# Incentivizing Firms to Protect Consumer Data: Can Reputation Play a (Bigger) Role?

#### Ying Lei Toh Toulouse School of Economics

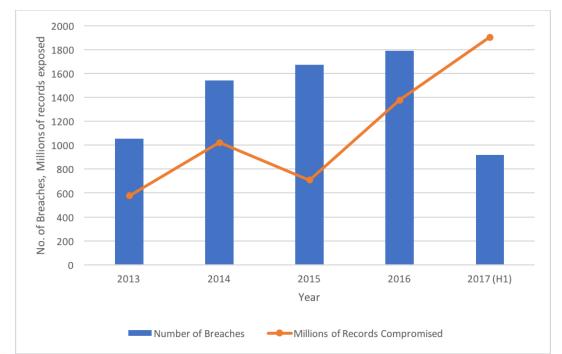
FTC PrivacyCon 2018, Washington D.C.

February 28, 2018





### **Growing number of data breaches**



PRIVACYCON

#### **Market Failures**







# **Can reputation play a role?**

#### In theory, yes

Investment lowers the probability of breaches







## **Can reputation play a role?**

In practice,

Are consumers *willing* to punish the firm?

- Are losses high relative to valuation?

Are consumers *able* to do so?

- Do they know about the breach?



### **Can reputation play a role?**





# **Policy Interventions**

"Indirect": Improving the reputation mechanism

- Increase consumers' willingness or ability to punish

"Direct": Correcting the market failures

- Imperfect information
- Externalities



	Impact on			
	Ability to Punish	Willingness to Punish	Investment Level	Consumer Surplus
Expelling Breached Merchants		+	+	+/-
Active Monitoring by Bank	+		+	+
Mandatory Breach Notification				





	Impact on			
	Ability to Punish	Willingness to Punish	Investment Level	Consumer Surplus
Expelling Breached Merchants		+	+	+/-
Active Monitoring by Bank	+		+	+
Mandatory Breach Notification	Greater transparency			





	Impact on			
	Ability to Punish	Willingness to Punish	Investment Level	Consumer Surplus
Expelling Breached Merchants		+	+	+/
Active Monitoring by Bank	+		+	+
Mandatory Breach Notification	+			

The state



	Impact on			
	Ability to Punish	Willingness to Punish	Investment Level	Consumer Surplus
Expelling Breached Merchants		+	+	+/-
Active Monitoring by Bank	+		+	+
Mandatory Breach Notification	+	Loss Mitigation		





	Impact on			
	Ability to Punish	Willingness to Punish	Investment Level	Consumer Surplus
Expelling Breached Merchants		+	+	+/
Active Monitoring by Bank	+		+	+
Mandatory Breach Notification	+	_	+/-	+/

The states



#### "Direct" interventions

	Impact on				
	Ability to Punish	Willingness to Punish	Investment Level	Consumer Surplus	
Revealing Security Inv't or State	Imperfect information				
Liability Rule	Externalities				



PRIVACYCON

### "Direct" interventions

	Impact on			
	Ability to Punish	Willingness to Punish	Investment Level	Consumer Surplus
Revealing Security Inv't or State			+	+
Liability Rule			+	+



# **Policy Implications**

"Direct" > "Indirect" interventions

PRIVACYCON

Always good to improve information (about security and breaches)

Trade-off between protecting consumer ex-post and fostering investment incentives ex-ante