Financing Development at Home: A Survey Experiment on Diaspora Members

Lindsay R. Dolan    Alexandra O. Zeitz

Wesleyan University    Concordia University

November 13, 2020
Migrants and the homeland
Economic ties between migrants and the homeland

- Remittances
  - Private transfers
    - Kapur 2014; Ratha 2003; Maimbo and Ratha 2005

- Investment
  1. Attracting homeland investors to country of residence
     Rauch and Trinidade 2002; Zeitz & Leblang 2020
  2. Facilitating investment into the homeland
     Leblang 2010; Pandya & Leblang 2017; Javorcik et al. 2011
Economic ties between migrants and the homeland

- Remittances
  - Private transfers
    - Kapur 2014; Ratha 2003; Maimbo and Ratha 2005

- Investment
  1. Attracting homeland investors to country of residence
     Rauch and Trinidade 2002; Zeitz & Leblang 2020
  2. Facilitating investment into the homeland
     Leblang 2010; Pandya & Leblang 2017; Javorcik et al. 2011

What about migrants as investors? Why invest at home?
Economic ties between migrants and the homeland

- Remittances
  - Private transfers
    - Kapur 2014; Ratha 2003; Maimbo and Ratha 2005

- Investment
  1. Attracting homeland investors to country of residence
     Rauch and Trinidade 2002; Zeitz & Leblang 2020
  2. Facilitating investment into the homeland
     Leblang 2010; Pandya & Leblang 2017; Javorcik et al. 2011

What about migrants as investors? Why invest at home?

Why invest in the home country government?
Why do migrants invest at home?

1. Specialized information
   - E.g. investor home bias
     Ahearne et al 2004; De Marco & Machiavelli 2016

2. Affinity or social obligation
   - “Impact investing”
   - Similar to remittance motivations
   - Non-financial determinants of investor behavior
     Brooks et al. 2015, Gray 2013
Why do migrants invest at home?

1. Specialized information
   - E.g. investor home bias
     Ahearne et al 2004; De Marco & Machiavelli 2016

2. Affinity or social obligation
   - “Impact investing”
   - Similar to remittance motivations
   - Non-financial determinants of investor behavior
     Brooks et al. 2015, Gray 2013
Why invest in the home country government?

1. National identity / patriotism
   H1: Invest if framed as “love for country”
Why invest in the home country government?

1. National identity / patriotism
   H1: Invest if framed as “love for country”

2. Stake in home economy / “developmental altruism”
   H2: Invest if framed as “development contribution”
Why invest in the home country government?

1. National identity / patriotism
   H1: Invest if framed as “love for country”

2. Stake in home economy / “developmental altruism”
   H2: Invest if framed as “development contribution”

3. Political support
   H3: Invest if higher government support
Why invest in the home country government?

1. National identity / patriotism
   H1: Invest if framed as “love for country”

2. Stake in home economy / “developmental altruism”
   H2: Invest if framed as “development contribution”

3. Political support
   H3: Invest if higher government support

* Financial self-interest
   H4: Invest based on yield
Research focus: Diaspora bonds

**SALIENT FEATURES OF**

**Pakistan banao Certificates**

**OBJECTIVES OF ISSUANCE OF PBC**

- Reliance on Pakistani overseas
- Balance of payment support & build-up of foreign exchange reserves
- Raise financing for critically important infrastructure projects including:
  - Dams
  - Road Networks
  - Power Generation
  - Transmission Projects
- Providing attractive investment opportunity
- PBC provides the much needed Sovereign investment avenue for overseas Pakistanis to earn a handsome return on investment
Recruiting a relevant sample

- **Community associations**
  - Approximates how bonds would be marketed
  - Members are likely investors
  - e.g. Organization of Pakistani Entrepreneurs (OPEN)
Recruiting a relevant sample

- **Community associations**
  - Approximates how bonds would be marketed
  - Members are likely investors
  - e.g. Organization of Pakistani Entrepreneurs (OPEN)

- **Facebook targeting**
  - Broader sample of diaspora members
  - Targeted based on usage language
    - Indian sample (Hindi), March 2019, N = 204
    - Pakistani sample (Urdu, Pashto, Punjabi), July-October 2020, N = 207
Recruiting a relevant sample

- **Community associations**
  - Approximates how bonds would be marketed
  - Members are likely investors
  - e.g. Organization of Pakistani Entrepreneurs (OPEN)

- **Facebook targeting**
  - Broader sample of diaspora members
  - Targeted based on usage language
    - Indian sample (Hindi), March 2019, \(N = 204\)
    - Pakistani sample (Urdu, Pashto, Punjabi), July-October 2020, \(N = 207\)

Participation incentive is chance to win $100 bond
Recruiting a relevant sample

Researchers want to hear from Pakistanis in the U.S. Take our survey for a chance to win a $100 financial prize!
Recruiting a relevant sample

reason why minority groups are apprehensive about giving identifiable information. Countless academic and policy institutions have gathered data on minority groups under a guise of some kinda relief or value to screw them over, royally. ICE asked immigrants to report to their offices to expedite their immigration to deport when ppl showed up, Tuskegee experiments, post 9/11 profiling horror stories to name a few.

I by no means am suggesting anything of that nature is at play but sharing some insight on why some of us are apprehensive.

Is it possible to learn what hypothesis this research is trying to prove? Why are these goras so interested in our “choti si”, economically diverse community?

I by no means am an academic so it’s possible these questions aren’t appropriate, but I do LOVE history and the idea of someone intentionally researching our community - just wanna be cautious in our current climate 😞😞😞

What’s understandable.

That’s not right. But it’s also imp for Pakistan to know it’s diaspora in USA. Can help bring money into the country.

Large upside if things are done intentionally 😊
Recruiting a relevant sample

“Pakistan is almost bankrupt. Interest rate or The coupon rate should be substantially higher than the prevailing bank rate to consider for investment.”

“This was a great survey and I learned a lot about bonds that I did not know before! I think the initiative by the Pakistani government to sell bonds to Pakistanis living abroad to invest in Pakistan, as development is a brilliant idea and something I am definitely interested in.”
Survey experimental design

Participants watch a video explaining bonds, then answer this question...

<table>
<thead>
<tr>
<th>Country</th>
<th>Pakistan</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating</td>
<td>(B range)</td>
<td>(A range)</td>
</tr>
<tr>
<td>Yield</td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>Maturity</td>
<td>5 years</td>
<td>5 years</td>
</tr>
</tbody>
</table>

If you have to choose one bond to invest in, which one would you choose?

- Pakistan bond
- US bond

We randomize how bonds are framed and whether politics or Pakistan’s economic troubles are mentioned.
Support for national identity as a motivation (H1)

Treat (Country Love): “Investing in the Pakistani government was described as a sign of love for country.”
Support for developmental altruism as a motivation (H2)

Treat (Development): “Investing in the Pakistani government was described as an important contribution to development.”

Treat (Econ): “Note that Pakistan’s economy is facing economic difficulties, with a shortage of dollars and rising inflation.”
No support for political support as a motivation (H3)

Treat (Politics): “... a typical Pakistani bond, **issued by Imran Khan’s government.**”
Limited support for financial self-interest as a motivation (H4)

Treat (Investment): “Investing in the Pakistani government was described as a safe and profitable investment.”

Treat (Econ): “Note that Pakistan’s economy is facing economic difficulties, with a shortage of dollars and rising inflation.”
- **Main Takeaways**
  - Diaspora investors motivated by national pride and development altruism
  - Political opinions and financial self-interest not very important
  - Implies that migrant investors may be receptive to social appeals from issuing governments

Other Observations
- Tested comprehension with conjoint survey with Indian sample
- Looked at other comparisons besides U.S.: Brazil, International Bond Index
- Similar patterns in Indian sample
Findings

- **Main Takeaways**
  - Diaspora investors motivated by national pride and development altruism
  - Political opinions and financial self-interest not very important
  - Implies that migrant investors may be receptive to social appeals from issuing governments

- **Other Observations**
  - Tested comprehension with conjoint survey with Indian sample
  - Looked at other comparisons besides U.S.: Brazil, International Bond Index
  - Similar patterns in Indian sample
Next steps

- Unlikely to collect additional survey data
Next steps

- Unlikely to collect additional survey data
- Planning follow-up interviews with survey respondents
  - Random sample?
  - Those with thoughtful comments?
  - The few from community associations?
Further slides
Descriptive statistics (Pakistan)
## Results (Pakistan)

<table>
<thead>
<tr>
<th></th>
<th>Chose Pakistan bond over U.S. bond (0-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td><strong>Treat: Investment Frame</strong></td>
<td>0.199*</td>
</tr>
<tr>
<td></td>
<td>(0.114)</td>
</tr>
<tr>
<td><strong>Treat: Country Love Frame</strong></td>
<td>0.299***</td>
</tr>
<tr>
<td></td>
<td>(0.107)</td>
</tr>
<tr>
<td><strong>Treat: Development Frame</strong></td>
<td>0.345***</td>
</tr>
<tr>
<td></td>
<td>(0.105)</td>
</tr>
<tr>
<td><strong>Return to Pakistan</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Treat: Politics</strong></td>
<td>−0.123</td>
</tr>
<tr>
<td></td>
<td>(0.076)</td>
</tr>
<tr>
<td><strong>Ruling Party</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Treat: Economy</strong></td>
<td>−0.009</td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
</tr>
<tr>
<td><strong>Pride</strong></td>
<td>0.101**</td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
</tr>
<tr>
<td><strong>Treat: Investment Frame X Pride</strong></td>
<td>−0.042</td>
</tr>
<tr>
<td></td>
<td>(0.145)</td>
</tr>
<tr>
<td><strong>Treat: Country Love Frame X Pride</strong></td>
<td>0.063</td>
</tr>
<tr>
<td></td>
<td>(0.132)</td>
</tr>
<tr>
<td><strong>Treat: Development Frame X Pride</strong></td>
<td>−0.072</td>
</tr>
<tr>
<td></td>
<td>(0.110)</td>
</tr>
<tr>
<td><strong>Treat: Investment Frame X Treat: Economy</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Treat: Country Love Frame X Treat: Economy</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Treat: Development Frame X Treat: Economy</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Treat: Investment Frame X Return to Pakistan</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Treat: Country Love Frame X Return to Pakistan</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Treat: Development Frame X Return to Pakistan</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Treat: Politics X Ruling Party</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>−0.470</td>
</tr>
<tr>
<td></td>
<td>(0.331)</td>
</tr>
<tr>
<td><strong>Covariates</strong></td>
<td>Basic</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>183</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>0.141</td>
</tr>
<tr>
<td><strong>Adjusted R²</strong></td>
<td>0.075</td>
</tr>
</tbody>
</table>

*Note:* *p<0.1; **p<0.05; ***p<0.01
Comparisons to other alternative bonds (Pakistan)
Comparisons to other alternative bonds (Pakistan)

Chose Pakistan (versus Brazil)

(H1) Pride

(H1) Treat: Country Love

(H1) Treat: Love for Country X Pride

(H1) Treat: Love for Country X Treat: Econ Crisis

(H2) Treat: Development

(H2) Treat: Development X Treat: Econ Crisis

(H2) Treat: Development X Will Return

(H3) Ruling Party Opinion

(H3) Treat: Politics X Ruling Party Opinion

(H4) Treat: Investment

(H4) Treat: Investment X Treat: Econ Crisis

Coeficient

Chose Pakistan (versus International Bond Index)

(H1) Treat: Country Love

(H1) Treat: Love for Country X Pride

(H1) Treat: Love for Country X Treat: Econ Crisis

(H2) Treat: Development

(H2) Treat: Development X Treat: Econ Crisis

(H2) Treat: Development X Will Return

(H3) Ruling Party Opinion

(H3) Treat: Politics X Ruling Party Opinion

(H4) Treat: Investment

(H4) Treat: Investment X Treat: Econ Crisis

Coeficient
Comparisons to all bonds (India)

Treat (Give Back/Investment): “So you can think about bonds as opportunities to give back/investment opportunities.”

Treat (Politics): “Also, think about how the current government will manage this money.”

Treat (Econ): “Keep in mind that the economy in India is currently booming/flagging.”
(a) Comparing between Indian bonds  
(b) Comparing between Indian and alternative bonds

Note: Figures indicate ACMEs obtained by regressing bond selection on characteristics of bonds. Unit of observation is the bond. In rounds 1-3 (panel A), respondents compared between Indian bonds, resulting in two bond observations per round. In rounds 4-6 (panel B), respondents compared between Indian bonds and alternative bonds, resulting in one (Indian) bond observation per round (the comparison bond is treated as an additional bond-specific feature). Regressions include no covariates. Standard errors are clustered by respondent.