

Evaluating Policies for Countering Extortion Racket Systems: A Simulation Approach

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Societal Dimensions of Organised Crime

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Extortion Racket Systems

- **Extortion Racket Systems (ERSs)**
 - Highly **prosperous economic criminal organisations**
 - **Production** and **supply** of “**protection**”
 - Explicit or implicit **threat of violence**
 - Exchange for **money** or other **economically relevant utility**
- ERSs are **spreading globally**, causing massive **disruption to economies**
- **Mafia** is but **an example**
 - Sicilian Mafia, Russian Mafia, Hong Kong Triads, and Yakuza

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- **Mafia** is but **an example**
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Yet there is no good understanding of their dynamics and how they may be countered

Two Perspectives on Mafia

- Traditional **cultural perspective** (Banfield, 1958; Hess, 1973)
 - ‘**Ethos**’ or **subculture** that supports Mafias
 - **Vague** and **denies agency**
- Modern **protection perspective** (Gambetta, 1993)
 - **Mafia as a business** and people pay pizzo for instrumental reasons: to obtain protection or avoid harm
 - **Powerful** and **precise** framework for understanding the Mafia
 - Has essentially **supplanted cultural perspective** (for good reason)

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But perhaps we threw out something important in our effort to be precise and include agency

Incentives and Norms

- **Protection perspective** relies on ‘**carrot and stick**’ approach



- Yet **people consider** more than only **incentives when deciding how to behave**
(Fehr & Fischbacher, 2004; Fehr & Gintis, 2007)



- **Social norms** are a key factor that can **motivate behaviour**
(Bicchieri & Xiao, 2009; Conte et al., 2013)



- E.g., Omertà

Integrating the Two Perspectives

- **Legal norms** are **shared behavioural rules** formalised as **laws** and **enforced by specialised actors**
- **Social norms** are **shared behavioural rules** followed because of **reciprocal expectations** and **enforced by the community** (Bicchieri, 2006; Conte et al., 2013; Elster, 1989)
 - Capture the idea of **social influence**
 - Operationalised by **EMIL-A**, a **normative architecture** that enables agents to recognise, follow, reason about, and enforce norms (Conte et al., 2013)
 - **Norm Salience** is a measure about how much **active, legitimate, complied with**, and **enforced** a norm is **within a social group** in a **given context** from an **agent's perspective** (Conte et al., 2013)

Research Questions

What are the independent and combined effects of **legal** and **social norms** approaches on countering ERSs?

1. How effective is a **legal norm only approach**?
2. Can a **social norm only** approach be effective on countering ERSs?
3. What **effects occur** when they are **combined**?

The Palermo Scenario Model

- **Computational agent-based model** including ERSs
 - Theory-driven
 - Empirically-grounded
 - Participatory modelling
- Can help us to **understand the effects** of different **policies** on countering ERSs
- **Generate data** about dynamics of ERSs especially important because in ERSs
 - There is lack of data
 - The empirical data are biased

The Palermo Scenario Model

- **Empirical Data**

- The **Sicily** and **Calabria database with 600+ entries** extracted from **police reports** and **court trials** elaborated by University of Palermo
- European and Italian **Surveys** (e.g., EVS, Eurobarometer 79.1)
- **Libro Mastro**
- **Literature** on the Mafia

- **Participatory Modelling**

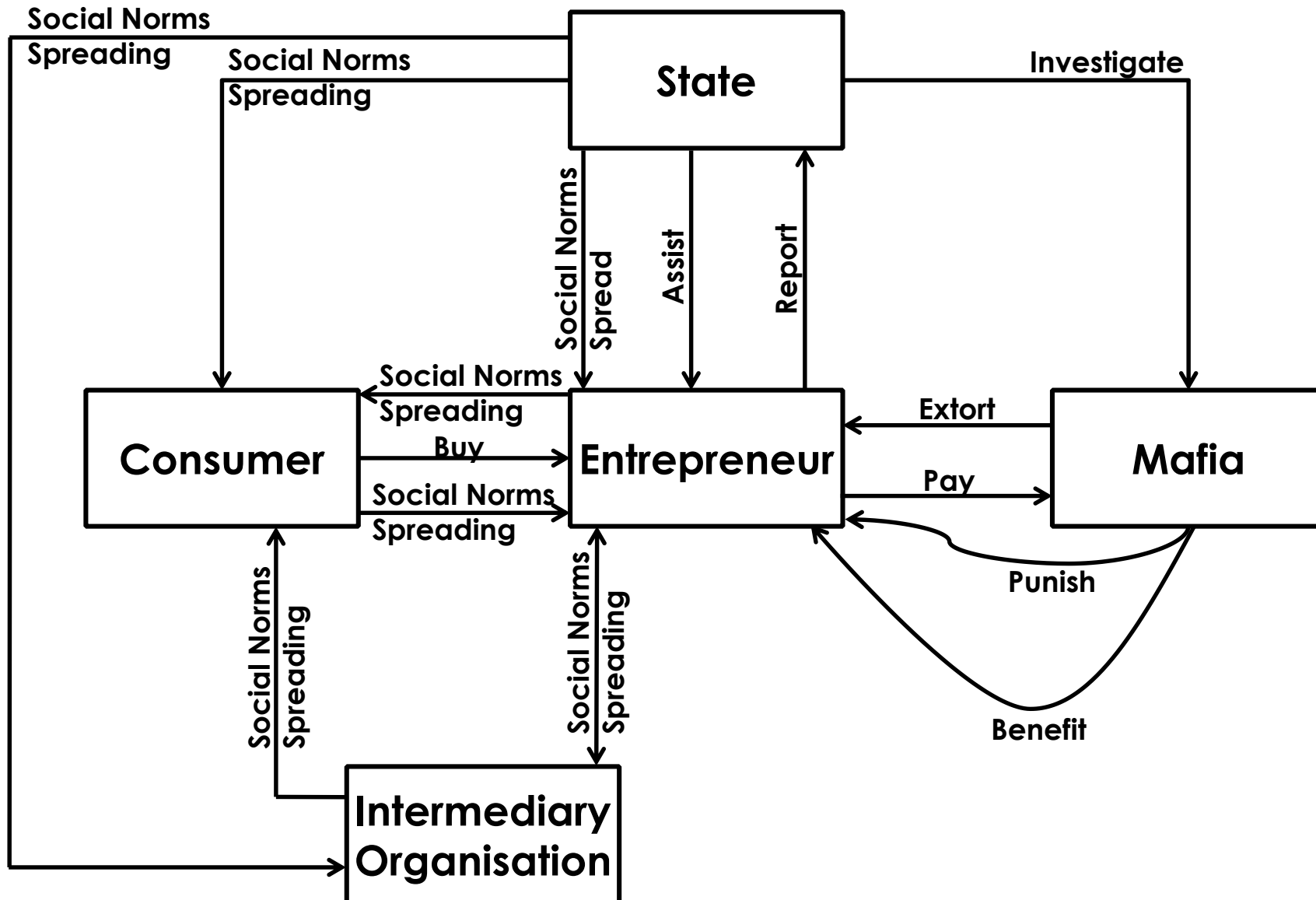
- Feedback from **an international stakeholder board** composed of 27 experts from 10 different countries
- Discussions with **members of AddioPizzo** (2013, 2014)
- Meetings and discussions with the **GLODERS project partners**

The Palermo Scenario Model

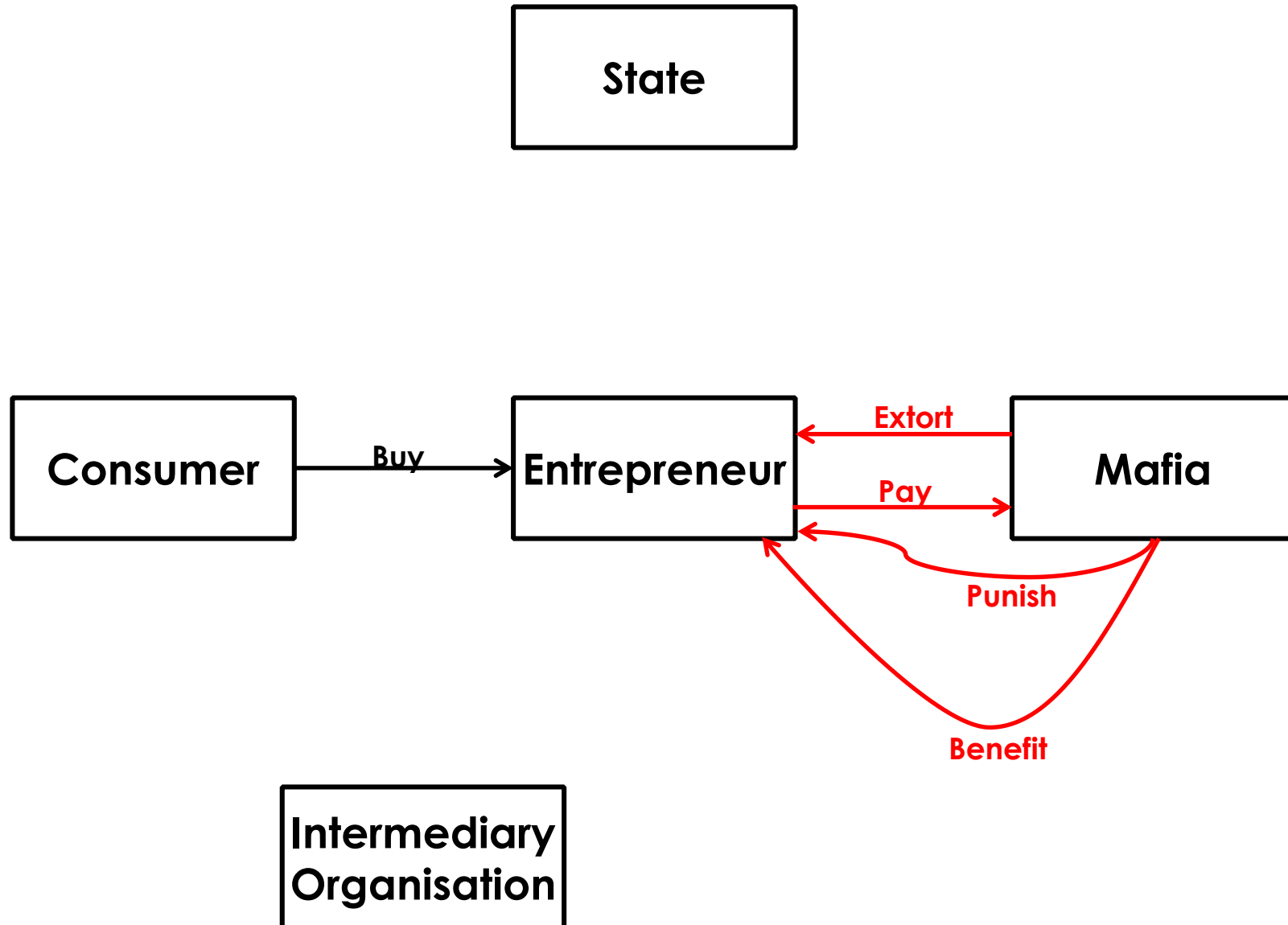
Actors

Mafia	A single Mafia organisation with multiple Mafiosi
Entrepreneur	Owners and manager of businesses
State	Government and law enforcement institutions
Intermediary Organisation	Non-governmental organisation
Consumer	People buying products

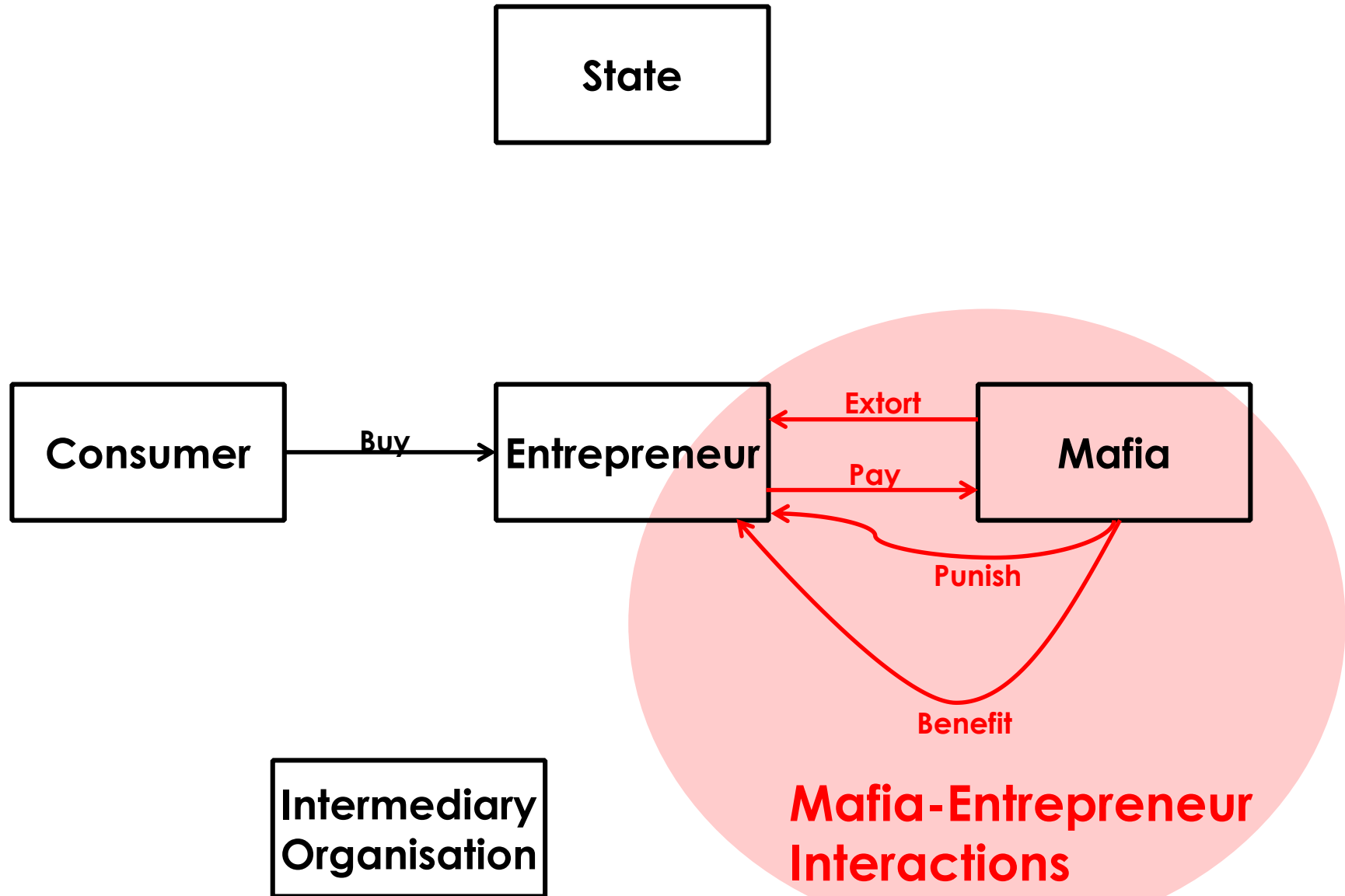
The Palermo Scenario Model Dynamics



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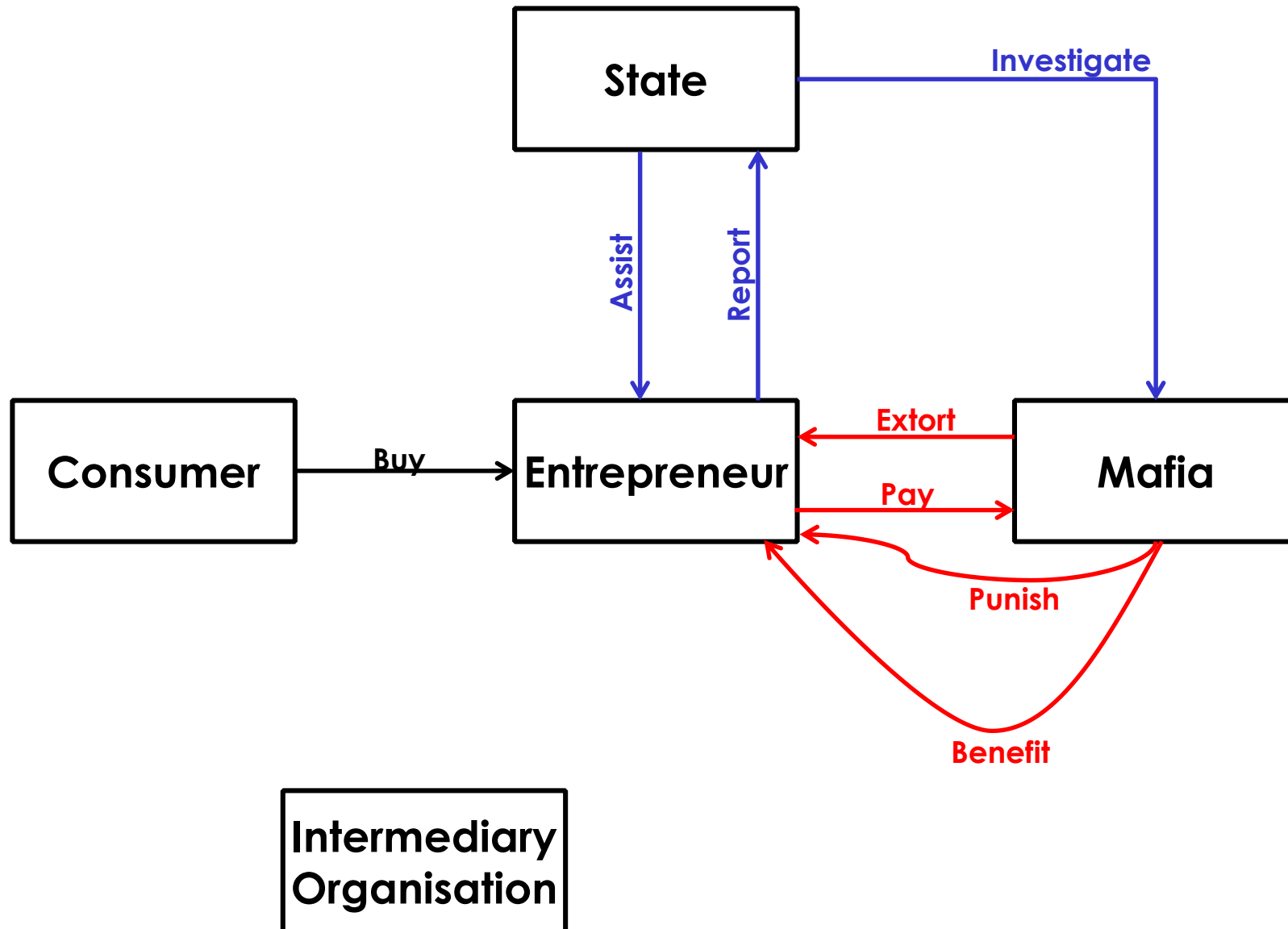
The Palermo Scenario Model Dynamics

- **Entrepreneurs Paying decision-making**
 - Based on **Instrumental** and **Normative** factors

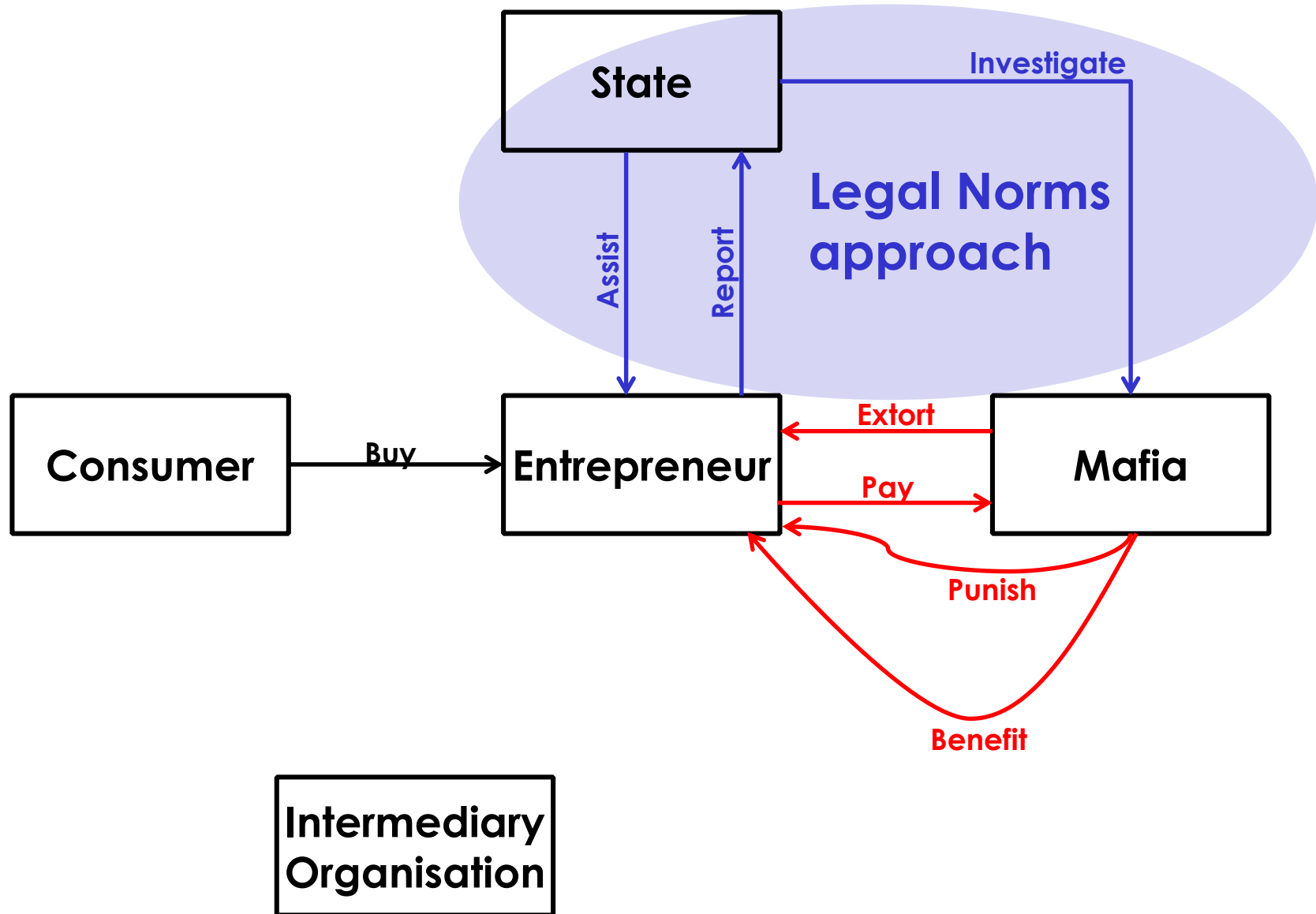
$$\text{Prob}_{\text{pay}} = (1 - \alpha)\text{Instrumental} + \alpha\text{Normative}$$

Decision Factors	
Instrumental	Normative
<ul style="list-style-type: none">• Amount of the Mafia request• Punishment by the Mafia• Benefit from the Mafia• Benefit from the State	<ul style="list-style-type: none">• Social norms and their relative salience (based on EMIL-A)

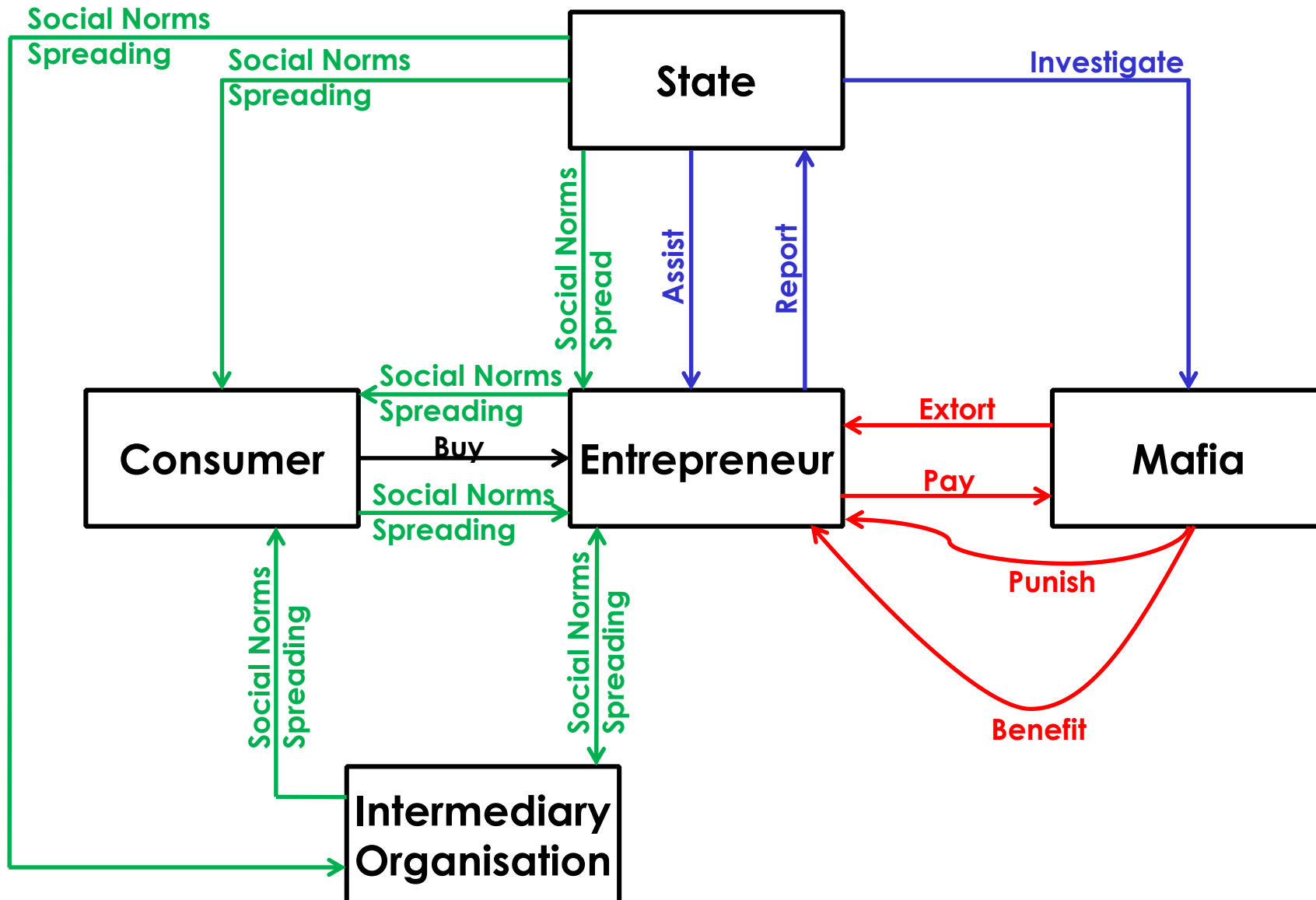
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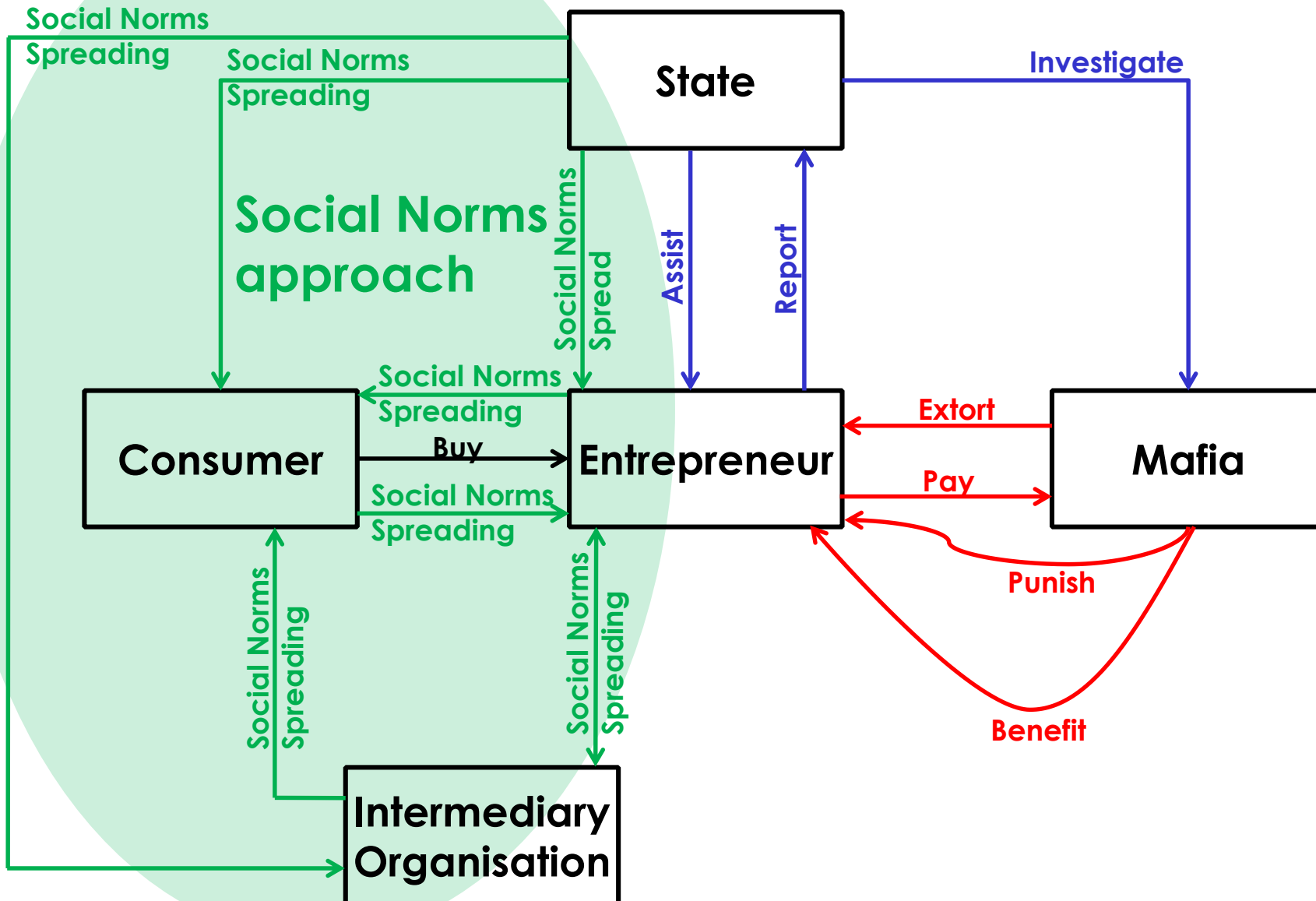
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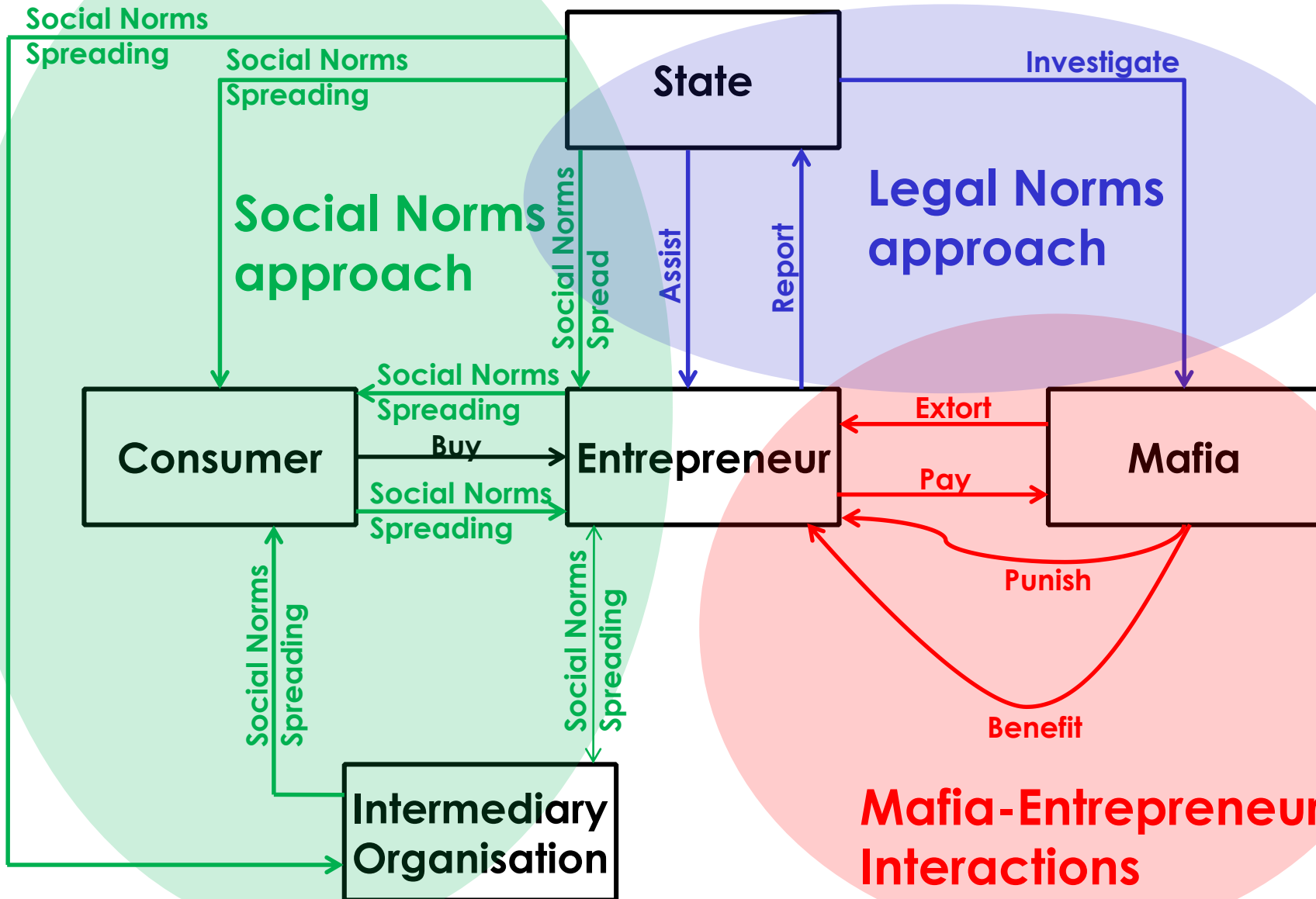
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The Palermo Scenario Model

Norms

Set of Norms

	TRADITIONAL
	NEW

Legal Norms

State

Investigate Mafia activity

Imprison Mafiosi

Confiscate Mafia's resources

Assist punished Entrepreneurs

Social Norms

Entrepreneur

Consumer

Pay pizzo

Do not pay pizzo

Do not report pizzo

Report pizzo

Avoid pizzo paying
Entrepreneurs

Experiments

1. Effects of Legal Norms
2. Effects of Social Norms
3. Effects of Legal and Social Norms

Experiment 1

Effects of Legal Norms

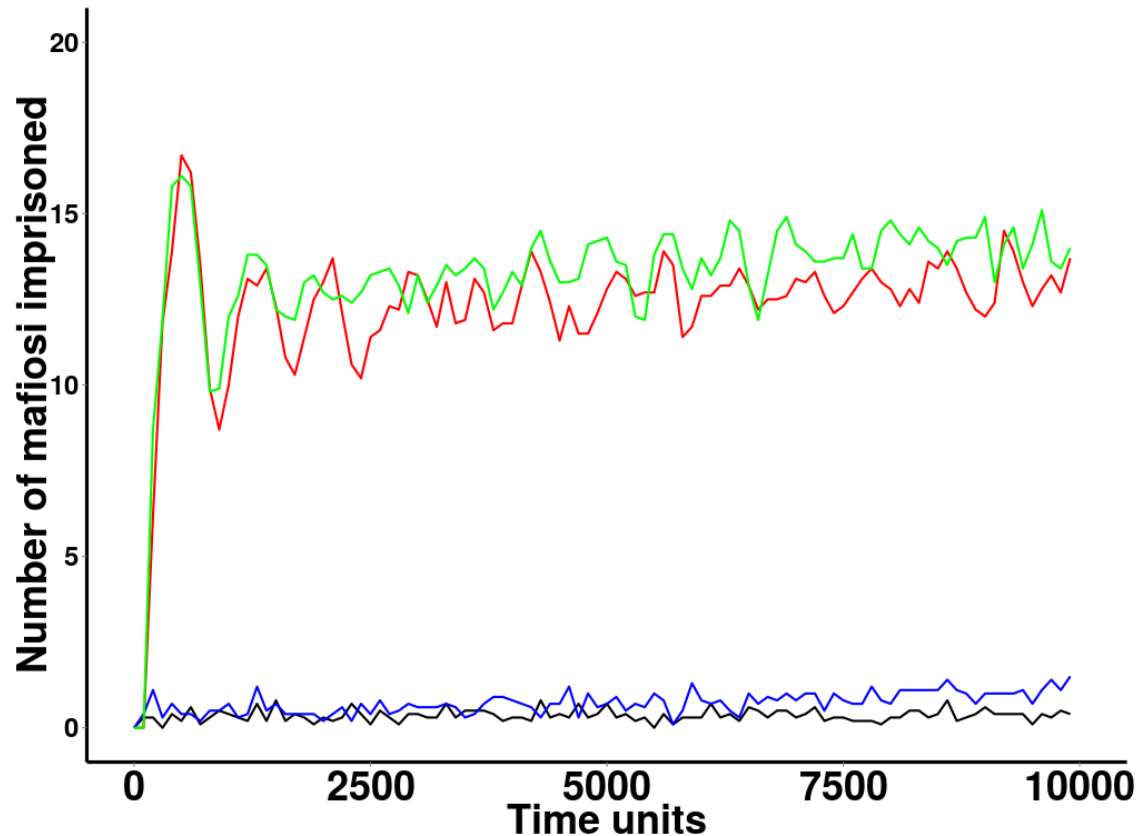
What **effects** does a **legal norms approach** alone have on

1. Strength of the Mafia?
2. Actions of Mafiosi?
3. Entrepreneurs' behaviours?
4. Salience of the social norms?

L1	L2	L3	L4
Weak Legal Norms No Social Norms Violent Mafia	Strong Legal Norms No Social Norms Violent Mafia	Weak Legal Norms No Social Norms Hidden Mafia	Strong Legal Norms No Social Norms Hidden Mafia

Experiment 1: Legal Norms Strength of the Mafia

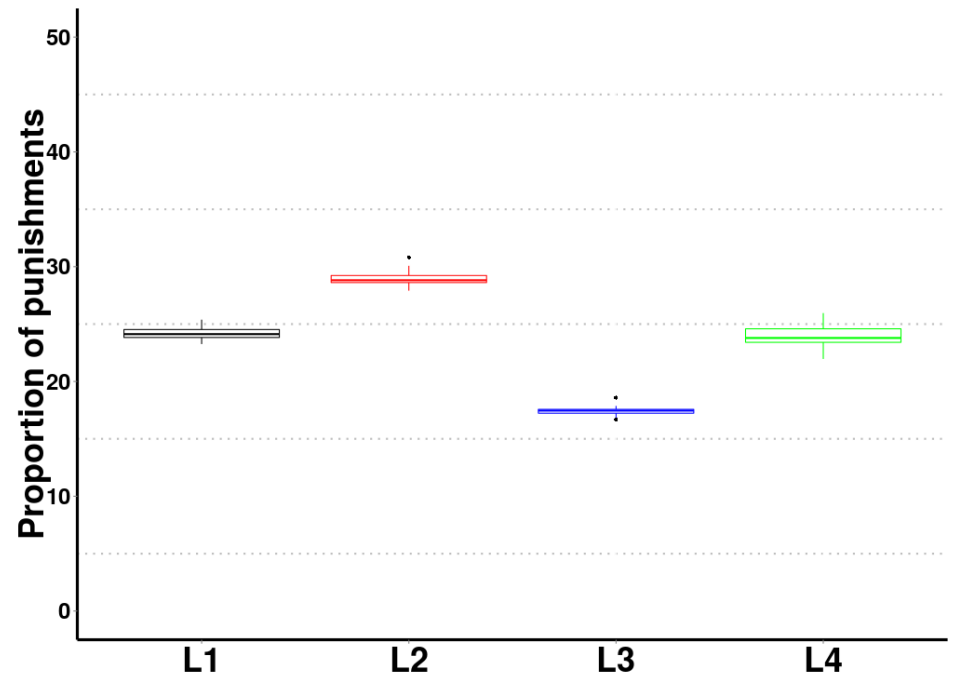
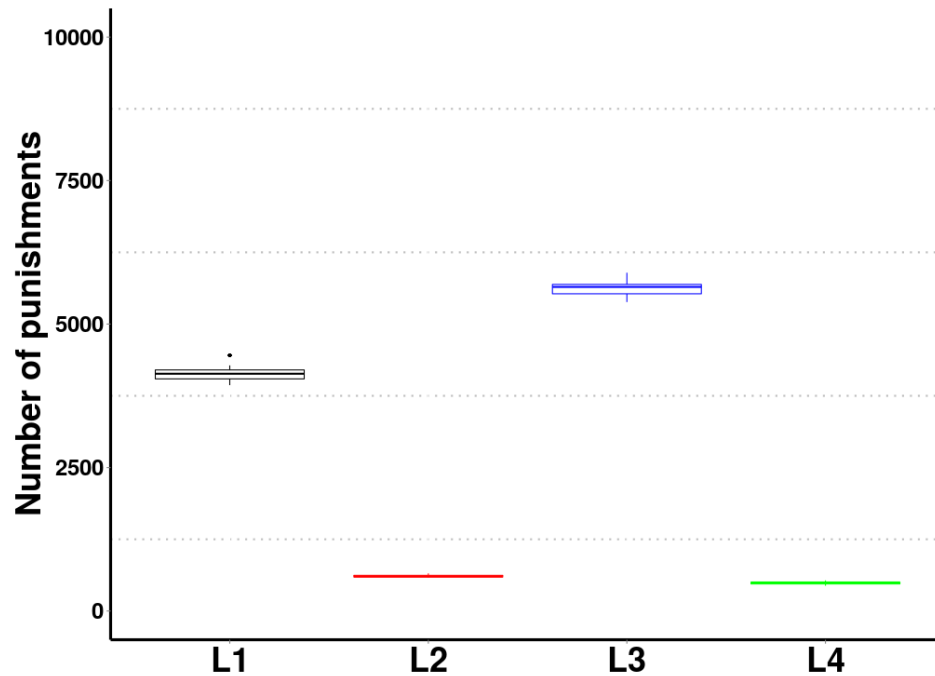
L1	L2	L3	L4
Weak Legal Norms No Social Norms Violent Mafia	Strong Legal Norms No Social Norms Violent Mafia	Weak Legal Norms No Social Norms Hidden Mafia	Strong Legal Norms No Social Norms Hidden Mafia



Experiment 1: Legal Norms

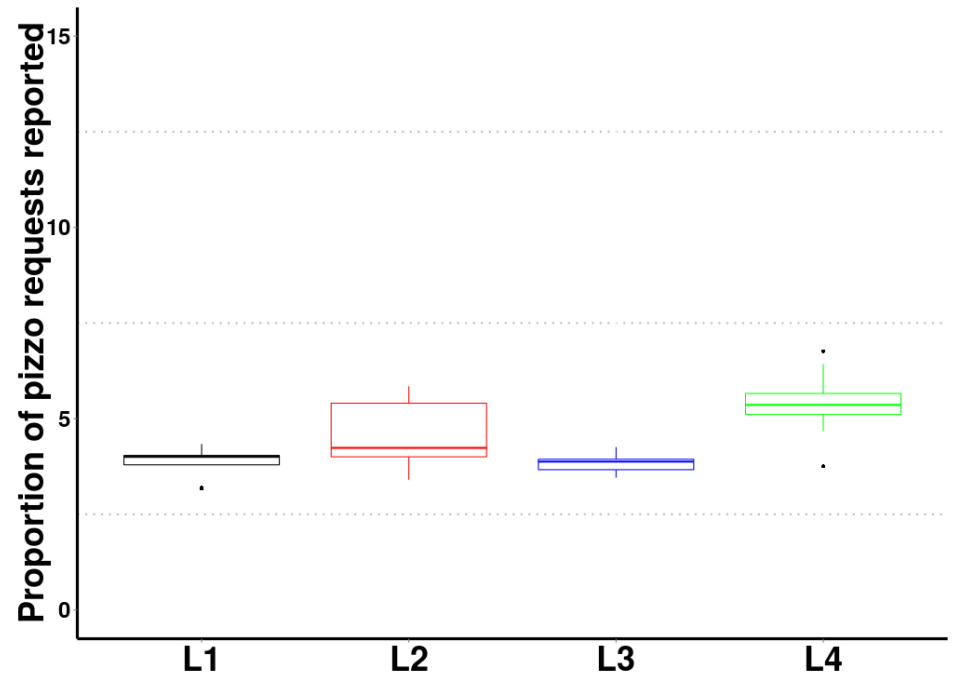
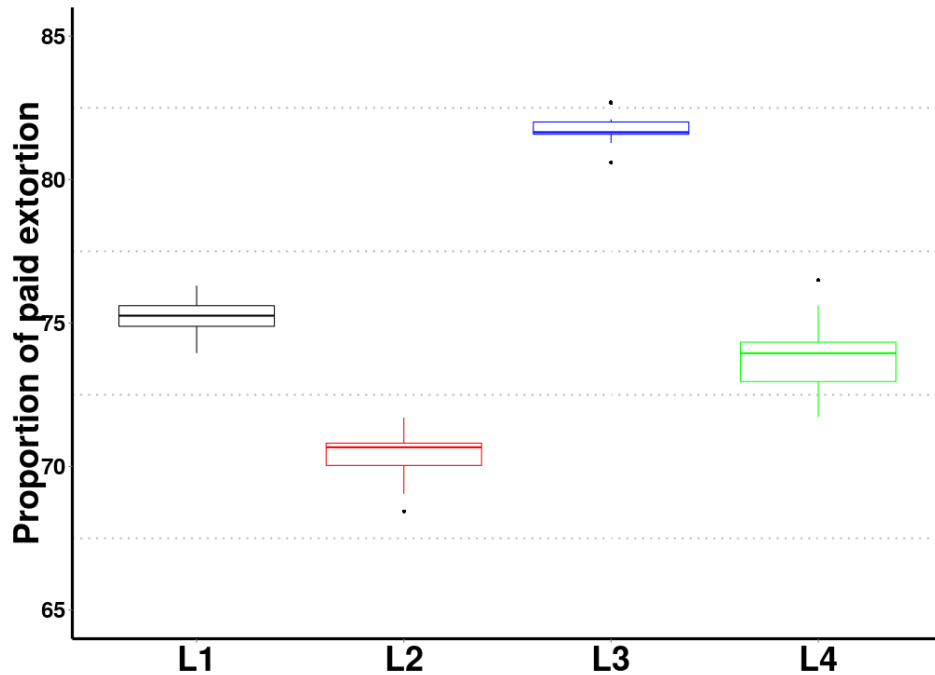
Actions of Mafiosi

L1	L2	L3	L4
Weak Legal Norms	Strong Legal Norms	Weak Legal Norms	Strong Legal Norms
No Social Norms	No Social Norms	No Social Norms	No Social Norms
Violent Mafia	Violent Mafia	Hidden Mafia	Hidden Mafia



Experiment 1: Legal Norms Behaviour of Entrepreneurs

L1	L2	L3	L4
Weak Legal Norms	Strong Legal Norms	Weak Legal Norms	Strong Legal Norms
No Social Norms	No Social Norms	No Social Norms	No Social Norms
Violent Mafia	Violent Mafia	Hidden Mafia	Hidden Mafia



Experiment 1: Legal Norms

Salience of the Social Norms

L1	L2	L3	L4
Weak Legal Norms	Strong Legal Norms	Weak Legal Norms	Strong Legal Norms
No Social Norms	No Social Norms	No Social Norms	No Social Norms
Violent Mafia	Violent Mafia	Hidden Mafia	Hidden Mafia



Experiment 2

Effects of the Social Norms

What **effects** does a **social norms approach** alone have on

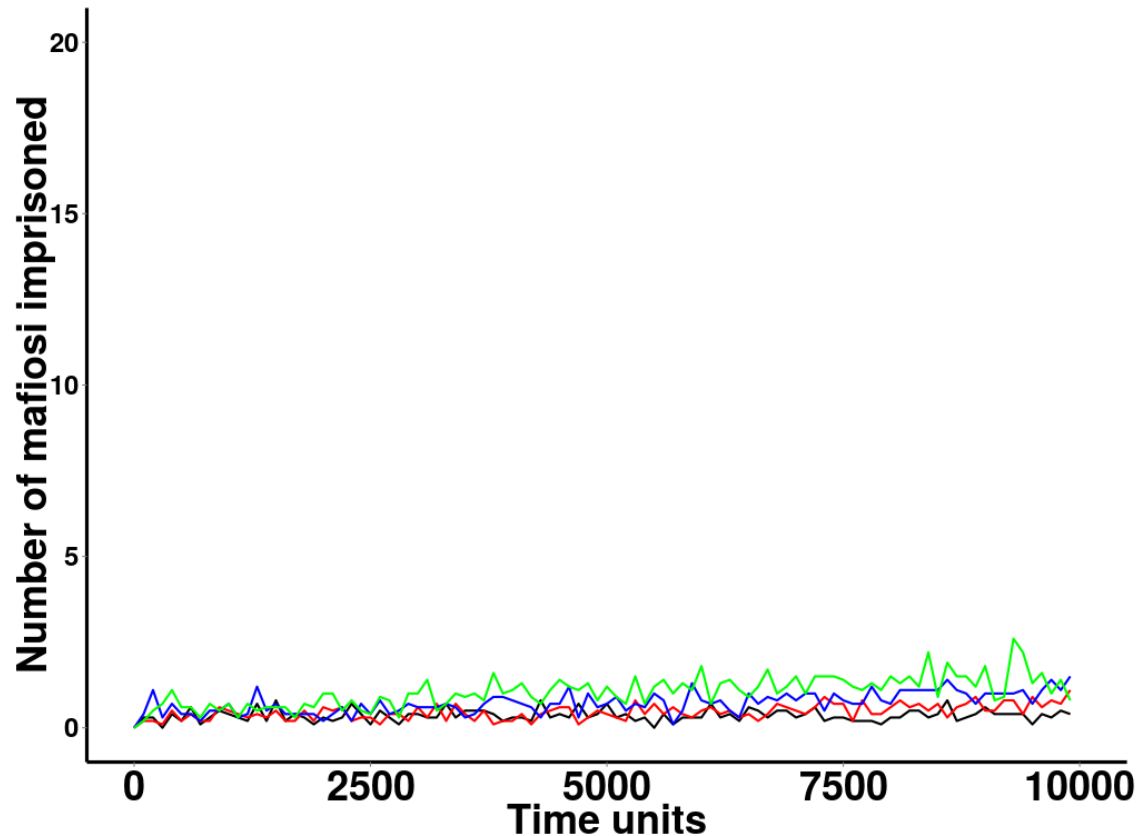
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S1	S2	S3	S4
Weak Legal Norms No Social Norms Violent Mafia	Weak Legal Norms Social Norms Violent Mafia	Weak Legal Norms No Social Norms Hidden Mafia	Weak Legal Norms Social Norms Hidden Mafia

Experiment 2: Social Norms

Strength of the Mafia

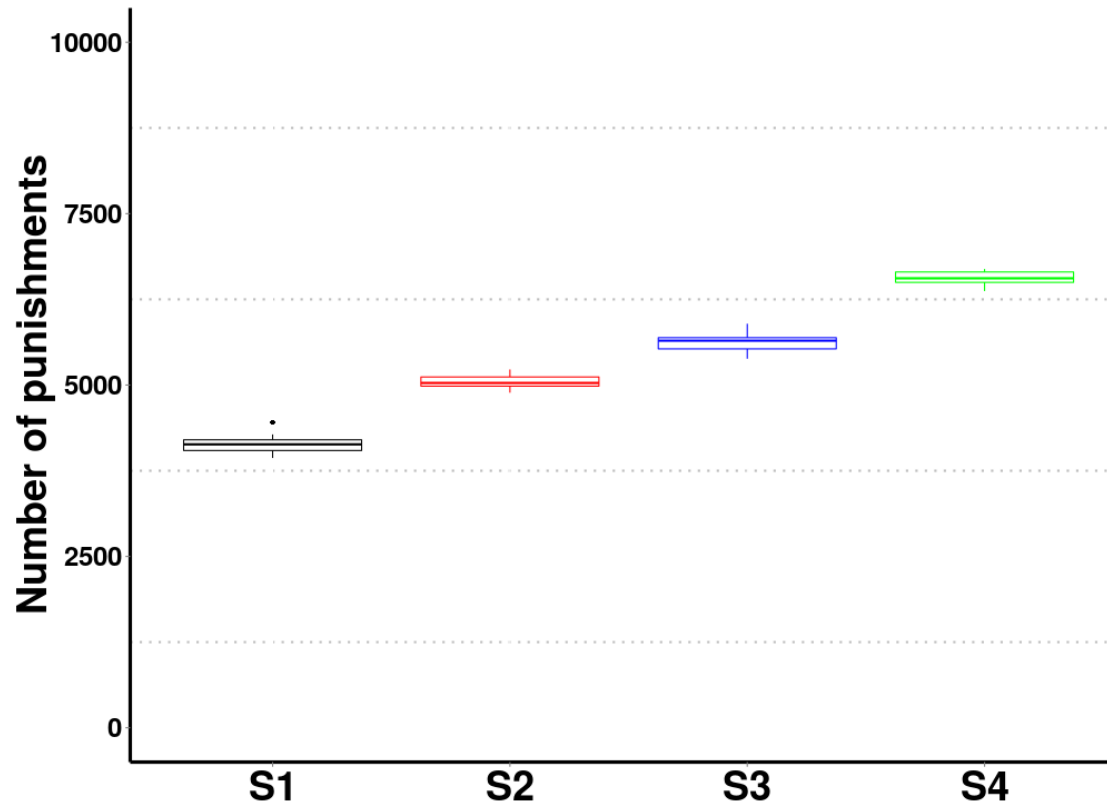
S1	S2	S3	S4
Weak Legal Norms	Weak Legal Norms	Weak Legal Norms	Weak Legal Norms
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Experiment 2: Social Norms

Actions of Mafiosi

S1	S2	S3	S4
Weak Legal Norms	Weak Legal Norms	Weak Legal Norms	Weak Legal Norms
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Experiment 2: Social Norms Behaviour of Entrepreneurs

S1

S2

S3

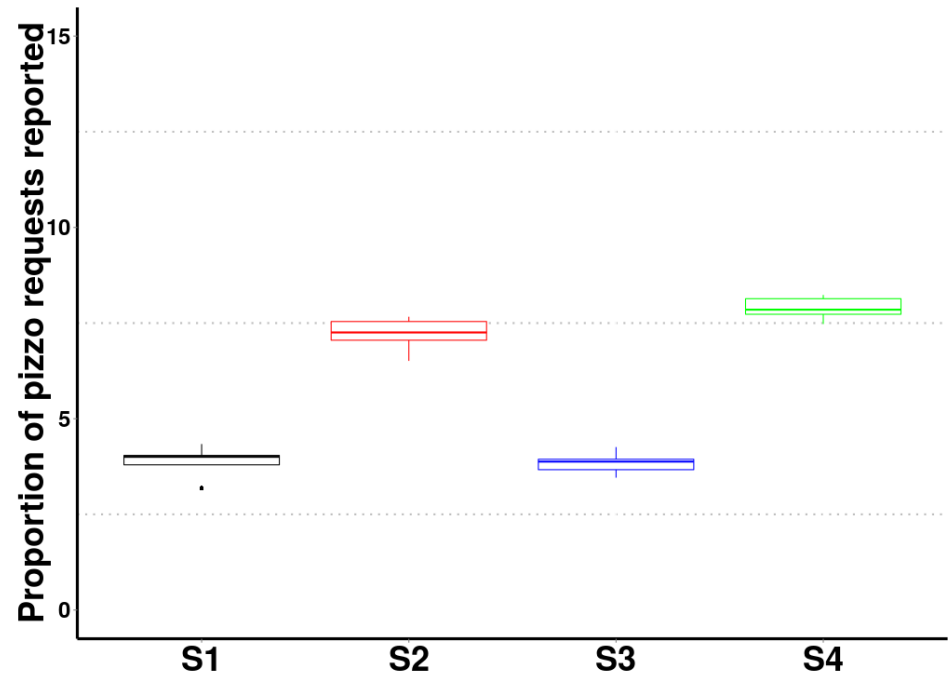
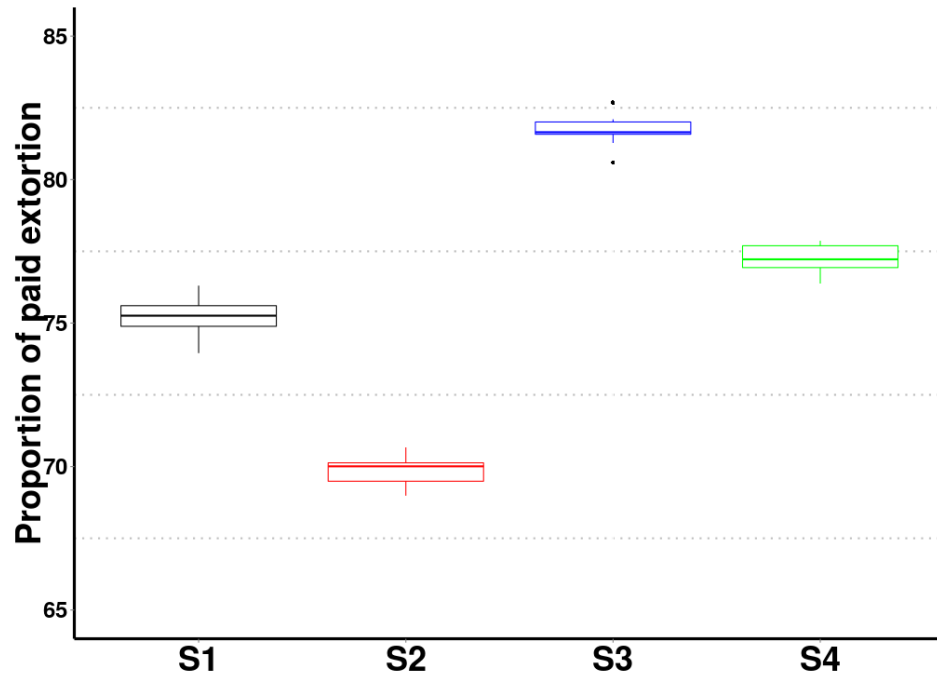
S4

Weak Legal Norms
No Social Norms
Violent Mafia

Weak Legal Norms
Social Norms
Violent Mafia

Weak Legal Norms
No Social Norms
Hidden Mafia

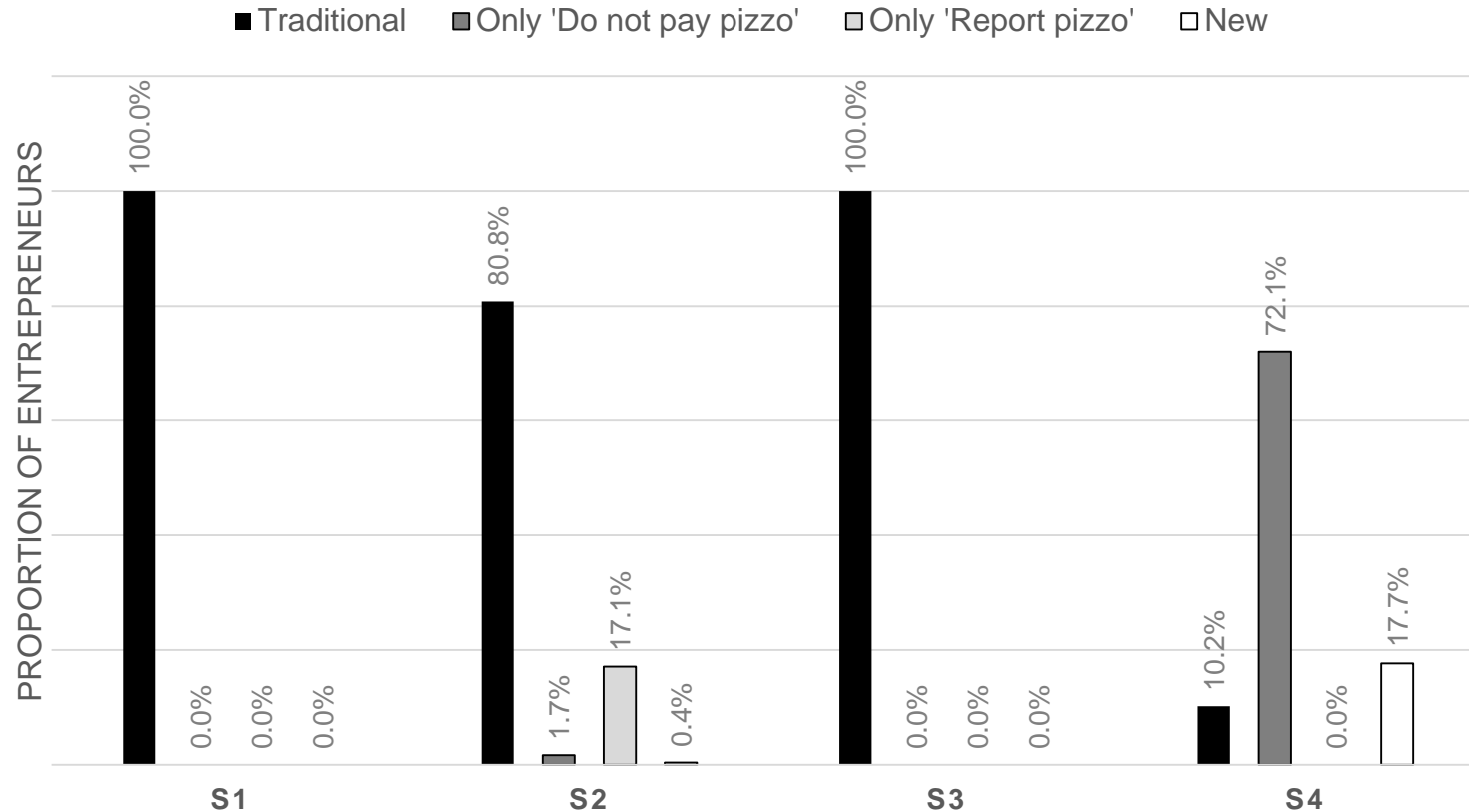
Weak Legal Norms
Social Norms
Hidden Mafia



Experiment 2: Social Norms

Salience of the Social Norms

S1	S2	S3	S4
Weak Legal Norms	Weak Legal Norms	Weak Legal Norms	Weak Legal Norms
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Experiment 3

Combined Effects of Legal and Social Norms

What **effects** does **combined legal and social norms approach** have on

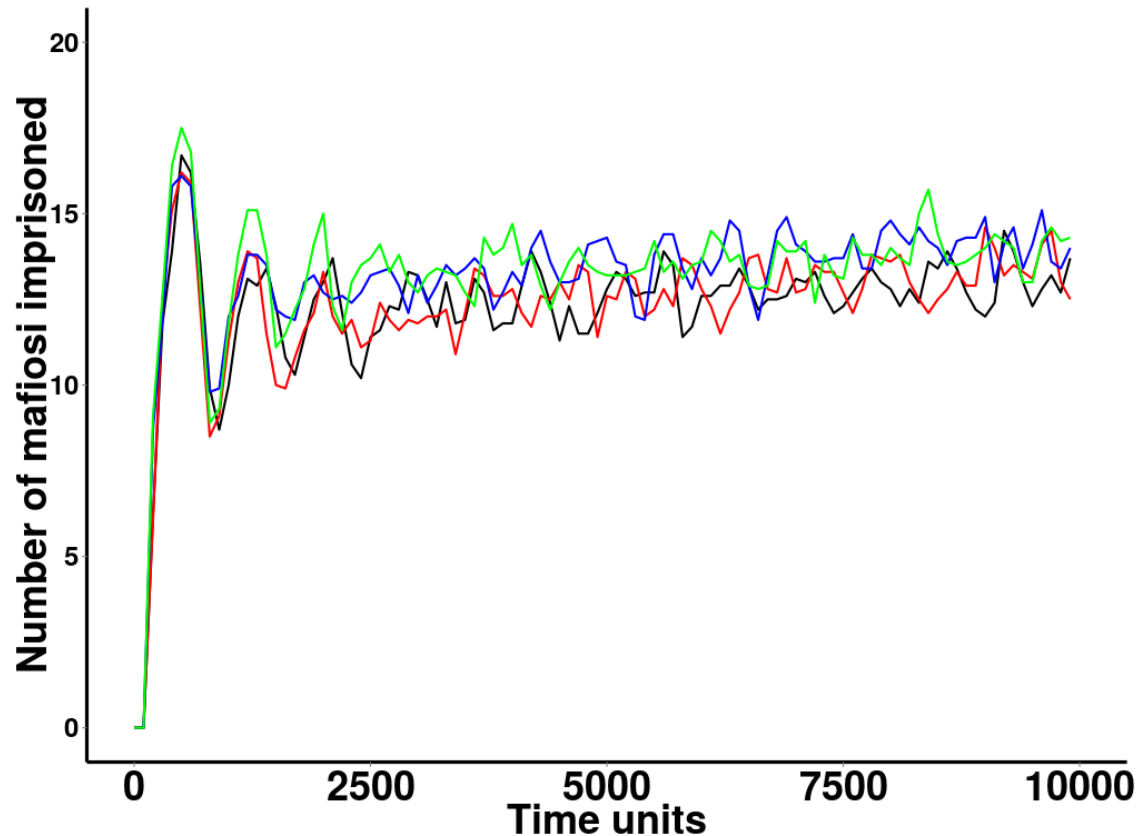
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Experiment 3: Legal and Social Norms

Strength of the Mafia

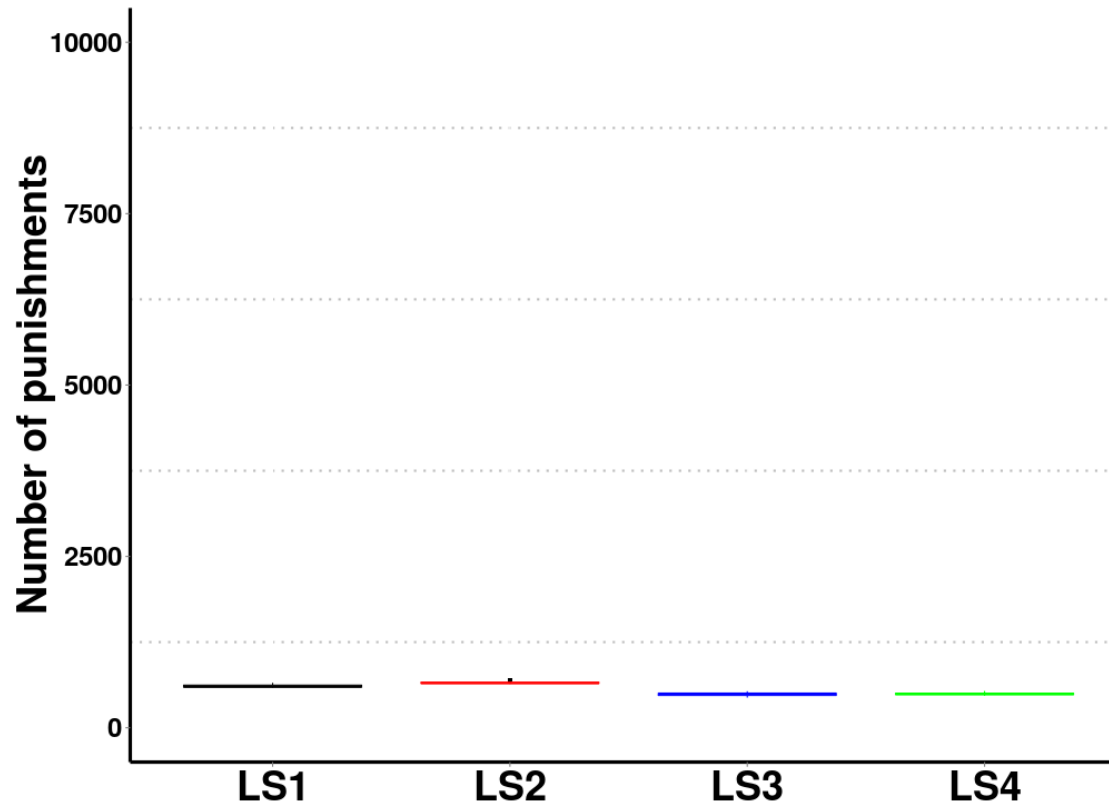
LS1	LS2	LS3	LS4
Strong Legal Norms	Strong Legal Norms	Strong Legal Norms	Strong Legal Norms
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Experiment 3: Legal and Social Norms

Actions of Mafiosi

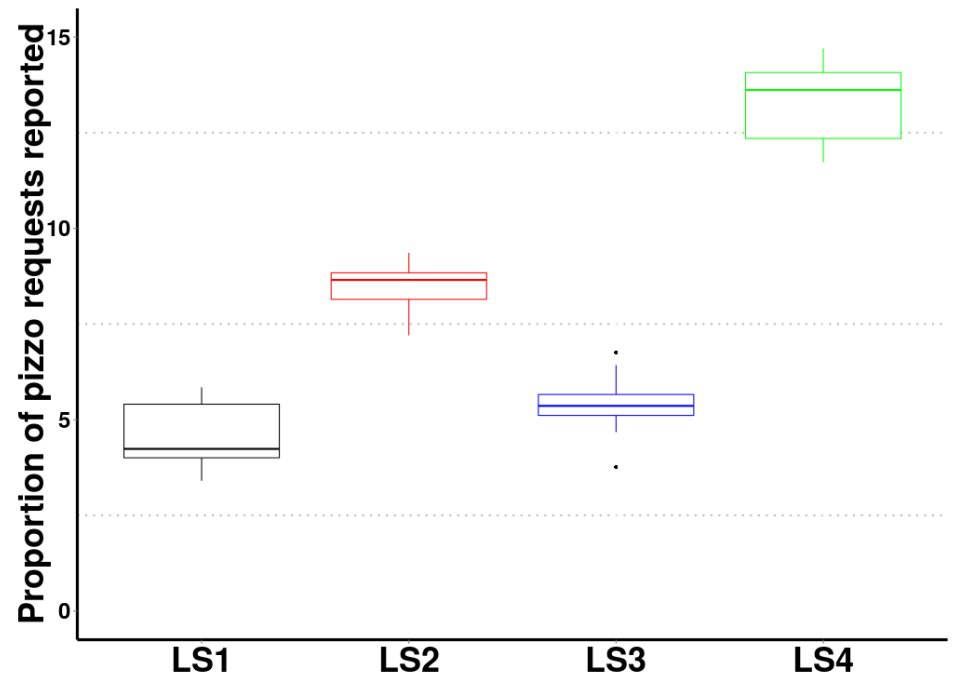
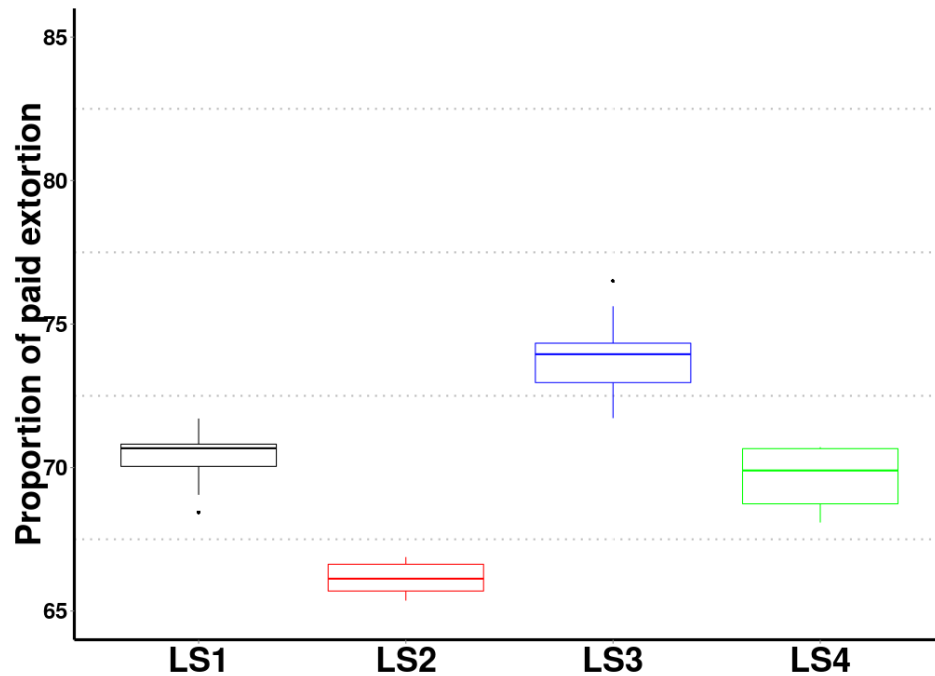
LS1	LS2	LS3	LS4
Strong Legal Norms	Strong Legal Norms	Strong Legal Norms	Strong Legal Norms
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Experiment 3: Legal and Social Norms

Behaviour of Entrepreneurs

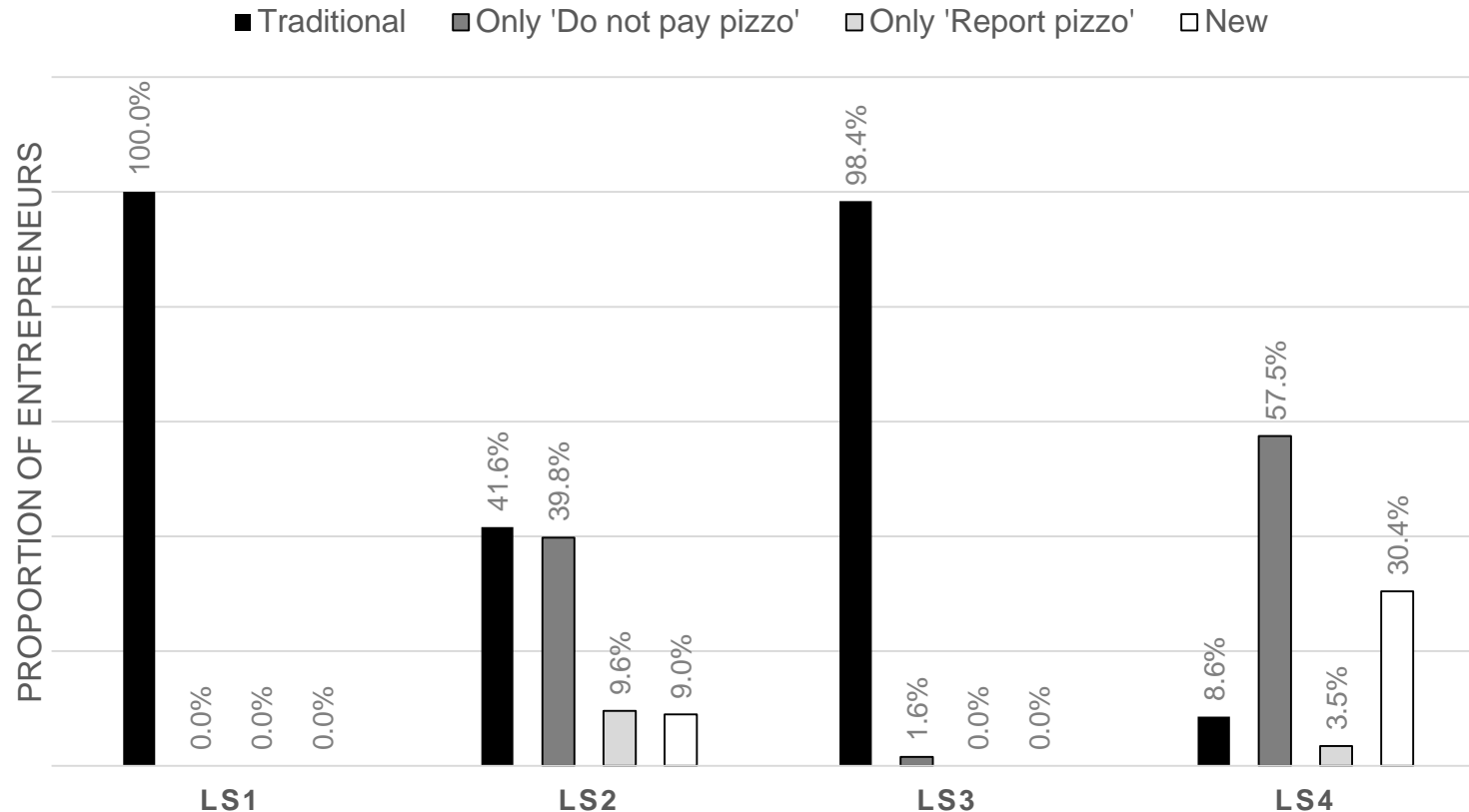
LS1	LS2	LS3	LS4
Strong Legal Norms	Strong Legal Norms	Strong Legal Norms	Strong Legal Norms
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Experiment 3: Legal and Social Norms

Salience of the Social Norms

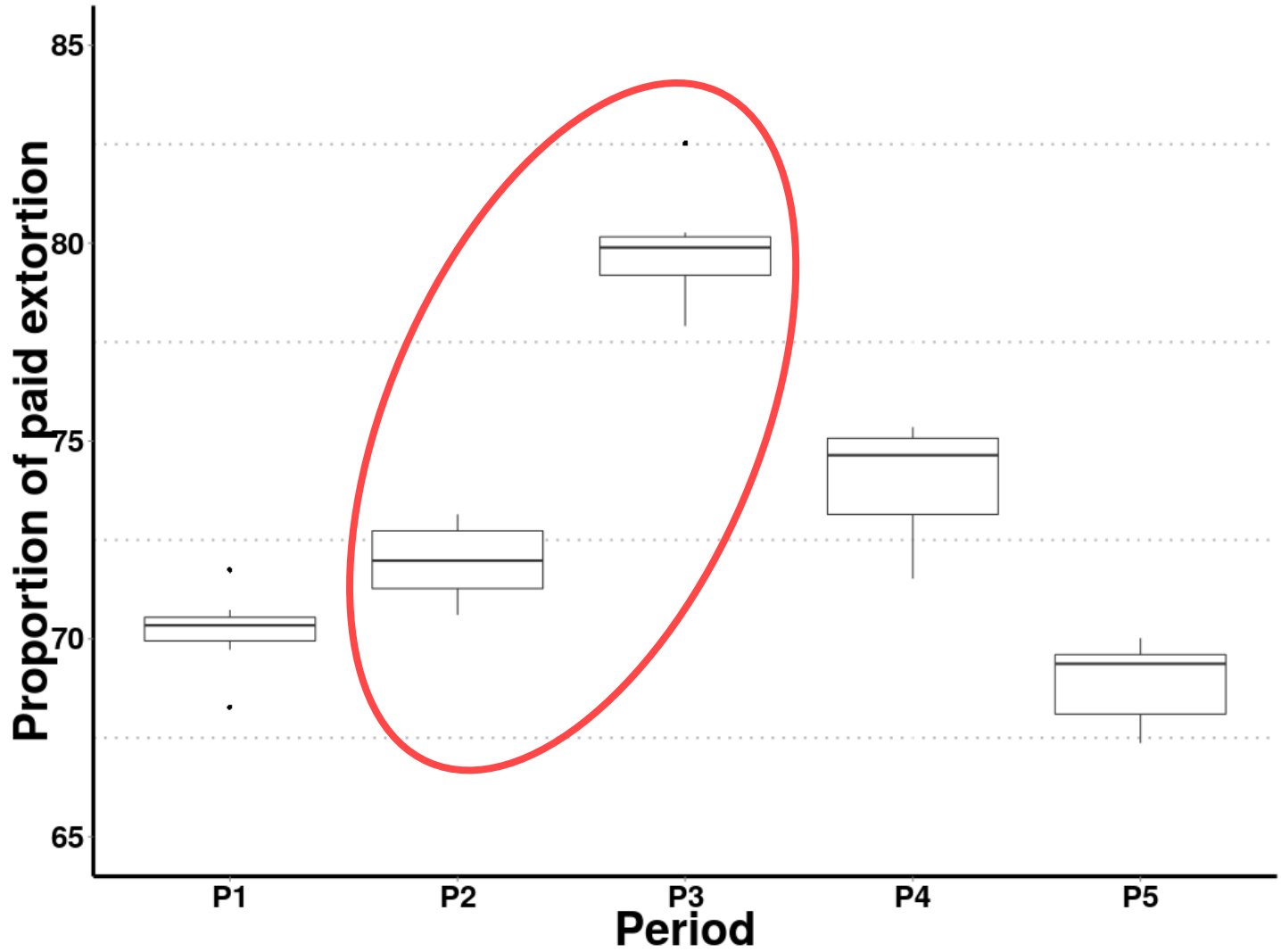
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Resilience

- In the **Legal** and **Social Norms** approaches alone, Entrepreneurs' behaviours are **vulnerable to sudden changes**
 - No to limited number of Entrepreneurs shifting from the TRADITIONAL to the NEW set of norms
- In the **combined Legal and Social Norms approach**, Entrepreneurs change their behaviours and are resistant to sudden changes
 - Large number of Entrepreneurs shifting from the TRADITIONAL to the NEW set of norms

Resilience



Conclusions

- **Legal Norms approach only**
 - **Effective** in imprisoning Mafiosi
 - **Vulnerable** to sudden changes
- **Social Norms approach only**
 - **Partially effective** in changing Entrepreneurs' behaviours
 - **Dangerous** to the Entrepreneurs
- **Combined Social and Legal Norms approach**
 - **Effective** in imprisoning Mafiosi
 - **Effective** in changing Entrepreneurs' behaviours
 - **Resilient** to sudden changes

References

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Thank you