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Social Protection & Labor

# The Impact of Syrian Refugees on the Turkish Labor Market

*September 23, 2015*

**Ximena Del Carpio (GSPDR)**  
**Mathis Wagner (Boston College)**

# Outline

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- **Issue and motivation**
- **Literature**
- **Summary of findings**
- **Data and descriptives**
- **Methodology**
- **Results**
- **Concluding remarks**
- **Discussants....**



# Syrian Refugee Crisis

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- War in Syria: 4+ million refugees, nearly 8 million internally displaced.
- 1.9 million in Turkey (remainder primarily in Jordan and Lebanon, and moving west).
- 85% in Turkey have left camps (or skipped them), and have no work permits (for foreseeable future).
- 2014 survey finds 56% of Turkish agree with the statement: “Syrians take our jobs” (69% in border provinces).
- In October 2014, the status of Foreigners under Temporary Protection’ was issued. It guarantees access to the labor market; however, it lacks secondary legislation (awaiting approval by the Council of Ministers), so it is not operational.
- Work permits for foreigners exist, but they are (very) difficult to obtain as they require guarantors and proof of financial assets.



# Broader Motivation

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- 60 million displaced people worldwide.
- Economics literature overwhelmingly about 'voluntary' migration rather than 'forced migration'. Challenges are different.
- 86% of refugees live in developing world, making high quality data on refugee location and knowledge about the outcomes of natives rare.
- Existing literature on refugees primarily about camps, though only less than 1/3 live in camps.



# Literature Review I

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- Vast literature on ‘voluntary’ migration, lack of evidence on forced displacement (Ruiz, Vargas-Silva 2013, Mabiso et al. 2014).
- Forcibly displaced likely:
  1. Harder to integrate in labor market.
  2. Different, e.g. more children, negative effects of displacement (Kondylis 2009), higher crime rates (Bell, Fasani, Machin 2013).
  3. Pose additional immediate challenges, e.g. food, housing, education.



# Literature Review II

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Labor market impact of refugees on locals (primarily from camps):

*Impact is heterogeneous: winners and losers*

- Tanzania (Burundi and Rwanda): Alix-Garcia, Saah 2009; Maystadt, Verwimp 2014; Ruiz, Vargas-Silva 2015.
- Uganda (Congolese): Kreibaum 2014.
- Turkey (Syrians): Akgunduz, van den Berg, Hassink 2015; Ceritoglu et al. 2015.



# Literature Review III

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## Additional impacts on locals:

- Net impact on **food security** is context dependent, but always heterogeneous (Mabiso et al 2015).
- Mixed impact on **trade** (Cali et al 2015)
- Long-run effects on local children, negative due to worse **health and education** (Baez 2011).
- Long-run effects on the **economy**, positive due to increased **investment** in infrastructure (Duranton Maystadt 2015).



# Main Results

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Using a novel instrument, we find that the impact of refugees on locals is as follows:

- Large-scale displacement of Turkish workers from informal jobs, particularly women, the low educated and workers in agriculture.
- Increase in higher wage, formal jobs, which allows for occupational upgrading of some Turkish workers.
- Some female displacement into education and inactivity.
- Average Turkish wage increases, primarily as the composition of the employed changes.





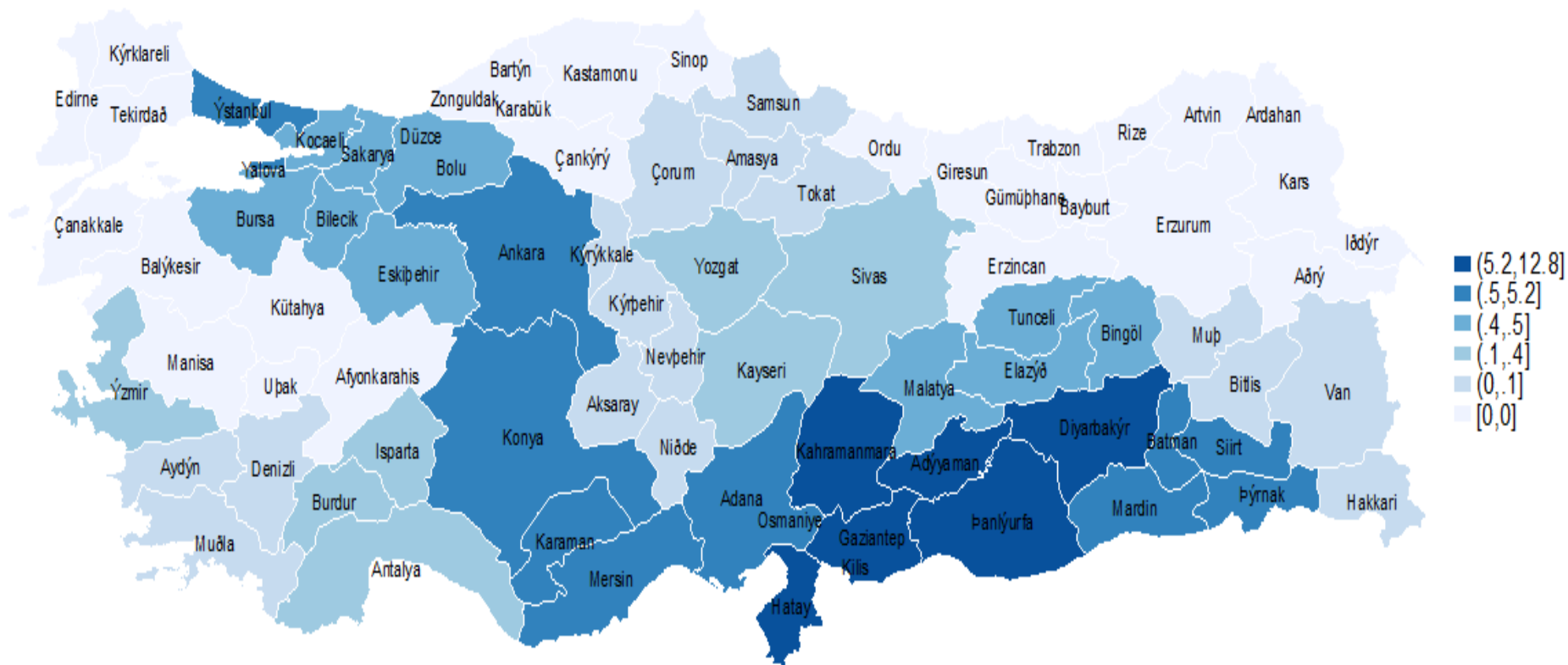
# Data and Summary Statistics



# Data: Syrian Refugees in Turkey (AFAD)

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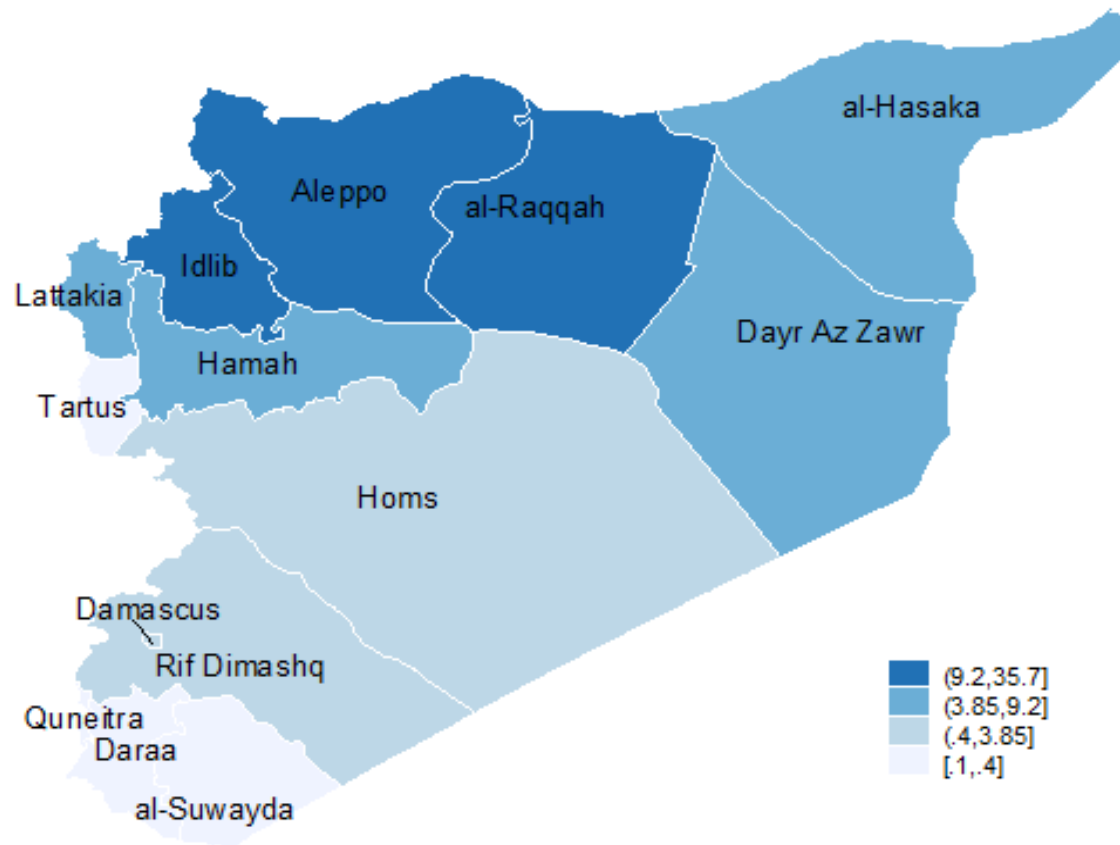
Figure 1  
Ratio of Syrian Refugees to Turkish Population (%)



# Data: Syrian Refugees Origin (AFAD)

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Figure 2  
Place of Origin of Syrian Refugees (%)



# Descriptive Statistics (Working-Age Population, %, LFS)

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	<b>2011</b>	<b>2014</b>
Employed	41.9	43.6
Unemployed	5.4	5.5
In school	12.4	15.0
Out-of-Labor force	40.3	35.9
Female	21.7	23.9
Educational Attainment (ages 25 - 64):		
Primary	59.4	55.7
High School	20.5	20.9
Higher Education	20.2	23.4
Job Characteristics:		
Informal	33.0	26.1
Field	14.3	11.1
Public	14.6	14.2
Self-Employed	21.2	18.5
Median monthly earnings	800	1100
Median hourly earnings	3.66	5.17
Working-age Population	47,749,482	49,891,181
Observations	336,949	336,326



# Preliminary Evidence

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	2011			2014			Diff-in-Diff
	Border	Non-Border	Difference	Border	Non-Border	Difference	
Employed	33.7	43.2	<b>-9.5***</b>	33.2	45.2	<b>-12.0***</b>	<b>-2.5</b>
Unemployed	5.1	5.4	<b>-0.3</b>	7.1	5.3	<b>1.8</b>	<b>2.1</b>
In school	12.4	12.4	<b>0.1</b>	15.0	14.9	<b>0.1</b>	<b>0.0</b>
Formal	15.9	29.9	<b>-14.0***</b>	18.9	34.3	<b>-15.4***</b>	<b>-1.4</b>
Informal	21.6	20.3	<b>1.4</b>	19.3	17.1	<b>2.2</b>	<b>0.8</b>
Full-time	33.2	44.5	<b>-11.3***</b>	34.1	45.6	<b>-11.4***</b>	<b>-0.2</b>
Part-time	4.3	5.7	<b>-1.4</b>	4.0	5.8	<b>-1.8</b>	<b>-0.4</b>
Regular workplace	19.1	27.8	<b>-8.7**</b>	18.9	30.2	<b>-11.3**</b>	<b>-2.5</b>
Field worker	9.8	12.1	<b>-2.3</b>	9.6	10.0	<b>-0.4</b>	<b>1.9</b>
Mean monthly earnings	856	1056	<b>-199***</b>	1143	1475	<b>-332***</b>	<b>-133*</b>
Mean hourly earnings	4.2	5.3	<b>-1.1***</b>	5.7	7.7	<b>-1.9***</b>	<b>-0.81*</b>
Population (in mill)	6.4	41.4	<b>-35.0</b>	6.6	43.3	<b>-36.8</b>	<b>-1.8</b>
Observations	37611	299338		44203	292123		



# Methodological approach



# Estimating Equation

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$$Y_{itr} = \gamma R_{rt} + f_t(D_r) + g(X_{irt}) + \delta_r + \delta_t + \varepsilon_{irt}$$

- $Y_{itr}$  = outcome of person  $i$  in subregion  $r$  and year  $t$
- $R_{rt}$  = refugee / population
- $f_t(D_r)$  = year-specific fourth-order polynomial of distance to border
- $\delta_r$  = subregion fixed effects
- $\delta_t$  = year fixed effects
- $g(X_{irt})$  = individual covariates



# Instrument

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$$IV_{rt} = \sum_s \frac{1}{T_{sr}} \pi_s R_t$$

- $T_{sr}$  = distance between Syrian governorate  $s$  and Turkish subregion  $r$
- $\pi_s$  = share of all refugees from Syrian governorate  $s$
- $R_t$  = total number of refugees





# Results-in detail



# Employment Impact 1 – IV Estimates

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## Panel A: Baseline Covariates

	Employed	School	Formal	Informal	Regular	Field
Refugees / Population	-1.138	0.451	1.474	-5.018	1.34	-4.454
	(0.474)**	(0.239)*	(0.555)***	(1.926)***	(0.433)***	(1.731)**
First-Stage T-Stat	3.55	3.55	3.55	3.55	3.55	3.55

## Panel B: Full Covariates

Refugees / Population	-1.405	0.878	1.217	-4.929	1.149	-4.335
	(0.599)**	(0.420)**	(0.401)***	(1.850)***	(0.332)***	(1.661)***
First-Stage T-Stat	3.58	3.58	3.58	3.58	3.58	3.58
<i>N</i>	673,275	673,275	673,275	673,275	673,275	673,275



# Employment Impact 2 – IV Estimates

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Independent variable: Refugees / Population

<b>Employed</b>	<b>Formal</b>	<b>Informal</b>	<b>Regular</b>	<b>Field</b>	<b>School</b>
<b>Female</b>					
-2.785	0.113	-6.285	-0.162	-5.715	1.49
(0.887)***	-0.166	(2.281)***	-0.205	(2.070)***	(0.599)**
<b>Male</b>					
0.041	2.326	-3.487	2.493	-2.89	0.256
-0.392	(0.756)***	(1.442)**	(0.718)***	(1.231)**	-0.274
<b>Primary Education</b>					
-1.518	1.497	-5.601	1.886	-5.182	
(0.507)***	(0.546)***	(1.950)***	(0.665)***	(1.816)***	
<b>High School</b>					
-1.724	0.69	-2.786	0.544	-1.175	
(0.672)**	(0.321)**	(0.873)***	-0.5	(0.589)**	
<b>Higher Degree</b>					
0.918	1.781	-1.212	-0.722	-0.093	
(0.526)*	(0.608)***	(0.485)**	-0.858	-0.143	



# Placebo Tests

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- **2009-11 pre-trends:**
  1. **Correlated with refugee flows (border subregions) and instrument.**
  2. **But not significant with distance controls.**
  
- **2012 education reform:**
  1. **Strongly correlated with refugee flows.**
  2. **But not significant with distance controls.**



# Wage Impact

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	<b>Employ</b>	<b>Female</b>	<b>Male</b>	<b>Formal</b>	<b>Inform</b>	<b>Primary</b>	<b>Second</b>	<b>Higher</b>
<b>IV Estimates</b>								
Refugees / population	4.7**	7.23*	4.57**	2.41*	3.54	4.37*	4.44**	-0.07
	(2.39)	(4.29)	(2.09)	(1.43)	(2.28)	(2.47)	(1.85)	(0.10)
First-Stage T-Stat	3.5	3.3	3.6	3.5	3.3	3.6	3.6	3.3

## **Decomposition at 2% refugees/population (in 2011 Turkish Lira)**

Wage Change	101	91	97	55	73	73	107	-8
Explained by:								
Observables	61	185	28	3	94	60	21	10
Unexplained	40	-93	69	53	-20	13	86	-18



# Implications of this work



# Implications of not issuing work permits

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- Counterforce to the gains made to date in the reduction of informality and low labor force participation of women in the Turkish economy.
- Potential increase in occupational health and safety violations.
- The costs fall disproportionately on some of the poorest Turkish workers, employed in the informal economy; both in terms of jobs and wages.
- Turkey misses out on the benefits that the most high-skilled and entrepreneurial refugees can bring (which are emphasized in your article).



# Issues to keep in mind...

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- **By all accounts the refugee camps are very impressive. The key issue currently is how to deal with the fact that the overwhelming majority of refugees are not inside of camps, but rather, living among Turkish society.**
- **Beyond the scope of this analysis, the current large-scale onward movement of refugees to Western Europe further complicates this picture:**
  - The number of refugees in Turkey are likely to fall, though additional refugees may of course be induced to flee Syria to make their way to Europe.
  - The most entrepreneurial and educated refugees may be more enticed to leave Turkey for Western Europe. Hence, Turkey may be missing the opportunity to reap a lot of the economic benefits that can come with immigrants.





# Implications for the work going forward

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- **Absence of data** to make important decisions (e.g. socio-economic needs, work permits, general insertion capacity).
- Key to be mindful of **differentiating between temporary places** (border region) **and permanent places** (larger cities, and other European countries).
- Assessment of the **suitability of existing programs** to be adapted to respond to the refugee population. Increased reliance on the **evidence base in similar contexts** to help refugees.
- Design a **plan that responds to the humanitarian assistance** (ensuring their welfare) while being **strategic and continuing to fulfill** the country's **development goals** (e.g. competitive, reduction of informality, increase FDI).
- **Coordination between receiving (host) countries** to best assist refugees and mitigate negative effects.





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**Thank you!**

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