

# Tax Behavior: Actors in the Field and Research Paradigms

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Taxes are “legal theft”,  
Thomas Aquinas (1225–74)  
Said in the Middle Ages.

Saint Mamas, Cyprus,  
famous for tax evasion  
and protector of tax  
Evaders (around yr 300).



The current fiscal system has degraded to an ignoble relic of the late absolutist state kleptocracy, Peter Sloterdijk (2010) concludes in “The Grasping Hand.”

## Peter Sloterdijk (2010)

“The modern democratic state gradually transformed into the debtor state... This metamorphosis has resulted,... , from a prodigious enlargement of the tax base—most notably, with the introduction of the progressive income tax...

... each year, modern states claim half the economic proceeds of their productive classes and pass them on to tax collectors, and yet these productive classes do not attempt to remedy their situation with the most obvious reaction: an antitax civil rebellion.”

# Overview

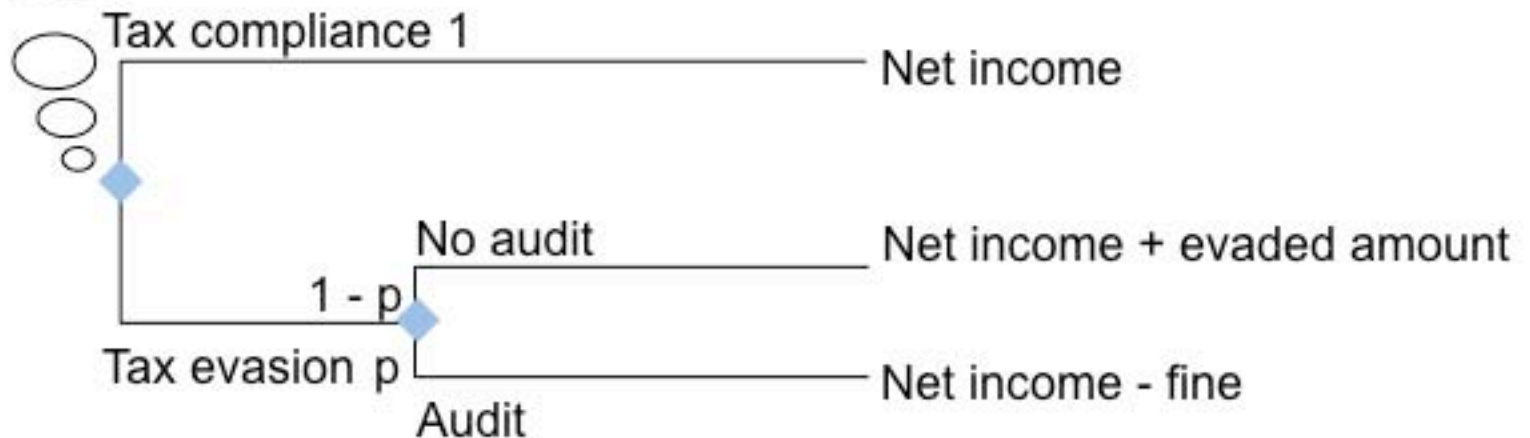
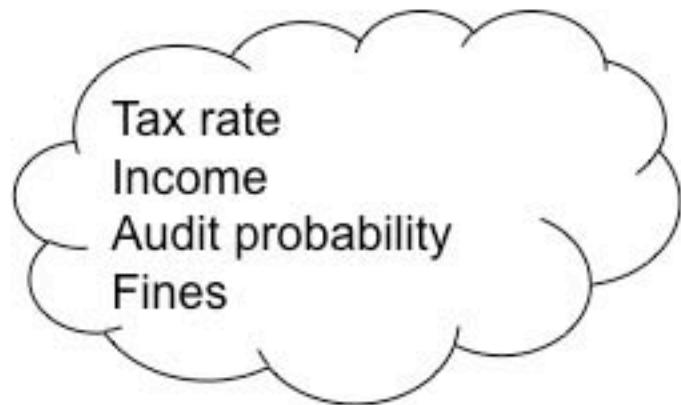
- Shift of perspectives in tax behaviour research: from authoritarian enforcement perspective to cooperation and trust
  - Decisions under risk
  - Social dilemma
  - Differential perspectives
  - Psychological contract
  - Interaction climate
- Slippery Slope Framework (power x trust dynamics)
- Concluding remarks

# Research perspectives

- Focus on the utility maximizing individual: paying taxes as decision under risk (Allingham & Sandmo, 1972; Srinivasan, 1973) → Fines, audits
- Focus on the social group: paying taxes as a social contribution dilemma (e.g., Dawes, 1980) → Moral, social norms, distributive fairness
- Focus on differences between taxpayers (segmentation criteria; Braithwaite, 2003; 2009) → Occupation, age, motivational postures
- Focus on the relationship between taxpayers and tax authority: Tax compliance as the result of a psychological contract (Feld & Frey, 2007; 2010) → Intrinsic motivation, interaction style
- Focus on the interaction climate: The climate in the nation state and interaction style of stakeholders shapes tax compliance (Kirchler, 2007; Kirchler, Hoelzl, & Wahl, 2008) → Antagonistic vs synergistic tax climate; power and trust

# Decision under risk

- Allingham & Sandmo (1972), Srinivasan (1973)
- Becker, G. S. (1968). Crime and punishment: An economic approach. *Journal of Political Economy*, 76, 169-217.



## Decision under risk

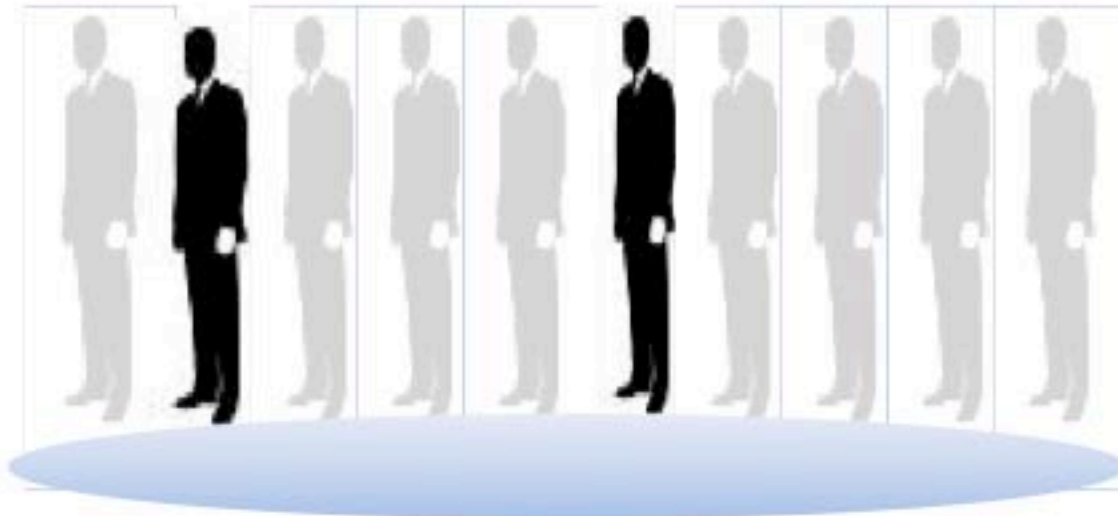
Average compliance rate by fine rate and audit probability  
(standard deviations in parentheses; Alm et al., 1995, p. 11)

Audit probability	Fine rate		
	1	2	4
0.05		<b>9.0 ( 4.0)</b>	6.9 ( 3.2)
0.30		10.9 ( 6.0)	<b>21.4 ( 4.4)</b>
0.60		9.8 ( 8.0)	54.8 (10.6)
<b>70.3 ( 7.5)</b>			

# Metaanalyses

Andreoni, J., Erard, B., & Feinstein, J. S. (1998). Tax compliance. *Journal of Economic Literature*, 36(2), 818-860.

Kirchler, E., Muehlbacher, S., Kastlunger, B. & Wahl, I. (2010). Why pay taxes? A review of tax compliance decisions. In J. Alm, J. Martinez-Vazques & B. Torgler (eds.). *Developing Alternative Frameworks for Explaining Tax Compliance* (pp. 15-31). London: Routledge.



Most people are honest !



# Why pay taxes? A review of tax compliance decisions

## Erich Kirchler, Stephan Muehlbacher, Barbara Kastlunger, Ingrid Wahl (2010)

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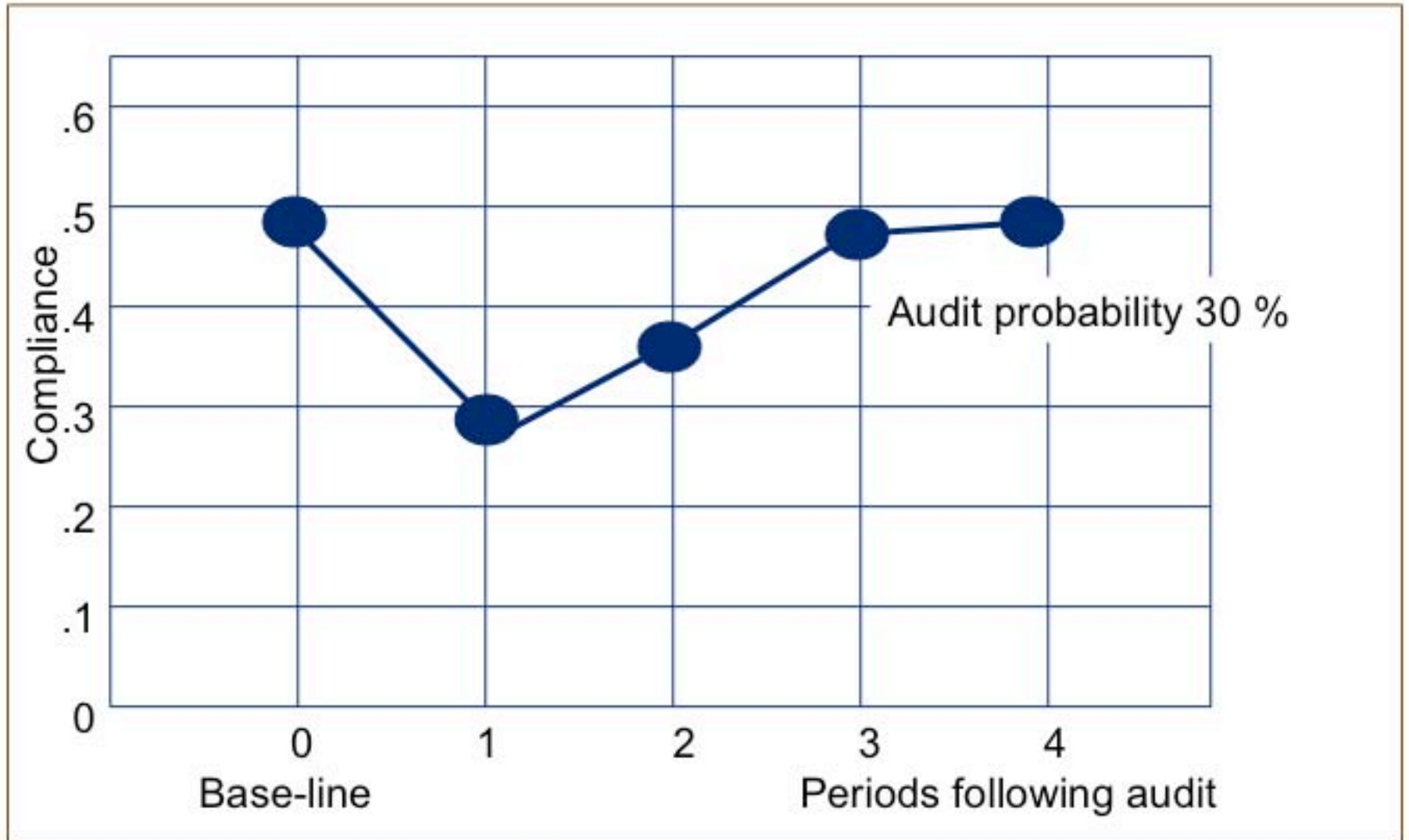
Publication	Method	Effect on tax compliance of ...			
		Level of Income	Tax rate	Audit probability	Fines
Ali, Cecil, & Knoblett (2001)	Aggregate data	-	-	+	0/+**
Alm, Jackson, & McKee (1992)	Experiment	+	-	+	+
Alm, McClelland, & Schulze (1992)	Experiment			+	
Alm, Sanchez, & de Juan (1995)	Experiment		+	+	+**
Anderhub, Giese, Güth, Hoffmann, & Otto (2001)	Experiment	-			
Baldry (1987)	Experiment	-	0		
Christian (1994)	Aggregate data	+			
Clotfelter (1983)	Aggregate data	+	-	+	
Collins & Plumlee (1991)	Experiment		-		0
Dubin, Graetz and Wilde (1990)	Aggregate data	+	-	+	
Feinstein (1991)	Aggregate data	0	+		
Fishlow & Friedman (1994)	Aggregate data	+			
Friedland (1982)	Experiment			+	+
Friedland, Maital, & Rutenberg (1978)	Experiment		-		~**
Gërxhani & Schram (2006)	Experiment Dutch sample Albanian sample			+	
Lang, Nöhrbaß, & Stahl (1997)	Survey*	-	-		
Mason & Calvin (1978)	Survey*	+		+	
Moser, Evans III, & Kim (1995)	Experiment		0/-**		
Park & Hyun (2003)	Experiment	0	-	+	+
Pommerehne & Weck-Hannemann (1996)	Aggregate data	-	-	+	0
Porcano (1988)	Survey*	0	0		
Schwartz & Orleans (1967)	Experiment				0**
Slemrod (1985)	Aggregate data	-	-		
Slemrod, Blumenthal, & Christian (2001)	Experiment			+**	
Spicer & Lundstedt (1976)	Survey*	0		0	0
Spicer & Thomas (1982)	Experiment			+**	
Trivedi, Shehata, & Lynn (2003), Trivedi, Shehata, & Mestelman (2004)	Experiment			+	
Vogel (1974)	Survey*	-			
Wärneryd & Walerud (1982)	Survey*	0		0	
Webley, Robben, Eiffers, & Hessing (1991)	Experiment			+	0
Weck-Hannemann & Pommerehne (1989)	Aggregate data	-	-	+	

Andreoni et al. (1998, p. 844)

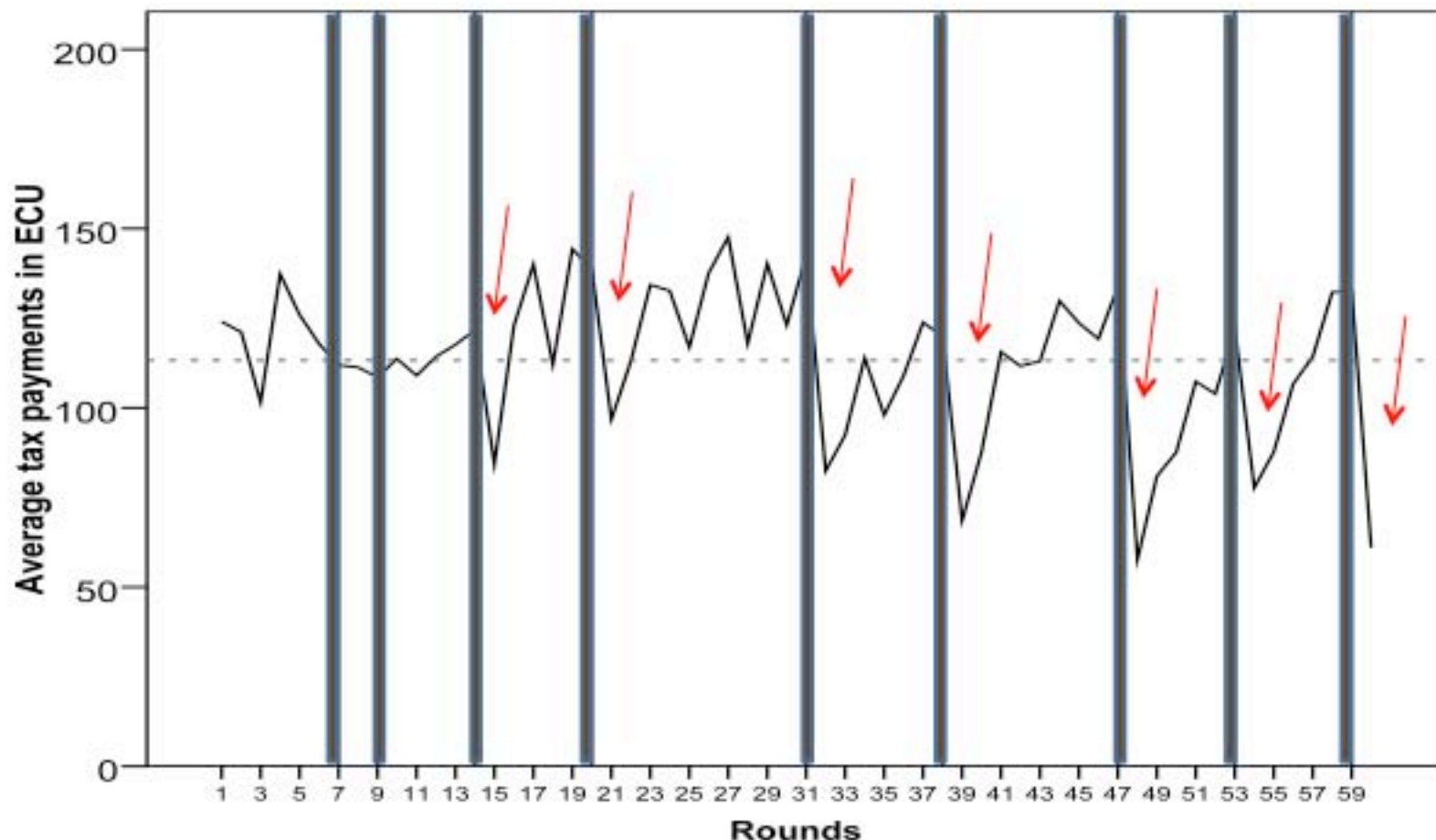
“One possible explanation is that audits may not turn out as badly as taxpayers initially fear. For example, if an audit fails to uncover non-compliance that is present or if a substantial penalty is not applied to discovered non-compliance, a taxpayer may conclude that it pays to cheat. Alternatively, perhaps taxpayers do find audits to be a negative experience, but the impact of this experience is to make them want to evade more in the future in an attempt to ‘get back’ at the tax agency...”

# Tax compliance

(Kirchler, Maciejovsky & Schwarzenberger, 2005)

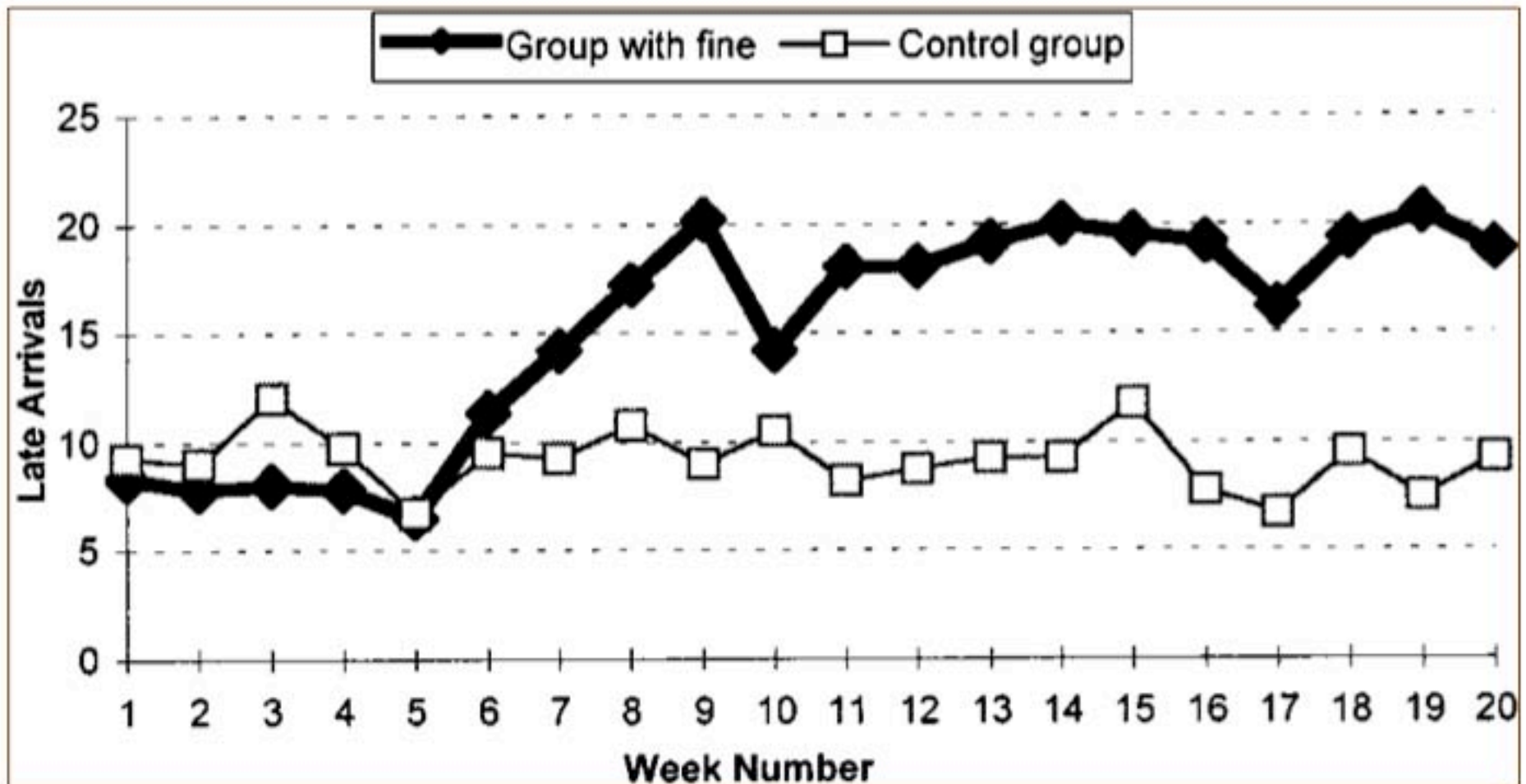


# Average tax payments over 60 filing periods (Kastlunger et al., 2009)



Note. The curve gives the average tax payments of the sample; the horizontal line gives the overall mean for the condition; the vertical lines mark the audits.

# A fine is a price !



Gneezy, U. & Rustichini, A. (2000). A fine is a price. *Journal of Legal Studies* 29(1) 1-18.  
Experimental group: Managements of 6 day care centers introduce a fine for late pick up of children; Control group: 4 day carecenters do not introduce a fine

## Correlations between tax evasion and measures of psychological instigations and constraints (Elffers et al., 1987)

Psychological variables	2-year self-report	Behavioural outcome measures	
		Documented status	Documented amount of tax evaded
Dissatisfaction			
Dissatisfaction with tax authorities	0	+	+
Comprehensibility of rules			
Personality	0	+	+
Competitiveness			
Alienation			
Tolerance of deviance			
Fear of punishment	-	0	0
Social control	+	0	0
Personal control (attitudes)	-	0	0

# Decision under risk

View of humankind:

Rational (egoistic) utility maximizers;

no differences: all pursue the same goals, all respond to tax office measures (audits, fines) similarly

Education strategies: audits and fines



# Decision under risk

View of system:  
Authorities

Authorities perceive taxpayers  
as egoistic utility maximizers  
and treat them accordingly

Taxpayers

Government  
Tax authority

Taxpayers





## Social dilemma

Hessing and Elffers (1993) treat tax evasion as defective behaviour within a social dilemma.

The social dilemma paradigm made tax of interest to economic and social psychologists.

# Social dilemma

The tax system represents a **social dilemma** with **individual interests being in conflict with collective**

**interests**: two or more people are interdependent for obtaining outcomes; if few people try to maximize their own outcomes, defecting is the rational choice. However, if a large number or all people maximize their outcome the effect is that sooner or later all get less than if they had chosen to cooperate.

From a mathematical and economic perspective, the **optimal strategy** for rational individuals is **not to cooperate**. The neoclassical economic approach to tax behaviour departs from the assumption that individuals and groups are rational agents trying to maximize their outcome by avoiding taxes.

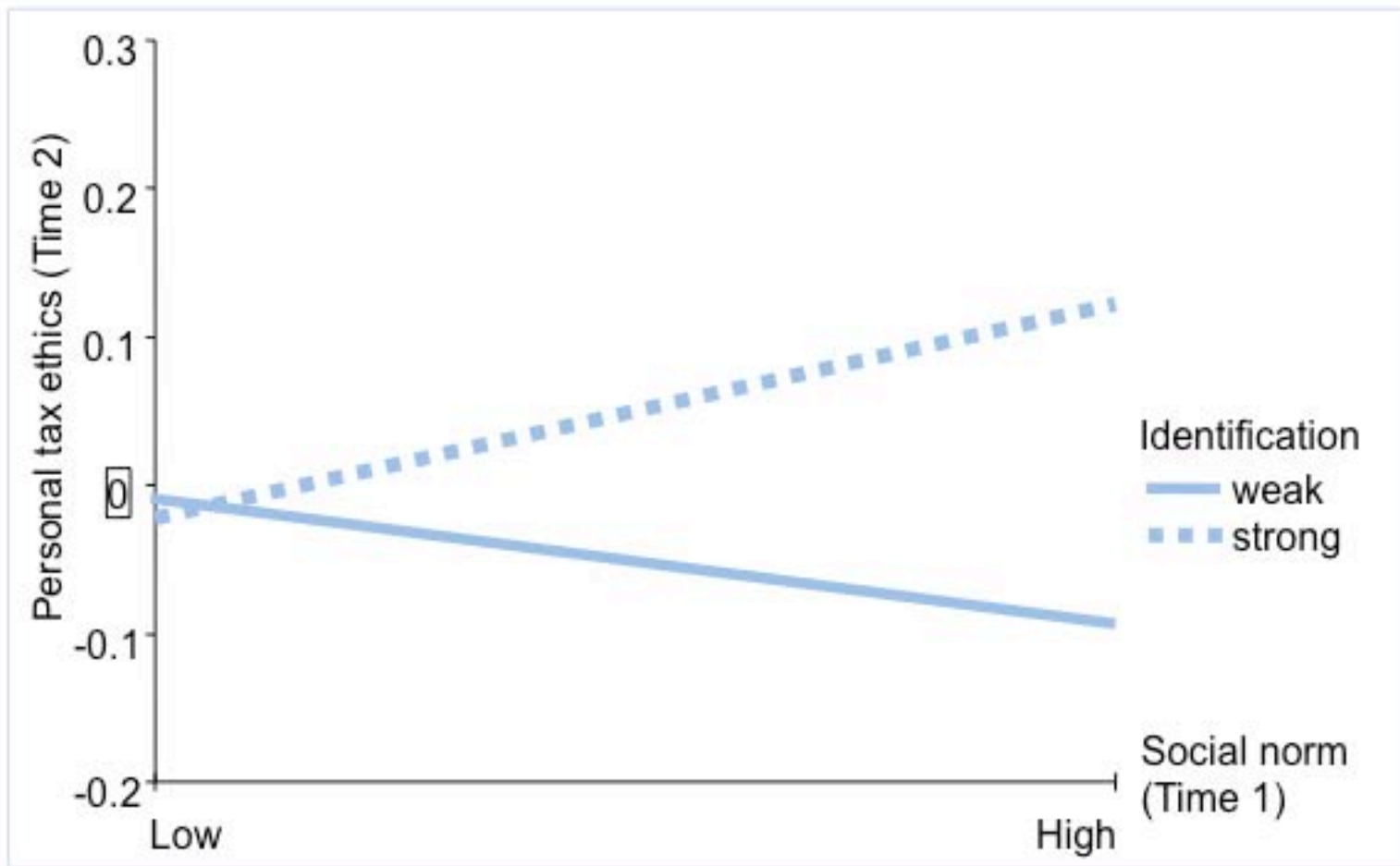
*Problem: Generalizability of findings is limited due to the fact that social dilemma research regards contributions of members of a group rather than contributions to an authority and exchange.*

## Social dilemma

Bo Rothstein (2000)

Two conditions need to be fulfilled: taxpayers need to trust that other taxpayers are paying their share, and rather than filling the pockets of tax bureaucrats tax authorities have to ensure that the money is invested in public welfare.

# Effects of social norms on personal tax ethics at low versus high levels of identification (Wenzel, 2005)



# Social dilemma

## View of humankind:

Rational utility maximizers; also social norms affect behavior.

No individual differences: all pursue the same goals; participation (voting, voice), social norms (horizontal trust) and distributive justice (horizontal, vertical and exchange fairness)

(In the experimental setting, authorities' behavior is invariant, reliable, predictable)

Education strategies: audits and fines; fairness and social norms



# Social dilemma

View of system:  
Authorities

Taxpayers make assumptions  
about the behavior of other  
taxpayers and behave  
accordingly

Taxpayers and social  
interaction

Government  
Tax authority

Taxpayers



## Differential perspective(s) - segmentation

Taxpayers should not all be lumped together and perceived as a homogeneous group: they find themselves in various situations, have developed different personal values, prove generous when there are calls for donations for the socially disadvantaged or those effected by catastrophes, and often have a decided sense of community.

Opportunity makes the thief

Sociodemographic characteristics: age, gender, education, etc.



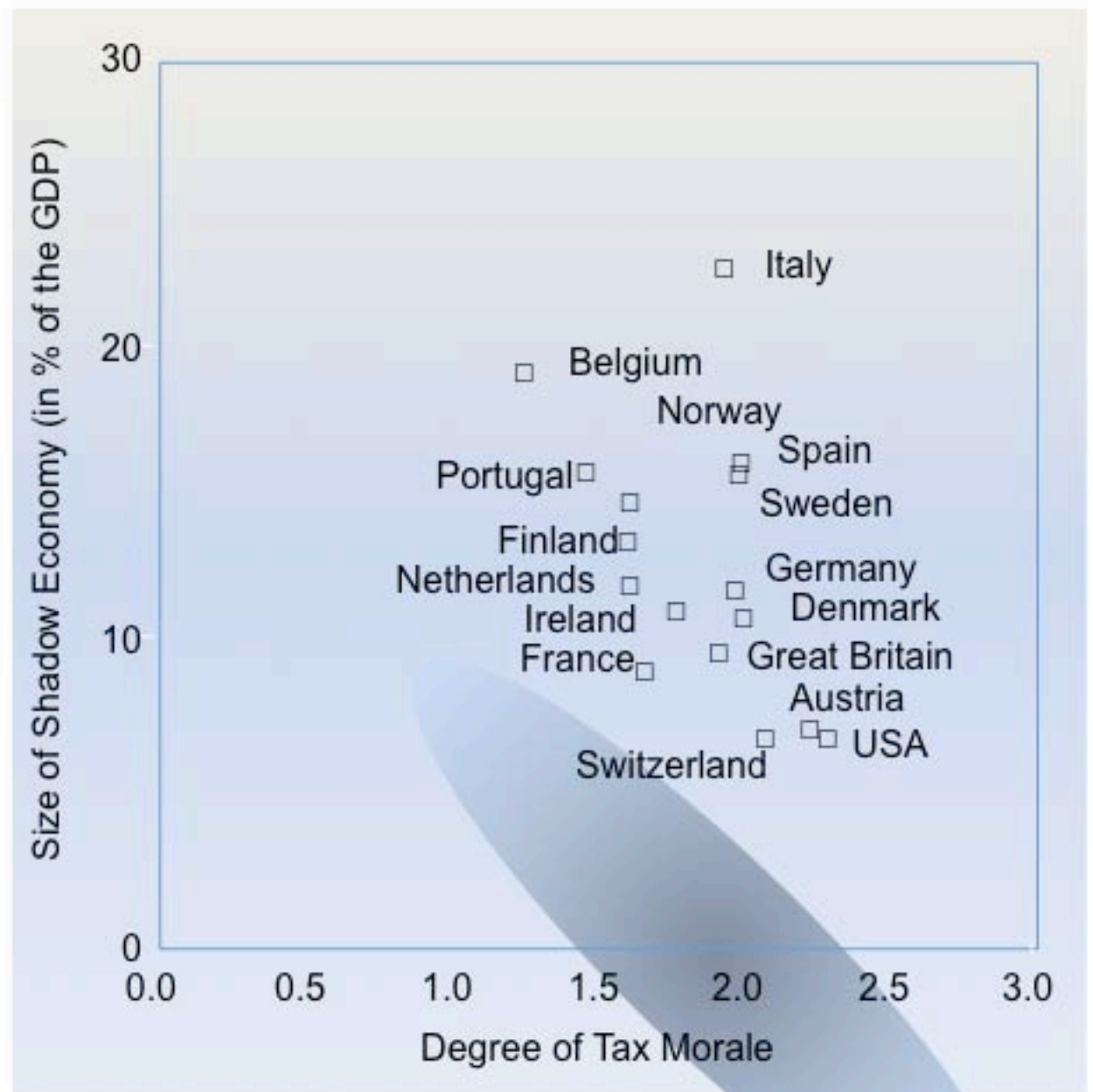
## Attitudes and tax morale

Schmölders (1960):

Tax morale is the “attitude of a group or the whole population of taxpayers regarding the question of accomplishment or neglect of their tax duties; it is anchored in citizens’ tax mentality and in their consciousness to be citizens, which is the base of their inner acceptance of tax duties and acknowledgment of the sovereignty of the state.” (p. 97f).

Attitudes drive behavior  
(Schmölders:  
tax morale)

Tax morale and  
size of shadow  
economy  
(Alm & Torgler,  
2005)



## Motivational postures (Braithwaite, 2003)

Braithwaite & Ahmed: tax morale =“internalized obligation to pay tax”.

Frey (1997) and Alm & Torgler (2005) define tax morale as “intrinsic motivation to pay one’s taxes”.

Orviska & Hudson (2002) link morale to the concept of civic duty. Civic duty proposes that people are motivated by a sense of responsibility and loyalty to the society and nation. Their behaviour is not regulated externally by audits and sanctions but by their concern for the society.

# Motivational postures and statements representing them (Braithwaite, 2003a, p. 20)

Motivational posture	Description	Statements representing motivational postures
Commitment	<p>Commitment combines a positive orientation towards tax authorities and deference. The tax system is perceived as desirable, tax law and tax collection are perceived as fair. Committed taxpayers feel a moral obligation to pay their share and to act in the interest of the collective.</p>	<p>a) Paying tax is the right thing to do.                      b) I feel a moral obligation to pay my tax.                      c) Overall, I pay my tax with good will.</p>
<h2>Deference</h2>		
Resistance	<p>Resistance reflects a negative orientation and defiance. The authority of tax officers may be doubted and their acts be perceived as controlling and dominating rather than as supportive.</p>	<p>g) If you don't cooperate with the Tax Office, they will get tough with you.                      h) It's important not to let the Tax Office push you around.                      i) It's impossible to satisfy the Tax Office completely.</p>
Disengagement	<p>Also, disengagement reflects a negative orientation and correlates with resistance. Individuals and groups keep socially distant and blocked from view and have moved beyond seeing any point in challenging tax authorities.</p>	<p>j) If I find out that I am not doing what the Tax Office wants, I'm not going to lose any sleep over it.                      k) I don't care if I am not doing the right thing by the Tax Office.                      l) If the Tax Office get thought with me, I will become <i>unpredictable</i>.</p>
<h2>Defiance</h2>		

# Australian Taxation Office Compliance Model and Motivational Postures (adapted from Braithwaite, 2003b, p. 3, James et al., 2003)

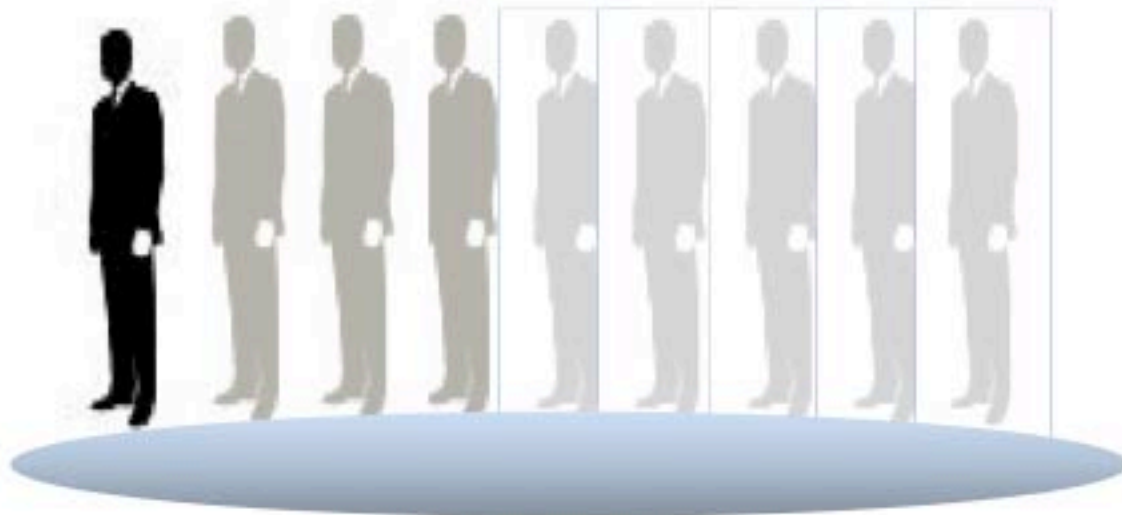


# Differential perspective(s) - segmentation

View of humankind:

Social beings with different motivational postures

Education strategies: responsive regulation



# Differential perspective(s) - segmentation

View of system:  
Authorities

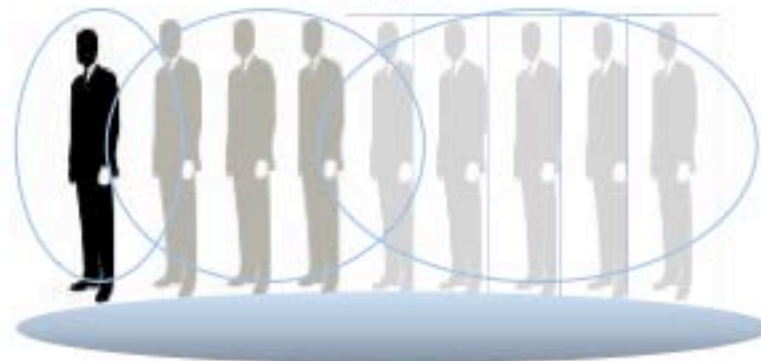
Segmentation and  
responsive regulation

Individuals  
characterized by  
motivational postures

Government  
Tax authority



Taxpayers



## Psychological contract

Taxpayers not necessarily unwilling to contribute to the commons; most have an intrinsic motivation to cooperate.

However, they react to aversive stimuli such as controls and sanctions, and they also react to fairness and the violation of rules of fairness on the part of the authorities. Both negative sanctions and also positive rewards can affect **intrinsic motivation**.

[MOTIVATION The surprising truth about what motivates us \[www.keepvid.com\].mp4](#)

4.45 min



# Psychological contract

## View of humankind:

Social beings, intrinsically motivated to cooperate; fairness and reciprocity

Education strategies: „psychological contract“



# Psychological contract

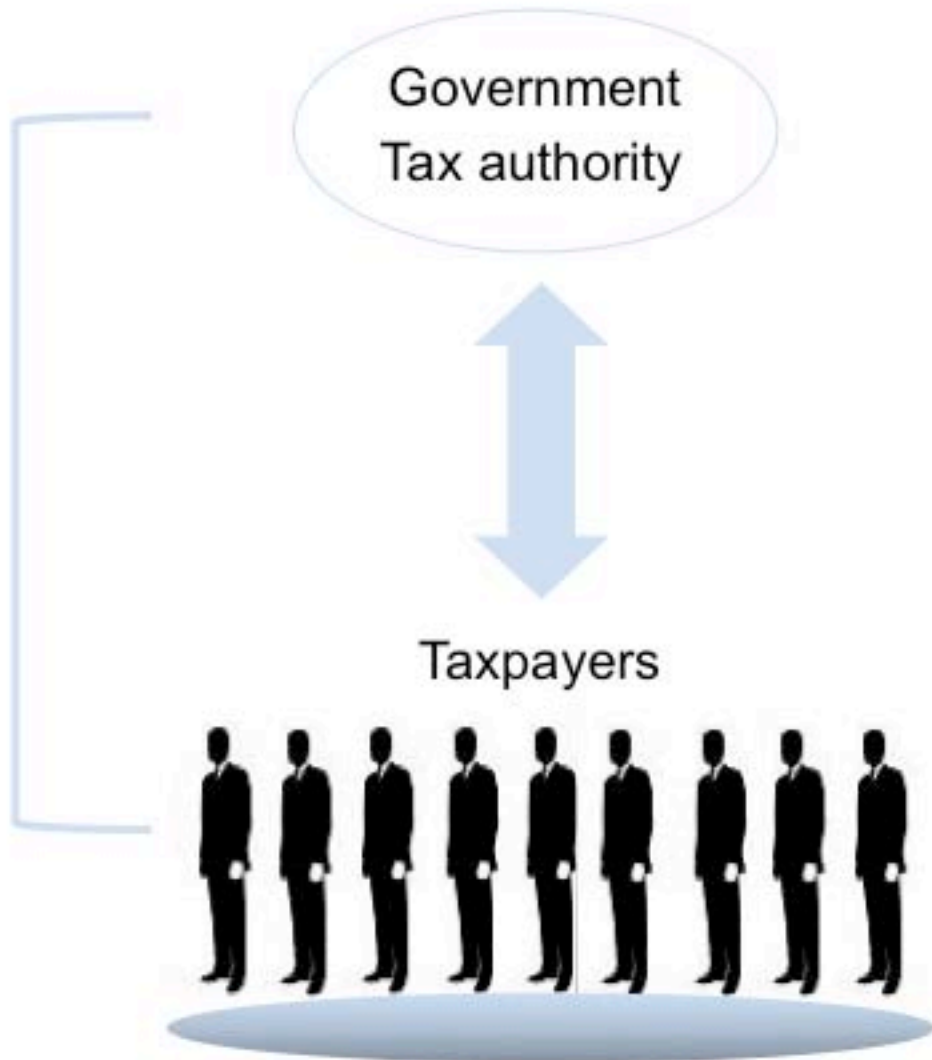
View of system:  
Authorities

Taxpayers are intrinsically  
motivated to cooperate if  
„psychological contract“ is  
respected by authorities

Taxpayers and social  
interaction with  
authorities

Government  
Tax authority

Taxpayers



## Interaction climate

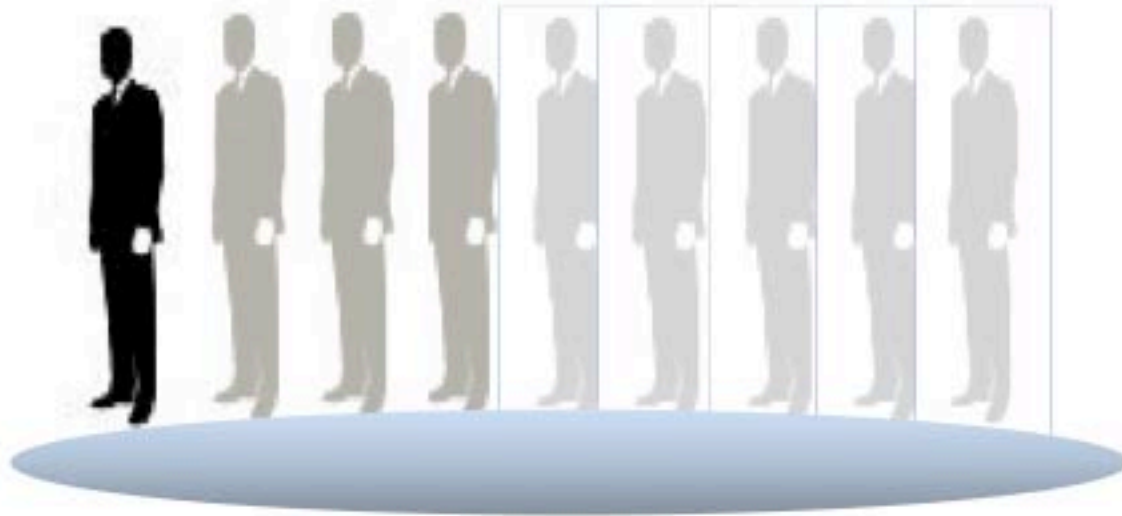
“Slippery slope framework” considers the relationship between authorities and citizens, and the climate of interaction: antagonistic vs synergistic.

# Interaction climate

View of humankind:

Social beings interacting in a social system

Strategies: positive interaction climate (trust, power)

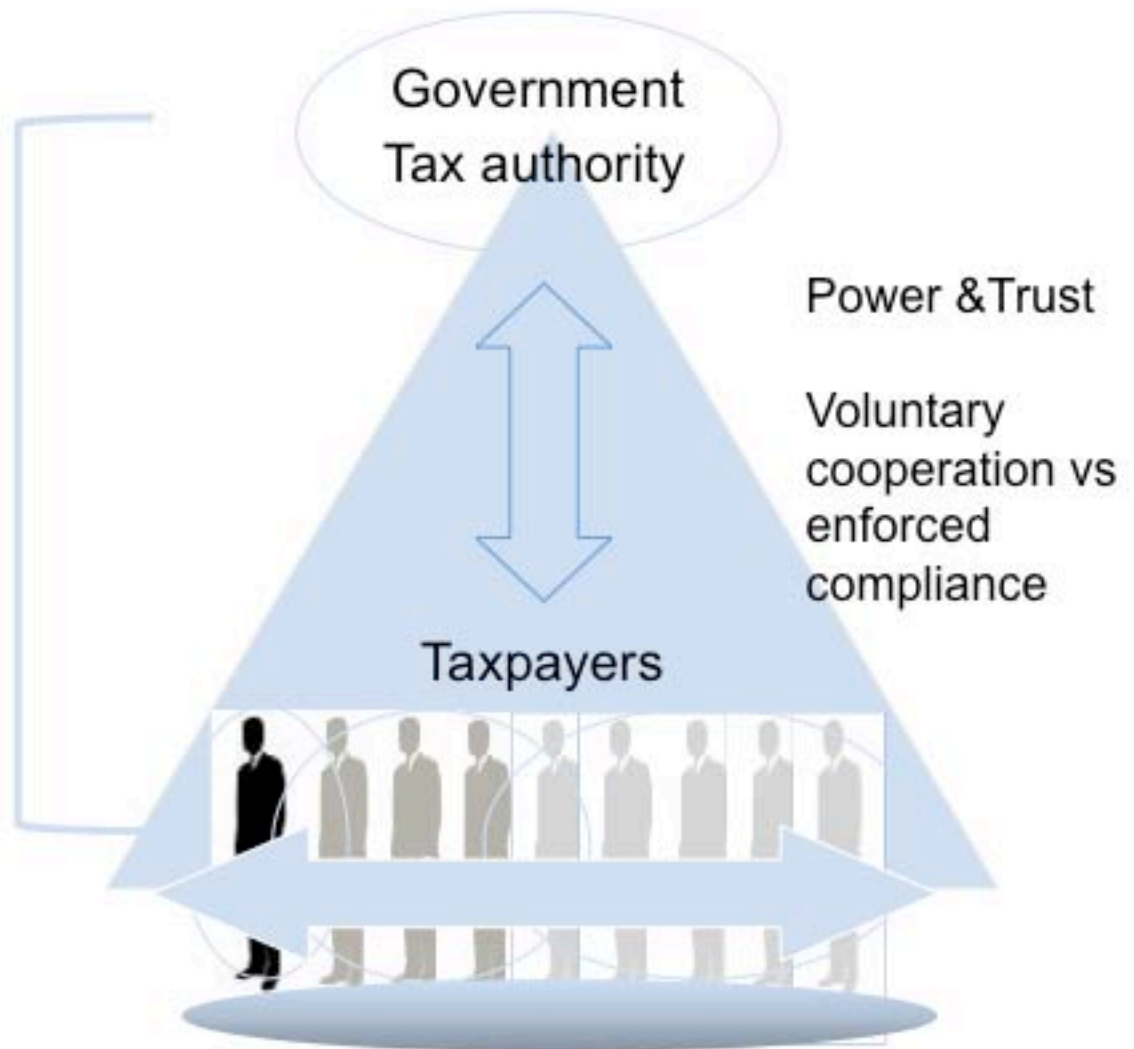


# Interaction climate

View of system:  
Authorities

Interaction climate;  
segmentation and  
responsive regulation

Individuals and groups  
interacting in social  
system



# Slippery Slope Framework

## Tax climate

### Antagonistic:

- „Cops and robbers“
- High social distance
- No respect
- Negative emotions
- Cost-benefit calculation
- Enforced compliance

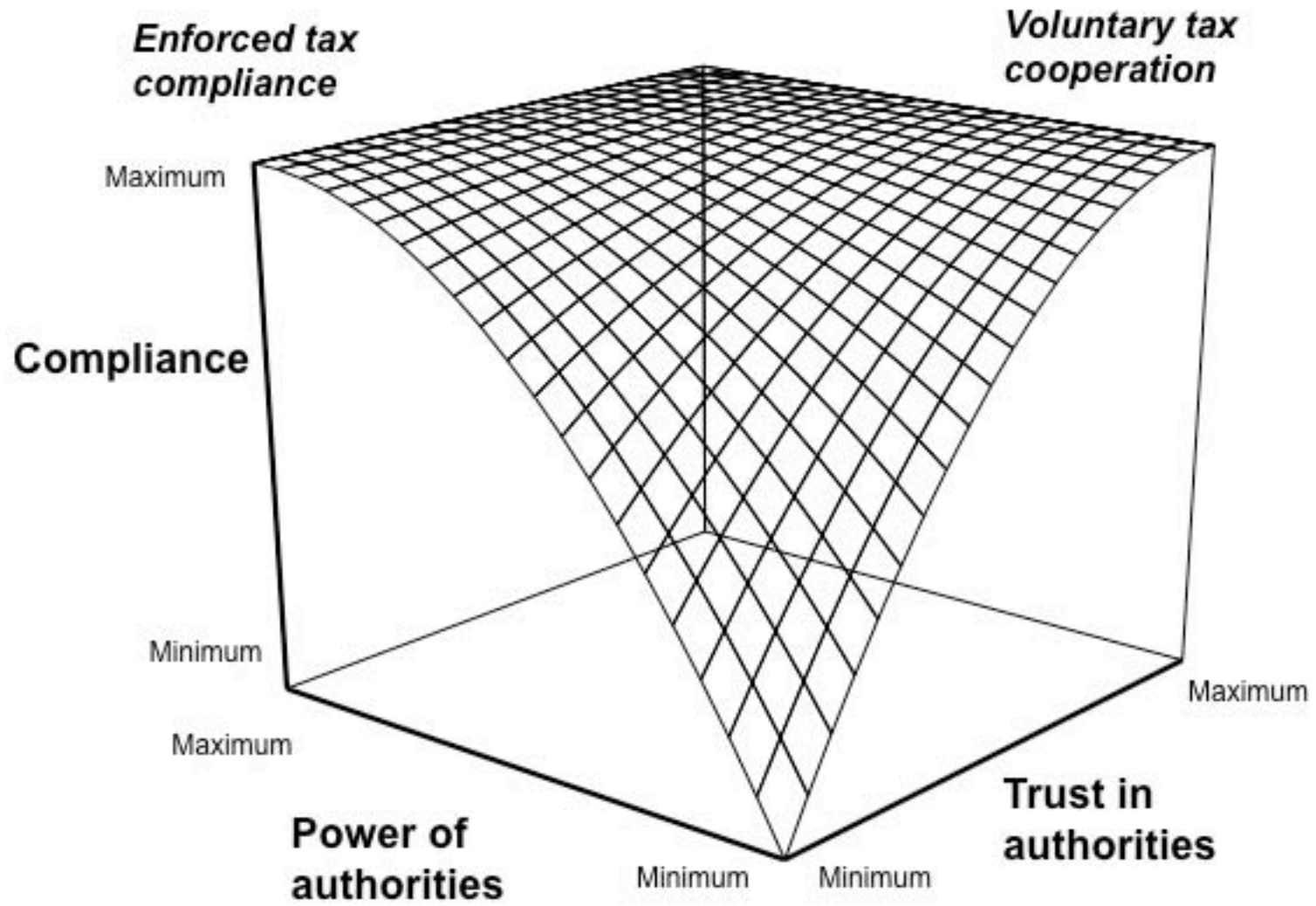
### Synergistic:

- „Service & client“
- No social distance
- Mutual respect
- Positive emotions, trust
- Feeling of responsibility
- Voluntary cooperation

# Key elements

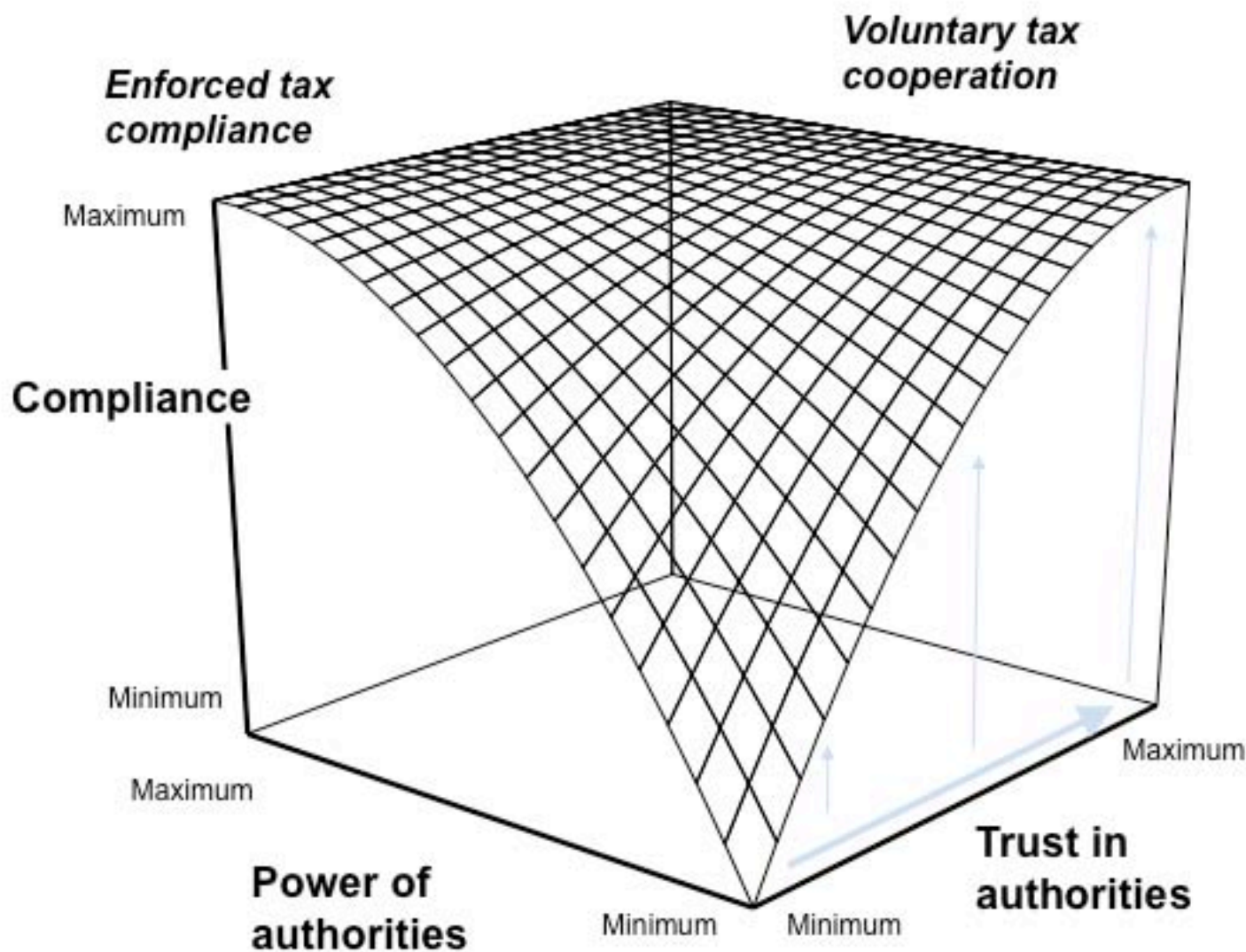
- *Power of authorities:* Perceived potential of tax authorities to detect and to punish evasion
- *Trust in authorities:* Taxpayers' perception of tax authorities as benevolent and working for the common good
- *Compliance:* Degree of cooperation by taxpayers
- Enforced compliance vs voluntary cooperation

# „Slippery slope framework“





# Voluntary tax compliance



Basis:

Subjective complexity of tax law

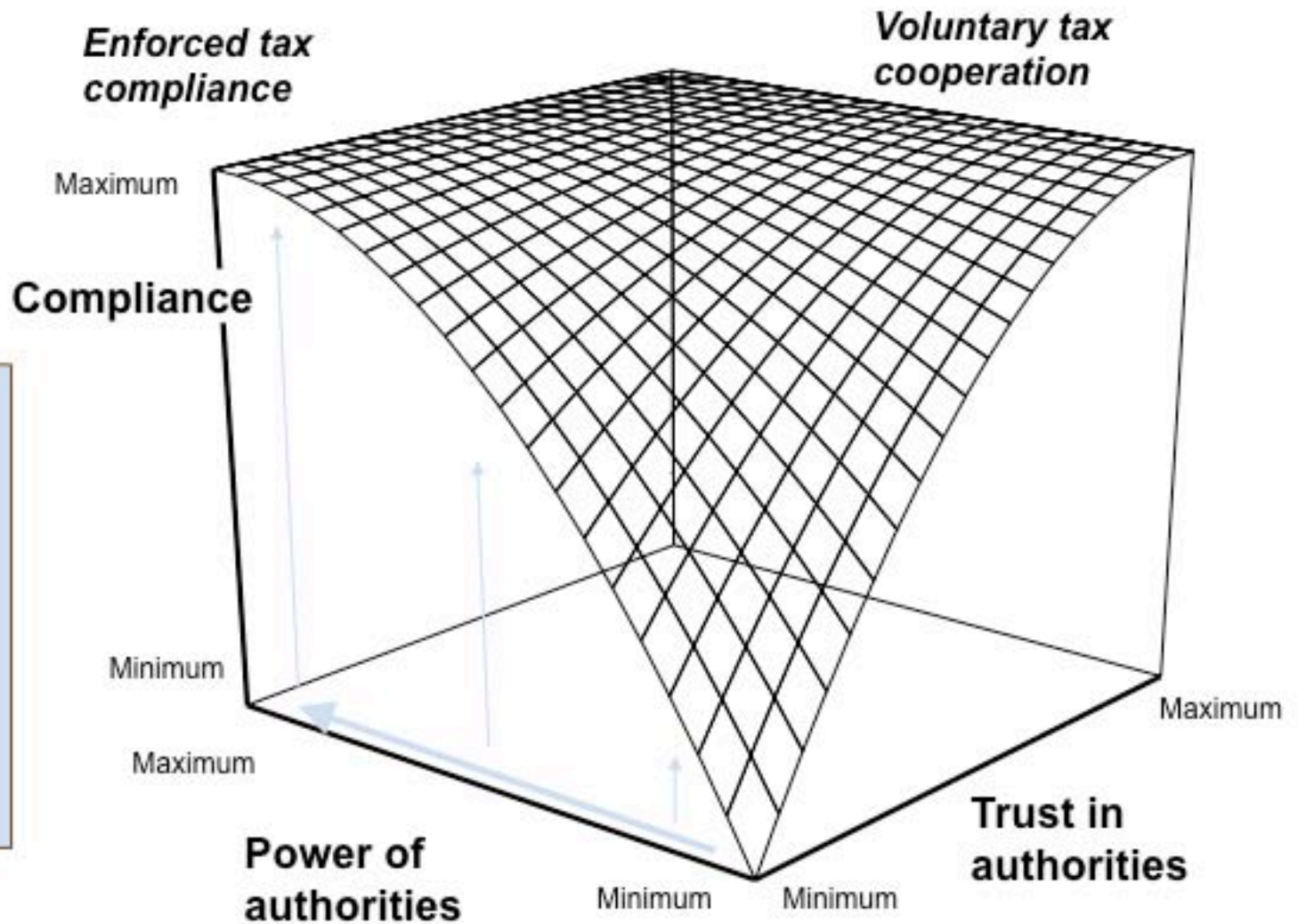
Tax morale and attitudes

Personal, social and societal norms

Fairness considerations

Motivational postures

# Enforced tax compliance



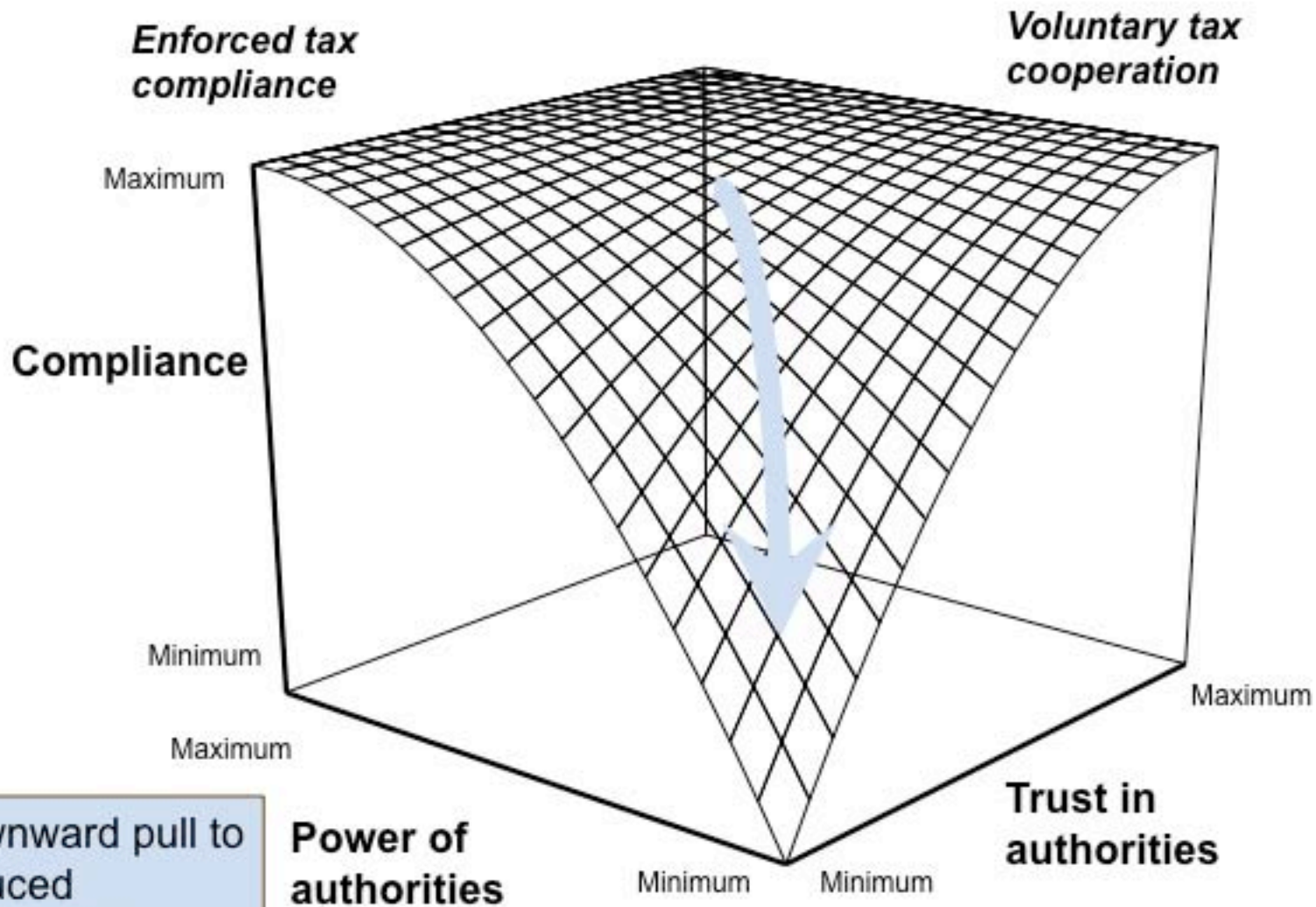
Basis:

Audits

Fines

(Sequences of audits;  
tax rate etc.)

# „Slippery slope“



Downward pull to reduced compliance

# Studies: Laboratory and online experiment

Manipulation Scenarios	
Power	Trust
<ul style="list-style-type: none"><li>• Audit probabilities</li><li>• Efficiency of audits</li><li>• Amount of fines</li><li>• Budget of tax office</li><li>• Competence of tax office</li></ul>	<ul style="list-style-type: none"><li>• Procedural fairness</li><li>• Distributive fairness</li><li>• Positive social representations</li><li>• Transparency</li><li>• Social norms</li></ul>

### Laboratory Experiment:

N = 64 females & 56 males

Design: 2 (High power vs. Low power) x 2 (High trust vs. Low trust)

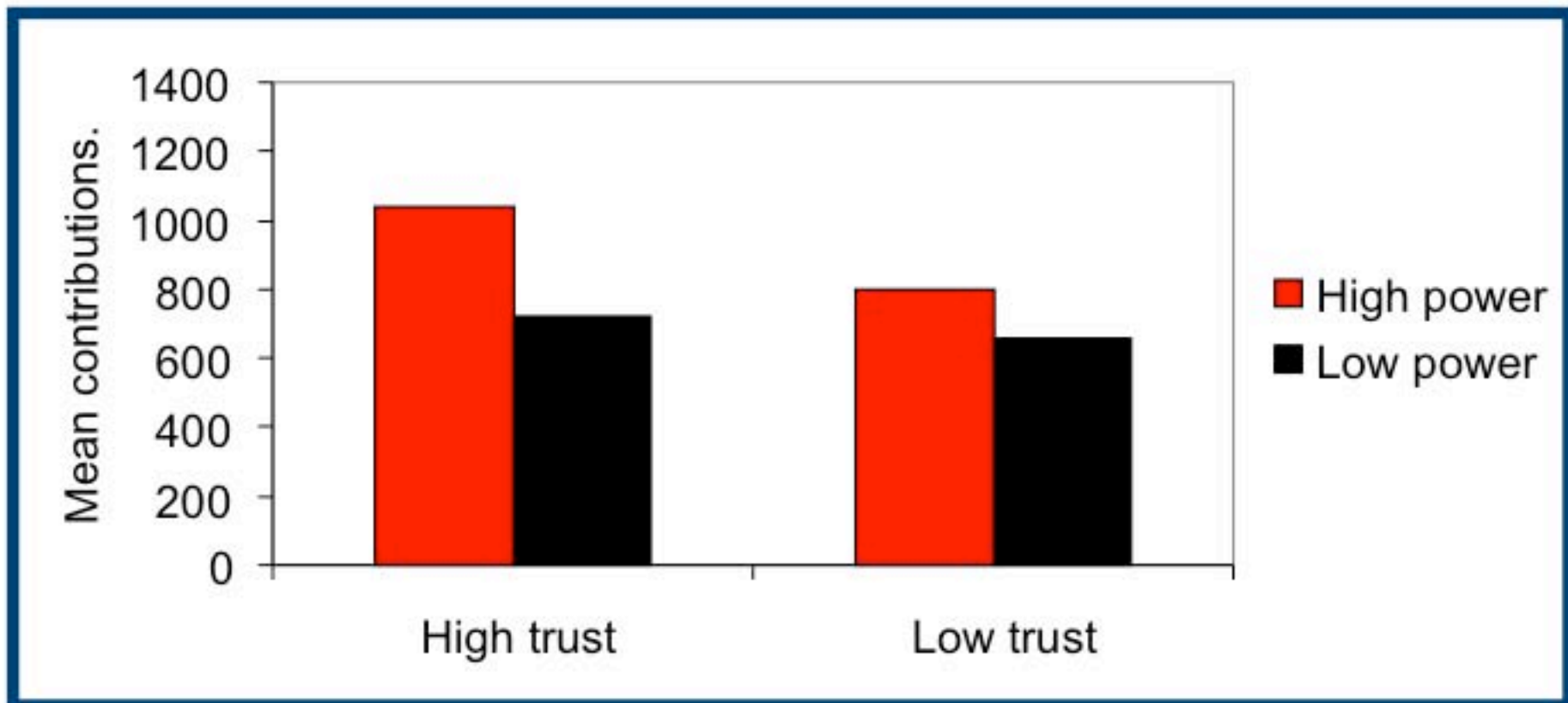
20 Periods tax simulation experiment (program: z-Tree, Fischbacher, 2007)

- Income: 3500 ECU
- Tax liability: 1400 ECU
- Audit probability: 10%
- Fine: amount evaded

Questionnaire (7-point answering scales):

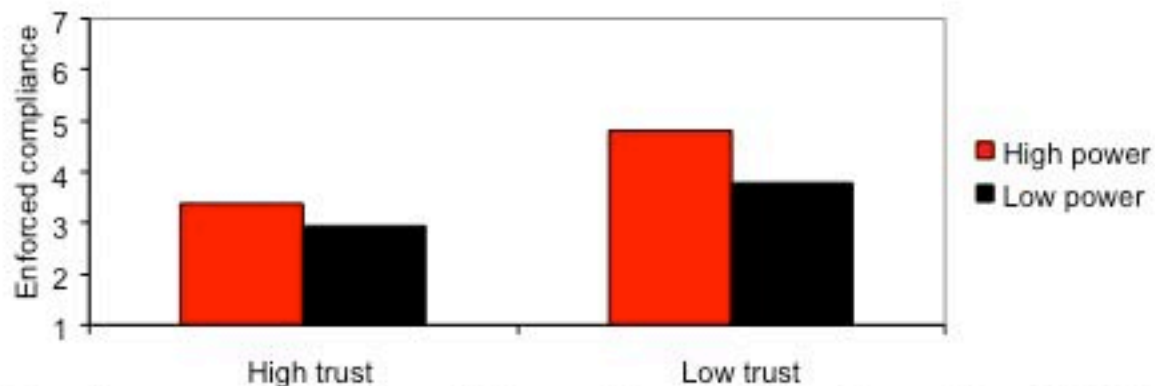
- Enforced compliance
- Voluntary cooperation

Results Study 1

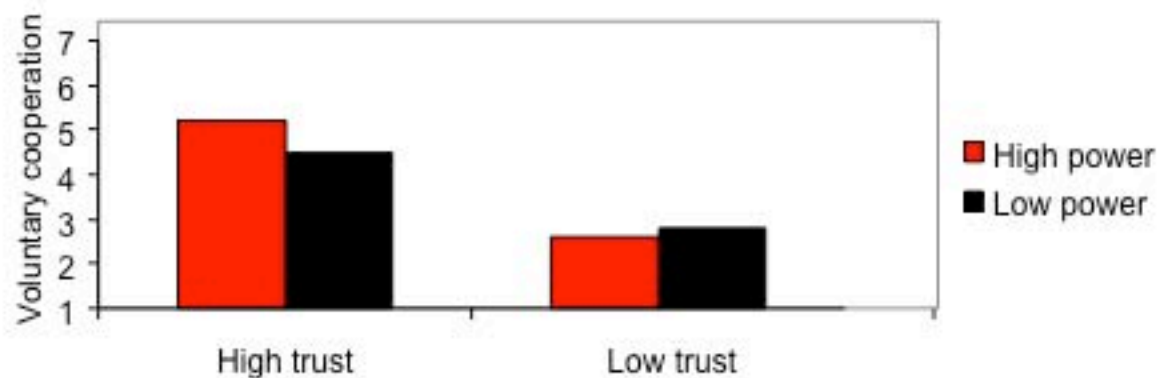


## Results Study 1

### Enforced compliance (Resistance, Braithwaite, 2003)



### Voluntary cooperation (Commitment, Braithwaite, 2003)



Covariates: sex = .54, age = 23.68, income = 1.71

### Online Experiment:

N = 41 females & 86 males; self employed taxpayers

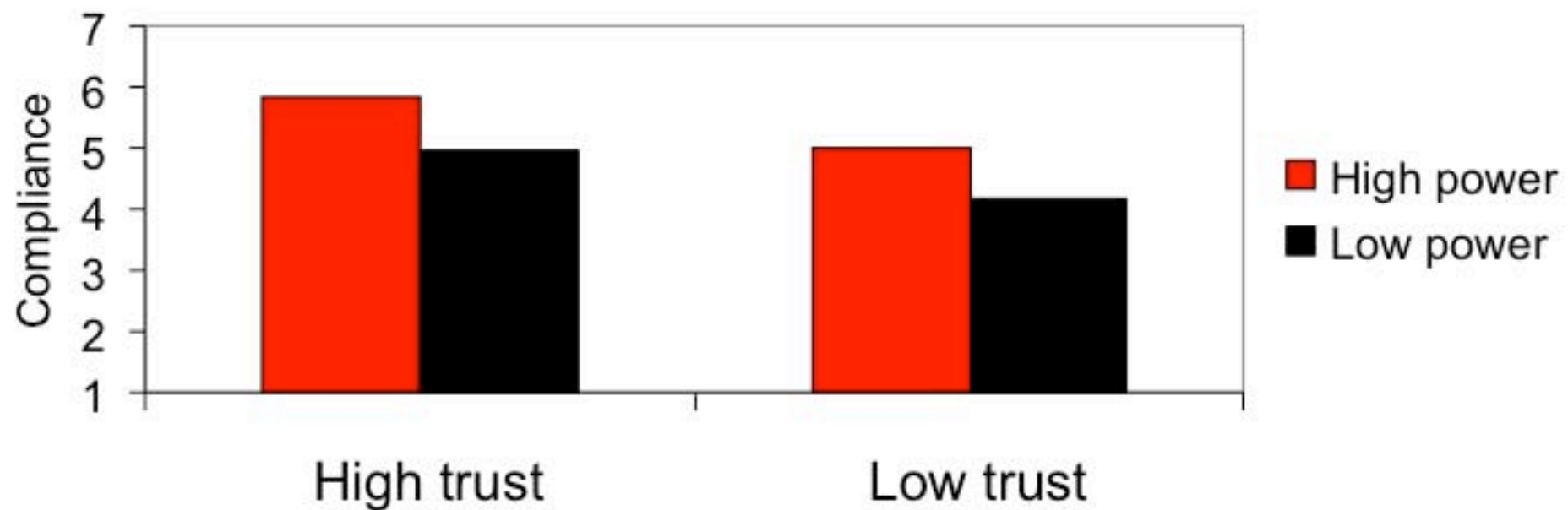
Design: 2 (High power vs. Low power) x 2 (High trust vs. Low trust)

Questionnaire (7-point answering scales):

- Compliance ( $\alpha = .84$ )
- Enforced compliance ( $\alpha = .63$ ; Resistance, Braithwaite, 2003)
- Voluntary cooperation ( $\alpha = .93$ ; Commitment, Braithwaite, 2003)
- Strategic evasion ( $\alpha = .83$ )

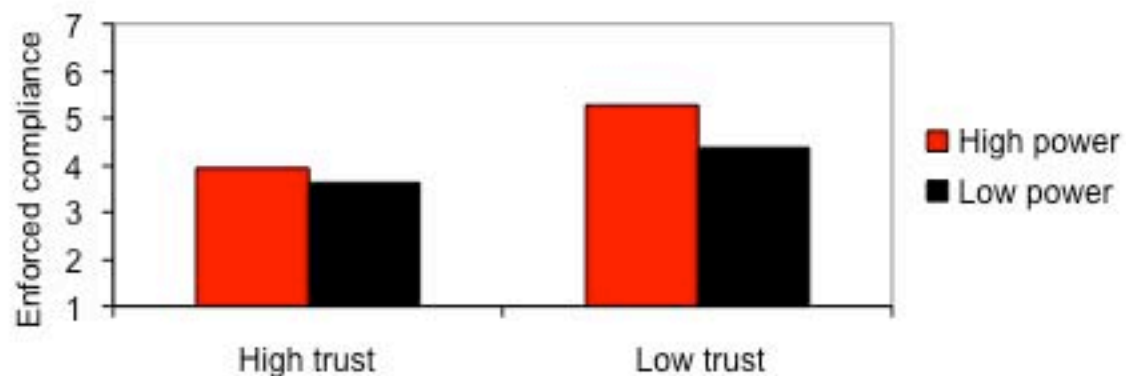


Results Study 2: Compliance

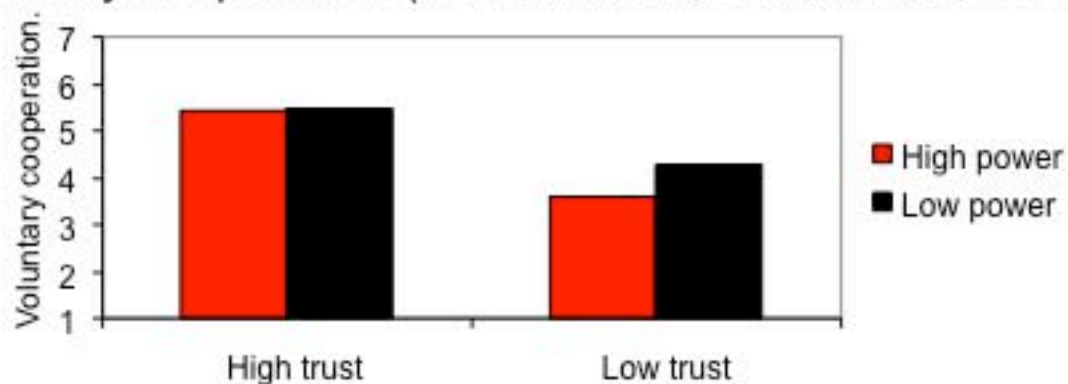


## Results Study 2:

Enforced compliance (Resistance, Braithwaite, 2003)

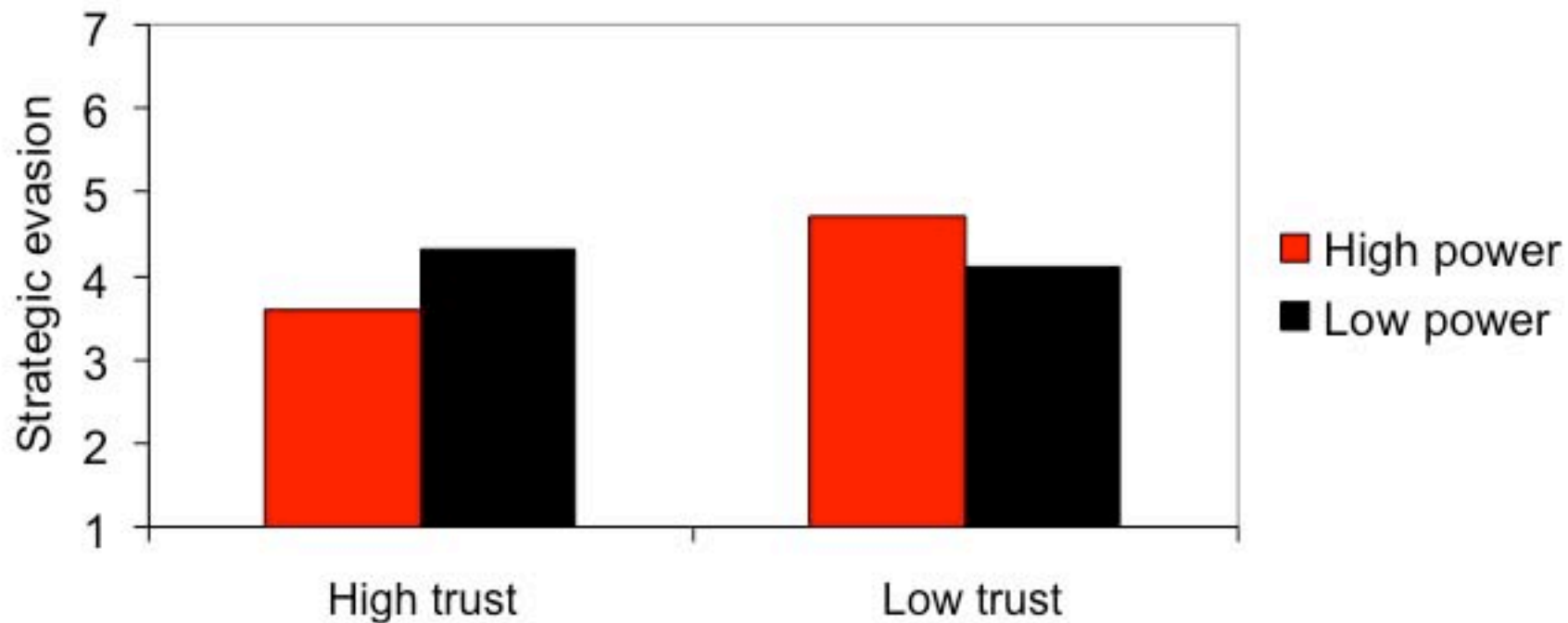


Voluntary cooperation (Commitment, Braithwaite, 2003)



Covariates: sex = 0.32, age = 38.54, income = 2.87

Results Study 2: Strategic evasion



### Survey in A

Representative sample of self employed: N = 491

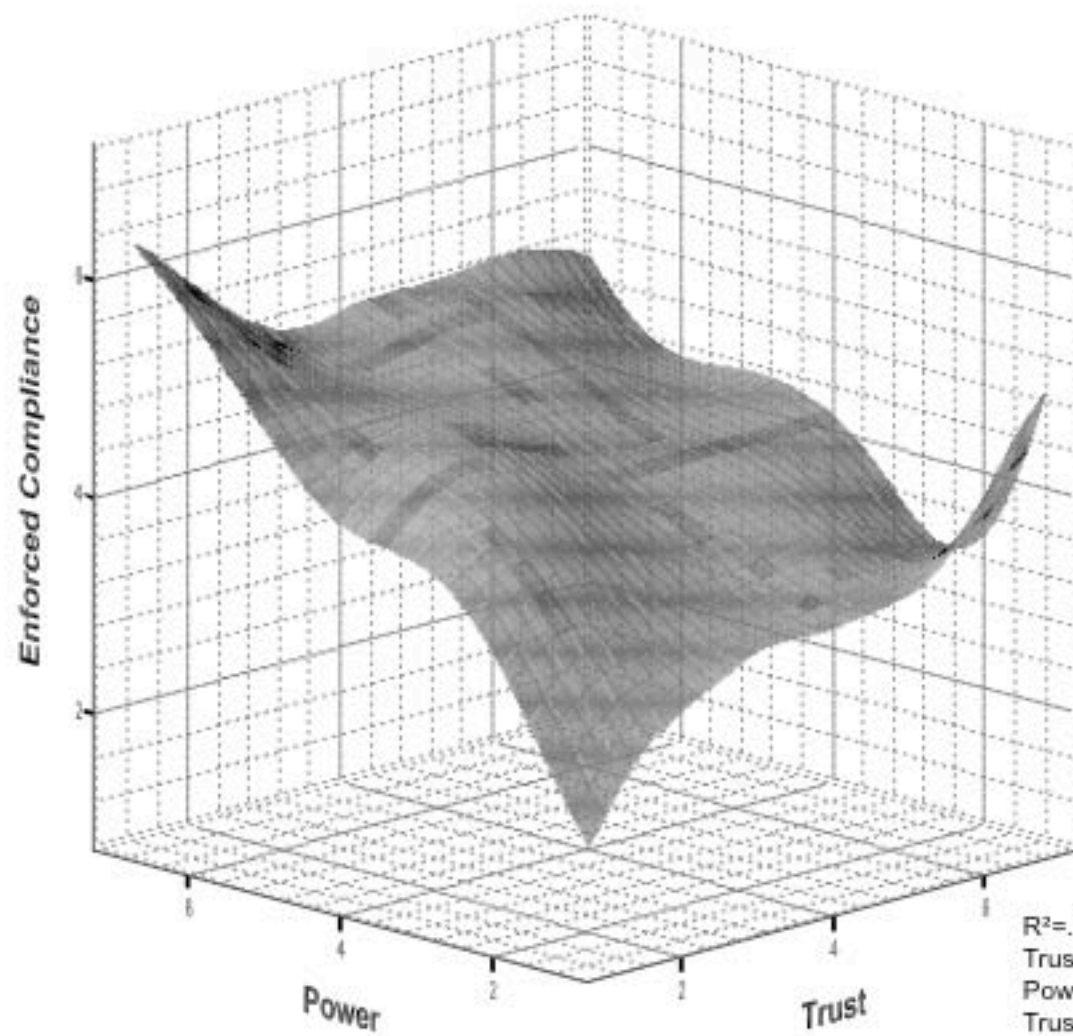
Questionnaire (7-point answering scales):

- Trust ( $\alpha = .89 - .91$ )
- Power ( $\alpha = .70 - .77$ )
- Enforced compliance ( $\alpha = .47 - .61$ )
- Voluntary cooperation ( $\alpha = .50 - .74$ )

# Enforced Compliance

## Study 3

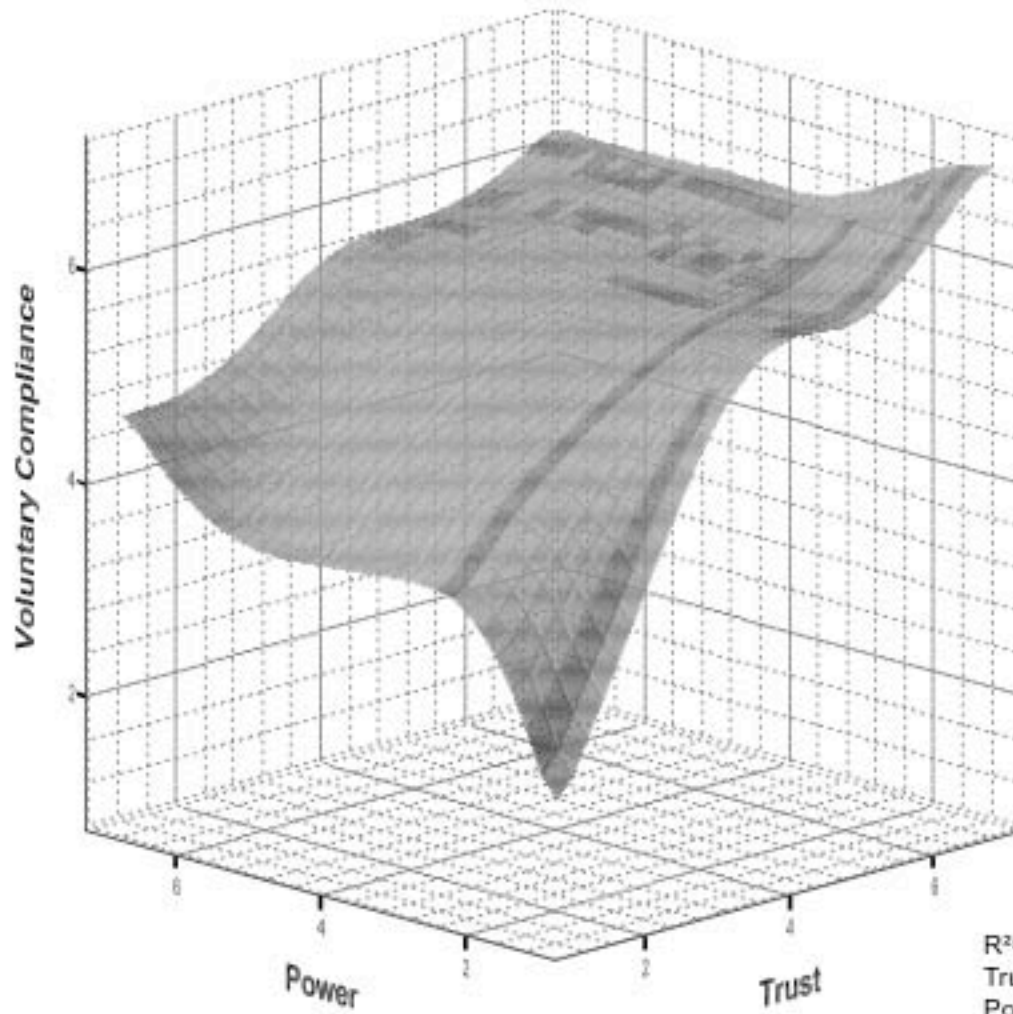
LLR-Glättung



# Voluntary cooperation

## Study 3

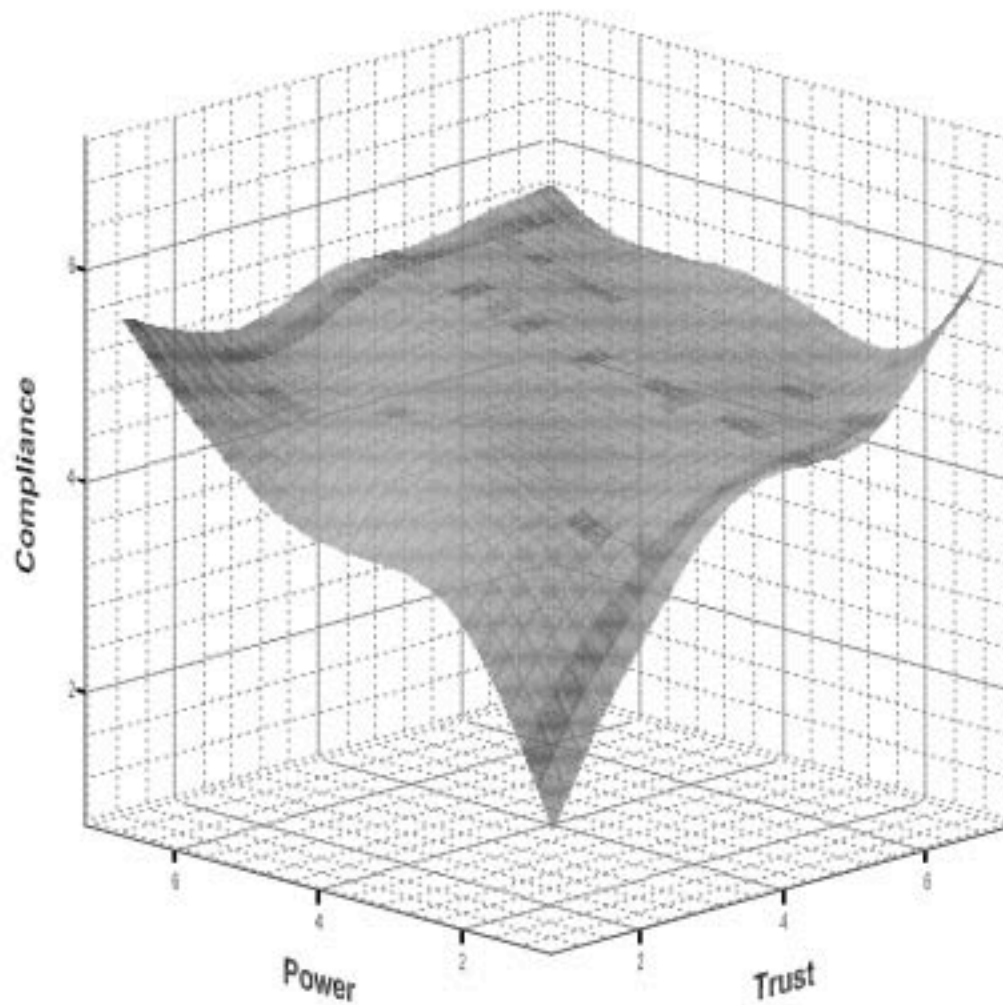
LLR-Glättung



$R^2 = .16$   
Trust  $\beta = .40$ ;  $p < .01$   
Power  $\beta = .01$ ;  $p = .89$   
Trust x power  $\beta = -.07$ ;  $p = .10$

# Compliance

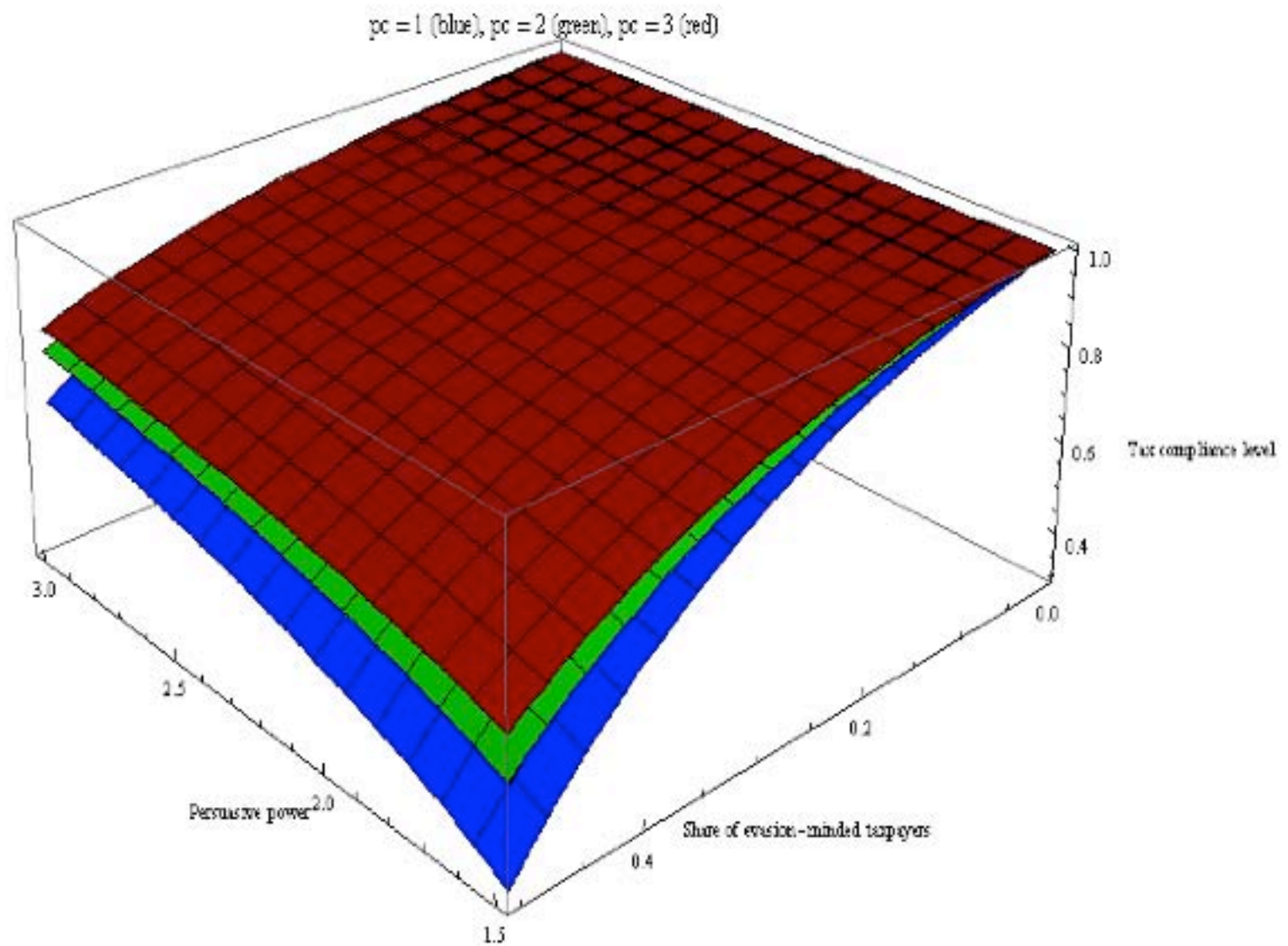
## Study 3



LLR-Glättung

$R^2 = .10$   
Trust  $\beta = .20$ ;  $p < .01$   
Power  $\beta = .21$ ;  $p < .01$   
Trust x power  $\beta = -.10$ ;  $p = .03$

The slippery slope framework: An attempt to formalization  
Aloys Prinz, University of Münster & Stephan Muehlbacher, University of Vienna





- Power & trust increase compliance
- Power fosters enforced compliance
- Trust fosters voluntary cooperation
- Strategic evasion depends on high power

**Results support the assumptions of the Slippery Slope Framework. However, power and trust are likely to affect each other; therefore there may be complex interactions and dynamics over time. The nature of the interplay is far from clear and has not been addressed in the tax context.**

## Dynamic aspects and regulation of interaction climate

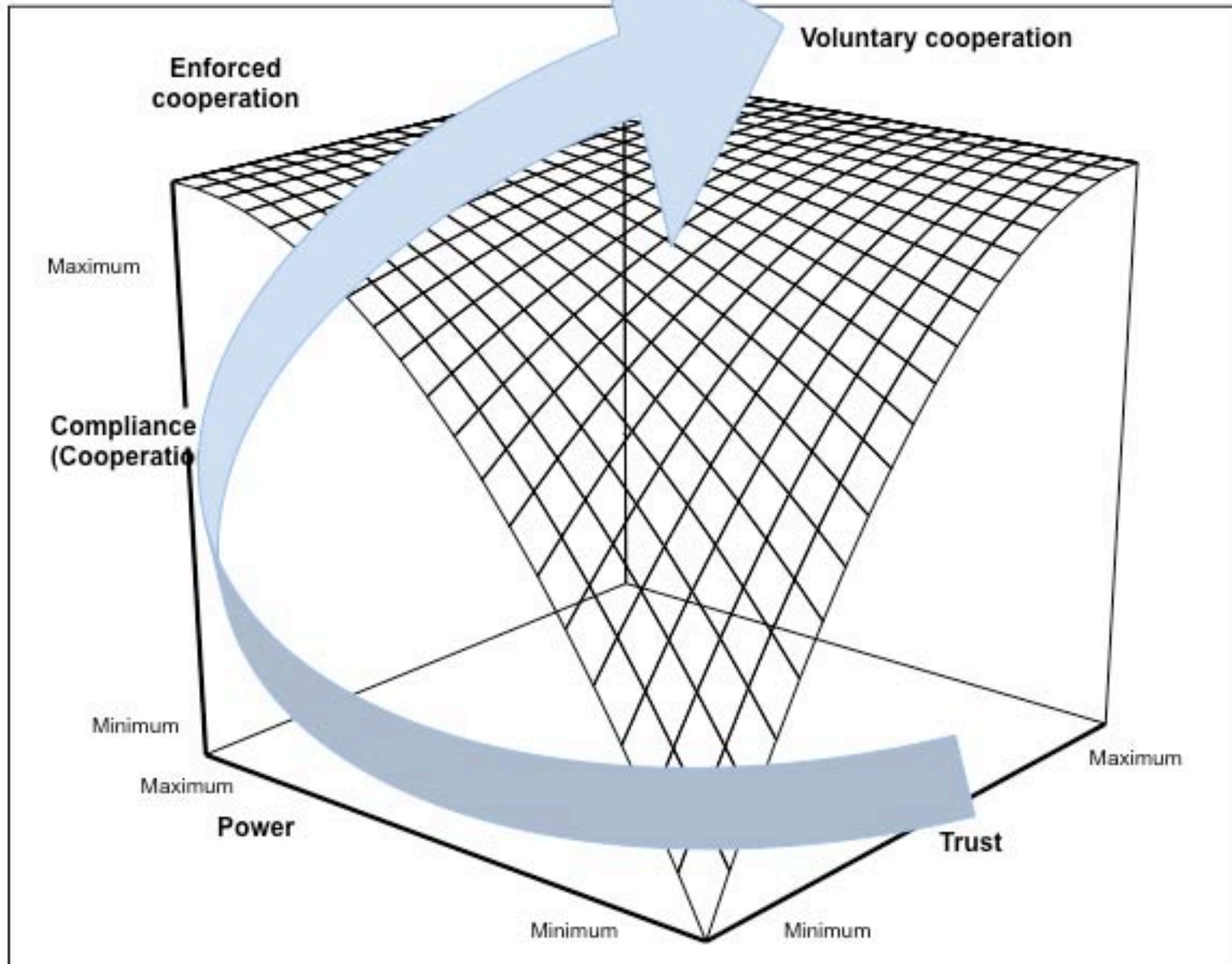
### Hypotheses and first empirical results

Power has both positive and negative effects on trust.

The exertion of power may evoke suspicion and mistrust in the group the measures are imposed on, which can lead to a vicious circle: mistrust of one party provokes mistrust of the other party, which justifies and deepens the mistrust of the first.

Power can have positive effects on trust. Bachmann (2001) for instance proposes that de-personalized forms of power (i.e., the power of a system) such as the law can be perceived as a necessary precondition for trust.

# Determinants of compliance



## Determinants of compliance

1. Tax law must be **simplified** so that taxpayers understand it.
2. Instead of a plethora of rules with exceptions, **principles** of behavior need to be fixed in law to minimize the space for interpretation and room for negotiation.
3. To protect honest taxpayers from free riders, **controls** are necessary.
4. Negative **sanctions** are necessary at an adequate level and in the proper form, depending on the ability of the tax offender to pay.

5. Tax authorities and above all tax auditors need to be efficiently **trained** so that they are experts in tax law and treat taxpayers according to their motivations and abilities in order to apply regulation strategies effectively.
6. Taxpayers need to be **segmented** according to their needs, so that appropriate services can be offered to facilitate tax honesty and tailored to meet needs at one “point of sale.”
7. The use of tax money must take place **transparently**; advertising campaigns should be used to inform the public of the services available, so that the fair exchange of tax contributions on the one hand for state services on the other is clear.

8. Tax authorities need to cooperate intensively with legislators, judges, and international authorities.
9. Establishment and communication of **social norms** of correct behavior is necessary; and measures need to be taken that strengthen the **identification** of citizens/residents with the community.
10. Focus needs to be on **justice** on the distributive, procedural, and retributive levels.

# Conclusion

The trend in tax behavior research indicates a **move from focusing on taxpayers only to the study of the social system** as a whole, of **all actors** (taxpayers, accountants, authorities, government) in the field and their **interaction dynamics**;

The trend indicates a move from understanding taxpayers as selfish individuals trying to maximize their own gain to **individuals with a sense of community** who are ready to cooperate if all agents in the social system (the state) contribute to a climate of mutual trust

In research, no preference must be given to one discipline or the other, but to the integration of economic and psychological approaches and research findings