



# Empowering Civil Society to Tackle the Hidden Economy through Cutting Edge Research

Colin C Williams  
Sheffield University Management School, UK

Belgrade, 13-14 December 2016



# Contents

- Definition
- Policy approaches towards undeclared work
- Data and methodology
- Findings
- Conclusions



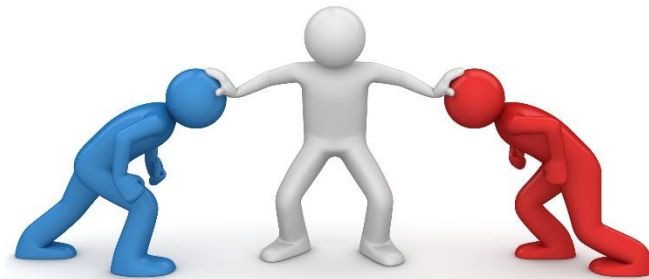
# Definition

- Undeclared work refers to paid work which is legal in all respects other than it is not declared to the authorities for tax, social security or labour law purposes (European Commission, 2007).
- If it is not legal in all other respects, it is not part of the undeclared economy (i.e. illegal goods and/or services exchanged - part of the criminal economy).



# Policy approaches towards undeclared work

**Rational  
economic actor  
approach**



**VS.**

**Social actor  
approach**



## Utilitarian theory of crime

People:

- rational actors who weigh up the benefits and costs of undeclared work.
- disobey the law if the expected penalty and probability of being caught is small relative to the benefits of disobeying the law (Bentham, 1788; Beccaria, 1797).



The goal: to change the cost/benefit ratio confronting potential participants.



By **increasing** the actual and/or perceived **penalties** and **risks of detection**.  
(not by increasing benefits of declared work)



# Rational economic actor approach



- Increasing the probability of detection reduces participation in the undeclared economy (e.g. Alm et al., 1992, 1995).

- Increasing fines reduces the undeclared economy (e.g. Alm et al., 1995; De Juan et al., 1994).

- Increasing penalties → growth in undeclared work, has no effect, or only a short-term effect (e.g. Elffers et al., 1987).

- Increasing the probability of detection does not result in higher levels of compliance (e.g., Dubin et al., 1997).

- Increasing penalties → increased non-compliance due to a **breakdown of trust** between the state and its citizens (e.g. Ayres and Braithwaite, 1992)



# Rational economic actor hypothesis

**H1:** The greater the perceived penalties and risk of detection, the lower is the likelihood of participation in undeclared work.

→ *H1a:* the greater are the perceived penalties, the lower is the likelihood of participation in undeclared work.

→ *H1b:* the greater are the perceived risks of detection, the lower is the likelihood of participation in undeclared work.



# Social actor approach

## People

- not always rational economic actors with perfect information;
  - limited in their ability to compute the costs and benefits;
  - misperceive or do not perceive the true costs of their actions;
  - influenced by their social context.
- +
- many voluntarily comply even when the benefit/cost ratio suggests that they should operate on an undeclared basis (e.g. Alm et al., 2010)



Low tax morale (low intrinsic motivation to pay taxes ) → participation in undeclared work (e.g. Alm and Torgler, 2006, 2011).





# Social actor approach

## Tax morale through the lens of institutional theory

Institutions are 'the rules of the game'; prescribed norms regarding the acceptability of activities

**Formal institutions:**  
laws and regulations  
(state morality)

**Informal institutions:**  
norms, values & beliefs  
of citizens (civic morality)



**Tax morale** measures the **gap** between the **formal and informal institutions**.



# Social actor hypothesis

**H2:** The greater the tax morale, the lower is the likelihood of participation in undeclared work



# Contrasting or complementary policy approaches?

## In practice:

- dominance of the rational economic actor approach

## Scholarly literature:

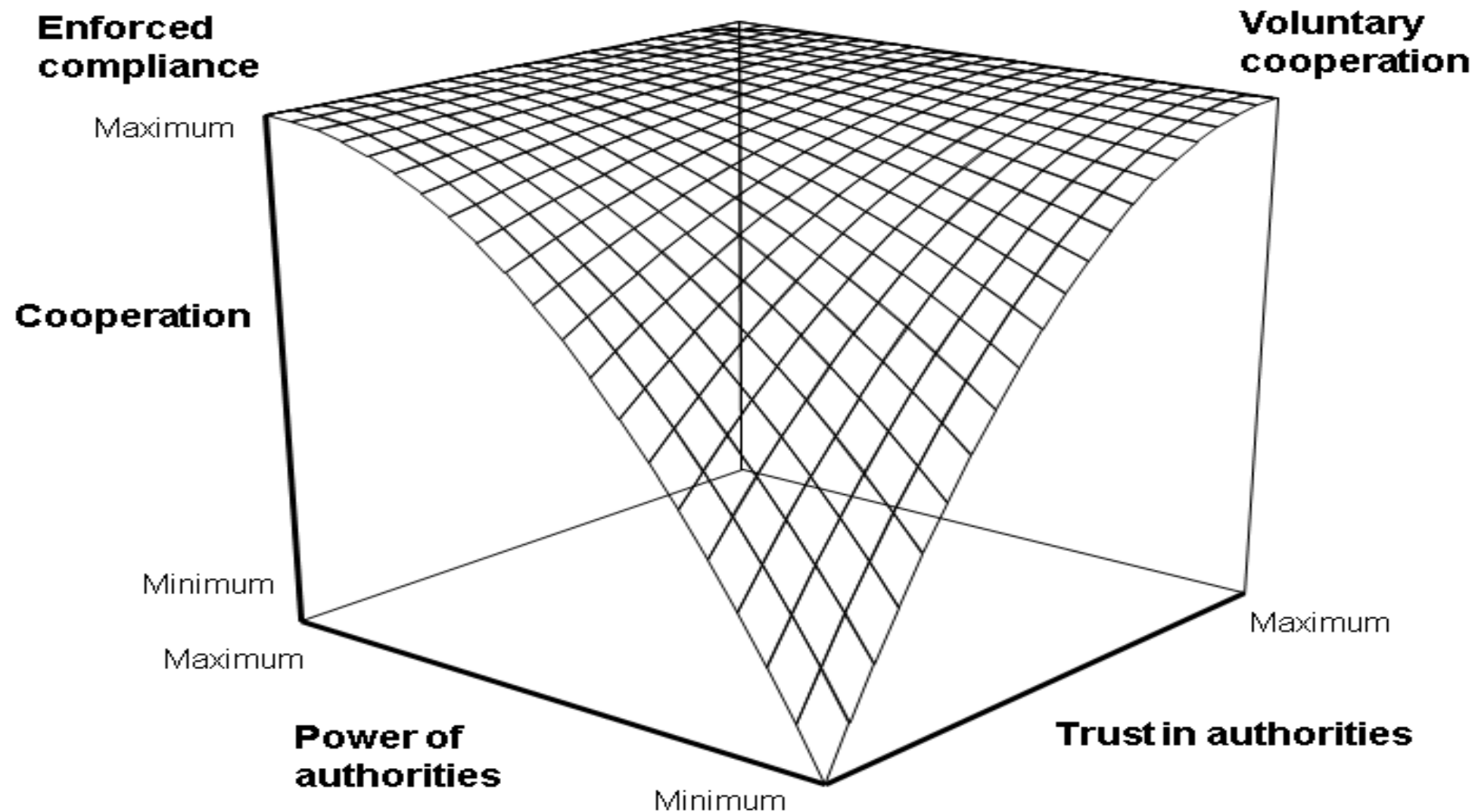
- social actor approach should be adopted as either an **alternative** or **complement** to the rational actor approach



→ 'Slippery slope' approach



# Slippery slope framework





# Slippery slope: previous results

Laboratory experiment (Wahl et al., 2010)



- participants paid significantly more taxes when both power and trust were high;
- voluntary compliance was highest when the authorities were both trustful and powerful;
- enforced compliance was highest when authorities were portrayed as powerful, but not trustworthy.
- further reinforced by two additional surveys of real-world taxpayers (Muehlbacher et al., 2011a,b).



# Slippery slope: previous results

- Increasing the power of authorities and trust of authorities may have complex interaction effects.
- Applying higher penalties and risks of detection might not always lead to the same outcome.
- Where there is already high tax morale, increasing the penalties and risks of detection might lead to greater non-compliance, due to a breakdown of trust between the state and its citizens.





**H3: The effect of perceived penalties and risk of detection on the likelihood of participation in undeclared work is different at varying levels of tax morale.**

→ *H3a*: the effect of perceived penalties on the likelihood of participation in undeclared work is different at varying levels of tax morale.

→ *H3b*: the effect of perceived risk of detection on the likelihood of participation in undeclared work is different at varying levels of tax morale.



- ***Data***

- Special Eurobarometer survey no. 402, 2013: 27,563 interviews in EU-28.

- ***Method***

- Multi-level logistic regression.





- ***Variables***

- *Dependent Variable*: dummy for participation in undeclared work in the last 12 months.

- *Independent Variables* (main):

- *Risk of detection*: dummy (very/fairly small risk OR fairly/ very high risk).
    - *Expected sanctions*: dummy (normal tax or social security contributions would be due OR normal tax or social security contributions due, plus a fine or imprisonment).
    - *Tax morale*: constructing index of self-reported attitudes towards the acceptability of undeclared work based on a 10-point Likert scale.

- *Independent Variables* (other controls):

- Gender, Age, Occupation, Difficulties paying bills , People 15+ years in own household, Children, Area, Region.



	EU 28	Western Europe	Southern Europe	East-Central Europe	Nordic nations
<i>Engaged in undeclared work (%)</i>	4	4	3	4	6
Expected sanctions (%)					
Tax or social security contributions due	32	26	40	46	22
Tax or social security contributions + fine or prison	68	74	60	54	78
Detection risk (%)					
Very small/ Fairly small	72	70	70	75	83
Fairly high/ Very high	28	30	30	25	17
Tax morale (mean)	3.5	3.7	2.6	4.1	2.7
<i>Not engaged in undeclared work (%)</i>	96	96	97	96	94
Expected sanctions (%)					
Tax or social security contributions due	24	19	25	41	18
Tax or social security contributions + fine or prison	76	81	75	59	82
Detection risk (%)					
Very small/ Fairly small	59	59	57	58	71
Fairly high/ Very high	41	41	43	42	29
Tax morale (mean)	2.2	2.1	2.1	2.6	1.8



# Findings

## Table 2. Multilevel mixed-effects logistic regression of propensity to participate in undeclared work

Fixed part	Model 1			Model 2		
	$\beta$	se( $\beta$ )	Exp( $\beta$ )	$\beta$	se( $\beta$ )	Exp( $\beta$ )
Constant	-1.465 ***	0.281	0.231	-1.195 ***	0.299	0.303
Expected sanctions (CG: Tax or social security contributions due)						
Tax or social security contributions + fine or prison	-0.204 **	0.079	0.816	-0.645 ***	0.157	0.525
Detection risk (CG: Very small/ Fairly small)						
Fairly high/ Very high	-0.621 ***	0.083	0.538	-0.548 ***	0.164	0.578
Tax morality	0.388 ***	0.020	1.474	0.319 ***	0.034	1.375
Gender (CG: Women)						
Men	0.691 ***	0.078	1.995	0.689 ***	0.078	1.992
Age (exact age)	-0.030 ***	0.003	0.971	-0.030 ***	0.003	0.971
Occupation (CG: Unemployed)						
Self-employed	0.100	0.149	1.105	0.094	0.149	1.098
Managers	-0.824 ***	0.160	0.439	-0.828 ***	0.160	0.437
Other white collars	-0.657 ***	0.150	0.519	-0.657 ***	0.150	0.518
Manual workers	-0.506 ***	0.121	0.603	-0.503 ***	0.121	0.605
House persons	-0.266	0.193	0.766	-0.271	0.192	0.763
Retired	-0.880 ***	0.173	0.415	-0.885 ***	0.173	0.413
Students	-0.564 ***	0.153	0.569	-0.575 ***	0.153	0.563
Difficulties paying bills (CG: Most of the time)						
From time to time	-0.550 ***	0.107	0.577	-0.545 ***	0.106	0.580
Almost never/ never	-0.958 ***	0.109	0.384	-0.952 ***	0.109	0.386
People 15+ years in own household (CG: One)						
Two	-0.332 ***	0.095	0.718	-0.338 ***	0.095	0.713
Three	-0.255 **	0.117	0.775	-0.263 **	0.117	0.769
Four and more	-0.370 ***	0.131	0.691	-0.375 ***	0.131	0.687



Continued

Children (CG: No children)						
Having children	-0.149 *	0.086	0.862	-0.146 *	0.086	0.864
Area (CG: Rural area or village)						
Small or middle sized town	-0.094	0.087	0.910	-0.088	0.087	0.915
Large town	-0.110	0.095	0.896	-0.109	0.095	0.897
Region (CG: East-Central Europe)						
Western Europe	-0.003	0.268	0.997	-0.004	0.269	0.996
Southern Europe	-1.166 ***	0.321	0.312	-1.163 ***	0.322	0.313
Nordic Nations	0.714 *	0.377	2.042	0.726 *	0.378	2.066
<i>Interaction terms</i>						
Expected sanctions: Tax or social security contributions + fine or prison x Tax morality				0.123 ***	0.038	1.131
Detection risk: Fairly high/ Very high x Tax morality				-0.020	0.040	0.979
N			20,131			20,131
<b>Random part</b>						
Country-level variance			0.2933***			0.2950***
(Standard error)			0.0947			0.0954
Countries			28			28
Variance at country level (%)			8.19			8.23

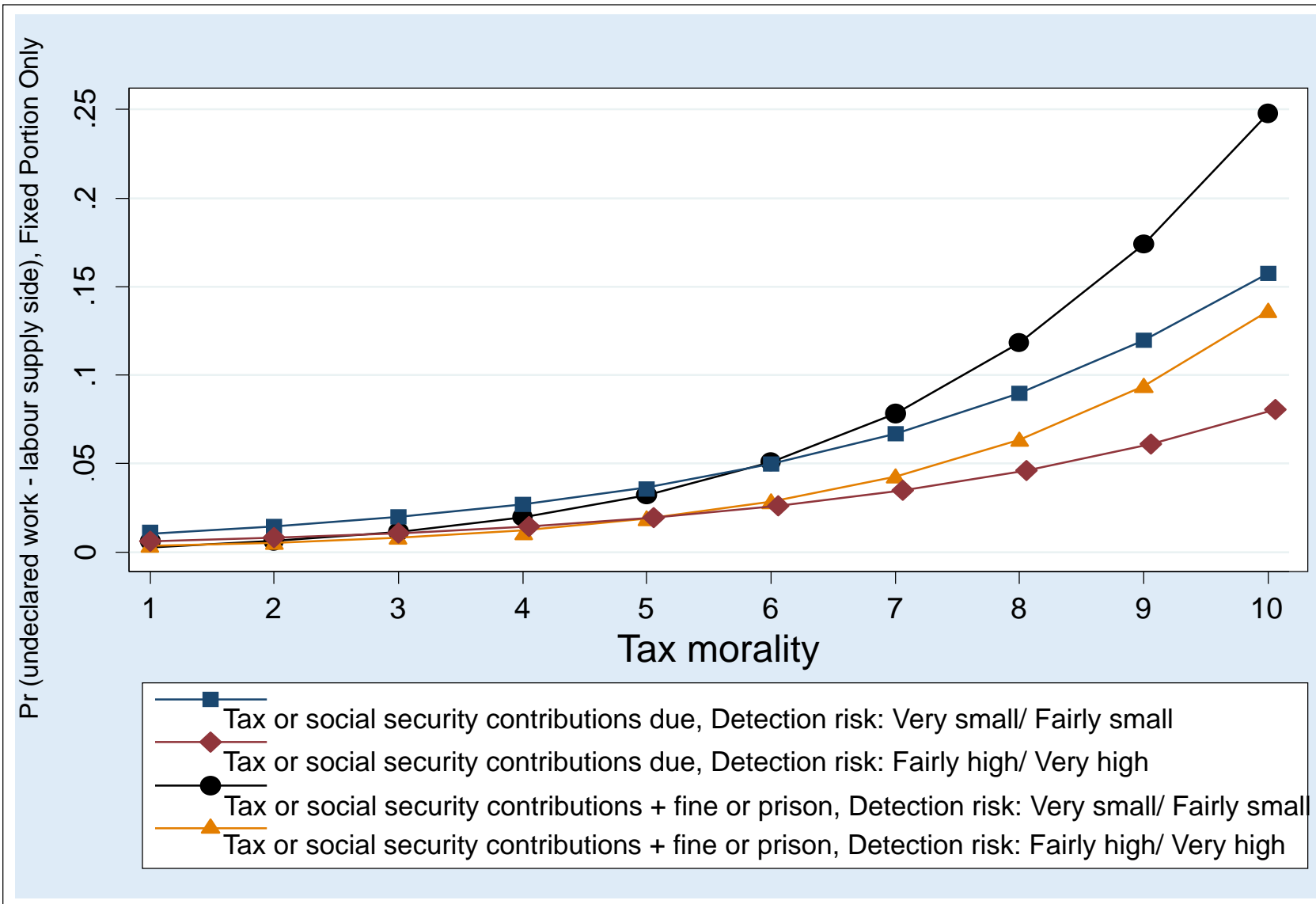
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Notes: All coefficients are compared to the benchmark category, shown in brackets.



# Findings

## Figure 1. Predicted probability of participation in undeclared work of a "representative" EU citizen



**'Representative' European citizen** (mean and modal values) of IV:

- 47 year-old,
- woman,
- two person household,
- retired,
- with no children,
- Never/almost never has financial difficulties in paying the household bills,
- small or middle sized town
- Western Europe.



Hypothesis	Result (p<0.01)
<i>H1</i> : The greater the perceived penalties and risk of detection, the lower is the likelihood of participation in undeclared work, ceteris paribus.	
<i>H1a</i> : perceived penalties	Confirmed
<i>H1b</i> : perceived risks of detection	Confirmed
<i>H2</i> : The greater the tax morale, the lower is the likelihood of participation in undeclared work, ceteris paribus.	Confirmed
<i>H3</i> : The effect of perceived penalties and risk of detection on the likelihood of participation in undeclared work is different at varying levels of tax morale, ceteris paribus.	
<i>H3a</i> : perceived penalties	Confirmed
<i>H3b</i> : perceived risk	Not confirmed



# Discussion and Conclusions

- 'Representative' EU citizen engaging in undeclared work:
- When trust in authorities and therefore **tax morale is relatively high**, increasing the power of authorities has only **a minor impact** on the probability of participating in undeclared work, and only in relation to changes in the perceived risk of detection.
- When trust in authorities worsens and **tax morale decreases** the **power of authorities plays a more significant role** in reducing the predicted odds of engaging in undeclared work.



# Discussion and Conclusions

- To tackle undeclared work, need to align the formal and informal institutions by:
  - Changing the informal institutions
  - Changing the formal institutions





## Changing informal institutions:

To change norms, values & beliefs of citizens (civic morality) requires:

- Tax education
- Awareness raising campaigns
- Normative appeals





## Changing formal institutions:

Change processes of formal institutions (from 'cops and robbers' approach to customer service-oriented approach) by:

- Improving procedural fairness
- Improving distributive fairness
- Improving redistributive justice





## **Changing formal institutions:**

Change products of formal institutions :

- GDP per capita
- Quality of governance/level of corruption
- Higher tax rates
- Increased social expenditure
- Greater expenditure of labour market interventions to protect vulnerable groups
- Reduce severe material deprivation
- Greater equality



## **Key lessons:**

Formal institutional failings lead to an asymmetry between state morale and civic morale (i.e., formal and informal institutions), which results in the greater prevalence of undeclared work

Need to focus on tackling this cause (i.e., formal institutional failings), NOT dealing with the consequences/effects (i.e., increasing penalties and the risks of detection)



Thank you for listening