Cultural Persistence of Minority Groups and Marriage Practices: Theory and Application to Turkish Migrants in Brussels

C. Guirkinger[a] J.P. Platteau[a] Z. Wahhaj[b]

[a]University of Namur

[b]University of Kent

December, 2017

Families, marriage and cultural transmission

- Bisin & Verdier (QJE 2000): **Minority cultures can survive in the long run**.
- The mechanisms that allow their persistence are centered on the role of the **family and marriage**.
- Minorities have more segregated marriage market and exert more effort in directly socializing their children.
- *"Individuals from the cultural minority have higher incentives to marry homogamously and to exert direct socialization efforts in order to transmit their cultural identity to their offsprings. In other words, minorities rationally react to the assimilation of the melting pot."*

Families, marriage and cultural transmission

- **Arranged marriages constitute a pivotal institution** enabling minority groups to ensure the intergenerational transmission of their values.
- This institution characterizes many traditional societies, that are fragmented or isolated.
- An implication of Bisin and Verdier's argument is that **this institution should not vanish but get strengthened** when members of these societies emigrate to modern societies.

This paper

- This paper is an attempt (i) to verify the idea of the persistence of cultural traits for the Turkish community in Brussels, and (ii) to delve into the marriage mechanism underlying this persistence:
  - We present descriptive evidence using first-hand data.
  - We propose a theory of arranged marriage in the context of a minority culture that offers a nuanced view on the process of cultural transmission.

The Turkish community in Brussels and its marriages

- **At first sight, the Turkish community in Brussels appears very closed** unto itself with nearly universal intra-group marriage, use of Turkish language, continuous links to the location of origin in Turkey etc. . .
- On the other hand, **if arranged marriages remain pervasive, they are declining** across generations and time. Furthermore, they tend to be more prevalent for the first-born children.
- Also, **the institution has evolved** and parents and children often choose together an appropriate spouse, rather than the former imposing their will on the latter.
- Another sign of a profound transformation of the marriage institution is the **high prevalence of divorce** (in contrast to the situation in Turkey).

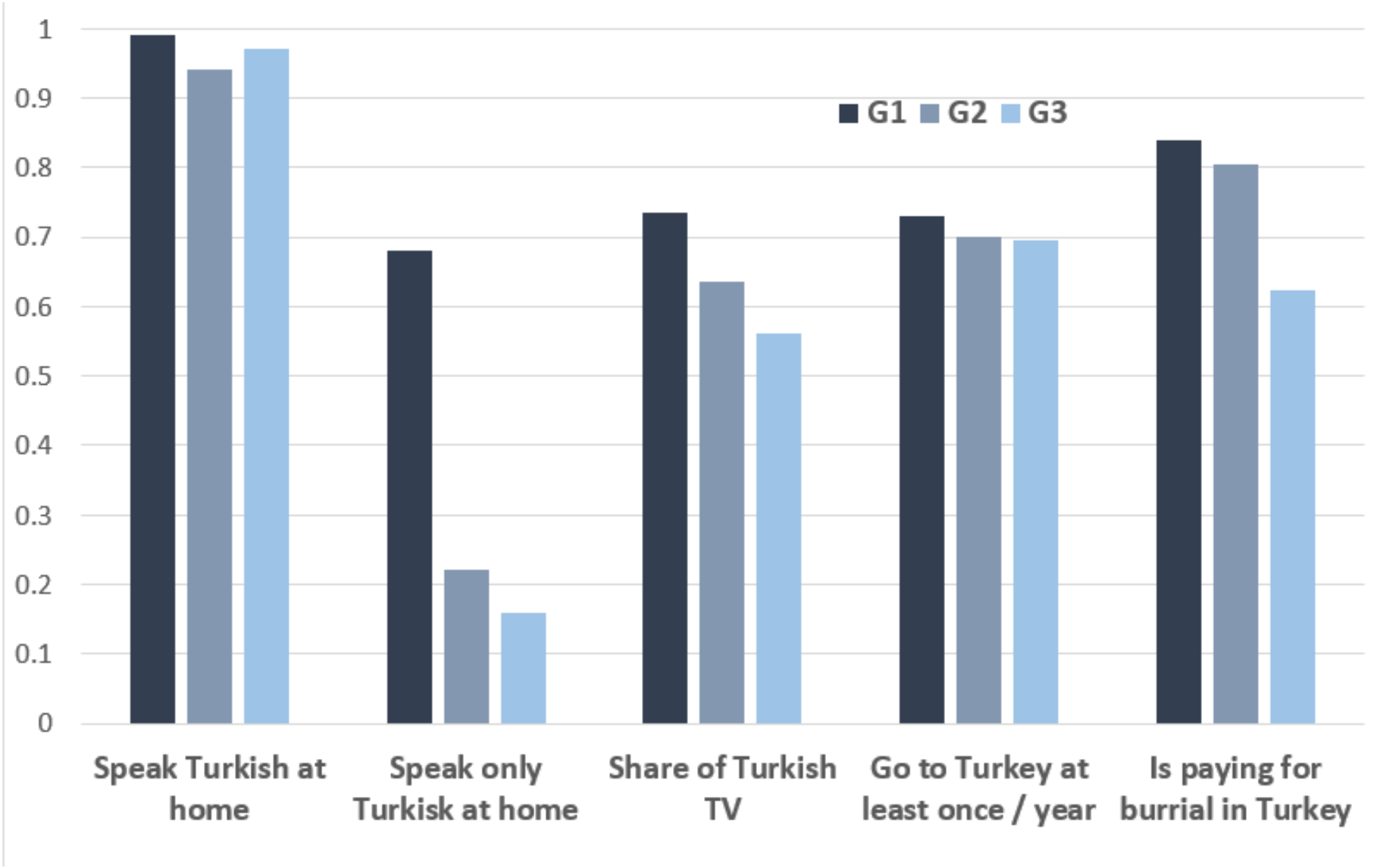
The Turkish community in Brussels and its marriages

- The above evidence suggests a situation more complex than that predicted by Bisin & Verdier, where homogamy and socialization efforts garantee the transmission of "pure" cultural traits.
- Owing to the influence of the wider society pervaded by values of individual choice, **partner choice is the result of bargaining** between parents and children.
- Parents may be forced to make concessions if they want to transmit their values to their grand-children.
- In particular, **they may have to accept the possibility of divorce** so as to convince children to accept an arranged marriage driven by the parents' preferences.

Data

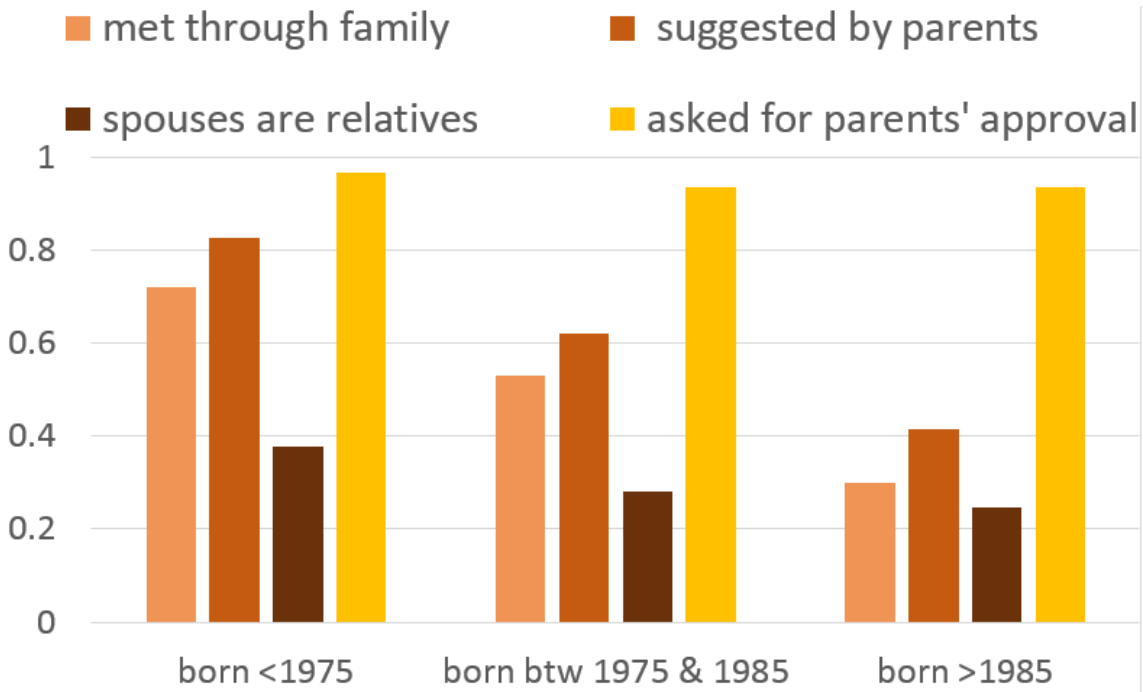
- In 2015, we surveyed 489 individuals of Turkish origin in two communes in Brussels, 322 women and 167 men, aged 20 to 65.
- We draw the sample from the national registry and stratified by generation:
  - G1: born in Turkey
  - G2: born in Belgium from two parents born in Turkey
  - G3: born in Belgium from one parent at least one G2 parent
- We ask detailed questions on:
  - household characteristics
  - education and labour market participation
  - links to Turkey, the community the family
  - marriages of respondents, their parents, siblings and children.

A closely-knit community



Evolving practices of marriage and divorce

- **Very high incidence of intra-group marriages** : the parents of the first spouse of our respondent were born in Turkey in 97% of the cases.
- **High but decreasing incidence of family involvement in spousal choice** (respondents' marriages):

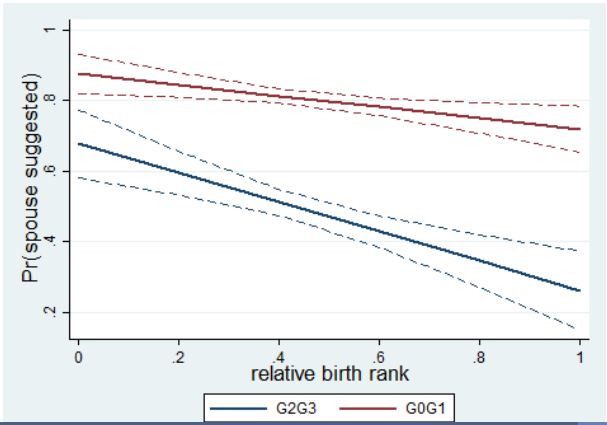


Evolving practices of marriage and divorce

- **High but decreasing incidence of "imported spouse"** (G2 respondents' marriages):

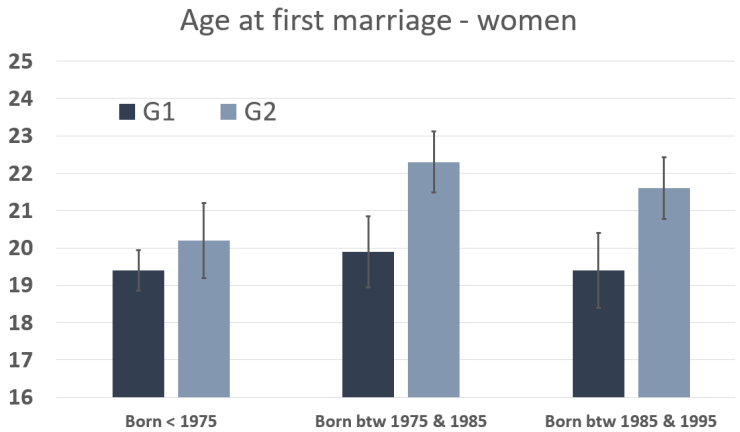
G2 birth date:	Marriage with G1	N
Born $<$ 1975	84%	51
Born btw 75 and 85	74%	53
Born $>$ 1985	43%	53
Total	67%	157

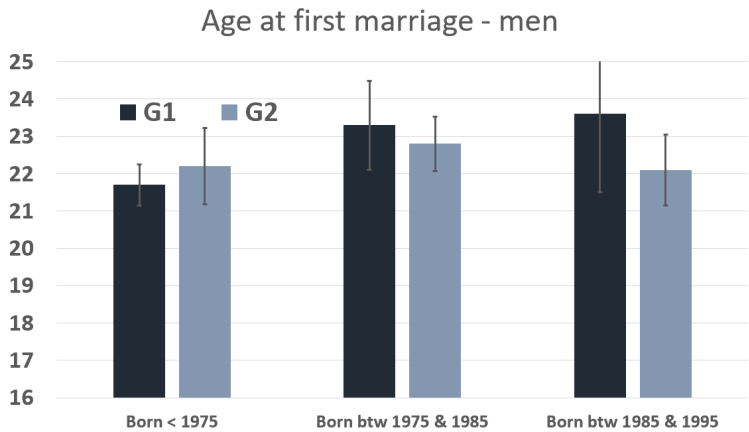
- **The spouse of first born are more likely to have been suggested by parents** for G2 and G3:



Evolving practices of marriage and divorce

- **"Liberalization" over time of the practice of arranged marriages**
  - The probability to have met one's spouse more than 10 times went from 35% for respondents born before 1975 to 81% for respondents born after 1985.
  - The corresponding figures for arranged marriages: 30% to 63%.
- **The age at first marriage is increasing for G2 women** :





Evolving practices of marriage and divorce

- **High rates of divorce** (respondents and their siblings born < 1975) :

G	divorce rate	N
0	6%	230
1	14%	524
2	26%	168
Total	14%	924

- **Low frequency of social exclusion following divorce** :
  - 90% of respondents did not feel rejected by members of their family following divorce.
  - 90% did not feel rejected by members of their community.
  - 19% went back to live with their parents following divorce.

Evolving practices of marriage and divorce

- **Remarriages are frequent, cohabitation may follow divorce** (cohabitation $<1\%$ before a first union):
  - 11% of divorced respondents live (umarried) with a partner, 4% are in a relationship but not living with their partner.
  - 26% are re-married.

Setup

Marriage between bride b & groom g with vector of characteristics $\mathbf{X}_b$ and $\mathbf{X}_g$ respectively generates a utility $U_b(\mathbf{X}_b, \mathbf{X}_g)$ for the bride and $U_g(\mathbf{X}_b, \mathbf{X}_g)$ for the groom.

We denote by f_b the parents/family of bride b. The utility derived by the parents by the same marriage is $U_{fb}(\mathbf{X}_b, \mathbf{X}_g)$ which can differ from the bride's utility for reasons to be discussed.

Cultural Transmission to Offspring from Marriage

Divergence in preferences (regarding groom choice) between the bride and her parents occurs because of concerns over cultural transmission to children born of the marriage (Bisin and Veridier 2000, 2001; Bisin, Patacchini, Verdier, Zenou 2011).

Two types of values, $t =$ 'traditional'; $m =$ 'modern'; $v(\mathbf{X}) =$ values possessed by individual with characteristics $\mathbf{X}$.

V^{ij} = utility obtained by individual with values $i \in \{t, m\}$ when his/her child/grandchild inherits values of type $j \in \{t, m\}$.

P^{ij} = prob. child acquires values j when both parents have values i

$\tilde{P}^{j}$ = prob. child acquires values j when parents have dissimilar values

Assumption 1 $V^{jj} = V^{ii} > V^{ij} = V^{ji}$ *if* $i \neq j$

Assumption 2 $P^{ii} > \tilde{P}^{i}, \tilde{P}^{j} > P^{ij}$ *if* $i \neq j$

Let $v(\mathbf{X}_b) = i$, $v(\mathbf{X}_g) = k$ and suppose $j \neq i$. Then we define

$$U_b(\mathbf{X}_b, \mathbf{X}_g) = \begin{cases} M(\mathbf{X}_b, \mathbf{X}_g) + P^{ii}V^{ii} + P^{ij}V^{ij} + \epsilon \text{ if } i = k \\ M(\mathbf{X}_b, \mathbf{X}_g) + \tilde{P}^{i}V^{ii} + \tilde{P}^{k}V^{ik} + \epsilon \text{ if } i \neq k \end{cases}$$

where $M(\mathbf{X}_b, \mathbf{X}_g)$ captures surplus generated by marriage due to degree of mutual compatibility between b and g; ϵ is stochastic variable with c.d.f. $F(.)$, realised after marriage is initiated, and $\mathbf{E}(\epsilon) = 0$.

Parents of bride b have characteristics $v_f(\mathbf{X}_b) = i'$ which may differ from $v(\mathbf{X}_b) = i$ and have a weight $\lambda_f \in (0,1)$ on mutual compatibility.

Parental surplus from the same match:

$$U_{fb}(\mathbf{X}_b, \mathbf{X}_g) = \begin{cases} \lambda_f M(\mathbf{X}_b, \mathbf{X}_g) + P^{ii} V^{i'i} + P^{ij} V^{i'j} + \epsilon \text{ if } i = k \\ \lambda_f M(\mathbf{X}_b, \mathbf{X}_g) + \tilde{P}^{i} V^{i'i} + \tilde{P}^{k} V^{i'k} + \epsilon \text{ if } i \neq k \end{cases}$$

Thus, the parents care about cultural transmission to their grandchildren. Utility derived by parents may differ from that of the bride for two reasons: (i) differences in values, (ii) differences in relative weight on mutual compatibility versus cultural transmission.

Bargaining over Choice of Partner

Bride b and her parents f_b bargain over groom choice from a set $G(b)$ of potential grooms, including both modern and traditional grooms, and with low and high levels of mutual compatibility with b.

Threat Point: Bride ignores parental wishes, marries her preferred groom, loses support from social network accessed through parents.

Let $\hat{g}(\mathbf{X}_b; b)$ be b's preferred groom (ex-ante); i.e.

$$\hat{g}(\mathbf{X}_b; b) = \arg \max_{g \in G(b)} \mathbf{E} U_b(\mathbf{X}_b, \mathbf{X}_g)$$

Let $N_b =$ value of social network bride can access via her family.

Groom choice given by Nash Bargaining Solution:

$$\max_{g \in G(b)} \left[W_b\left(\mathbf{X}_b, \mathbf{X}_g\right) + N_b - W_b\left(\mathbf{X}_b, \mathbf{X}_{\hat{g}(b)}\right) \right] \left[W_{fb}\left(\mathbf{X}_b, \mathbf{X}_g\right) - W_{fb}\left(\mathbf{X}_b, \mathbf{X}_{\hat{g}(b)}\right) \right]$$

subject to

$$\begin{aligned} W_b\left(\mathbf{X}_b, \mathbf{X}_g\right) + N_b &\geq W_b\left(\mathbf{X}_b, \mathbf{X}_{\hat{g}(b)}\right) \\ W_{fb}\left(\mathbf{X}_b, \mathbf{X}_g\right) &\geq W_{fb}\left(\mathbf{X}_b, \mathbf{X}_{\hat{g}(b)}\right) \end{aligned}$$

where $W_i\left(\mathbf{X}_b, \mathbf{X}_g\right) = \mathbf{E}U_i\left(\mathbf{X}_b, \mathbf{X}_g\right)$ for $i \in \{b, f_b\}$

Characteristics of Arranged Marriage

In the following, we refer to $\hat{g}\left(\mathbf{X}_b; b\right)$ as b's 'preferred groom'.

We say a marriage is 'arranged' if the chosen groom is not the preferred groom.

Lemma 1 *If the bride's preferred groom has the same type of values as her parents, then the chosen groom is the same as the preferred groom.*

Lemma 2 *If the bride's preferred groom is not chosen, then the chosen groom (i) has the same type of values as her parents; and (ii) has the highest level of mutual compatibility with the bride among those who share the parents' values.*

Definition 1 *A 'situation of conflict' is one where* $v\left(\mathbf{X}_{\hat{g}(b)}\right) \neq v_f\left(\mathbf{X}_b\right)$.

Let $g_f(b)$ be potential groom with highest level of mutual compatibility with the bride among those who share the parents' values.

Suppose $v_f\left(\mathbf{X}_b\right) = v\left(\mathbf{X}_b\right) = i$; i.e. parents and daughter have same values. Difference in expected utility from cultural transmission when one marries someone who shares one's own values vs when the partners have different values:

$$\Phi\left(P^{ii}, \tilde{P}^i, V^{ii}, V^{ji}\right) = \left(P^{ii} - \tilde{P}^i\right) V^{ii} - \left(\tilde{P}^j - P^{ij}\right) V^{ij}$$

Proposition 1 *Suppose the parents and daughter have the same values. In a situation of conflict, an arranged marriage occurs if and only if*

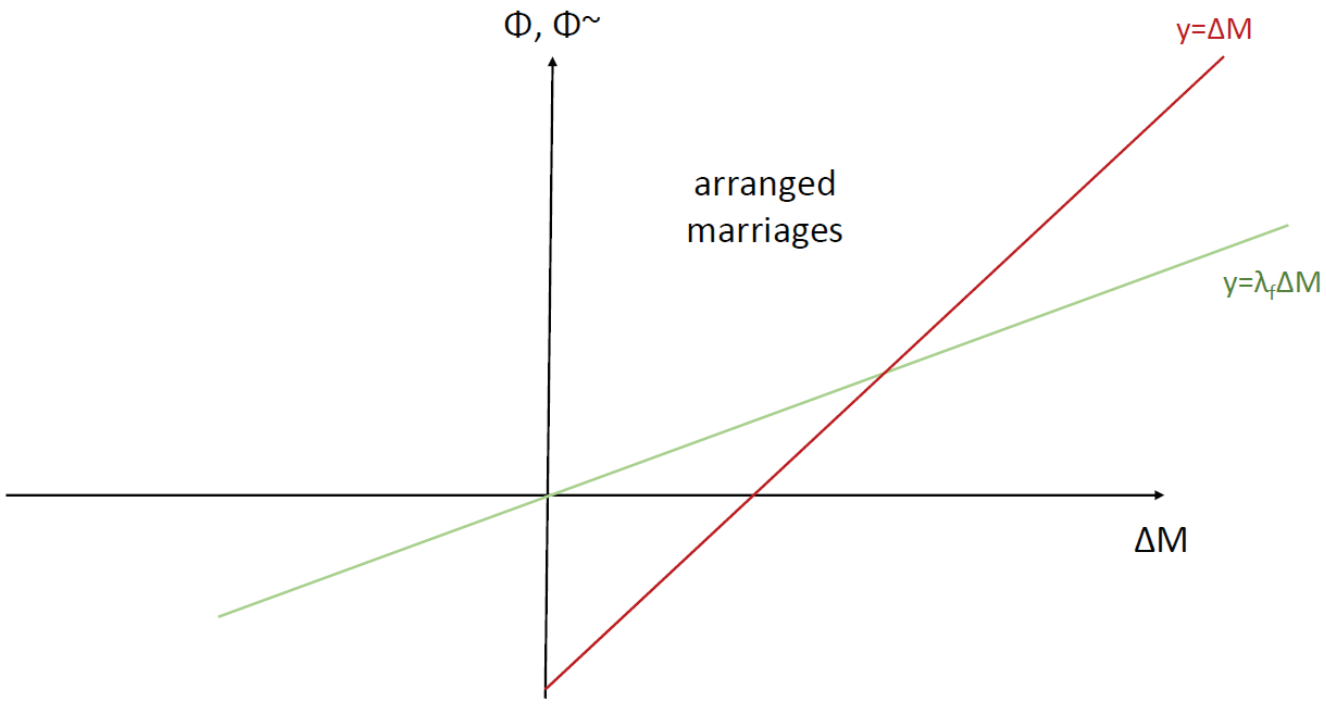
$$\begin{aligned} \Phi(.) &> M\left(\mathbf{X}_b, \mathbf{X}_{\hat{g}(b)}\right) - M\left(\mathbf{X}_b, \mathbf{X}_{g_f(b)}\right) - N_b \\ \Phi(.) &> \lambda_f\left[M\left(\mathbf{X}_b, \mathbf{X}_{\hat{g}(b)}\right) - M\left(\mathbf{X}_b, \mathbf{X}_{g_f(b)}\right)\right] \end{aligned}$$

Suppose $v_f(\mathbf{X}_b) = j \neq v(\mathbf{X}_b) = i$; i.e. parents and daughter have different values. Difference in expected utility to parents from cultural transmission when daughter marries someone who shares their values vs when both daughter+groom have different values from them:

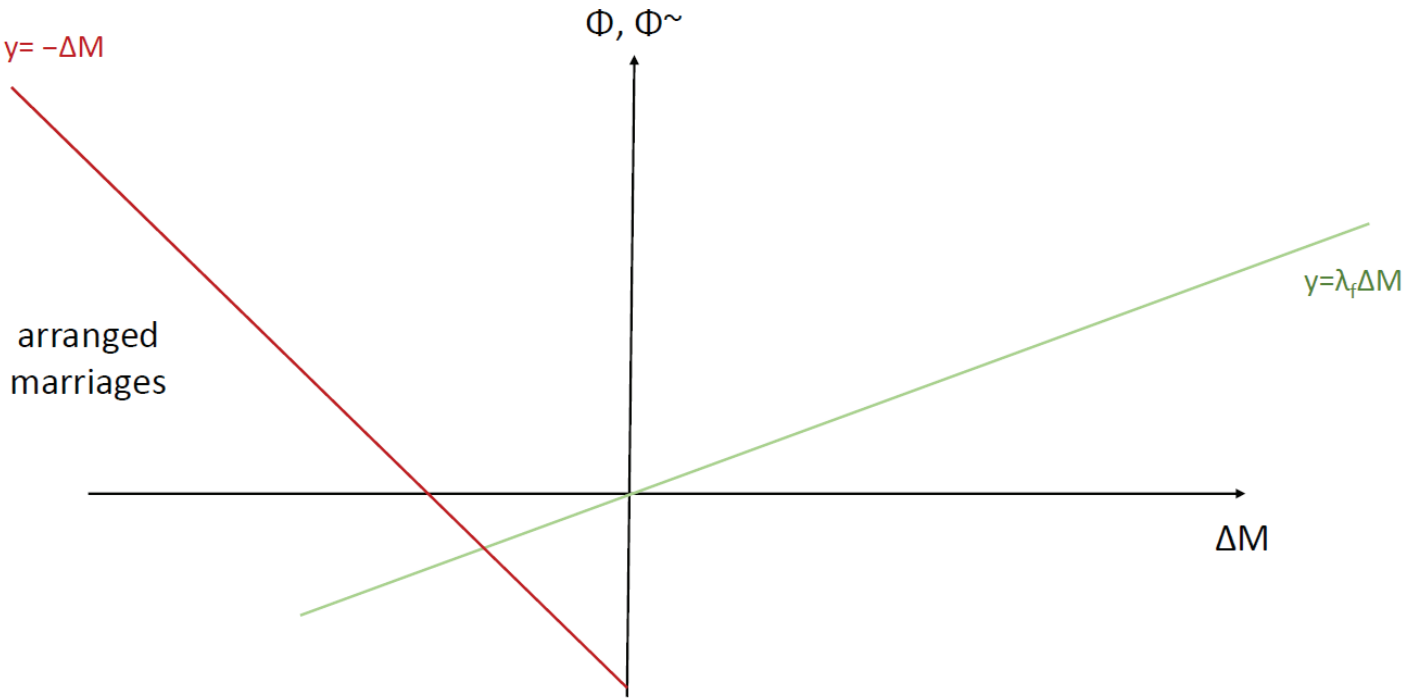
$$\tilde{\Phi}\left(P^{ii}, \tilde{P}^{i}, V^{ii}, V^{ji}\right) = \left(\tilde{P}^{j} - P^{ij}\right) V^{jj} - \left(P^{ii} - \tilde{P}^{i}\right) V^{ji}$$

Proposition 2 *: Suppose the parents and daughter have different values. In a situation of conflict, an arranged marriage occurs if and only if*

$$\begin{aligned} \Phi(.) &< M\left(\mathbf{X}_b, \mathbf{X}_{g_f(b)}\right) - M\left(\mathbf{X}_b, \mathbf{X}_{\hat{g}(b)}\right) + N_b \\ \tilde{\Phi}(.) &> \lambda_f \left[M\left(\mathbf{X}_b, \mathbf{X}_{\hat{g}(b)}\right) - M\left(\mathbf{X}_b, \mathbf{X}_{g_f(b)}\right)\right] \end{aligned}$$



Parents and Daughter have Same Values



Parents and Daughter have Different Values

Divorce and Remarriage

Suppose there is a second period in which it is possible to divorce and remarry. If children have already been born of the first marriage and cultural transmission has occured, there is no conflict of interest between parents and daughter at the time of remarriage.

We denote by $g_r(b)$ the preferred groom on the remarriage market.

Let αN_b be the utility from social support available to divorcees where $\alpha \in (0, 1)$.

The bride will divorce in the second period (ignoring the groom's choices for the time being) if and only if realisation of ϵ is sufficiently small:

$$\mathbf{E}U_b\left(\mathbf{X}_b, \mathbf{X}_{\tilde{g}(b)}\right) + N_b + \epsilon < \mathbf{E}U_b\left(\mathbf{X}_b, \mathbf{X}_{g_r(b)}\right) + \alpha N_b$$

Then the bride's first-period expected utility sum from marrying any groom is increasing in α, while the parents' expected utility is unaffected. The threat point utilities are also unaffected by changes in α.

Therefore, the Nash bargaining product corresponding to $g_f(b)$ is increasing in α while the Nash bargaining product for $\hat{g}(\mathbf{X}_b; b)$ is equal to zero. Thus we obtain,

Proposition 3 *The probability of arranged marriage is increasing in the social support (α) available for divorcees.*

Implications for Immigrant Marriages

The G2 cohort, raised as immigrants, have greater exposure to the majority society than the G1 cohort, thus more likely to have 'modern' vs 'traditional' values.

Thus, a more restrictive set of conditions (Proposition 2) for the G2 cohort experiencing arranged marriage vs the G1 cohort (Proposition 1).

Strong social support available for divorcees (either state or community support) translates into high divorce rates but also high incidence of arranged marriages (Proposition 3) and thus successful transmission of traditional values within the immigrant community

TBD: Evolution of values across cohorts in the context of arranged marriages.