Organized Crime and Firms: Evidence from Italy

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The Mafia in Italy

The big squeeze
The Mafia in Italy

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

Italy's anti-mafia police arrest 11 suspected aides of Cosa Nostra boss

Mafia in Italy Siphons Huge Sums From Migrant Centers

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

There is a risk of mafia interference in Italy's election, top politicians warned on Wednesday.

Interior Minister Marco Minniti said it was a "1 in 100 mafia conditioning the free vote".

Italy's anti-mafia police on Tuesday arrested 11 suspected gangsters accused of aiding and abetting fugitive Matteo Messina Denaro, widely believed to be Italy's most wanted mafia boss.

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

Authorities were set on the trail after 60 hectares (150 acres) of land in the region was 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 ($346,700) was pocketed by members of Cosa Nostra," said police.

Migrant outside the Sant'Anna Cava reception center in the district of Palermo was among 66 people arrested on charges of mafia association.

File photo showing anti-mafia police walking through Palermo, Sicily. Photo: AFP/Elia Guareschi

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-style extortion related tofruit, fish, and drugs.

The suspects are members of the Rizzuto family, a powerful clan operating in the Sicilian Calabrian provinces.

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

They for instance threatened the owner of the upscale Rome restaurant Via Veneto to pay US$22,000 over fruit and vegetable deliveries.

The arrests show how the Sicilian Cosa Nostra had infiltrated Rome businesses through legitimate firms 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 Rizzuto clan to the infamous Ndrangheta and Camorra, according to media.

"In Rome, we are used to dealing with the Ndrangheta and the Camorra and instead here, since the summer of 2014, we have been facing a recognizable, visible organizational structure of an important Mafia family from Agrigento, the Rizzuto," said Prosecutor Michele Prestipino Giarrita, The Washington Post reported.
Organized Crime Around the World

46 Charged in Mafia Racketeering Conspiracy

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

Undercover two-year operation finds gang leaders would beat up league members and smuggle their children into illegal businesses were directed

46 Charged in Mafia Racketeering Conspiracy

Cali Murder Inc. A Colombian Drug Cartel War May Be Back 

Japan Gives Yakuza Criminal Gangs The Finger

Japanese criminal gangs are being targeted on two fronts: police crackdowns and an end to their income. "This is the beginning of the end for Yakuza gangs," said a senior police official.

Deadly gang extortion racketeers drive emigration from El Salvador

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.

Anastasia Meloney

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.
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...
  • ↓ in size (revenues ↓4.2%, assets ↓1.4%) and slight ↓ 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 2\textsuperscript{nd} 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.

Source: Pinotti 2016.
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**
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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

\[ y_{m,p,t} = \alpha_m + \alpha_{p,t} + \beta TREATED_{m,p,t} + \epsilon_{m,p,t} \]

municipality fixed effect
province-year fixed effect
anti-mafia enforcement dummy

• Firm-level

\[ y_{i,m,p,t} = \alpha_i + \alpha_{p,t} + \beta TREATED_{m,p,t} + \epsilon_{i,m,p,t} \]
firm fixed effect
province-year fixed effect
anti-mafia enforcement dummy
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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

<table>
<thead>
<tr>
<th>LHS</th>
<th>(1) Turnover All</th>
<th>(2) Entry All</th>
<th>(3) Exit All</th>
<th>(4) Turnover &gt;10 firms</th>
<th>(5) Entry &gt;10 firms</th>
<th>(6) Exit &gt;10 firms</th>
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</thead>
<tbody>
<tr>
<td>Confiscation Dummy</td>
<td>1.153*** (7.16)</td>
<td>1.093*** (6.96)</td>
<td>0.0613*** (4.68)</td>
<td>1.161*** (7.41)</td>
<td>1.116*** (7.28)</td>
<td>0.0528*** (4.07)</td>
</tr>
</tbody>
</table>

- 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

<table>
<thead>
<tr>
<th>LHS</th>
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<th>(2) Assets</th>
<th>(3) Revenue per employee</th>
<th>(4) ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confiscation Dummy</td>
<td>-0.042***</td>
<td>-0.014*</td>
<td>-0.016***</td>
<td>-0.001</td>
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<tr>
<td></td>
<td>(-2.64)</td>
<td>(-1.93)</td>
<td>(-2.64)</td>
<td>(-1.52)</td>
</tr>
</tbody>
</table>

- After anti-mafia enforcement action, firm size and revenue per employee ↓
- 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

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Confiscation Dummy</td>
<td>-0.086***</td>
<td>-0.044***</td>
<td>-0.020</td>
<td>-0.006***</td>
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<tr>
<td></td>
<td>(-2.86)</td>
<td>(-3.09)</td>
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<td>(-2.76)</td>
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<tr>
<td>Redeployment Dummy</td>
<td>-0.023</td>
<td>-0.012</td>
<td>-0.009</td>
<td>-0.004*</td>
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<tr>
<td></td>
<td>(-0.90)</td>
<td>(-0.87)</td>
<td>(-0.96)</td>
<td>(-1.82)</td>
</tr>
</tbody>
</table>

- Results are driven by confiscations, not redeployment
Conclusion

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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