

# An overview of the economic approach to non-compliant behaviour

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**Tax evasion** is the illegal non-payment or under-payment of taxes, usually by deliberately making a false declaration or no declaration to tax authorities – such as declaring less income, profits or gains than the amount actually earned, or overstating deductions. It entails criminal or civil legal penalties.

**Tax avoidance** is the legal practice of seeking to minimise a tax bill by taking advantage of a loophole or exception to the rules, or adopting an unintended interpretation of the tax code. It usually refers to the practice of seeking to avoid paying tax by adhering to the letter of the law but being opposed to the spirit of the law. Proving intention is difficult; therefore the dividing line between avoidance and evasion is often unclear.

<https://www.transparency.org/>

## Evasion: definition

All modern societies collect taxes to finance the provision of collective public goods and services such as transportation, defense, health and education systems. However, almost all economies also suffer from a significant level of non-compliance in paying taxes due.

**Taxation and evasion are two phenomena that find their origin at the same time, and one has always accompanied the other.** These phenomena are and continue to be the subject of study, confirming their importance in our society.

**The tax gap** or **revenue gap** is an estimate of tax evasion in that it provides an indication of the extent of spontaneous adherence, so-called 'compliance,' to paying taxes.

The 'gap' is the difference between the taxes that are actually collected by tax administrations and those that would be collected under a regime of perfect spontaneous compliance with existing legislation.

# Evasion: relevance

- **Evasion** has always been and is still today a **relevant problem** not only in developing countries, but also in developed countries.
- Murphy (2019): in 2015 the tax gap, i.e. the tax loss, in the European Union is estimated to be around 825 billion euros per year. Similarly, in 2021, the VAT gap, the only tax gap for which comparative estimates exist for all EU countries, is estimated to be around 60.6 billion. Of these, 14.6 billion are found to be missing in Italy. No one else in the EU has been able to show itself less capable of collecting the value-added tax. (European Commission, 2023).
- **Italy is the first country for tax evasion in Europe**, with approximately 190 billion euros of tax evaded.

## VAT GAP IN 2021 (EUR million)



Figure: Vat Gap in the EU 2021

## Evasion: theoretical economic literature

Building on Gary Becker's (1968) rational choice model of crime, **Allingham and Sandmo (A-S)(1972)** developed a model to analyze tax evasion. Their model examines a taxpayer's decision-making process, where they rationally compare the benefits of evading taxes with the expected costs of being caught and punished. Assuming rational behavior, the A-S model explains individual actions through an economic analysis focused on maximizing the expected value of income, based on the standard expected utility theory (EUT) model. A-S (1972): choice of a rational taxpayer who compares the **advantages deriving from tax evasion** and the **expected costs of being discovered in tax evasion and punished**.

## "Classic" Tools to fight evasion: enforcement

- the probability of being discovered and punished
- the fine envisaged for tax evaders.

The Allingham and Sandmo framework has laid the groundwork for numerous subsequent academic studies on tax evasion.



# Empirical results: the "Yitzhaki puzzle"

Empirical analyses do not confirm what the theoretical model prescribes. As a general trend, in fact, the model seems to greatly overestimate tax evasion, since, in matching with reality, the results are significantly smaller: **using actual audit probabilities and penalty rates, the return on evasion is 91-98 percent.**

## **So why do most taxpayers not evade?**

Moreover, this model of tax evasion predicts a negative relationship between tax rate and evasion whenever fines are imposed for evasion and taxpayers show decreasing absolute risk aversion (Yitzhaki 1974).

Empirical evidence on this point finds a positive relationship between evasion and tax rate (see, for example, Ali et al. 2001; Alm et al. 1995). This negative relationship between tax rate and evasion predicted by the EUT model, due to the fact that it is counterintuitive and lacks empirical confirmation is referred to as the **"Yitzhaki paradox" or "Yitzhaki puzzle"**

# The tax morale

However, the A-S themselves were the first to acknowledge that their model failed to capture all the underlying motivations for tax compliance

**”This is a very simple theory, and it may perhaps be criticized for giving too little attention to nonpecuniary factors in the taxpayer’s decision on whether or not to evade taxes.”**

**From a prescriptive point of view**, the A-S model is mainly focused on one element: determining the optimal anti-evasion policy (e.g., increasing controls or punishments). But doing so forgets an important part: those who have paid taxes and who perhaps deserve more attention in the fight against evasion, which is accomplished not only by discouraging evaders, but also by **incentivizing tax compliance**.

This reflection leads one to consider that some individuals pay taxes only because they are "scared" of the possible expected penalty, but other taxpayers pay taxes simply because they think it is right, out of a form of intrinsic motivation. This "something" that leads individuals to pay taxes is identified, as mentioned above, with **"tax morale."**

**"Tax morale measures taxpayer perceptions and attitudes towards paying and evading taxes".**

<https://www.oecd.org/>

# Principal Elements

The system of audit and punishment alone cannot explain tax compliance: in fact, in countries where there are very low levels of audit and penalties, most rational taxpayers are expected to evade taxes.

**A high degree of compliance is observed.**

Tax morale could be an important factor influencing, and thus explaining, tax compliance. Following the work of Gordon (1989), several articles have incorporated tax morality into standard models of tax evasion, recognizing that individuals refrain from tax evasion both out of fear of being caught and, therefore, punished, but also for moral and social reasons: individuals have an intrinsic motivation to behave prosocially so as to avoid social stigma.

# Tax morale I

Following the work of Luttmer and Singhal (2014), we can define the tax morale.

**“The term “tax morale” is often used in reference to these types of influences on tax compliance. We will define tax morale broadly as an umbrella term capturing nonpecuniary motivations for tax compliance as well as factors that fall outside the standard, expected utility framework”**

*Luttmer, Erzo F. P., and Monica Singhal. 2014. "Tax Morale." Journal of Economic Perspectives, 28 (4): 149–68.*

Five important channels through which "tax morale" can influence a country's tax compliance.

- 1) **intrinsic motivation**, which can be considered as an additional term in the utility function that leads individuals to pay taxes;
- 2) **reciprocity**, i.e., from the payment of taxes comes additional utility for the individual depending on the relationship the individual has with the State (e.g., quality/quantity of public goods and services provided by the state or perceptions about the fairness of the tax system);
- 3) **peer effects and social influences**: additional utility accrues to the individual who has paid taxes in relation to the opinions or behaviors of other individuals in the community;

- 4) **long-term cultural factors** that may influence willingness to pay taxes;
- 5) **imperfect information and deviations from utility-maximizing behavior** (e.g., individuals may misperceive the probability of detection or may use techniques other than utility maximization).

# Intrinsic motivation

- **Calvet and Alm (2007)**. One aspect of compliance that is difficult to explain is that most people pay most of what they legally owe, even though there are very strong incentives to evade taxes because of the low probability of audit and the small penalties for evasion;
- **Alm and Torgler (2011)**. The ethical dimension of individuals: they may have personal moral rules, may incur psychological costs if they do not pay taxes, and may feel pleased with themselves for being virtuous and paying taxes;
- **Torgler (2006)**. Religiosity as a potential factor affecting the tax morale ("the intrinsic motivation to pay taxes") of the taxpayer. Empirical analysis identifies religiosity as a factor potentially affecting tax morale.



# Reciprocity I

A taxpayer's willingness to pay taxes depends on the individual's own relationship with the State. Taxpayers may see taxes as a **quid pro quo** for a **social contract**: payment of taxes is necessary to obtain goods and services provided by the state in return. This view of tax compliance suggests that compliance may be influenced by perceptions of the legitimacy of the State to impose tax payments (**Levi 1989**), as well as by attitudes toward the government (trust) or perceptions about the fairness of taxation (e.g., **Feld and Frey 2002**).

**Feld and Frey (2002)** point out that the relationship between tax authorities and taxpayers goes through an implicit or "psychological" contract: **"The more strongly the political participation rights are developed, the more important this contract is, and the higher tax morale is."** Thus, compliance can be influenced by the type and quality of services provided by government and financed by tax revenues.

# Reciprocity II

Positive correlations between measures of institutional quality, trust in government and satisfaction with public services and tax compliance (see OECD 2013); **Harbaugh et al. (2007)**: positive reactions by our brains when we make payments intended for a good cause: transfers, even forced ones, as in the case of taxes, when intended for a good cause, funding a nonprofit organization, activate in our brains a kind of reward that generally prompts us to experience pleasant and useful situations. This strange result highlights an interesting point, reciprocity: **our willingness to voluntarily pay taxes increases or decreases in relation to the goodness and effectiveness of what the state decides to do with our money.** Relatedly, our voluntary compliance is also linked to the trust we place in the State.

**D'Attoma (2018)** conducts a historical analysis to explain Italy's (low) tax compliance by connecting it to the low trust that Italian citizens have in institutions. D'attoma uses historical data from the unification of Italy to the Second Republic to assess the effects of Italy's main formal institutions (Church, State, and political parties) and informal institutions (patronage) on Italian taxpayers' tax compliance. The author argues that the unification and fascism in the 19th century had significant repercussions on Italians' perception of the State: Italians lacked trust in their government and fellow citizens, which reduced their willingness to pay taxes.

**Bénabou and Tirole (2006)** point out that people are concerned with other people's opinion and image of them (self-image).

**Di Gioacchino and Fichera (2020)** analyze tax compliance and tax morale in a network analysis context: the results suggest that the more integrated people are, the more they care about their reputation, and the higher their tax compliance. The authors show that if all individuals in the network "update" their intrinsic motivation based on the tax morale of their neighbors, eventually all converge to a common tax morale: in this corner situation either all individuals evade or all pay taxes. In this context, the stigma that is socially associated with tax evasion behavior takes on a very important role.

**Goffman (1963)** defines stigma as **"an attribute that is deeply discrediting"** and argues that the stigmatized person is reduced **"from a whole and usual person to a contaminated, discounted one."** In this context, social construction processes are essential: in fact, stigma is defined as **"a special kind of relationship between an attribute and a stereotype."** From this point of view, stigma occurs as a discrepancy between **"virtual social identity"** (how a person is virtually identified by society) and **"actual social identity"** (how a person actually characterizes himself). Thus the process of defining stigma is a "rational" process, that is, it is the society in which we live that defines what is deviant and provides the context in which "negative" evaluations are expressed.

# Long-term cultural factors

**Culture refers to general social norms that persist over long periods of time and are transmitted from generation to generation.**

Such persistence over time is one of the fundamental characteristics that distinguishes "culture" from conditioning effects that occur among contemporary subjects. The payment of taxes can be considered as arising from one's cultural background if these elements reflect (internalized) social norms that persist for long periods and survive for several generations.

**The Prospect Theory** has become a fundamental element in behavioral economics by considering the psychological component in the analysis: This methodology studies not so much the behavior of the taxpayer as a rational subject, but the choices that an individual (as such) makes.

**Kahnemann and Tversky**, postulated the Prospect Theory, a theoretical model related to the decision-making processes that cause people to make sub-optimal decisions: this model can be useful in understanding why many taxpayers do not report less income than they actually earn, despite the fact that it would be more convenient for them to do the opposite, given the low probability of audit and the low penalties they would face if they were caught evading.

# Conclusions