.89</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>40.64</td>
<td>2.63</td>
<td>32.13</td>
</tr>
<tr>
<td>Tunisia</td>
<td>2010</td>
<td>35.81</td>
<td>2.6</td>
<td>27.03</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>40.81</td>
<td>2.44</td>
<td>31.57</td>
</tr>
</tbody>
</table>

**Source:** Povcal database (accessed in October 2018)

- The Gini is quite moderate and stagnant. How real is it?
- Bottom 10% of the population: < 3% consumption share
- Top 10% of the population: >25% consumption share
- Big divide among income earners:
  - An extremely rich group at the top
  - A much poorer mass of the population

(Alvaredo et al 2018)
Wages and productivity growth diverging
Developed economies

Growth in average wages and labour productivity in developed economies (index) 1999-2013

- Labour productivity has continued to outstrip real wage growth, among developed economies
- No such data for Arab region to examine these trends

A negative growth in real earnings in several countries across the region

Mean monthly real earnings of employees, annual growth (%), 2014-2015

- Real earnings growth is negative for most countries, except for Morocco, Tunisia, Oman and KSA.
- Labour income share in GDP is low; it lies between 30% and 40% across Arab countries (2016)

Source: Based on ILO 2018.
Enterprise survey: What do we know about wages and capital share in the private sector of Arab countries?

Why higher capital employment could be a source of inequality?

Source: UN-ESCWA Estimates based on ES
Enterprise survey: Country Examples

Manufacturing does not have the highest wage bill!

Source: UN-ESCWA Estimates based on ES
Enterprise survey: What do we know about wages and capital share continued?

Correlation between employment and wage share

Correlation between employment and Capital share

Capital and labour do not complement each other!

Source: UN-ESCWA Estimates based on ES
Enterprise survey: Wage share, Capital Share and Technology

Those who innovate employ less labour and more capital.

Source: UN-ESCWA Estimates based on ES
2. Redistributive fiscal policies
Current expenditure in health (% GDP) in the Arab region is significantly below the World average;

Arab region was ahead of other regions in making investments in education (% GDP), but it has seen a declining trend recently, particularly since mid-2000s.

**Current Health Expenditure 2000-2015 (% GDP)**

![Graph showing current health expenditure 2000-2015 (% GDP)]

**Government Expenditure on Education, Total 2000-2014 (% GDP)**

![Graph showing government expenditure on education 2000-2014 (% GDP)]

Source: World Bank, WDI; calculations for the Arab World based on IMF.
Fiscal incidence analysis: Impact of taxes and transfers on poverty and inequality

Impact on poverty

- Jordan as an example:
- Public transfers impact significantly in reducing poverty and inequality than direct taxes and social security contributions

Impact on Gini

Jordan: Burden of taxes: Is it helping to improve equality

**Burden of direct tax by deciles**

- Direct taxes show progressivity, but the burden of direct taxes tends to be low for the top decile.
- Indirect taxes are more regressive, as we know -- poorest 40% of the population spare a larger share of its market income for indirect taxes as compared to higher decile population.

**Burden of indirect tax by deciles**

3. Initial structures of inequality in non-income dimensions and their evolution
Disparity across countries is systematic over the years

Education and health achievements

Average years of education

Prevalence of child stunting

- Mean years of schooling increased in all countries; but large disparities between countries: the average years of education in Sudan is 4.2 years versus 9.7 in Jordan.

- Prevalence of child stunting decreased in all countries; but large disparities between countries exist: Prevalence of child stunting in Sudan is 38% versus 8% in Jordan.

Source: based on MICS/DHS
Across countries/ Within countries: Rural vs Urban

Average years of education

Prevalence of child stunting

Source: based on MICS/DHS

- Inter-country inequality is systematic and persistent; So too gap between rural and urban.
Initial structures

**Education of head of household and living area**

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**Child (under 5) mortality rate**

- **2000-2003**
  - Egypt: 84 (HH_head_no education), 37 (HH_head_above secondary)
  - Jordan: 32 (HH_head_no education), 24 (HH_head_above secondary)
  - Morocco: 62 (HH_head_no education), 23 (HH_head_above secondary)
  - Tunisia: 65 (HH_head_no education), 20 (HH_head_above secondary)

- **2011-2014**
  - Egypt: 41 (HH_head_no education), 22 (HH_head_above secondary)
  - Jordan: 26 (HH_head_no education), 15 (HH_head_above secondary)
  - Morocco: 34 (HH_head_no education), 10 (HH_head_above secondary)
  - Tunisia: 74 (HH_head_no education), 48 (HH_head_above secondary)

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**Child (under 5) mortality rate in rural and urban areas (2011-2014)**

- **Urban**
  - Egypt: 34 (HH_head_no education), 18 (HH_head_above secondary)
  - Jordan: 43 (HH_head_no education), 25 (HH_head_above secondary)
  - Morocco: 33 (HH_head_no education), 15 (HH_head_above secondary)
  - Tunisia: 10 (HH_head_no education), 41 (HH_head_above secondary)
  - Sudan: 78 (HH_head_no education), 47 (HH_head_above secondary)

- **Rural**
  - Egypt: 13 (HH_head_no education), 5 (HH_head_above secondary)
  - Jordan: 20 (HH_head_no education), 10 (HH_head_above secondary)
  - Morocco: 10 (HH_head_no education), 5 (HH_head_above secondary)
  - Tunisia: 49 (HH_head_no education), 74 (HH_head_above secondary)
  - Sudan: 49 (HH_head_no education), 74 (HH_head_above secondary)

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- Child mortality rate is much lower in the household where the head of the household is above secondary education than in household with a head without any education.

- The pattern is same within rural and within urban areas. Exp: Jordan rural

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**Source:** based on MICS/DHS
Initial structures

| Education of head of household and living area |

Percentage of women (15-49) reporting hospital is too far for accessing treatment

- The percentage of women (15-49) reporting hospital is too far for accessing treatment is much higher in households whose head is not educated.

- The reportage is greater in rural areas regardless of the level of education of the head.

...across level of education in rural and urban areas
Initial structures

Education of head of household and living area

Percentage of households who have at least one mobility asset (car, bicycle, motor scooter)

- Across countries, there is an improvement in the share of households having mobility asset, but the pattern of disparity remain similar between the households (between the head having secondary education and no education).
Initial structures

Education of head of household and living area

Access to sanitation: Percentage of people having NO access to sanitation

- The percentage of people having NO access to sanitation and safe water is much larger considering households whose head is not educated ...

Access to water: Percentage of people having NO access to safe water

- Rural areas: higher percentage of people reporting NO access to safe water…
• *Pre-existing inequalities matter*

• *Pre-existing inequalities between countries (higher income vs low income) and between population groups by their level of education (uneducated vs secondary educated head of household) and area of stay (rural vs urban) don’t show significant catch up between 2000-2014.*
4. Policy discussion
Policy discussion

Bridging the gap in income and non-income dimensions requires more holistic intervention:

- **Strategizing inclusive economic growth**
  - STRATEGIC INVESTMENTS IN INDUSTRIES; CREDIT EXPANSION POLICIES; PROMOTING DIVERSIFICATION (THROUGH INCENTIVES)
  - INVESTING IN RESEARCH AND DEVELOPMENT; TRAINING AND SKILL UPGRADING, EMPLOYMENT SERVICES, ALMPS; WAGE POLICY

- **Redistributive fiscal policy**
  - TARGETING PUBLIC EXPENDITURE TO SOCIAL INVESTMENTS (SUCH AS QUALITY EDUCATION) AND SOCIAL PROTECTION
  - TAX FAIRNESS AND MORE PROGRESSIVITY

- **Transformative policies to bridge pre-existing inequalities**
  - IDENTIFYING AND PRIORITIZING ACTION AREAS
  - MEASUREMENT OF INEQUALITY SHOULD HAVE A STRATEGIC FOCUS

- **Greater international cooperation to support poorer economies**

Cross-cutting issues:

- Gender equality
- Trade and Technology
- Institutions/good governance
Thank you
### Measures of income inequality

Extreme rich vs. the rest of the population among

The share of total income by income earners

<table>
<thead>
<tr>
<th>Region</th>
<th>Top 10%</th>
<th>Bottom 50%</th>
<th>Middle Class (40%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle East</td>
<td>64%</td>
<td>10%</td>
<td>Less than 30%</td>
</tr>
<tr>
<td>Western Europe</td>
<td>37%</td>
<td>21%</td>
<td>45%</td>
</tr>
<tr>
<td>United States</td>
<td>47%</td>
<td>13%</td>
<td>40%</td>
</tr>
</tbody>
</table>

- Big divide among income earners:
  - An extremely rich group at the top
  - A much poorer mass of the population

- What happened to the middle class in the region?
  - The size of middle class population is shrinking in the region

Source: Alvaredo et al 2018.

(ESCWA (2014) Arab Middle Class report; Abu-Ismail and Sarangi (2014) UN-WIDER paper)
Fiscal incidence analysis

Market Income ($Y^m$):
Wages and salaries, income from capital, private transfers (remittances, private pensions, etc) before taxes, social security contributions and government transfers AND contributory social insurance old age pensions ONLY in the case in which pensions are treated as deferred income

Net Market Income ($Y^n$)

Disposable Income ($Y^d$)

Post-fiscal (or consumable) Income ($Y^{pf}$)

Net Market Income ($Y^n$) = Market Income ($Y^m$) - Personal income taxes AND employee contributions to social security (DT+SS)

Disposable Income ($Y^d$) = Net Market Income ($Y^n$) + Direct near cash transfers (T)

Post-fiscal (or consumable) Income ($Y^{pf}$) = Disposable Income ($Y^d$) + Indirect subsidies (IS)

Final Income = Post-fiscal (or consumable) Income ($Y^{pf}$)

Indirect taxes (IT):
VAT, excise taxes and other indirect taxes

Direct near cash transfers (T):
Conditional and unconditional cash transfers, school feeding programs, free food or cash and transfers, etc

Indirect subsidies (IS):
Energy, food and other general or targeted price subsidies

In-kind transfers:
Free or subsidized government services in education and health

Co Payments, user free

Personal income taxes AND employee contributions to social security (DT+SS):
ONLY in the case that contributory pensions are treated as transfers

Source: Lustig and Higgins (2013)