Organized Crime and Firms: Evidence from Italy

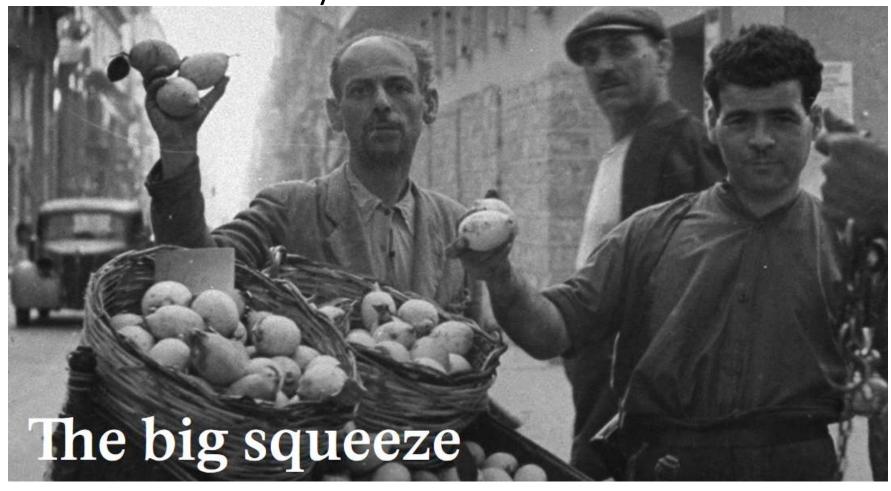
Pablo Slutzky

Maryland

Stefan Zeume

Michigan/UIUC

The Mafia in Italy



The Mafia in Italy

'Concrete risk' of mafia meddling in Italy election, ministers warn

Italy's Interior Minister Marco Minniti. Photo: Mah

There is a risk of mafia interference in Italy country's top politicians warned on Wedne

Interior Minister Marco Minniti said it was a "f mafia conditioning the free vote".

Mafia in Italy Siphons Huge Sums From Migrant Centers



Italy's anti-mafia force on Tuesday arrested 11 suspected gangsters accu migrant outside the Sant'Anna Cara reception center in aiding and abetting fugitive Matteo Messina Denaro, widely believed to hihe center were among 68 people arrested on charges of fr association. Alessandro Grassani for The New York Times Sicilian mafia.

The operation, which involved over 100 special agents, implicated mafia famil and Salemi, two towns in western Sicily, a police statement said.

Authorities were set on the trail after 60 hectares (150 acres) of land in the reg sold for a price perceived to be too low.

"The real price of the land was far higher than the sale price... The difference, EUR200,000 (\$246,700) was pocketed by members of Cosa Nostra," said polic the Sicilian organised crime group.

By Gaia Pianigiani

July 17, 2017

Leer en español

Anti-Mafia Bust in Italy and Germany Snares 37 Sicilian Mobsters

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Italian police announced on Wednesday that they have seized 11 million euros (US\$ 13 million) in assets and arrested 37 people, including two Italian Carabinieri officers, who were allegedly involved in mafia-type extortion related to fruit, fish

and drugs.

setta, Italy (Photo: NormanEinstein, CC BY-SA 3.0)

The suspects are members of the Rinzivillo family, a powerful clan operating in the Sicilian Caltanissetta province.

The clan is believed to have been extorting money from restaurant owners with the help of the two detained Carabinieri officers who allegeldy provided them information from their database.

They for instance threatened the owner of the upscale Rome restaurant Via Veneto to pay US\$ 212,000 over fruit and vegetable deliveries.

The arrests show how the Sicillian Cosa Nostra had infiltrated Rome businesses through legitimate fresh and frozen fish front companies and how it was cooperating with mafia syndicates from other regions of Italy.

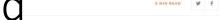
Among the arrested was a lawyer who had connected the Rinzivillo clan to the infamous 'Ndrangheta and Camorra,

"In Rome, we are used to dealing with the 'Ndrangheta and the Camorra and instead here, since the summer of 2014, we ISOLA DICAPO RIZZUTO. Italy _ The gr have been facing a recognizable, visible organizational structure of an important Mafia family from Agrigento, the Rinzivillo," said Prosecutor Michele Prestipino Giarrita, The Washington Post reported.

In Mexico's shale patch, cartel violence scares off drillers

REYNOSA, Mexico (Reuters) - The oil and gas fracking boom has lured scores of

Organized Crime Around the World



Police smash secret Hong Kong triad command centre fitted with CCTV in industrial building

 $Under cover two-year operation finds gang \ leaders would \ beat up \ teenage \ members \ and \ scapego \ at them if their illegal \ businesses \ were \ detected$



46 Charged in Mafia Racketeering Conspiracy

By Eli Rosenberg

Aug. 4, 2016

Forty-six members of an organized crime net New York's five Mafia families were charged conspiracy, according to an indictment unseal

The group, which included members of the Ge and Bonanno crime families, worked together spanned from Springfield, Mass., to South Flo arson, health care and credit card fraud, illega illegal firearms and cigarettes, according to th those charged were from New York.

Federal authorities said the arrests, the produ investigation conducted by federal and local undercover special agent as well as a coopera the Mafia was still a force in the city.

Preet Bharara, the United States attorney for York, said in a statement that "threatening to people who get in the way of their criminal sc play in the mob's playbook."



drillers to the Eagle Ford regiment of the Chinese gangs are laundering drug money through Vancouver real estate



scouver, washing the drug

state, and transferring

REUTERS World Business Markets Politics TV

WORLD NEWS MAY 16, 2016 / 11:49 AM / 2 YEARS AGO

JAPAN GIVES YAKUZA CRIMINAL GANGS THE FINGER

Japanese criminal gangs are losing members as new laws, police crackdowns and an embe their income. With many gangsters now seeking rehab, is this the beginning of the end for



Gangs prey on both rich and poor with demands backed by death threats. Many business owners, from hawkers to tycoons, must hand over a slice of revenues, pushing them to the brink.

One deported woman, who got off a bus with her young son, said her decision to leave home started with a phone call she received in January. The caller, a gang member, demanded up to \$400 every month in extortion payments.



Expected to return to Cali after serving prison time, some old gangsters will find a "new generation" of criminals running businesses in town. Will that mean trouble

The Mafia and Firms #1: Money laundering

 Organized crime generates illegitimate cash through drug trafficking, smuggling, extortion, loan sharking, gambling, etc.

- Organized crime also owns ~5,000 restaurants and cafés across Italy, among them some in tourist areas
- Businesses are used to generate legitimate revenues but also to launder money from illegal activities
- Money laundering is facilitated by popularity of restaurants with tourists and cash nature of transactions
- Basically, legitimate revenues are inflated by illegitimate ones, then spent (e.g., on wages, dividends)



The Mafia and Firms #2: Protection money

- Mafia demands protection money (pizzo)
- Example (Sicily, furniture manufacturing):
 - Pay EUR 3,000 every 6 months
 - Benefits
 - Protection from competition
 - Protection from theft
 - Debt collection
 - Customers
 - Costs if decide not to pay
 - [Forgo all the above benefits]
 - Loss of business
 - Bodily harm



Motivation

- Organized crime is an economically important global phenomenon
 - Annual revenues of \$870 billion (1.5% of global GDP; UNODC 2012)
 - Mafia (Italy, U.S), Yakuza (Japan), Triads (China), Russian mafia, drug cartels (South and Latin America/Mexico), ...
- Presence of organized crime has been associated with poor economic growth
 - Affects contract allocation, incentives to invest & innovate, career choices, ...
- Organized crime imposes costs on firms
 - World Economic Forum: "To what extent does organized crime (mafia-oriented racketeering, extortion) impose costs on businesses?" (1 = huge costs; 7 = no costs)
 - Firms in 122 out of 137 countries: At least some cost
 - One in five countries: Medium to huge costs

Motivation

- Organized crime impacts firms through (among others)
 - Cartel/collusion enforcement
 - Existing firms protected through limited entry, guaranteed customers, contract allocation
 - Generate revenues w/o need to compete on price/quality, debt collection
 - But at cost of protection money (pizzo), reliance of mafia-approved suppliers, no innovation
 - Extends to allocation of license agreements and public contracts

Money laundering

- Cash from illicit activities is hard to spend but can be turned into legitimate cash at some cost
- Firms exist/survive due to fake revenues
- But firms artificially profitable, no incentive to innovate,

• [Loan sharking]

This paper

- Challenge: Strength of organized crime is hard to observe directly
 - We use anti-mafia enforcement actions as a shock to the strength of organized crime
 - Specifically, we exploit staggered municipality-level asset confiscations
 - If you are part of the identification mafia, I got something(*) for you later
 - Idea: Anti-mafia enforcement actions weaken local organized crime (reputation)





More typically, confiscations of buildings, cash, land, weapons—and arrests

(*) mostly arguments

Preview of Findings

Around 10,000 staggered municipality-level anti-mafia enforcement actions across Italy...

- ...at municipality level...
 - firm turnover rate increases by 1.1ppt (11.6%): exit of existing and entry of new firms
 - innovative activity and competition for public procurement contracts increase
- ...at firm level...
 - \downarrow in size (revenues \downarrow 4.2%, assets \downarrow 1.4%) and slight \downarrow in profitability
 - more so among firms in the non-tradable sector and incorporated during heydays of the mafia

Evidence consistent with organized crime

- acting as a barrier to entry
- offering protection from competition
- exploiting firms as a front to launder money

Agenda

- Organized crime in Italy
- Anti-mafia enforcement actions
- Methodology
- Data
- Results
- Alternative explanations

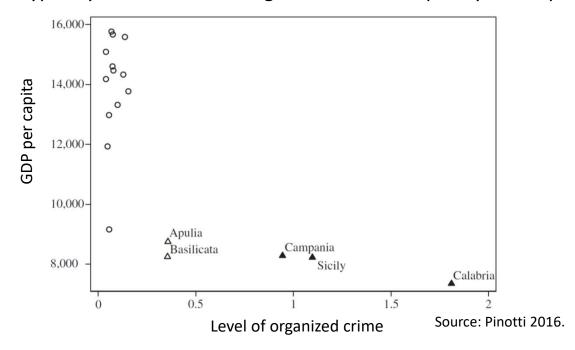
Organized crime in Italy

- Long history of organized crime
 - Mafia evolved to protect property and land after unification of Italy in 2nd half of 19th century, particularly where weak law enforcement
 - Since then involved in enforcing contracts, controlling labor unions, influencing elections, trafficking drugs, controlling legal business (partly for tax cover) across Italy
- Some of the most (in)famous mafia groups:
 - Cosa Nostra/Mafia (Sicily) ~ rev EUR 1.87bn
 - Camorra (Campania) ~ rev EUR 3.75bn
 - 'Ndrangheta (Calabria) ~ rev EUR 3.49bn
 - Sacra Corona Unita (Puglia) ~ rev EUR 1.12 bn



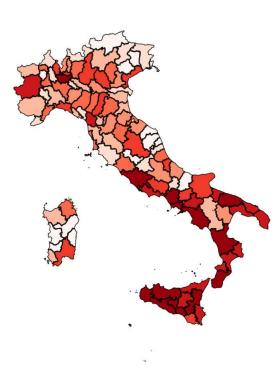
Organized crime in Italy

- Italy has 2nd highest level of organized crime among OECD countries
- Italy is the economically most developed country among those high levels of organized crime
- Within Italy, regions typically associated with organized crime are poorly developed.



Organized crime in Italy

- Far from a Southern phenomenon
 - Mafia has ownership in legitimate businesses across Italy
 - See opening narrative: many restaurants and bars in the tourist districts of Rome, Florence, etc. are mafia-owned
 - 'Sowing the mafia'
 - In the 1960s and 1970s, convicted mafia members were resettled to small municipalities in the Northern regions (*Soggiorno Obbligato*)
 - Municipalities that received resettled mafia members display more signs of organized crime presence today (Pinotti and Stanig 2016)
 - Confiscations of mafia assets across Italy
 - All regions, >90% of provinces, >95% of population
 - Economically meaningful at country level
 - Revenues from criminal activity 6.6%-8% of Italian GDP
 - Revenues of licit businesses with mafia ties 12% of GDP



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Anti-mafia enforcement actions

- Late 19th c: mafia helps with enforcement of the law
- Anti-mafia efforts (at least ever) since Mussolini
- Anti-mafia efforts gained momentum in the 1980s
 - Law 646 (1982) introduced a procedure by which the government can seize assets belonging to individuals suspected of having ties to the mafia
 - Purpose: weaken resources, reputation of local organized crime families
 - Mafia assets are redeployed for social uses: Police stations, NGO offices, ...
- Further momentum after 1992



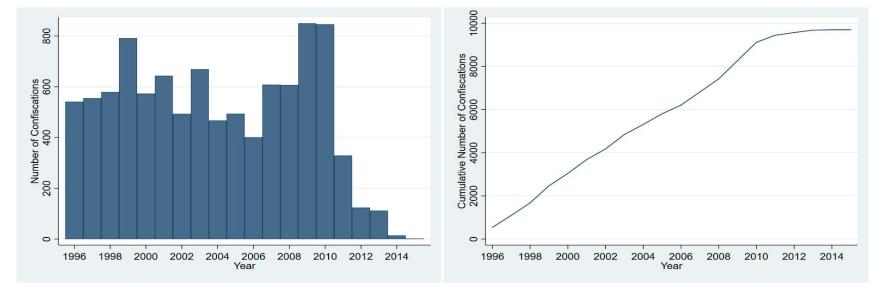
Assassination of Judge Borsellino



Assassination of Judge Falcone

Anti-mafia enforcement actions

- More than 30,000 assets confiscated over the last 30 years
 - Mostly houses, apartments, land—but also shops, factories, cars
- Confiscations are staggered across time, affect >400 municipalities and >80k firms



Anti-mafia enforcement actions

- Use municipality-level confiscations as shock to strength of organized crime
- Concern: Endogeneity/selection/etc.
- Mitigation:
 - Decision to confiscate made at 'law court' level
 - 137 law courts, roughly 1 per province
 - Inclusion of province-time FE (and muni-year FE in cross-sectional tests)
 - Munis with and w/o confiscation look similar along observables
 - Hard to predict which muni experiences enforcement action
 - No enforcement patterns around muni-level elections
 - [Parallel trends assumption does not seem to be unviolated]
 - Cross-sectional firm characteristics with muni-year FE

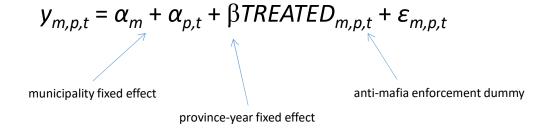


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Methodology

- Diff-in-diff techniques around anti-mafia enforcement actions
- Municipality-level



• Firm-level

$$y_{i,m,p,t} = \alpha_i + \alpha_{p,t} + \beta TREATED_{m,p,t} + \varepsilon_{i,m,p,t}$$
firm fixed effect

anti-mafia enforcement dummy province-year fixed effect

Agenda

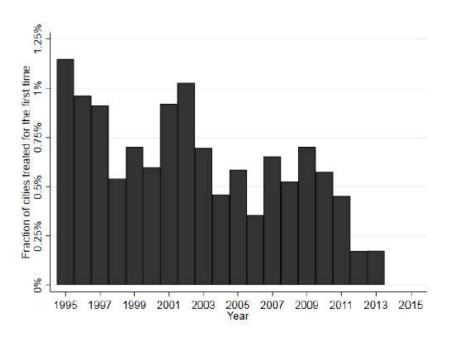
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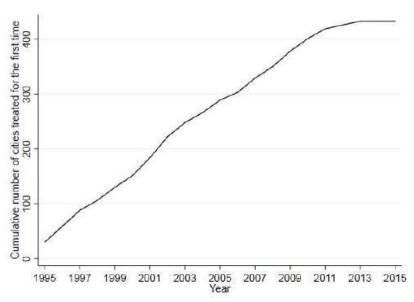
Data

- Most data obtained from Orbis (BvD)
 - DVDs for 2005-2015 to construct time series for all Italian firms over 1995-2015 period
 - Survivorship bias less a concern after 2005
 - Annual financial statements cover 834,016 firms
- LHS variables
 - Municipality-level
 - Firm turnover, exit, and entry rate
 - #Innovators, parameters of public procurement auctions
 - Firm-level
 - Revenues
 - Total Assets
 - Revenues per employee
 - ROA

Data

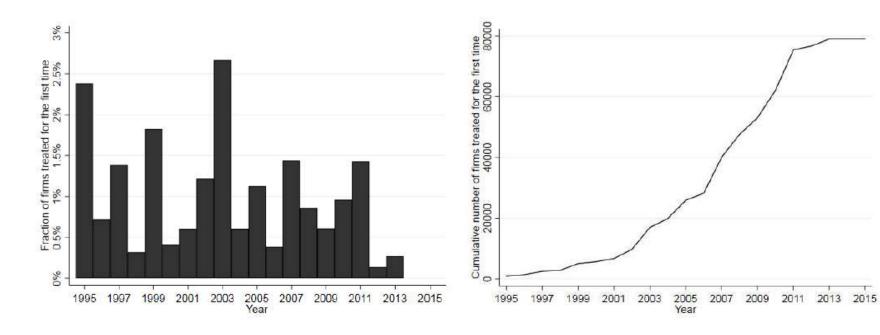
• Municipalities affected by anti-mafia enforcement actions over the sample period (~11% of municipality-years affected)





Data

• Firms affected by anti-mafia enforcement actions over the sample period (~15% of firm-years affected)



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Results at municipality-level: Competition

• LHS: Firm turnover, entry, exit

-	(1)	(2)	(3)	(4)	(5)	(6)
LHS	Turnover	Entry	Exit	Turnover	Entry	Exit
	A11	All	All	>10 firms	>10 firms	>10 firms
Confiscation Dummy	1.153***	1.093***	0.0613***	1.161***	1.116***	0.0528***
•	(7.16)	(6.96)	(4.68)	(7.41)	(7.28)	(4.07)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Province x Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	80,822	80,822	80,822	78,272	78,272	78,272
R-squared	0.591	0.604	0.753	0.647	0.656	0.774

- After anti-mafia enforcement action, firm turnover increases (through entry and exit)
- More pronounced among municipalities that experience repeated anti-mafia enforcement actions
- Consistent with organized crime enforcing cartels/collusion

Results at municipality-level: Further results

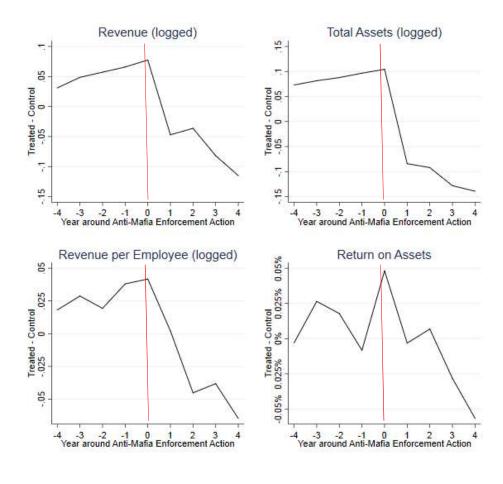
Innovation

- After anti-mafia enforcement action, number of inventors increases
- Consistent with organized crime reaping benefits of innovation, enforcing cartels/collusion

Procurement auction

- After anti-mafia enforcement action, competition for public contracts increases
- Consistent with organized crime enforcing cartels/collusion, affecting contract allocation

Results at firm-level: Main result



Results at firm-level: Main result

• LHS: Revenue, Assets, Revenue per employee (all logged), ROA

LHS	(1) Revenue	(2) Assets	(3) Revenue per employee	(4) ROA
Confiscation Dummy	-0.042*** (-2.64)	-0.014* (-1.93)	-0.016*** (-2.64)	-0.001 (-1.52)
Firm FE	Yes	Yes	Yes	Yes
Province x Year FE N	Yes 9,287,935	Yes 9,336,706	Yes 4,799,734	Yes 9,316,457
R-Squared	0.805	0.900	0.796	0.371

- After anti-mafia enforcement action, firm size and revenue per employee \downarrow
- More pronounced among firms in municipalities that experience repeated enforcement actions
- Consistent with organized crime enforcing cartels/collusion and laundering money

Firm-level: Further results

• Tradable vs. non-tradable

- Distinguish tradable vs. non-tradable industries
- Results driven by non-tradable sector: tradable sector seems to benefit from enforcement actions
- Possible that tradable sector faces cost of mafia presence but cannot reap all the benefits

Mafia strength

- Identify firms founded during mafia heydays (measured by homicides)
- After anti-mafia enforcement actions, firms founded during heydays of the mafia are more adversely affected
- Consistent with such firms benefitting more from mafia presence

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Alternative explanations 1/2

- Increase in competition reflects shift away from shadow economic activity but not real increase in competition
 - Plan: Study nighttime lights, electricity & water usage around enforcement
 - Idea: Measures are less subject to not capturing (changes in) shadow economic activity
 - Expect to find increase in nighttime lights, electricity, and water usage around treatment
 - Done: Compare evolution of revenues of new firms after enforcement to evolution of revenues of new firms in unaffected municipalities
 - Not different

Alternative explanations 2/2

- Weakening of mafia is actually strengthening of law enforcement
 - But: Can extend analysis to redeployment as opposed to confiscation years
 - Weakening of the mafia occurs at confiscation, strengthening of law enforcement (if any) at redeployment—oftentimes years later

	(1)	(2)	(3)	(4)	
LHS	Revenue	Assets	Revenue per employee	ROA	
Confiscation Dummy	-0.086***	-0.044***	-0.020	-0.006***	
,	(-2.86)	(-3.09)	(-1.49)	(-2.76)	
Redeployment Dummy	-0.023 (-0.90)	-0.012 (-0.87)	-0.009 (-0.96)	-0.004* (-1.82)	
Firm FE	Yes	Yes	Yes	Yes	
Province x Year FE	Yes	Yes	Yes	Yes	
N	5,022,722	5,050,675	2,651,371	5,039,241	
R-Squared	0.808	0.901	0.794	0.388	

• Results are driven by confiscations, not redeployment

Conclusion

Around 10,000 staggered municipality-level anti-mafia enforcement actions across Italy...

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Discussion

- Document association between the war on organized crime and firms in Italy
 - Here: asset confiscations—alternatives: council dissolutions, feuds, displacement, ...
 - Here: Italy—alternatives: Russia, Japan, USA, South/Latin America, ...
- Provide evidence of potential channels through which OC affects economic growth
 - Competition, innovation, inefficient/inflated incumbents
- Highlight benefits of paying for protection for incumbents
- Indicate similarities, differences between organized crime and (corrupt) government
 - Protection money ≈ tax