Intended vs. Unintended Consequences of Migration Restriction Policies
Evidence from a Natural Experiment in Indonesia

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SPJ Core Courses – Jobs and Migration
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Motivation

- In recent decades, migration policies have experienced less cross-country coordination compared to trade policies (Hatton, 2007)
- An unusual policy experiment: Indonesia recently restricted international migration of female domestic workers to a number of major destinations (e.g. in 2009 to Malaysia, and in 2011 to Saudi Arabia)
- These *Moratoria* intended to prevent migration of informal workers, aiming to protect migrant workers overseas, following episodes of abuse and harassment
- This resulted in the sudden partial impediment to migrate for hundreds of thousands of women

➢ What was the impact of these reforms (in particular the ban to migrate to Saudi Arabia imposed in 2011) on origin communities?
After beheading, Indonesia stops sending workers to Saudi Arabia

From Kathy Quiano, CNN
June 26, 2011 8:52 p.m. EDT

Indonesian govt. reacts to execution

STORY HIGHLIGHTS
- NEW: The moratorium goes into effect August 1
- NEW: Saudi Arabia has apologized

Jakarta (CNN) -- Indonesia will impose a moratorium on sending workers to Saudi Arabia, effective August 1, the country said late Wednesday. The move comes after the Gulf kingdom beheaded an Indonesian worker without first informing the Indonesian government.
Our contribution

• We assess the consequences of restrictions to emigration on local labor markets at the origin. Most studies focus the consequence of migration in destination countries.

• We assess the effects of emigration on origin communities in a country where migrants are predominantly women. Most studies focus on countries where migrants are often males.

• We assess the effect of maternal presence on schooling behavior of children. Most studies assess the effect of paternal absence.
Background on Indonesia international migrants

- Over 500,000 people per year migrated in the recent decades. In 1996, 56% of documented migrants were women, raising to 68% by 2000 and to 80% by 2006.
- Female migrants to Malaysia and Saudi Arabia represented 55% of total flows in 2006.
- Female migrants mostly low-skilled, with 50% with primary education.
- 80% of female migrants employed as domestic workers overseas.
- The typical contract duration for temporary international migrants from Indonesia is 2-3 years.
- Considerable spatial variation in rates and destinations of international migration across Indonesia.
- Strong ethnic and religious sorting of Indonesian emigrants across destination countries (Bazzi, 2012).
Background on Indonesia international migrants

- Concerns for their human rights often raised in the political discussion in Indonesia
  - Physical and mental abuse, violence and harassment at all stages of migration
  - Salary retained, under-paid
  - Extortion, exploitation
Moratoria were applied to several traditional destinations

- Malaysia as of June 2009 (lifted in December 2011)
- Kuwait as of September 2009
- Jordan as of July 2010
- Arab Saudi as of August 2011
- Syria as of August 2011
- United Arab Emirates as of October 2013
- Qatar as of November 2013
- Oman as of early 2015
Female migration flows to traditional destinations declined after the Moratoria were imposed.
Given the importance of female migration, also total flows declined dramatically.
Male emigration did not compensate for the decline in female migrants
Emigration to “formal jobs” did not compensate for the decline in emigration of domestic workers.
Empirical strategy: difference-in-difference

- We exploit the spatial variation in female migration before the Moratorium (in 2005) to build treatment and control groups depending on the intensity of female migration to Saudi Arabia, before the policy was introduced.
- Data: administrative village level data (PODES).
- **Treatment districts**: districts where at least 50% of female migrants departed abroad from villages where “Saudi Arabia” was indicated as the 1st destination for international migrants.
- **Control districts**: all other districts in Indonesia (not “exposed” to the policy).
- PODES data merged at the “district” level with LFS and Household Consumption Surveys (Sakernas, Susenas), used to measure outcomes.
- Results robust to different definition of “treatment districts”
Empirical strategy: Distribution of Treated Districts across Provinces in Indonesia

Fraction of Villages sending Female Migrants to Saudi A. by Province
PODES 2005 Records

WORLD BANK GROUP
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Empirical strategy: the 2011 moratorium to Saudi Arabia did reduce migration flows

<table>
<thead>
<tr>
<th></th>
<th>Dependent Variable: Number of Migrants</th>
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<tbody>
<tr>
<td>Saudi A. District</td>
<td>14.014*** (7.294) 15.587***** (9.538) 16.894****** (9.254) - - -</td>
</tr>
<tr>
<td>Post-Moratorium</td>
<td>2.115** (1.132) 2.613** (1.365) 2.931*** (1.431) 2.250* (1.147) 2.855** (1.377) 3.328** (1.400)</td>
</tr>
<tr>
<td>Saudi A. District * Post-Moratorium</td>
<td>-4.923**** (1.514) -5.180**** (1.920) -4.574**** (1.865) -5.079**** (1.520) -5.286**** (1.918) -4.853**** (1.873)</td>
</tr>
<tr>
<td>Mean Dep. Var. Pre-Moratorium</td>
<td>20.227 24.005 24.005 20.227 24.005 24.005</td>
</tr>
<tr>
<td>Village Characteristics</td>
<td>No No Yes No No No</td>
</tr>
<tr>
<td>District Fixed Effects</td>
<td>No No No Yes Yes Yes</td>
</tr>
<tr>
<td>Year Fixed Effects</td>
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<tr>
<td>Population-weighted</td>
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<td>Number of Observations</td>
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</tr>
<tr>
<td>Number of Villages</td>
<td>49258 49258 49258 49258 49258 49258</td>
</tr>
<tr>
<td>Number of Districts</td>
<td>286 286 286 286 286 286</td>
</tr>
</tbody>
</table>
RESULTS: The Moratorium led to an increase in informality rate by 1.5 percentage points, and in the share of workers employed in agriculture by 1.9 percentage points.
The Moratorium led to an increase in the junior secondary enrolment rate by 3.8 (3.1) percentage points for females (males).
The Moratorium had stronger effects in areas more exposed to the policy (e.g. with higher incidence of female migration to Saudi Arabia)

Percentage point increase in the share of employment in the informal sector by intensity of female emigration to Saudi Arabia

Percentage point increase in the share of employment in agriculture by intensity of female emigration to Saudi Arabia
The Moratorium had stronger effects in areas more exposed to the policy (e.g. with higher incidence of female migration to Saudi Arabia)

Percentage point increase in junior secondary enrolment by intensity of female emigration to Saudi Arabia

- Male
- Female

- 40%
- 60%
- 70%
The absence of significant pre-treatment differences between “treated” and “control” districts supports the validity of the identification strategy.
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Impact of Saudi A. Moratoria on Informalities
Full Sample

\[ P > F = 0.164 \]

\[ P > F = 0.067 \]
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Conclusions

• The recent series of moratoria to migration of the Indonesian government provide a rare opportunity to study the consequences of migration restrictions at the origin.
• The Saudi Arabia 2011 moratorium was effective at reducing migration outflows.
• However, origin communities were seemingly negatively affected by the migration restriction, with more men and women moving into agriculture and informality.
• We also find evidence of an “unintended” positive effect of maternal presence on secondary school enrolment.
• Results call for the importance of considering migration policy with a comprehensive approach, not just at destination but also at origin.