



# Varieties of Regulatory Regimes and their Effect on Citizens' Trust in Firms

---

Libby Maman

Yuval Feldman

David Levi-Faur



“Trust is a solution for  
specific problems of risk”

Niklas Luhmann, 2000



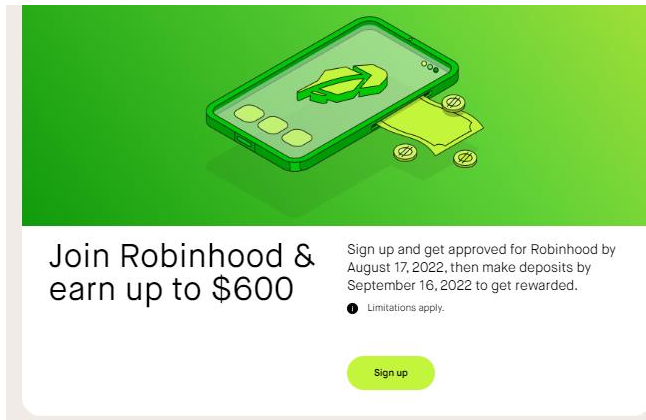
“Features of social organization,  
such as trust, norms, and  
networks, that can improve the  
efficiency of society by  
facilitating coordinated actions”

Putnam, 1993



# Working Definitions

- **Trust** is a psychological state comprising the intention to accept vulnerability based upon the positive expectations of the intentions or behaviour of another”
- (Rousseau, Sitkin, Burt, and Camerer, 1998, p. 395).
- **Trust in firms:** the decision to trust a firm and be willing to be vulnerable and use its service or product.



Join Robinhood & earn up to \$600

Sign up and get approved for Robinhood by August 17, 2022, then make deposits by September 16, 2022 to get rewarded.  
• Limitations apply.

Sign up



# The FinTech industry and open-banking apps

- The promise: Reducing banking costs
- The threat: Open banking means more entities accessing banking data, and banking data being transferred more often – increasing the possibility that **data privacy is compromised**.

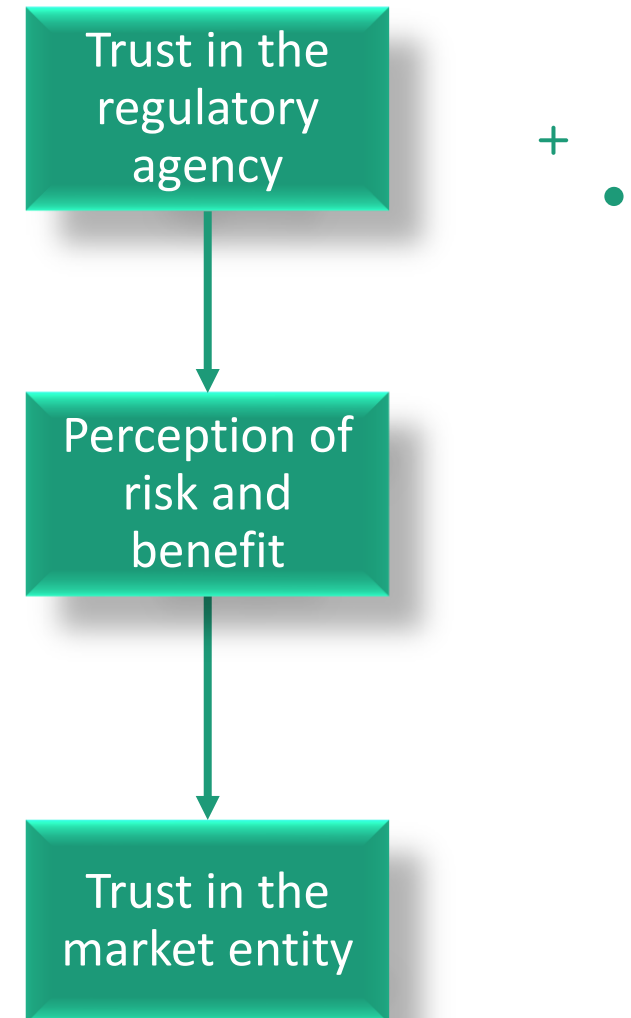
# The role of regulation in fostering trust in firms

## Contractual/Conditional trust

- Trust that builds on the existence of institutions that reduce the possible risks

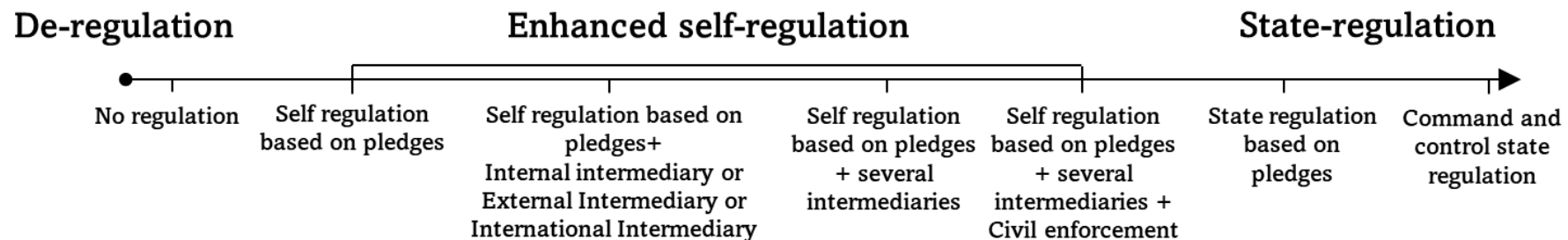
Regulators as “third-party trust providers” (Six and Verhoest 2017).

“Government may be as important for the structure and functioning of the economy as monetary institutions or the availability of tools and machines themselves” (Polanyi 1992).



# Regulatory Designs

- Regulation can occur in various designs
  - State regulation
    - Command-and Control
    - Hybrid designs – Relying on pledges
  - Enhanced self-regulation and intermediaries: *i.e. internal disciplinary body, international accreditation.*



---

# Research Questions

- How do different varieties of regulatory regimes increase the public's trust in firms?
- What is the role of trust in the regulator in this relationship?

+

●

○

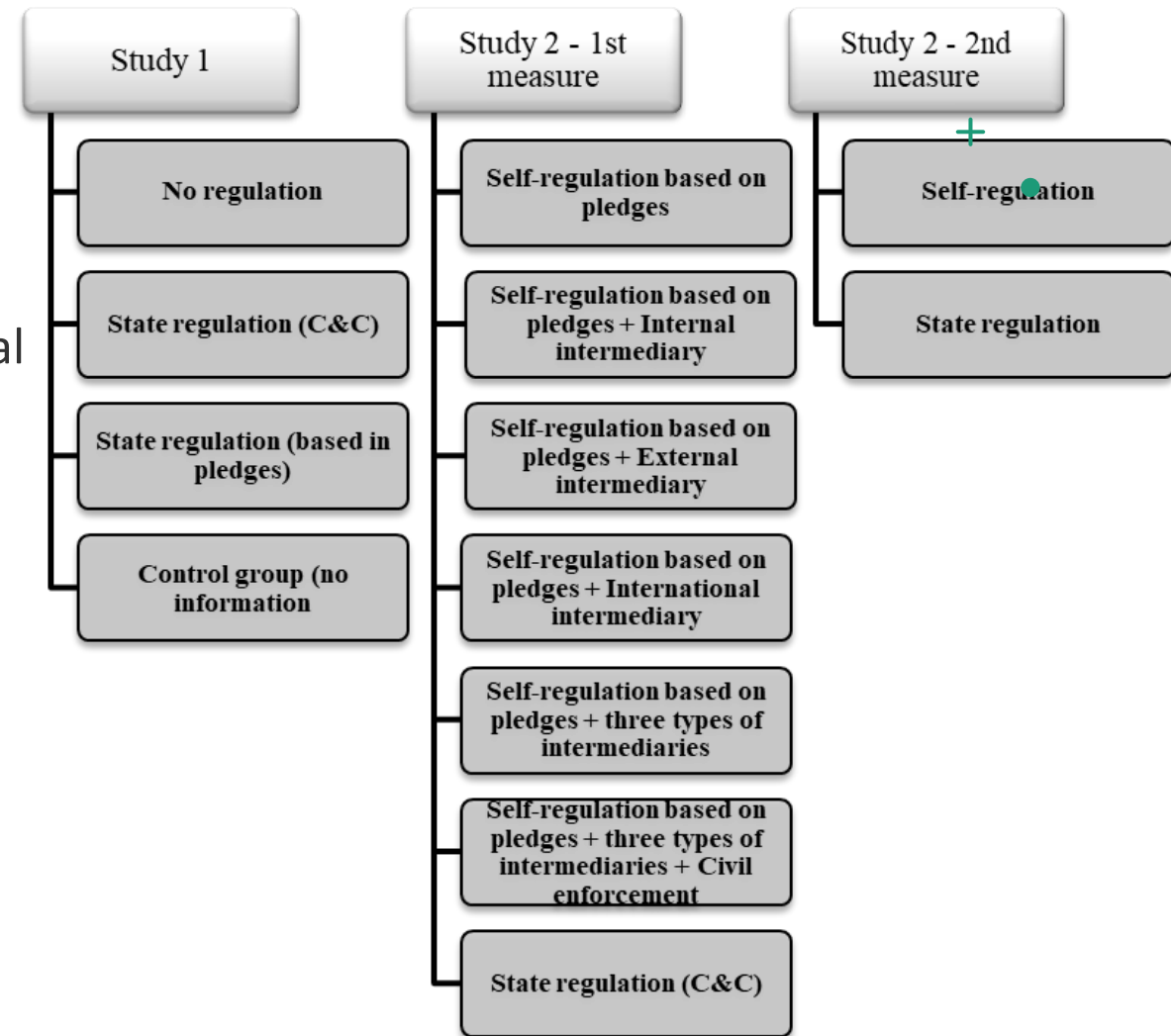
# Hypotheses

- •H1a: Trust in firms will be higher in state regulatory regimes than in self-regulation regimes.
- •H1b: Trust in firms will be higher in state regulatory regimes where the state regulator monitors the firms (C&C), than in state regulation regimes where the regulator reduces monitoring levels and relies on pledges.
- •H2a: Trust in firms will be higher in enhanced self-regulatory regimes that include an intermediary rather than thin self-regulatory regimes that bases only on pledges.
- •H2b: Trust in firms will be higher in enhanced self-regulatory regimes that include several intermediaries rather than enhanced self-regulatory regimes that include only one kind of intermediary.
- •H2c: Trust in firms will be higher in enhanced self-regulatory regimes that include the possibility for private sanctions rather than in enhanced self-regulatory regimes that does not include this possibility.



# METHODOLOGY

- Two experimental surveys describing a hypothetical case to reduce existing biases and to be able to generalize the results.
- Online panel in Israel (*ipanel*)
- Representative sample



# Study 1

- **Case description (all respondents received):**
- Recently in Israel, new FinTech companies began to offer financial services. A new company called “Superior information” offers a service of improving credit and lowering costs of loans and fees. However, in order to enjoy the service, you are required to grant the company access to use your personal information in your bank account.
- **Treatment group 1: No regulation**
- Currently, there is no governmental regulation in Israel over the activity of companies like this one with regard to managing and saving personal consumer information.
- **Treatment group 2: State regulation based on pledges**
- The Governmental Authority for Financial Information Safety, a governmental agency aimed at regulating and overseeing the protection of personal information of FinTech services has granted the “Superior information” company a license. The license was given after the company has declared that it obeys the regulations of protection of personal information of consumers. The Governmental Authority for Financial Information Safety does not oversight the activity of companies after a license has been granted.
- **Treatment group 3: Command-and-control state regulation**
- The Governmental Authority for Financial Information Safety, a governmental agency aimed at regulating and overseeing the protection of personal information of FinTech services has granted the “Superior information” company a license. The Governmental Authority for Financial Information Safety examines every new financial technology offered in the market, and only grants a license after finding that it fits with regulation of protection of personal information of consumers. The Governmental Authority for Financial Information Safety also oversees the activity of companies that receive a license. In case a violation of regulation occurs, the Governmental Authority for Financial Information Safety will fine the company with high amount or cancel the license if the violation reoccurs.
- **Control group: No information**

***Treatment group 1: Self-regulation – Pledges***

The company has declared it complies with existing rules regarding holding and managing consumers' personal information.

***Treatment group 2: Self-regulation - Pledges + Internal intermediary***

The company has declared it complies with existing rules regarding holding and managing consumers' personal information. In addition, the company employs a lawyer, which is in charge of the fair management of personal information.

***Treatment group 3: Self-regulation - Pledges + External approval***

The company has declared it complies with existing rules regarding holding and managing consumers' personal information. In addition, it received the approval of an NGO that promotes the fair use of consumers' personal information.

***Treatment group 4: Self-regulation - Pledges + Certification***

The company has declared it complies with existing rules regarding holding and managing consumers' personal information. In addition, the company has been audited by an international certification organization and received accreditation.

***Treatment group 5: Self-regulation - Pledges + Internal intermediary + External approval + Certification***

The company has declared it complies with existing rules regarding holding and managing consumers' personal information. In addition, the company employs a lawyer, which is in charge of the fair management of personal information. It has also received the approval of an NGO that promotes the fair use of consumers' personal information. In addition, the company has been audited by an international certification organization and received accreditation.

***Treatment group 6: Self-regulation - Pledges + Internal intermediary + External approval + Certification+ Enforcement***

The company has declared it complies with existing rules regarding holding and managing consumers' personal information. In addition, the company employs a lawyer, which is in charge of the fair management of personal information. It has also received the approval of an NGO that promotes the fair use of consumers' personal information. In addition, the company has been audited by an international certification organization and received accreditation.

In the event that "Superior information" will violate the rules it has committed to the NGO's approval and international accreditation will be annulled.

**Control group: State regulation**

# Measures

## Trust in the firm

Study 1	Study 2
▪ Perceived ability (3 items)	▪ Trust to not exploit personal information (2 items)
▪ Perceived benevolence (3 items)	▪ Confidence to grant access to use bank account data (2 items)
▪ Perceived integrity (4 items)	
▪ Willingness to grant access (2 items)	

### Additional Variables

- Income
- Education
- Party affiliation
- Religiosity
- Ethnicity
- Age
- Gender
- Employment sector
- Consumption of financial media
- Tendency to trust people
- Perception of government corruption
- Satisfaction from life
- Trust in the regulator (study 1)
- Fear of data exploitation (study 2)

# Sample

- Study 1:
- February-March 2020, N=597
- Study 2:
- July-August 2020, N=598

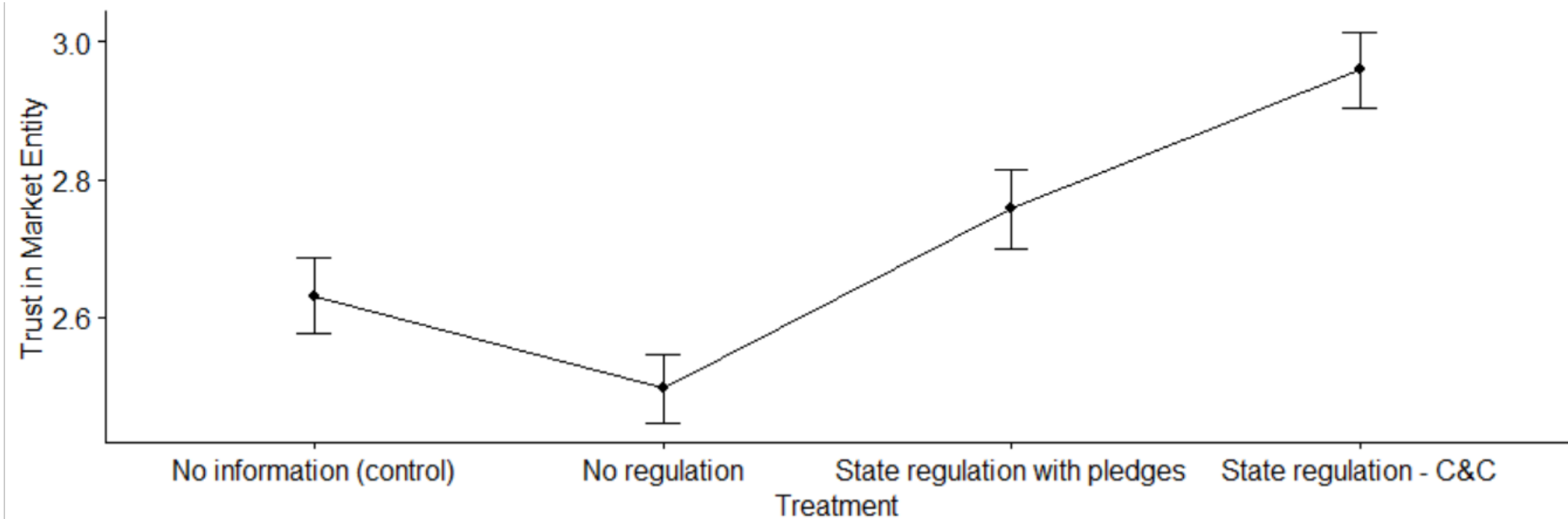
	Study 1	Study 2	Population (2018)
<b>% Female</b>	50.5	50.6	51.3
<b>Age</b>			
<b>18-29</b>	29.8	30.4	21.9
<b>30-39</b>	21.7	24.7	20.5
<b>40-49</b>	18.4	18.7	18.5
<b>50+</b>	29.8	26	39.1
<b>Education</b>			
<b>Low</b>	17.8	14.3	11.4
<b>Middle</b>	21.6	20.5	21.8
<b>High</b>	60.3	65.1	66.8
<b>Income</b>			
<b>Low</b>	50.4	50	50
<b>High</b>	49.6	49.9	50
<b>Identity</b>			
<b>Jewish</b>	77.3	83.3	82.1
<b>Arab</b>	18.4	16.6	17.9

Notes: the population data was generated by the Central Bureau of Statistics (CBS).

# Findings

---

# Study 1



Notes: Points indicate group means; error bars indicate 95 % confidence intervals; n = 150 (control), 153 (no regulation), 147 (state regulation based on pledges), 147 (state regulation C&C).

# Study 1

Table 1: Regression Analyses with Contrasts—The Effect of Regulatory Regime on Trust in the firm Study 1

	Dependent Variable: Trust in firms			
Predictors	Estimates	std. Error	CI	p
(Intercept)	2.711	0.027	2.657 – 2.764	<0.001
No regulation vs Regulation	0.121	0.022	0.078 – 0.164	<0.001
State regulation based on pledges vs C&C state regulation	0.101	0.039	0.025 – 0.177	0.010
condition	0.092	0.055	-0.015 – 0.199	0.094
Observations	577			
R <sup>2</sup>	0.064			

Hypothesis 1: For both regulation groups, an increase in trust in the firm comparing to no regulation

Hypothesis 2: An increase in trust in the firm for the C&C group comparing to only pledges



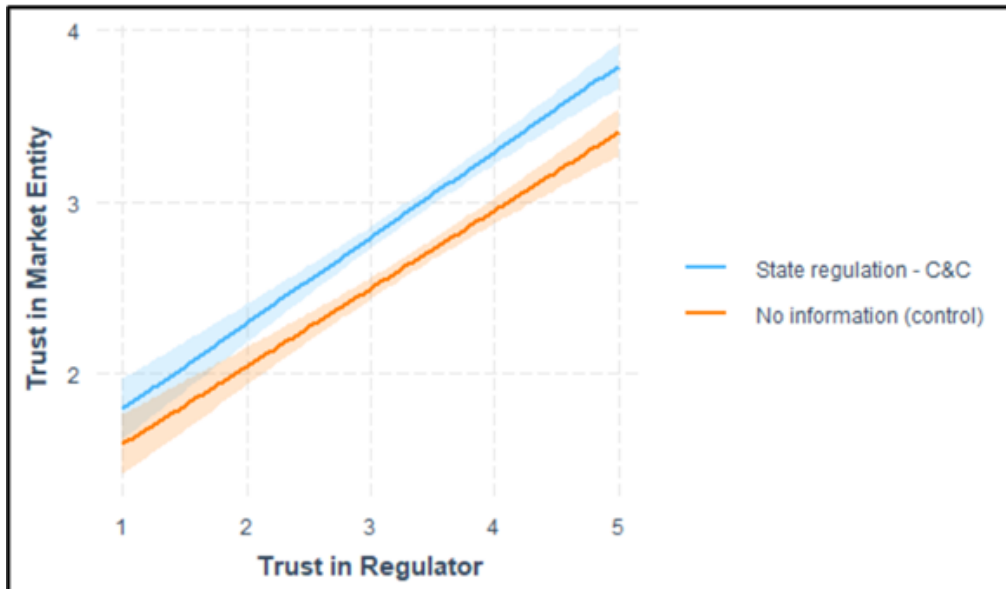
# Study 1

Table 2: Regression Analyses—The Effect of Regulatory Regime on Trust in the firm Controlling for Trust in the Regulator Study 1

	Dependent Variable: Trust in Firm			
Predictors	Estimates	std. Error	CI	p
(Intercept)	1.139	0.190	0.766 – 1.511	<0.001
No regulation	0.201	0.271	-0.329 – 0.732	0.457
State regulation based on pledges	-0.518	0.278	-1.063 – 0.028	<b>0.063</b>
C&C state regulation	0.159	0.268	-0.366 – 0.684	0.552
Trust in the regulator	0.453	0.056	0.344 – 0.562	<b>&lt;0.001</b>
No regulation*Trust in the regulator	-0.110	0.079	-0.264 – 0.045	0.165
State regulation based on pledges *Trust in the regulator	0.208	0.083	0.045 – 0.370	<b>0.013</b>
C&C state regulation *Trust in the regulator	0.046	0.078	-0.107 – 0.199	0.559
Observations	566			
R <sup>2</sup>	0.394			

Hypothesis 5:  
Significant interaction  
of trust in regulator and  
thin hybrid state reg  
group

# Study 1

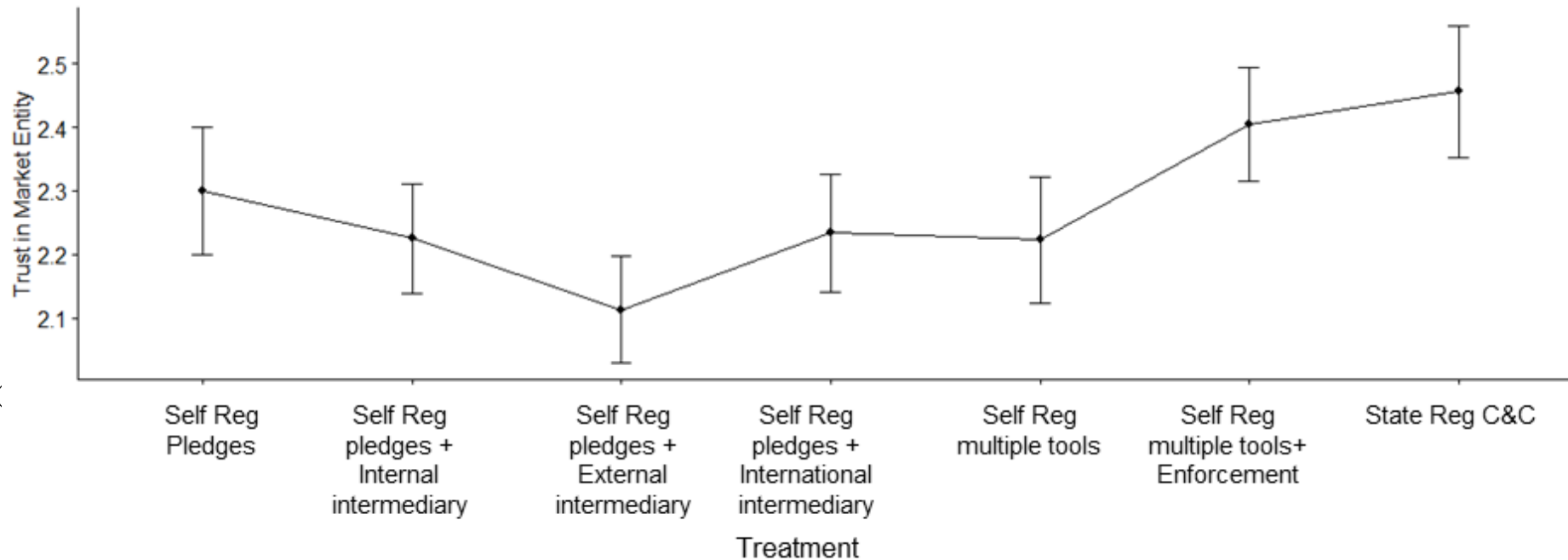


Public trust in the regulator is important when the state regulation is based on pledges. In contrary, when regulation involves sanctions and oversight, trust in the regulator has a smaller impact on trust in the regulated market companies

# Study 2

## First Measure

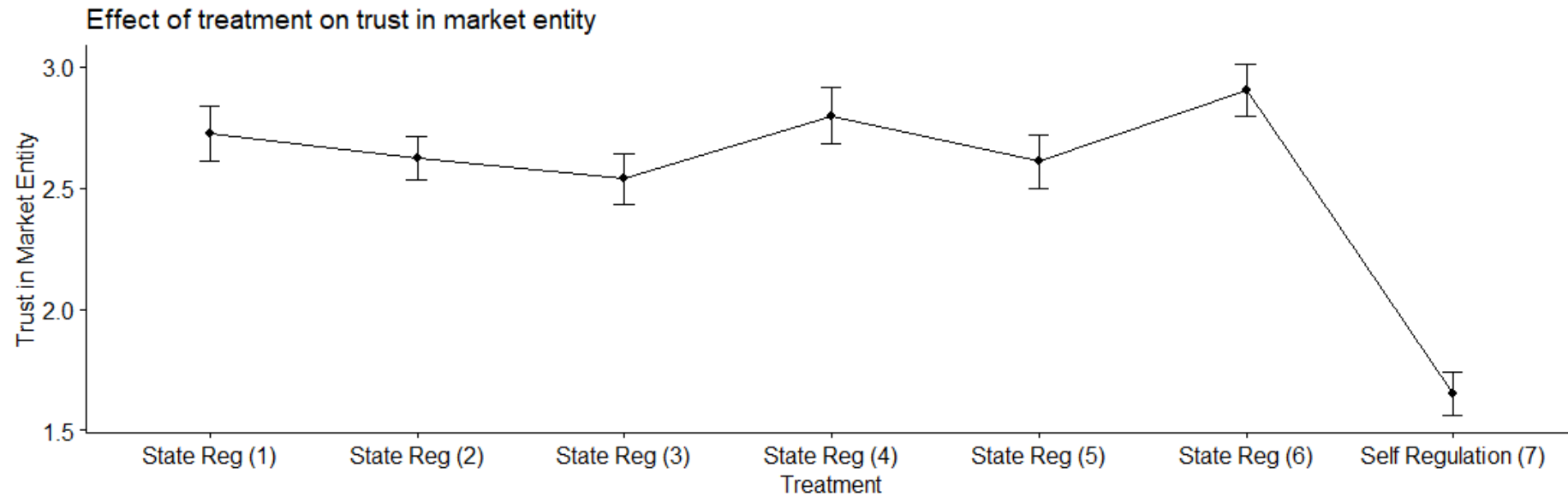
Seco



Notes: Points indicate group means; error bars indicate 95 % confidence intervals; n = 82 (Self Reg Pledges), 81 (Self Reg Pledges + Internal Int.), 81 (Self Reg Pledges + External Int.), 77 (Self Reg Pledges + International Int.), 83 (Self Reg Multiple tools), 66 (Self Reg Multiple tools+ Enforcement), 75 (State Reg C&C).

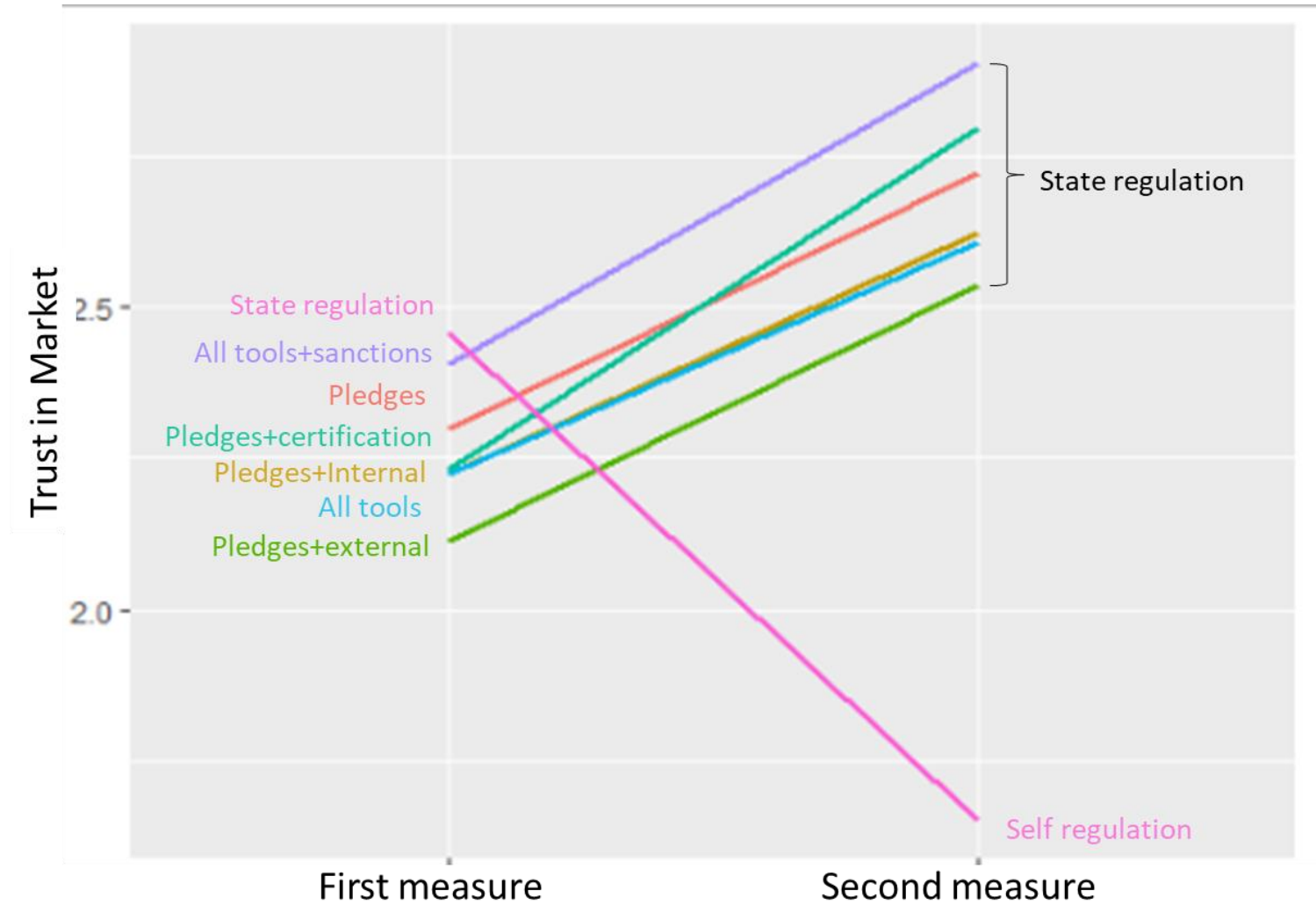
# Study 2

## Second Measure



Notes: Points indicate group means; error bars indicate 95 % confidence intervals; n = 82 (Group 1), 81 (Group 2.), 81 (Group 3), 77 (Group 4), 83 (Group 5), 66 (Group 6), 75 (Group 7).

# Study 2



# Study 2

Table 4: Regression Analyses—The Effect of Regulatory Regime on Trust in Firm Study 2

	Dependent Variable: Trust in Firm							
	First measure				Second measure			
Predictors	Estimates	std. Error	CI	p	Estimates	std. Error	CI	p
(Intercept)	<b>2.456</b>	<b>0.096</b>	<b>2.267 – 2.645</b>	<b>&lt;0.001</b>	<b>1.651</b>	<b>0.108</b>	<b>1.440 – 1.862</b>	<b>&lt;0.001</b>
Group 1	-0.157	0.133	-0.418 – 0.105	0.241	<b>1.072</b>	<b>0.148</b>	<b>0.781 – 1.362</b>	<b>&lt;0.001</b>
Group 2	<b>-0.231</b>	<b>0.133</b>	<b>-0.492 – 0.031</b>	<b>0.084</b>	<b>0.973</b>	<b>0.148</b>	<b>0.682 – 1.264</b>	<b>&lt;0.001</b>
Group 3	<b>-0.344</b>	<b>0.134</b>	<b>-0.606 – -0.081</b>	<b>0.010</b>	<b>0.887</b>	<b>0.149</b>	<b>0.595 – 1.180</b>	<b>&lt;0.001</b>
Group 4	<b>-0.223</b>	<b>0.136</b>	<b>-0.489 – 0.044</b>	<b>0.102</b>	<b>1.147</b>	<b>0.152</b>	<b>0.849 – 1.444</b>	<b>&lt;0.001</b>
Group 5	<b>-0.233</b>	<b>0.133</b>	<b>-0.493 – 0.027</b>	<b>0.079</b>	<b>0.958</b>	<b>0.148</b>	<b>0.669 – 1.247</b>	<b>&lt;0.001</b>
Group 6	-0.051	0.140	-0.326 – 0.224	0.718	<b>1.255</b>	<b>0.156</b>	<b>0.948 – 1.561</b>	<b>&lt;0.001</b>
Observations	540				537			
R <sup>2</sup>	0.017				0.143			

# Summary of findings

---

- Regulation increased trust in the Fintech company
- State regulation increased trust in the company more than self-regulation regimes even enhanced self-regulatory regimes
- State regulation increased trust in the company more when it includes oversight and enforcement and less when it is solely based on self-regulatory mechanisms such as pledges.
- Enhanced self-regulation which includes sanctions increased trust in the company more than when it doesn't.
- Using multiple self-regulatory tools (enhanced self-regulation) did **not** increase trust
- State regulation based on pledges can increase trust only if trust in the regulator is high

# Implications and limitations

- **Implications:**

- Both market actors and the public are on the side of the winners of regulation
- While C&C is a safe way to ensure trust in markets- it is a consistent act of distrust and burdensome to firms
- A possible entry point to the *virtuous cycle of trust* and relaxing the regulation– increasing trust in the regulator

- **Limitations:**

- Enhanced self-regulatory systems that rely on intermediaries do not achieve satisfactory levels of public trust – perhaps since they are under the radar?
- Focusing only on one regulatory sector, what happens in other sectors? Would this be the same in the health and vaccination sector?
- Focusing only on one country – what happens in other countries with higher levels of trust?







Thank you!

---

# Study 1



Items	
Would you be willing to grant “Meyda Adif” access to information from your bank account in order to examine improvement for the terms of your credit card?	
I feel safe granting “Meyda Adif” authorization to use my bank account data	
I believe that “Meyda Adif” will use my personal information to my own benefit	
“Meyda Adif” will do everything it can to assist me, should I need its help	
“Meyda Adif” is concerned with the well-being of its customers, and not only with its own benefit	Cronbach’s $\alpha$ = .89.
I believe that "Meyda Adif" is honest and will present true information to me	Mean 2.707.
To my opinion, "Meyda Adif" will try to follow up on its commitments to its costumers	Standard deviation 0.676.
I believe that "Meyda Adif" acts lawfully	
I believe that "Meyda Adif" acts in a transparent manner	
I believe that "Meyda Adif" is professional	
I believe that "Meyda Adif" can improve the terms of my credit card, and lower the prices of commissions and loans	
Overall, I believe that "Meyda Adif" is an efficient, effective company	

# Study 2

---

Items	First Measure	Second Measure
I trust the 'Superior information' company, to not exploit my personal information	Cronbach's $\alpha$ = .88 Mean = 2.274 Standard deviation = 0.831	Cronbach's $\alpha$ = .93 Mean = 2.55 Standard deviation = 0.988
Most of the Israeli public will trust the 'Superior information' company to not exploit their personal information		
I feel confident to grant the 'Superior information' company access to use my bank account data		
Most of the Israeli public will have the confidence to grant the 'Superior information' company access to use their bank account data		

# ANOVA results

---

- First study:
  - ( $F(3,573) = 13.16, p < 0.001$ ) (confirming that the type of regulation does affect trust in the firm)
  - A *post-hoc* analysis using Tukey test showed that all groups were significantly different from each other except of “no regulation” – “control” and “state reg-pledges” - “control”. The effect is considered medium (Cohen’s  $f=0.26, \eta^2=0.064$ ).
- Second study – repeated measure:
  - $F(1, 536) = 63.6, p < 0.0001$ , generalized eta squared = 0.022. *Post-hoc* analyses with a Bonferroni adjustment revealed that all the pairwise differences, between time points, were statistically significantly different ( $p < 0.001$ ).