A Missing Market for Work Permits

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Trillion-dollar bills on the sidewalk

• Large efficiency losses from restrictions on international migration. Yet:
  • Freer migration is not a popular idea. Some people are hostile to it.
  • People are concerned with loosing their jobs. Some view migrants as a threat to their living standards.
  • Inflow of migrant labor will generate negative extraneities for the native population.
  • Cultural backlash against migrants in some quarters.

• Political and economic challenges in finding a feasible mechanism to capture gains from migration.
The Missing Market

• A foreigner needs a **Work Permit** to take up employment in the host country.

• Citizenship comes with an unrestricted right to take up a job – the “right-to-work”.

• Currently this right is a non-marketable entitlement. Its value cannot be used for their benefits.

• Some citizens in high-wage economy would be happy to do something other than work for wage. Many foreigners want jobs in these countries.
Creating a market for Work Permits

• Citizens should be free to rent-out their right-to-work for the period of their choosing => new Work Permits.

• The renter of Work Permits can take up any job offer in that country for a defined period.

• The equilibrium price of Work Permit balances the aggregate supply with aggregate demand measured in time units.

• The market is disembodied from the persons renting out their rights to work. The market is anonymous.
Partial antecedents

- Selling citizenships instead of quotas and long queues (Chiswick; Becker; Becker and Lazear).
- Selling visas to control human smuggling (Auriol and Mesnard).
- Selling work permits to compensate the vulnerable native workers (Weinstain).
- Visa auctions (Zavodny).
- “Cash-for-passport” or golden visa programs (e.g., Caribbean countries).
None of these ideas have been popular

- Historically, these ideas were not popular.
- One view: Paying money is ethically objectionable route to the honor of citizenship.
- These programs mostly target a global elite of the very rich.
How is our proposal different?

• We introduce a supply side of the market. Citizens are free to rent out their right-to-work. The payment made for Work Permits are funded by foreigners.

• Only a time-bound Work Permit could be purchased, not citizenship.

• The competitive prices for the Work Permits appeal to a broad range of people across the income distribution, while “cash-for-passport” programs target the rich.

• The low transaction costs ensure higher welfare gains.

• Our approach provides scope for internalizing externalities associated with migrants, including taxes levied on Work Permits.

• A political component – citizens directly benefit from migrants
Supply: Who might want to rent out their right to work?

• Young person – finance extra schooling or skill training
• Provide home-care for relatives in need (aging societies)
• Cope with unemployment, while retraining or moving
• Want to set up a new business or unpaid community service.
• Go to work in a different country or just take a long vocation
• Want to retire early
• Seriously ill or disable
Simple expository model

Wages in the high-wage country:

\[ F(w), w \in [w^{min}, w^{max}] \quad F(w^{min}) = 0, \quad F(w^{max}) = 1 \]

Labor force in the high-wage country \( n_h \) and in the low-wage country \( n_l \) draw wages from the same distribution, \( n_h + n_l = 1 \)

- Supply: \( F(p)n_h \)
- Demand: \( [1 - F(p)]n_l \)

Market at equilibrium: \( p = F^{-1}(n_l) \)

If \( n_l > 0.5 \), \( p > \text{median wage} \)
More general model

1. Costs: moving costs, tax on the purchase of the Work Permit, costs of living, “migration premium” - \( \tau \ (> 0) \)
2. Different wage distribution for foreigners and natives - \( G(w) > F(w) \)

The market clears if:

\[
F(p')(1 - n_l) = [1- G(p' + \tau)]n_l \Rightarrow p' < p
\]

\[
\frac{\partial p'}{\partial \tau} = -\frac{1}{1+\gamma} < 0 \text{ where } \gamma \equiv \frac{f(.)n_h}{g(.)n_l}
\]

A unit increase in \( \tau \) will lead to:

- Increase in purchase price \( p' + \gamma/(1 + \gamma) \)
- Decline in selling price \( p' - 1/(1 + \gamma) \)
Theoretical model

Price of Work Permit
Auctioning Work Permits

- Citizen $i$ submits an offer to rent out her right to work for duration $D_i$ and minimum acceptable asking price $P_i$
- Buyer $j$ submits his desired duration $d_j$ for a WP at maximum price $p_j$.
- Solve for the equilibrium price that equate total proposed durations.

\[
p = \arg \min \left| \sum_{P_i > \omega} D_i - \sum_{p_j < \omega + \tau} d_j \right|
\]

- Alternative – Give the WP to the highest bidder and use that to cover the lowest selling offer. Then government will capture all the surplus.

- Or, eBay type auction.
How will it work?

• **A seller** receives the money. His profile (SSN) indicates that he cannot work. On expiration of WP the seller becomes eligible to work.

• **A byer** receives a confirmation from the host government about his purchase. The confirmation is the document to support visa petition. The dates of the visa is linked to the duration of Work Permit.

• Secondary market for both sellers and buyers: legal support for sellers; financial (loans) and insurance instruments for buyers.
US-Mexico Simulations (1)

• Data: CPS 2018 March Supplement; Mexico Encuesta Nacional de Ocupación y Empleo (ENOE) 2018.

• Mincer regression on the sample of US workers. Log of yearly earnings on a standard set of controls + race, type of enterprise, military status, country of birth, citizenship status.

• Use data from ENOE 2018 to predict wages of Mexicans in the US ($\hat{w}_{\text{US}}^{\text{MX}}$), and calculate current wage in Mexico in USD ($w_{\text{MX}}^{\text{MX}}$, $\text{PPP} = 10.35$).
US-Mexico Simulations (2)

• A US citizen rents out her right to work if $w_{US}^U < p$

• A migrant buys the Work Permit if

$$\hat{w}_{MX}^US \geq p'' + p''\tau_{wp} + C_m + C_{us} + \tau_{us}\hat{w}_{MX}^US + (1 + \pi)w_{MX}^M$$

• A migrant incurs the costs:
  • Purchasing a Work Permit $p''$
  • Tax on purchasing a Work Permit $\tau_{wp} p''$
  • Cost of moving to the US – fixed amount $C_m$
  • Cost of living in the US - % of earnings in the US - $C_{us}$
  • Tax on earnings in the US (standard income tax brackets) $\tau_{us}\hat{w}_{M}^US$

• Price of the Work Permit:

$$p'' = \text{argmin}_p \left| \begin{array}{c} n_s - n_b \\ w_{US}^U < p \\ w_{MX}^U > (1 + \tau)p + C_m + C_{US} + \tau_{US} + \pi \end{array} \right|$$
Empirical demand and supply
## Simulation scenarios: one-year rental

<table>
<thead>
<tr>
<th>Simulated scenario</th>
<th>1</th>
<th>2</th>
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<td><strong>Parameters</strong></td>
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<tr>
<td>Tax on purchase of Work Permit (%)</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>70</td>
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<tr>
<td>Cost of moving from Mexico to US ($)</td>
<td>0</td>
<td>1,000</td>
<td>1,000</td>
<td>2,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
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<tr>
<td>Cost of living in US (% of US earnings)</td>
<td>0</td>
<td>5</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>“Premium” (% of earnings in Mexico)</td>
<td>0</td>
<td>25</td>
<td>50</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<tr>
<td><strong>Simulation results</strong></td>
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<tr>
<td>Price of Work Permit ($)</td>
<td>29,800</td>
<td>26,000</td>
<td>24,300</td>
<td>23,000</td>
<td>20,000</td>
<td>19,900</td>
<td>14,300</td>
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<tr>
<td>Average earnings of sellers ($)</td>
<td>16,200</td>
<td>14,900</td>
<td>13,400</td>
<td>12,800</td>
<td>11,500</td>
<td>10,300</td>
<td>7,400</td>
</tr>
<tr>
<td>Expected earnings of buyers in the US ($)</td>
<td>57,600</td>
<td>59,000</td>
<td>60,800</td>
<td>60,500</td>
<td>63,700</td>
<td>65,000</td>
<td>72,300</td>
</tr>
<tr>
<td>Number of sellers(buyers) (M)</td>
<td>48.47</td>
<td>43.7</td>
<td>38.12</td>
<td>36.05</td>
<td>31.81</td>
<td>31.64</td>
<td>19.17</td>
</tr>
<tr>
<td>Total earnings of migrants ($B)</td>
<td>2,762</td>
<td>2,527</td>
<td>2,259</td>
<td>2,124</td>
<td>1,876</td>
<td>1,784</td>
<td>1,362</td>
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<tr>
<td>Tax revenue from migrants’ earnings ($B)</td>
<td>597</td>
<td>551</td>
<td>493</td>
<td>463</td>
<td>413</td>
<td>395</td>
<td>309</td>
</tr>
<tr>
<td>Net gains for sellers ($B)</td>
<td>661</td>
<td>485</td>
<td>416</td>
<td>369</td>
<td>269</td>
<td>266</td>
<td>131</td>
</tr>
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</table>
Simulated distribution of household incomes in the US
Economic implications

• Rich country
  • Wages in the low skill sector will rise
  • Low ability/motivation workers will be replaced by higher ability/motivated workers – plumbers, electricians, medical technicians.
  • Increase in tax revenue
  • Wages in the middle of the wage distribution might decline, some lose

• Poor country
  • Those who otherwise could not get a permit gain.
  • Middle-High skill labor gain the most. Most skilled might use other ways to migrate.
  • Remittances increase
  • Return to education increases
  • Reduction in pressure of educated unemployed
  • Brain-drain- but it is a temporary migration.
Market for Work Permits as Social Protection

• New binding floor for labor earnings – a normatively chosen social minimum income.

• Upward pressure on wages of low-skilled workers in rich countries (they gain the most) -> reduction in poverty and inequality.

• Non-pecuniary benefits – childcare, elderly care, volunteer work.

• The policy is more effective compared to other programs to guarantee minimum income, such as topping up all incomes until they reach the desired minimum, or job guarantee programs. These programs suffer from high admin costs, disincentive effects, and welfare losses.

• MWP scheme puts no pressure on the host country budget.
Michelle Ramirez, the single mother of two is struggling to make ends meet on her receptionists salary as day care and medical costs rise.
Denise Egebrecht cares for his father, while also raising his 8-year-old daughter. Denise has just lost his job. His wife’s salary is not enough to cover all the expenses.
Refugee crisis

- Turkish government spent about $40B supporting Syrian refugees
- International donor community spends additional $B to integrate Syrian refugees into the Turkish economy
- Why not to spend some of these money to help refugees to purchase the Work Permits from the Turkish citizens.
Market for Work Permits (MWP) and Universal Basic Income (UBI)

• **UBI:**
  - provides a uniform transfer to everyone.
  - requires high domestic taxes or available only as an option of existing welfare programs.
  - May discourage work.
  - A mechanism to address job-loss due to automation.

• **MWP** also provides potential income to every citizen.
  - Self-targeting poor workers directly and indirectly through tightening the labor market.
  - Could help workers who lost their jobs, but without leakages associated with UBI.
  - Could be implemented in parallel to the existing welfare programs.
  - Self-financing
Political economy: Pros

• Citizens directly benefit from selling their RTW
• Better attitudes towards migrants and migration among native population.
• Increase in wages of low skilled occupations
• Lower inequality, better protection of the poor,
• insurance that benefits large share of citizens.
• Potential solution (at least partial) to many problems (childcare, elderly care, refugees)
• Freer, more dynamic labor market
• Gains to the national income – a stimulus that will bring further gains to the economy
Political economy: Cons

• Some could lose from extra competition for their skills from migrants.
• Concerns about disincentives and deskillling
• MWP might crowd out some public and private investments
• Selling rights-to-work might serve as precedent for marketization of other rights.
• MWP while addressing externalities might still be not enough to overcome them
• Concerns about enforcement of visas and GE effects
• Brain-drain
“There is still a paradoxical gap between the recognition of [problems] and finding appropriate solutions for them,”
Kerem Kimik, head of the Turkish Red Crescent Society.

We need some creative thinking about how to tap into the truly huge global gains from freer international migration.

We hope our proposal helps to sparks this constructive discussion.