

Can I have permission to leave the house? Return migration and the transfer of gender norms

Michele Tuccio & Jackline Wahba

UNU-WIDER Conference 2016



Motivation

- The past few decades have witnessed an increasing awareness of the need to achieve **gender equality** as a necessary step for greater economic development.

Motivation

- The past few decades have witnessed an increasing awareness of the need to achieve **gender equality** as a necessary step for greater economic development.
- **Social norms** frame the gender roles at the roots of the distribution of power between men and women.

Motivation

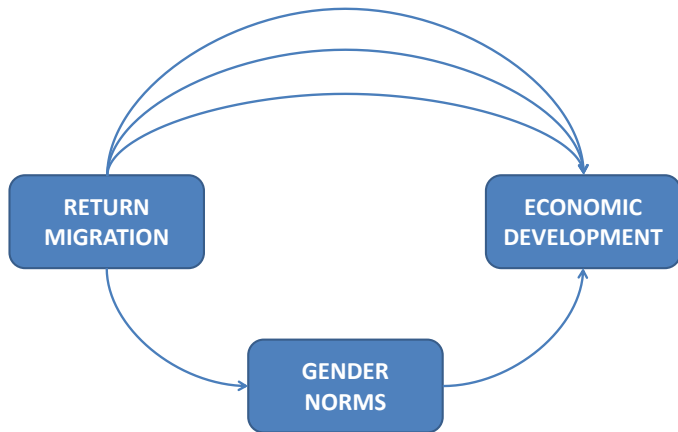
- The past few decades have witnessed an increasing awareness of the need to achieve **gender equality** as a necessary step for greater economic development.
- **Social norms** frame the gender roles at the roots of the distribution of power between men and women.
- **Exposure** to different practices within a country has been proved to be a powerful tool to modify underlying gender norms (Beaman et al., 2009; Meyersson, 2014).

Motivation

- The past few decades have witnessed an increasing awareness of the need to achieve **gender equality** as a necessary step for greater economic development.
- **Social norms** frame the gender roles at the roots of the distribution of power between men and women.
- **Exposure** to different practices within a country has been proved to be a powerful tool to modify underlying gender norms (Beaman et al., 2009; Meyersson, 2014).
- This paper demonstrates that, through exposure, international migration may also act as a channel of **norms transmission**.

Motivation

More



Aims

Do women with a returnee family member bear different gender norms compared to non-migrant households?

Aims

Do women with a returnee family member bear different gender norms compared to non-migrant households?

- We focus on a Middle Eastern country - **Jordan** - where there have been calls for social change for the last years.

Aims

Do women with a returnee family member bear different gender norms compared to non-migrant households?

- We focus on a Middle Eastern country - **Jordan** - where there have been calls for social change for the last years.
- Jordan is a **great example** of non-oil middle-income economy where both gender inequality and emigration rates are high.

Aims

Do women with a returnee family member bear different gender norms compared to non-migrant households?

- We focus on a Middle Eastern country - **Jordan** - where there have been calls for social change for the last years.
- Jordan is a **great example** of non-oil middle-income economy where both gender inequality and emigration rates are high.
- It has still one of the **lowest female labour force participation** rates in the world (15% in 2010).

Aims

Do women with a returnee family member bear different gender norms compared to non-migrant households?

- We focus on a Middle Eastern country - **Jordan** - where there have been calls for social change for the last years.
- Jordan is a **great example** of non-oil middle-income economy where both gender inequality and emigration rates are high.
- It has still one of the **lowest female labour force participation** rates in the world (15% in 2010).
- At the same time, Jordan is a **labor exporter economy**, with a migrant population ratio reaching 11%. Return migration is also an important feature, with 11% of the households having a returnee among their members.

Jordan Labor Market Panel Survey

- **JLMPS** collected statistical data for more than 5,100 households and about 25,000 individuals in Jordan in 2010.
- A unique characteristic of the JLMPS is to provide important information about **women's status** in the society.

Stats

Index

Empirical strategy

- The regression **specification** is:

$$Y_i = \alpha_0 + \alpha_1 R_i + \alpha_2 X_i + \epsilon_i \quad (1)$$

where Y_i is the level of gender norms perceived by individual i , where 0 means high discrimination against women and 1 implies perfect gender equality. R_i is the return migration variable. X_i is a vector of individual's characteristics (age, marital and employment status, educational attainment, mother's education, governorate dummies...)

Empirical strategy

- The regression **specification** is:

$$Y_i = \alpha_0 + \alpha_1 R_i + \alpha_2 X_i + \epsilon_i \quad (1)$$

where Y_i is the level of gender norms perceived by individual i , where 0 means high discrimination against women and 1 implies perfect gender equality. R_i is the return migration variable. X_i is a vector of individual's characteristics (age, marital and employment status, educational attainment, mother's education, governorate dummies...)

- **SELECTION!**

Identification: Emigration

- For the selection into emigration, we use historical real **oil prices**, which have a substantial influence on the scale of emigration towards oil-producing countries which adopt employer-driven immigration systems and respond to fluctuations in local economic conditions.

Identification: Emigration

- For the selection into emigration, we use historical real **oil prices**, which have a substantial influence on the scale of emigration towards oil-producing countries which adopt employer-driven immigration systems and respond to fluctuations in local economic conditions.
- We adopt average oil prices for when the individual was **20 years old**, age of entry to the labour market. Military conscription at the age of 18 was compulsory for all males for a minimum of 2 years, until 1999, when it became voluntary.

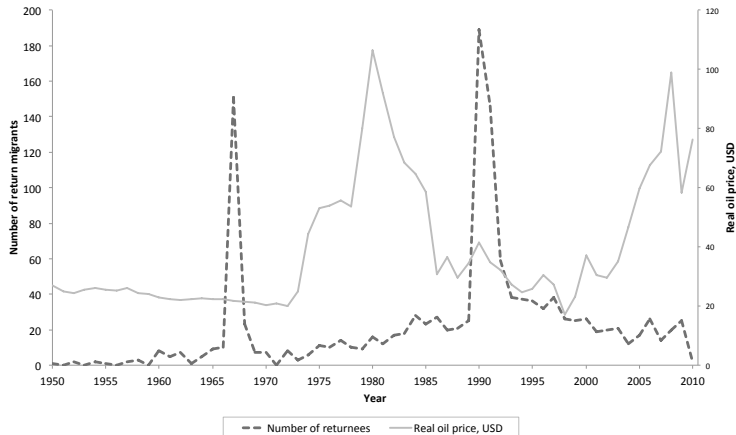
Identification: Emigration

- For the selection into emigration, we use historical real **oil prices**, which have a substantial influence on the scale of emigration towards oil-producing countries which adopt employer-driven immigration systems and respond to fluctuations in local economic conditions.
- We adopt average oil prices for when the individual was **20 years old**, age of entry to the labour market. Military conscription at the age of 18 was compulsory for all males for a minimum of 2 years, until 1999, when it became voluntary.
- Exploiting a variable on the **age at first job** included in the JLMPS confirms our hypothesis.

Identification: Emigration



Identification: Emigration



Identification: Return migration

- For the selection into return migration, we construct a variable for several exogenous **shocks** that induced Jordanian emigrants to come back to their homes.

Identification: Return migration

- For the selection into return migration, we construct a variable for several exogenous **shocks** that induced Jordanian emigrants to come back to their homes.
 - 1 1967: “**Arab-Israeli War**”, fought by Israel and its neighboring countries.
 - 2 1982: “**First Lebanon War**”, where thousands of civilians and military forces died.
 - 3 1990/91: “**First Gulf War**”, Iraq invaded Kuwait.
 - 4 2003: “**Iraq War**”, which has lead to a large outflows of migrants.

Identification: Return migration



The model

$$Y_i = \alpha_0 + \alpha_1 R_i + \alpha_2 X_i + \epsilon_i \quad (2)$$

$$M_k = \beta_0 + \beta_1 O_k + \beta_2 Z_k + \mu_k \quad (3)$$

$$R_k = \gamma_0 + \gamma_1 S_k + \gamma_2 C_k + n_k \quad (4)$$

The model

$$Y_i = \alpha_0 + \alpha_1 R_i + \alpha_2 X_i + \epsilon_i \quad (2)$$

$$M_k = \beta_0 + \beta_1 O_k + \beta_2 Z_k + \mu_k \quad (3)$$

$$R_k = \gamma_0 + \gamma_1 S_k + \gamma_2 C_k + n_k \quad (4)$$

The three equations above are estimated simultaneously using **Conditional Mixed Process (CMP)**. Our recursive system is made up of 2 Heckman selections and we use limited-information maximum likelihood (LIML). CMP allows the estimation of a multi-equation mixed system in a Seemingly Unrelated Regressions (SUR) framework, where all their errors can be correlated.

Results: Norms

Table 1: Return migration and the Role of Women Index (RWI)

	(1)	(2)	(3)
RWI			
Return migrant	-0.005 (0.005)	-0.051 (0.037)	-0.062 (0.030)**
Probability of Emigration			
Oil price		0.002 (0.000)***	0.001 (0.000)***
Probability of Return Migration			
Shocks			0.148 (0.009)***
rho_12		0.207 (0.161)	0.222 (0.122)*
rho_13			0.223 (0.103)**
rho_23			1.388 (0.037)***

Results: Norms

Results are **robust** to several checks:

- Different weighting techniques (PCA, MCA, equal weights)
- Different indices (FMI, DMPI)
- Subsamples (married)
- Single variables
- Different reference year for oil price (24 years old)

Checks

Results: Norms

- According to our hypothesis of a migration-induced transfer of norms, to understand why the relationship seems to be negative we need to focus on **destinations** and their gender norms.
- Gender norms in Arab countries are overall discriminatory against women, but there are **differences**.
- Why exploit this heterogeneity by defining countries on the basis of their **degree of conservatism**.

Results: Norms

Table 2: Return migration by destination and the RWI

	(1)	(2)	(3)	(4)	(5)	(6)
	More conservative destinations			Conservative destinations		
	mca	pca	equal	mca	pca	equal
Return migrant	-0.077 (0.031)**	-0.103 (0.035)***	-0.107 (0.040)***	0.153 (0.088)*	0.147 (0.111)	0.121 (0.103)
Probability of Emigration						
Oil price	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Probability of Return Migration						
Shocks	0.148 (0.009)***	0.148 (0.009)***	0.148 (0.009)***	0.148 (0.009)***	0.148 (0.009)***	0.148 (0.009)***
rho_12	0.284 (0.128)**	0.332 (0.123)***	0.272 (0.111)**	-0.661 (0.331)**	-0.614 (0.369)*	-0.362 (0.265)
rho_13	0.279 (0.107)***	0.307 (0.104)***	0.255 (0.097)***	-0.485 (0.212)**	-0.427 (0.248)*	-0.295 (0.230)
rho_23	1.387 (0.037)***	1.387 (0.037)***	1.388 (0.037)***	1.387 (0.037)***	1.387 (0.037)***	1.387 (0.037)***

Results: Outcomes

Table 3: Return migration and female labour force participation

	(1)	(2)	(3)
	All destinations	More conservative	Conservative
LFP			
Return migrant	-0.353 (0.151)**	-0.346 (0.157)**	0.883 (0.590)
Probability of Emigration			
Oil price	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Probability of Return Migration			
Shocks	0.152 (0.009)***	0.152 (0.009)***	0.152 (0.009)***
rho_12	0.596 (0.208)***	0.573 (0.222)***	-0.203 (0.573)
rho_13	0.441 (0.140)***	0.454 (0.151)***	-0.591 (0.599)
rho_23	1.367 (0.038)***	1.367 (0.038)***	1.367 (0.038)***

Results: Outcomes

Table 4: Return migration and daughters' dropout from education

	(1)	(2)	(3)
	All destinations	More conservative	Conservative
Dropout			
Returnee father	0.861 (0.358)**	0.861 (0.358)**	-0.089 (0.082)
Probability of Emigration			
Oil price	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Probability of Return Migration			
Shocks	0.152 (0.009)***	0.152 (0.009)***	0.150 (0.009)***
rho_12	-1.129 (0.414)***	-1.129 (0.414)***	0.102 (0.305)
rho_13	-0.562 (0.358)	-0.562 (0.358)	0.119 (0.346)
rho_23	1.366 (0.038)***	1.366 (0.038)***	1.361 (0.038)***

Results: Outcomes

Table 5: Return migration and wives' fertility

	(1)	(2)	(3)
	All destinations	More conservative	Conservative
Fertility			
Returnee husband	0.798 (0.404)**	0.892 (0.419)**	1.090 (1.148)
Probability of Emigration			
Oil price	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Probability of Return Migration			
Shocks	0.148 (0.009)***	0.148 (0.009)***	0.148 (0.009)***
rho_12	-0.199 (0.106)*	-0.235 (0.108)**	-0.206 (0.265)
rho_13	-0.217 (0.101)**	-0.240 (0.104)**	-0.258 (0.297)
rho_23	1.387 (0.037)***	1.387 (0.037)***	1.387 (0.037)***

Results: Outcomes

- In order to corroborate our findings, we replicate specifications on LFP and education for **men**.

Results: Outcomes

- In order to corroborate our findings, we replicate specifications on LFP and education for **men**.
- If there is a transfer of discriminatory norms against women from destination to origin countries, we would expect that having a returnee in the family does not have **any impact** on the labour force participation and school dropout of men. Conversely, if we find significant effects, this would question our estimation strategy.

Results: Outcomes

- In order to corroborate our findings, we replicate specifications on LFP and education for **men**.
- If there is a transfer of discriminatory norms against women from destination to origin countries, we would expect that having a returnee in the family does not have **any impact** on the labour force participation and school dropout of men. Conversely, if we find significant effects, this would question our estimation strategy.
- Remarkably, results for men are **not significant**, stressing the robustness of our hypothesis of a transfer of discriminatory norms.

Conclusion

- When **selection** issues are not accounted for, having a returnee family member has no effect on the self-perceived gender norms. However, the coefficient of return migration becomes statistically significant once we control for the double selectivity.

Conclusion

- When **selection** issues are not accounted for, having a returnee family member has no effect on the self-perceived gender norms. However, the coefficient of return migration becomes statistically significant once we control for the double selectivity.
- Women with a returnee in the household are more likely to have internalized **discriminatory gender norms** than women with no migration experience, and this is driven by returnees from more conservative Arab countries, which indeed bear great level of gender inequalities.

Implications

- Although female labour force participation is extremely low in Jordan, international migration cannot act as a push to escape this **trap**, since it transferred discriminatory norms from destination countries, which eventually widen already existent gender gaps.

Implications

- Although female labour force participation is extremely low in Jordan, international migration cannot act as a push to escape this **trap**, since it transferred discriminatory norms from destination countries, which eventually widen already existent gender gaps.
- **BOTTOM LINE:** Return migrants are potentially drivers of change, but destination matters.

Thank You!
(m.tuccio@soton.ac.uk)

The “Transfer of norms” literature

- Seminal paper in sociology: **Levitt (1998)**, “social remittances”.
- Seminal paper in economics: **Spilimbergo (2009)**, “foreign education and democracy”.
- Institutions: **Batista & Vicente (2011)**, **Chauvet & Mercier (2014)**, **Rapoport et al. (2014)**.
- Fertility: **Beine et al. (2013)**, **Bertoli & Marchetta (2013)**.
- Gender equality - Macro studies: **Lodigiani & Salomone (2012)**, “female political participation”; **Ferrant & Tuccio (2014)**, “discriminatory social institutions”.
- Gender equality - Micro studies: ? [Back](#)

Descriptive statistics [Back](#)

Table 6: Characteristics of women in returnee and non-migrant HH

	Without migrant	With returnee	t-Test
Employment status	0.14	0.11	(2.05)*
Less than basic education	0.24	0.20	(2.69)**
Basic education	0.36	0.30	(2.93)**
Secondary education	0.16	0.21	(-3.57)***
Post-secondary education	0.24	0.29	(-2.74)**
Married	0.92	0.91	(1.83)
Consanguinity	0.36	0.31	(3.12)**
Rural areas	0.33	0.09	(13.78)***
Age	36.5	40.1	(-9.21)***
Age squared	14.3	17.3	(-9.57)***
Children	0.92	0.92	(-0.29)
Mother's education	1.49	1.70	(-5.72)***
N	3260	838	

Composite indicators

- Most of previous studies constructed **cross-country** measures of broad concepts of gender inequality, including outcome variables such as educational and employment status, poverty and political participation.
- There is very little literature on the construction of composite indicators of discrimination against women at **micro level** (Frias, 2008; Agbodji et al., 2013), and virtually no literature focusing on discriminatory norms rather than on outcomes.
- We exploit **3 sets of variables** included in the JLMPS on gender norms, administered to all females in the age group 15-60.

[Back](#)

Role of Women Index

- 1 Place of a woman should not only be the house, she should be allowed to work
- 2 A husband should help the working mother in taking care of the children
- 3 A husband should help the working wife in housework
- 4 Female education should be to get jobs, not only to become good wives/mothers
- 5 The woman working outside home can be a good mother
- 6 Women should work in order to be financially independent
- 7 Female work doesn't contradict with ability to build good relationship with husband
- 8 Women should get leadership positions in the society
- 9 I do not mind if boys and girls get the same level of education
- 10 Boys and girls should be treated equally

[Back](#)

Freedom of Mobility Index

- 1 You do not need permission to go to the market
- 2 You do not need permission to go to the doctor for treatment
- 3 You do not need permission to take one of the children to the doctor
- 4 You do not need permission to visit a relative, friend or neighbour

[Back](#)

Decision-Making Power Index

- 1 In your family you usually have the final say in making large household purchases
- 2 In your family you usually have the final say in making household purchases for daily needs
- 3 In your family you usually have the final say in visiting family, friends or relatives
- 4 In your family you usually have the final say in choosing what food should be cooked each day
- 5 In your family you usually have the final say in getting medical treatment or advice for yourself
- 6 In your family you usually have the final say in buying clothes for yourself
- 7 In your family you usually have the final say in taking the children to the doctor
- 8 In your family you usually have the final say in sending the children to school
- 9 In your family you usually have the final say in buying clothes for the children

[Back](#)

Composite indicators

- Use **Principal Component Analysis**: Weights determined on the basis of the relative contribution made by the variables to the variance of the composite index. Greater weights are assigned to variables which contribute to larger shares of variation. The advantage of this methodology is to estimate the set of weights that explains the largest variation in the original variables.
- To check the robustness of our results, we also use **Multiple Correspondence Analysis**, which is better suited for binary responses.
- As a further test, we adopt also **equal weights**, which are seldom preferred since there may be no obvious reason for valuing one variable more or less than the others.

Results: Norms

Table 7: The Role of Women Index using different weighting techniques

	(1)	(2)	(3)
RWI			
Return migrant	mca -0.062 (0.030)**	pca -0.085 (0.033)**	equal -0.089 (0.038)**
Probability of Emigration			
Oil price	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Probability of Return Migration			
Shocks	0.148 (0.009)***	0.148 (0.009)***	0.148 (0.009)***
rho_12	0.222 (0.122)*	0.262 (0.120)**	0.218 (0.107)**
rho_13	0.223 (0.103)**	0.252 (0.102)**	0.210 (0.094)**
rho_23	1.388 (0.037)***	1.388 (0.037)***	1.388 (0.037)***

Results: Norms

Table 8: Return migration and the Freedom of Mobility Index (FMI)

	(1)	(2)	(3)
FMI			
Return migrant	mca -0.131 (0.045)***	pca -0.140 (0.043)***	equal -0.131 (0.045)***
Probability of Emigration			
Oil price	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Probability of Return Migration			
Shocks	0.148 (0.009)***	0.148 (0.009)***	0.148 (0.009)***
rho_12	0.304 (0.095)***	0.336 (0.095)***	0.303 (0.095)***
rho_13	0.282 (0.092)***	0.318 (0.092)***	0.282 (0.092)***
rho_23	1.387 (0.037)***	1.387 (0.037)***	1.387 (0.037)***

Results: Norms

Table 9: Return migration and the Decision Making Power Index (DMPI)

	(1)	(2)	(3)
DMPI	mca	pca	equal
Return migrant	-0.153 (0.082)*	-0.151 (0.066)**	-0.148 (0.088)*
Probability of Emigration			
Oil price	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Probability of Return Migration			
Shocks	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
rho_12	0.243 (0.149)	0.246 (0.139)*	0.238 (0.155)
rho_13	0.237 (0.135)*	0.263 (0.133)**	0.232 (0.140)*
rho_23	1.388 (0.037)***	1.388 (0.037)***	1.388 (0.037)***

Results: Norms

Table 10: Robustness check - Heckman selection

	(1)	(2)
	Probability of Return Migration	Probability of Emigration
Oil price		0.007 (12.55)***
Shocks	0.104 (7.36)***	
Mills	0.618 (12.65)***	
$\chi^2(18)=1156.26$	Prob> $\chi^2=0.000$	
Observations	11,311	

Results: Norms

Table 11: Robustness check - Single variables

	(1)	(2)	(3)	(4)	(5)
Return migrant	Female Leadership -0.251 (0.097)***	Go to Doctor -0.133 (0.043)***	Visit Relatives -0.106 (0.046)**	Decide purchases -0.142 (0.042)***	Children to Doctor -0.321 (0.108)***
Probability of Emigration					
Oil price	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Probability of Return Migration					
Shocks	0.148 (0.009)***	0.148 (0.009)***	0.148 (0.009)***	0.148 (0.009)***	0.155 (0.009)***
rho_12	0.263 (0.104)**	0.253 (0.082)***	0.219 (0.090)**	0.163 (0.073)**	0.298 (0.106)***
rho_13	0.209 (0.090)**	0.258 (0.077)***	0.220 (0.084)***	0.158 (0.065)**	0.279 (0.099)***
rho_23	1.387 (0.037)***	1.387 (0.037)***	1.386 (0.037)***	1.387 (0.037)***	1.352 (0.037)***
N	4,098	4,098	4,098	3,773	3,773

Results: Norms

Table 12: Robustness check - Reference year for oil price [Back](#)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		RWI	equal		FMI	equal		DMPI	
	mca	pca		mca	pca		mca	pca	equal
Return migrant	-0.072 (0.024)***	-0.097 (0.029)***	-0.106 (0.034)***	-0.097 (0.041)**	-0.109 (0.039)***	-0.097 (0.041)**	-0.134 (0.086)	-0.155 (0.067)**	-0.131 (0.091)
Probability of Emigration									
Oil price at 24	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Probability of Return Migration									
Shocks	0.159 (0.009)***	0.159 (0.009)***	0.158 (0.009)***	0.158 (0.009)***	0.158 (0.009)***	0.158 (0.009)***	0.158 (0.009)***	0.158 (0.009)***	0.158 (0.009)***
rho_12	0.272 (0.089)***	0.315 (0.098)***	0.281 (0.090)***	0.215 (0.084)**	0.251 (0.084)***	0.215 (0.084)**	0.202 (0.155)	0.256 (0.140)*	0.199 (0.161)
rho_13	0.248 (0.082)***	0.278 (0.086)***	0.242 (0.081)***	0.217 (0.087)**	0.256 (0.087)***	0.216 (0.087)**	0.204 (0.136)	0.264 (0.128)**	0.200 (0.141)
rho_23	1.308 (0.037)***	1.308 (0.036)***	1.308 (0.037)***	1.308 (0.037)***	1.308 (0.037)***	1.308 (0.037)***	1.308 (0.037)***	1.308 (0.037)***	1.308 (0.037)***