Political Economy of Appropriate Fiscal Management by the Monarchies: Is There Hope?

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Background

ERF project on Macroeconomic Management and Fiscal Policy and Institutions in Resource-Rich Arab Economies (coordinated by Kamiar Mohaddes, Hoda Selim and myself) and Previous one coordinated by Ibrahim Elbadawi and Hoda Selim

Through country case studies, literature review and new analyses
Motivation
Some Findings from the Country Case studies, Literature Review and Our own Studies:
1. Because of fixed exchange rates (to $US) fiscal institutions are key to avoiding resource curse
2. Despite some Arab Countries like Qatar, UAE Kuwait having highest GDPPCs in world, almost all of their fiscal policies and institutions suggest that they could become vulnerable to the oil curse
3. Their Governance: Least democratic in the world, in many cases led by kings, some of the last royal families in the world: oil may make it more difficult for dictatorship coups democratic institutions to occur (e.g., Wright et al 2015)
4. Political Economy Explaining This:
   - Autocratic: Rentier State: Oil Rents avoid need to Tax and hence give citizens role in government
   - Authoritarian Distributive Bargain

5. But there are Major Problems in Fulfilling this Bargain
   a. Insufficiently Open Budgets
   b. Lack of appropriate assessments, inefficiency
   c. Excessive Procyclicality and Volatility
   d. Excessive Consumption, insufficient investment
   e. Excessive Employment of Nationals in Government
   f. Insufficient Diversification away from Oil
   g. Absence of taxation (for sustainability after oil, decreased volatility)
   h. Insufficient Legal Rights
## Quantitative Indicators of the Problems: Comparisons Across Groups of Oil Countries

<table>
<thead>
<tr>
<th>Indicator</th>
<th>GCC</th>
<th>Other MENA</th>
<th>Non-MENA Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Oil Rents as Share of GDP (1980-2012)</td>
<td>37.8</td>
<td>28.2</td>
<td>17.2</td>
</tr>
<tr>
<td>2 Volatility of Oil Revenues (1980-2012)</td>
<td>0.40</td>
<td>0.52</td>
<td>0.37</td>
</tr>
<tr>
<td>3 GDP Volatility</td>
<td>31.0</td>
<td>39.9</td>
<td>5.2</td>
</tr>
<tr>
<td>4 Government Consumption (% of GDP)</td>
<td>23.2</td>
<td>16.4</td>
<td>12.8</td>
</tr>
<tr>
<td>5 Primary Fiscal Balance (1990-2013)</td>
<td>-0.19</td>
<td>1.5</td>
<td>1.82</td>
</tr>
<tr>
<td>6 Bank Non-Performing Loans (1998-2015)</td>
<td>6.29</td>
<td>18.05</td>
<td>6.21</td>
</tr>
<tr>
<td>7 Strength of Legal Rights (2013-2015)</td>
<td>1.5</td>
<td>1.4</td>
<td>4.8</td>
</tr>
<tr>
<td>8 Open Budget Survey Scores</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9 Non-Oil Taxes as % GDP</td>
<td>2.9</td>
<td>4.5</td>
<td>17.9</td>
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</tbody>
</table>
List of Suggested Policy Reforms

1. Improve Resource Management Accounting: Join EITI, Revenue Watch, Global Financial Integrity.
2. Strengthen SWFs, Join SWF Institute
3. Strengthen Comprehensiveness (e.g., military), Quality of Budgets, Independent Appraisal, Build trust by citizenry
4. Reduce Government Consumption and its volatility, especially fuel subsidies, reduce government employment and inflated wages so as to raise productivity and encourage pvt sector
More Reforms Including beyond Fiscal Ones

5. **Adopt Fiscal Rules, Enforce Them and Audit Expenditures to Reduce pro-cyclicality and volatility**

6. **Introduce New Taxes on Income, V.A, to reduce cyclicality and income inequality, Careful Auditing, Enforcement**

7. **Improve External Auditing and Program Evaluation** to raise efficiency, reduce corruption, increase trust

8. Improve ability to **internalize externalities in infrastructure** with more regional coordination in all of the above

9. **Beyond Fiscal Policy**
   a. Exchange Rate Policy to promote diversification
   b. Revise labor laws and enforcement and foreign worker policy in GCC to encourage nationals especially women to enter the private sector, lower outward remittances
   c. **Strengthen property rights and rule of law and business friendly environment to induce private sector to adopt higher technology**
In View of Past History and Current

• Not Clear that Overthrowing Monarchies will be better for avoiding the Oil Curse or Improving Fiscal Policy

• But then, How to Convince the Monarchs that it May be in Their Interest to Make these Reforms
Purpose of Political Economy Models

• Scenario 1: We explore how volatility of oil income would have an effect on the provision of public good. Under the assumption that the elites are more risk averse than the citizens, the elites would limit their private consumption and increase the expected level of public good.

• Scenario 2: We explore the elites’ willingness to invest in the private sector when they are facing a future without oil income. We find that the elites are willing to invest more when the income gap between private sector and oil sector is large.
Scenario 1: Setting

• One period game with two players: Citizens and Elites
• Volatility coming from oil income $Z$. $Z$ is assumed to be stochastic with mean $\bar{Z}$ and variance $\sigma^2$
• Elites determine levels of their private consumption $C$ and public good $G$,
• Citizens receive private sector income $H$, and also enjoy public good. They don’t have control over public good but they can choose to revolt if they are not satisfied with the level of the public good.
Scenario 1: Setting

• Fiscal rules of the elites:
  Rule 1: Elites choose their own consumption $C$ and the level of public good is determined by the realized public income minus the level of elites’ consumption, $G = Z - C$.
  Rule 2: Elites choose public good $G$ so that elites consumption would be $C = Z - G$.

• The role of commitment: what if the elites cannot commit to these rules
Scenario 1: Setting

- The timing of the game is summarized as follows:
- The elites choose the policy vector \{C, G\} according to rule 1 \{C, G = Z - C\} or according to rule 2 \{G, C = Z - G\} subject to budget constraint \(C + G = Z\)
- The citizens decide if they are going to revolt. \{D = R\} denotes that they are going to revolt; \{D = N\} denotes that they are not going to revolt.
- The public income \(Z\) realized.
- Nature determines if the elites stay in power conditional on the citizens’ decision.
- All payoffs are realized.
Scenario 1, Case 1:

- Citizens and Elites are both risk neutral
- Elites’ utility function: $U(C, G) = qCG$
- Political threat from the citizens is determined by: $E((1 - \mu)\delta Z) > E(HG)$ where $(1 - \mu)$ is prob. of success if citizens decide to revolt, $\delta$ is the loss to the citizens from participating in revolt
- The elites have ability to buy off the citizens by raising the level of public good to

$$\bar{G} = \frac{(1 - \mu)\delta \bar{Z}}{H}$$

- However, the elites would prefer to split the income equally between the two goods
- The difference between $\bar{G}$ and optimal $G \equiv G_1 = \frac{\bar{Z}}{2}$ for the elites measures the tension between the two classes
- Volatility has no impact when they both are risk neutral
Scenario 1, Case 2:

- Citizens are risk neutral and elites are risk averse.
- Elites’ maximization problem: \( \max_{C,G} E(\log(qCG)) \)
- Under rule 1, \( \{C_2, G_2 \equiv E(G) = \bar{Z} - C_2 \} \), optimal bundle is given by:
  \[
  C_2^{-1} - E(G)^{-1} = \sigma^2 (E(G))^{-3}
  \]
- If \( \sigma = 0 \), then \( C_2 = G_2 = \frac{\bar{Z}}{2} \)
- If \( \sigma > 0 \), then \( G_2 > C_2, \quad G_2 > \frac{\bar{Z}}{2} \)
- As the volatility goes up, the elites would limit their spending further and increase the expected level of public good.
Scenario 1, Case 2:

- Under rule 2, \( \{G_3, C_3 \equiv E(C) = \tilde{Z} - G_3\} \), the optimal bundle is given by:
  \[
  G_2^{-1} - E(C)^{-1} = \sigma^2 (E(C))^{-3}
  \]

- We have the opposite results comparing to rule 1 since now the consumption bears all the uncertainty:

  If \( \sigma > 0 \), then \( C_3 > G_3, G_3 < \frac{\tilde{Z}}{2} \)

- \( G_2 > G_1 > G_3 \), under rule 2, the elites would spend less on private consumption and increase the expected level of public good

- As the volatility increases, the gap between two goods becomes larger
Scenario 1, Case 2:

• Since the citizens are risk neutral, they only care about the expected level of public good, thus
  \[ \bar{G} = \frac{(1-\mu)\delta\bar{Z}}{H} \]
  doesn’t change.

• Between rule 1 and rule 2, the elites would prefer rule 1 when they commit on consumption and leave all the uncertainty to the public good.

• The tension between elites and citizens decreases if the elites are risk averse and they adapt rule 1.
Scenario 1, Case 3:

- Citizens are risk averse and elites are risk neutral
- Political threat from the citizens is determined by: $E(\log(1 - \mu)\delta Z) > E(\log(HG))$
- Elites’ optimal bundle is the same as case 1, elites spend equally on the two goods.
- Under rule 1, the revolting constraint would be
  \[
  \log(1 - \mu) + \log \delta + \log 2 - \log H + \frac{3\sigma^2}{2\bar{Z}^2} \geq 0
  \]
- Under rule 2, the revolting constraint is:
  \[
  \log(1 - \mu) + \log \delta + \log 2 - \log H - \frac{\sigma^2}{2\bar{Z}^2} \geq 0
  \]
- It is better for the elites to adapt rule 2, which puts all uncertainty on private consumption.
- As the volatility increases, the constraint under rule 1 is more likely to bind while the constraint under rule 2 is less likely to bind.
Scenario 2: Setting

- **Two periods game, oil income at first period but not the second.** Elites’ policy space is \( \{C_1, G_1, C_2, G_2, I, \tau\} \), and the income of private sector is:
  \[
  H_1 = H, \quad H_2 = H + rI
  \]
- The sole source of public income at 2\(^{nd}\) period is from taxing the private sector. We assume the ceiling of tax rate is \( \bar{\tau} \)
- The elites cannot commit to 2\(^{nd}\) period policies. \( \{C_2, G_2, \tau\} \), thus \( \tau = \bar{\tau}, C_2 = G_2 = \frac{\bar{\tau}}{2} H_2 \)
- The citizens can revolt at 2\(^{nd}\) period. If they win, they can set their prefer tax rate, all the tax would go to public good.
Scenario 2

• Thus the citizens choose to revolt if:
  \[ 1 - \mu > 2(1 - \bar{\tau})\bar{\tau} \]

• At the first period, the elites’ problem is:
  \[
  \max_{C_1, G_1, I_1} C_1 G_1 + \beta q \left( \frac{\bar{\tau} H_2}{2} \right)^2
  \]
  Subject to budget constraint \( C_1 + G_1 + I = Z \).

• The optimal investment is:
  \[
  I = \frac{Z - \beta qr \bar{\tau}^2 H}{1 + \beta qr^2 \bar{\tau}^2}
  \]
Scenario 2

- The larger the income gap between private sector and the natural resource sector, the larger the investment would be.
- If the maximum tax rate \( \tau \) increases, there are two effects:
  1. It would directly decrease the optimal investment;
  2. It may increase the likelihood of revolting.
- The increase of maximum tax rate would always have the first effect but not necessarily the second one.
Model implications

- When the elites are more risk averse than the citizens, it may be their best interest to increase the provision of the public good by committing to a lower level of their consumption. This would happen even without sufficient political threat from the citizens.

- When the oil is running out, the elites would more likely to invest on private sector if the income gap between the private sector and oil sector is large.

- However, elites cannot commit on a lower tax rate without political threat from the citizens.
Other Models to Capture how and why autocratic elites (especially monarchies) may see it in their interest to undertake specific reforms

1. **Information Availability**, Ego Rents vs. Earnings from Private Sector and Taxes

2. **Elites in Private Sector**: Education, Infrastructure, especially useful when youth unemployment becomes a possibility as in S.A.

3. **Longer time horizon** (grandchildren as heirs) than elected leaders or even than military ones (modified version of models by Caselli and Cunningham (2009) and Caselli and Tesai (2011))

4. **Institutionalized checks and balances**. Selectorate to make sure only good leaders are selected. Besley and Kudamatsu (2007)