Do Deterrents Prevent Undeclared Work? An Evaluation of the Rational Economic Actor Approach

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Do Deterrents Prevent Undeclared Work? A Policy Brief
An Evaluation of the Rational Economic Actor Approach
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UNDECLARED WORK:
1 in 25 Europeans (4%) are engaged in undeclared work

What’s the ISSUE?

Across the member states of the European Union and beyond, paid transactions occur that are not declared to the state for tax, social security and/or labour law purposes when they should be declared. This is not a minority practice. The undeclared economy is estimated to be equivalent to 17.9 per cent of the EU28 GDP in 2016 [1]. Similarly, it is estimated that 9.3 per cent of total labour input in the private sector in the EU28 is undeclared and that undeclared work constitutes on average 14.3 per cent of gross value added in the private sector [2]. Furthermore, in 2013, 4 per cent of EU28 citizens admitted that they have conducted undeclared work in the 12 months prior to the survey [3]. However, this percentage might be underestimated, given that respondents might not answer honestly about illegal work practices. Tackling the undeclared economy has thus become a core issue on the policy agendas of supra-national agencies and governments [4-6]. Addressing this practice is important because it results in lost public revenues, a worsening of working conditions, and unfair competition for legitimate businesses.

How, therefore, can the undeclared work be tackled? Reviewing the policy measures used by governments, two distinct approaches are identified, namely a rational economic actor approach that tackles undeclared work by ensuring that the payoff from undeclared work is outweighed by the costs, which is heavily used, and a social actor approach grounded in a view that undeclared work arises when horizontal and vertical trust are low, which is used to a lesser extent.

The purpose of this policy brief is to review the policies that can help EU Member States reduce the share of undeclared work and focuses on evaluating the effectiveness of the rational economic actor approach.

KEY POINTS

- Undeclared work is more common in the Member States with less modernised systems of government, higher levels of corruption and lower trust in authorities and where the protection of vulnerable groups is ineffective.
- Compared with 2007, in 2013 participation in undeclared work has become less affected by the perceived level of deterrents and more influenced by the level of both horizontal and vertical trust.
- Deterrents needs to be complemented with measures aimed to build trust by altering both formal institutions (i.e., improve structural economic and social conditions; enhance procedural justice, procedural fairness and redistributive justice) and informal institutions (i.e., tax education and awareness raising campaigns).
What is UNDECLARED WORK?

The European Commission defines undeclared work as ‘any paid activities that are lawful as regards their nature but not declared to public authorities, taking into account differences in the regulatory systems of the Member States’. This implies that the provision of illegal goods or services (i.e., drugs) belongs to the wider criminal economy and not to the undeclared economy.

UNDECLARED WORK: Association with Structural Conditions

Analysing the association between the cross-country variations in the size of undeclared work and various structural conditions, the conclusion is that undeclared work is more common in Member States with low levels of GDP per capita, less modernised systems of government (supporting the ‘modernisation’ theory), higher levels of corruption and lower levels of trust in authorities (supporting ‘institutional’ theory), and where social transfers are ineffective at reducing poverty, there are lower levels of public expenditure on labour market interventions to protect vulnerable groups, there is greater inequality, and higher levels of long-term and very long-term unemployment (supporting the ‘political economy’ theory). Refuting the common assumption that undeclared work is directly related to taxation levels, no significant relationship is identified between undeclared work and the implicit tax rate on labour (Table 1).

What do the theories argue?

- ‘modernisation’ theory argues that undeclared work becomes less prevalent with economic development and the modernisation of government.
- ‘institutional’ theory argues that undeclared work arises when there is a low trust at both the horizontal (between citizens) and vertical (between citizens and government) level.
- ‘political economy’ theory argues that undeclared work results from inadequate levels of state intervention in work and welfare arrangements which leaves workers less than fully protected.

Table 1. Relationship between undeclared work and various structural conditions

<table>
<thead>
<tr>
<th>MODERNISATION THEORY</th>
<th>POLITICAL ECONOMY THEORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita in Purchasing Power Standards</td>
<td>Impact of social transfers on poverty reduction</td>
</tr>
<tr>
<td>European Quality of Government Index</td>
<td>Negative ***</td>
</tr>
<tr>
<td>Negative ***</td>
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<table>
<thead>
<tr>
<th>INSTITUTIONAL THEORY</th>
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<tbody>
<tr>
<td>Corruption Perceptions index (high value = little corruption)</td>
<td>Gini coefficient</td>
</tr>
<tr>
<td>Trust in authorities index</td>
<td>Income inequality</td>
</tr>
<tr>
<td>Negative ***</td>
<td>Positive **</td>
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<td>Negative ***</td>
<td>Positive **</td>
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<td>Negative ***</td>
<td>Positive *</td>
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<tr>
<td>Negative ***</td>
<td>Negative</td>
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</tbody>
</table>

Table Notes: Significant at: *** p<0.01, ** p<0.05, * p<0.1
Source: Abridged form of the results presented in [2]

TACKLING UNDECLARED WORK: An Evaluation of the Rational Economic Actor Approach

Conventionally, governments have adopted a rational economic actor approach when tackling undeclared work. Starting from the view that participation in undeclared work arises when the pay-off is greater than the expected cost of being caught and punished [7], governments seek to
deter participation by increasing the actual or perceived penalties and risks of detection [8-10]. Until now, however, the evidence that increasing deterrents elicits reductions in undeclared work is less than conclusive. Some studies reveal that this reduces it and others not, and yet other studies call for deterrents to be complemented with measures which increase voluntary compliance [11-24].

How, therefore, are deterrents perceived by European Union citizens? Using data from a Eurobarometer Survey (79.2) conducted in 2013 across the 28 Member States, the finding is that 7 per cent of citizens perceive the risk of detection as being very high and 29 per cent fairly high (i.e., 36 per cent of Europeans perceive the risk as being high, as Figure 2 displays).

![Figure 2](image)

**Figure 2.** The perceived risk of detection of undeclared work
*Source: authors’ own work based on Eurobarometer 79.2 (2013)*

**What’s the RATIONAL ECONOMIC ACTOR APPROACH?**

The view that people engage in undeclared work so long as the benefits of doing so are higher than the costs. According to this view, increasing the costs will reduce undeclared work.

**Policy measures related with this view focus on deterrents and seek to:**

- Increase the actual and/or perceived level of detection.
- Increase the actual and/or perceived penalties.

The perceived risk of detection is higher in Lithuania, the United Kingdom, Ireland and Portugal where some 50 per cent of citizens perceived the risk of being detected if they engage in undeclared work as fairly high or very high. In contrast, in Slovenia, Malta, Sweden, the Czech Republic, Netherlands and Bulgaria a quarter or less of citizens perceive the risk of detection as fairly high or very high (Figure 3).

![Figure 3](image)

**Figure 3.** The perceived risk of detection of undeclared work, by country
*Source: authors’ own work based on Eurobarometer 79.2 (2013)*

To start to evaluate the effectiveness of the deterrent measures, the relationship between cross-country variations in the level of undeclared work and the perceived levels of detection can be analysed. As Figure 4 displays, there is no significant association between the percentage of citizens engaged in undeclared work in a country and the percentage of citizens perceiving the level of detection as being high (i.e., very high or fairly high). This result,
therefore, questions the effectiveness of this measure.

Figure 4. The relation between the perceived risk of detection of undeclared work
Source: authors’ own work based on Eurobarometer 79.2 (2013)

Analysing the second deterrent, the perceived penalty, 21 per cent of citizens in the European Union consider that the normal tax or social contribution would be applied if detected doing undeclared work. A further 56 per cent consider that a fine would be applied alongside the normal contributions due, 6 per cent expect prison and 17 per cent expect other penalties or refused to answer (Figure 5). As such, a relatively high per cent of Europeans perceive that there is no penalty for engaging in undeclared work and only the normal contribution due would be paid if caught doing undeclared work.

Figure 5. The perceived sanctions for engaging in undeclared work
Source: authors’ own work based on Eurobarometer 79.2 (2013)

As Figure 6 displays, a larger share of citizens expect that no additional sanction will be applied if one is caught engaging in undeclared work (i.e., only the normal tax or social contribution due will be applied) in Poland (41 per cent), Lithuania (39 per cent), Latvia (37 per cent), Croatia (34 per cent) and Estonia (33 per cent). In these countries, one third or more of the population do not expect that an additional sanction would be applied to those working undeclared. In contrast, in Denmark (77 per cent), Sweden (70 per cent), Germany (68 per cent), Austria (67 per cent) and Luxembourg (64 per cent), more than two-thirds of citizens expect that a fine would be applied in addition to the normal contributions due for those caught engaging in undeclared work.

Figure 6. The perceived sanction for engaging in undeclared work, by country
Source: authors’ own work based on Eurobarometer 79.2 (2013)

Examining if there is a relationship between the perceived severity of the sanction in a country and the share of people engaged in undeclared work, the results show no significant correlation.
As such, the share of people engaging in undeclared work is not lower in the countries where the expected sanctions are perceived as high (normal tax or social contribution due plus fine or prison). Again, the effectiveness of deterrent measures is not confirmed.

Meanwhile, as Figures 8 and 9 display, the variables related with the alternative approach, namely the social actor approach, are strongly associated with the engagement in undeclared work.

**What is the SOCIAL ACTOR APPROACH?**

The view that people engage in undeclared work when there is low horizontal and vertical trust. According to this view, measures aimed to build trust will reduce undeclared work.

- **Horizontal trust** refers to trust between citizens. People are more likely to engage in undeclared work if they perceive that a large share of people are doing so (e.g., they know other persons engaged in undeclared work).
- **Vertical trust** refers to the trust between citizens and government. It is measured as the asymmetry between the formal and informal institutions. When a high asymmetry exists (i.e., there is a lack of trust in government and the rule of law), people are more likely to engage in undeclared work.

- **Formal institutions** represent the laws, rules, and regulations of a society which govern and prescribe behaviour (i.e., the formal rules of the game).
- **Informal institutions** represent the unwritten socially shared rules (i.e., values, norms and beliefs), which are created, communicated, and applied outside of formal channels.

**Policy measures related with this view focus on building trust** and seek to:

- Alter the **formal institutions** by improving *procedural justice* (authorities treat citizens in a respectful, impartial and responsible manner by shifting away from a ‘cops and robbers’ approach), *procedural fairness* (citizens perceive that they pay a fair share compared with others), and *redistributive justice* (citizens believe that they receive the goods and services they deserve in return for the taxes they pay).
- Alter the **informal institutions** through tax education and awareness raising campaigns (i.e., information about what public goods and services are paid from taxes, information about the benefits of undeclared work) or normative appeals (i.e., reminding the citizens how their taxes are used for public goods and services such as schools and hospitals).

**Figure 7.** The relation between the perceived sanctions and undeclared work

**Source:** authors’ own work based on Eurobarometer 79.2 (2013)

**Figure 8.** The relation between the vertical trust and undeclared work

**Source:** authors’ own work based on Eurobarometer 79.2 (2013)
Larger shares of undeclared work are associated with higher asymmetry between the formal and informal institutions (i.e., high values of tax morality index) and larger shares of population knowing other persons that engage in undeclared work. However, the association between the share of undeclared work and vertical trust is weaker compared with the association with horizontal trust (i.e., personally knowing people engaged in undeclared work). Therefore, measures aimed to alter citizens’ beliefs regarding the extensiveness and acceptability of undeclared work are required.

Figure 9. The relation between the horizontal trust and undeclared work
Source: authors’ own work based on Eurobarometer 79.2 (2013)

Analysing these relationships further on an individual rather than country level, between 2013 and 2007, the above findings have become more pronounced. Investigating the views and behaviour of EU 28 citizens, and controlling for their socio-demographic and socio-economic characteristics, the association between participation in undeclared work and deterrents (the perceived risk of detection and the perceived sanctions) has become weaker. Meanwhile, the association between participation in undeclared work and horizontal and vertical trust has become stronger (Figure 10).

Figure 10. The association between the rational economic actor approach, the social actor approach and the participation in undeclared work, comparison between 2007 and 2013
Source: authors’ own work based on Eurobarometer 79.2 (2013) & Eurobarometer 67.3 (2007)

Furthermore, analysing data collected in 2015 from two member states of the European Union and one EU candidate country (i.e., Bulgaria, Croatia and FYR of Macedonia), the results are similar. There is no association between participation in undeclared work and deterrents (i.e., perceived level of penalties and perceived risk of detection), but there is a strong association between participation in undeclared work and the level of vertical trust [22, 23]. Indeed, as Figure 11 displays, there is no difference between the perceived sanction of those engaged in undeclared work and those not engaged in undeclared work in Bulgaria, and small differences in Croatia and FYR of Macedonia (48 per cent of those engaged in undeclared work perceive that if caught doing undeclared work the normal contribution due plus a fine or prison would be applied compared with 54 per cent of those not engaged in undeclared work in Croatia, or 57 per cent in FYR Macedonia who expect the same level of sanction). Similarly, the difference between the perceived risk of detection of those not engaged in undeclared work compared with those engaged in undeclared work is very small in FYR of Macedonia (58 per cent of those not engaged in undeclared work perceive the risk as being high or very high compared with 56 per cent of those not engaged in such activities) and rather small in Croatia (33 per cent compared
with 29 per cent) and Bulgaria (26 per cent compared with 17 per cent).

In sharp contrast, the differences between the level of horizontal and vertical trust of those not engaged in undeclared work and those engaged in undeclared work are very large. In all three countries, the share of those engaged in undeclared work that personally know other persons engaged in undeclared work is double the share of those not engaged in undeclared work. Similarly, the asymmetry between the formal and informal institutions (i.e., level of vertical trust) is higher for those engaged in undeclared work compared with those not engaged in such activities. As such, those engaged in undeclared work have both lower horizontal trust (they think other people are engaged in undeclared work in their society) and lower vertical trust (higher asymmetry between their norms and beliefs and the legal environment).

<table>
<thead>
<tr>
<th></th>
<th>Bulgaria</th>
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<th>Croatia</th>
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<th>FYR of Macedonia</th>
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<tbody>
<tr>
<td></td>
<td>Engaged in undeclared work (%)</td>
<td>Not engaged in undeclared work (%)</td>
<td>Engaged in undeclared work (%)</td>
<td>Not engaged in undeclared work (%)</td>
<td>Engaged in undeclared work (%)</td>
</tr>
<tr>
<td>RATIONAL ECONOMIC ACTOR</td>
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<td></td>
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<tr>
<td>Expected sanctions (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax or social security contributions due</td>
<td>39</td>
<td>91</td>
<td>52</td>
<td>46</td>
<td>52</td>
</tr>
<tr>
<td>Tax or social security contributions + fine or prison</td>
<td>61</td>
<td>91</td>
<td>48</td>
<td>54</td>
<td>48</td>
</tr>
<tr>
<td>Detection risk (%)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Very small/ Fairly small</td>
<td>83</td>
<td>74</td>
<td>71</td>
<td>67</td>
<td>44</td>
</tr>
<tr>
<td>Fairly high/ Very high</td>
<td>17</td>
<td>26</td>
<td>29</td>
<td>33</td>
<td>56</td>
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<tr>
<td>SOCIAL ACTOR</td>
<td></td>
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<td></td>
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<tr>
<td>Horizontal trust</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Knowing persons engaged in undeclared work (%)</td>
<td>44</td>
<td>44</td>
<td>87</td>
<td>47</td>
<td>78</td>
</tr>
<tr>
<td>Vertical trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Tax morality (mean)</td>
<td>4.1</td>
<td>2.7</td>
<td>3.2</td>
<td>2.3</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Figure 11. The rational economic actor approach and the social actor approach variables: by participation in undeclared work

However, despite the evidence from different studies and surveys on the effectiveness of deterrents, when the policy approaches employed by governments across the European Union are analysed, it becomes quickly apparent that deterrents are the most common policy approach and the importance attributed to this approach by the governments has increased over time (Figure 12). Indeed, comparing the results of two surveys in 2010 and 2017 amongst policymakers, it is revealed that in 2017, compared with 2010, the measures related to the rational economic actor deterrence approach are perceived as the top two most effective policy measures for tackling undeclared work, while measures related to the social actor approach (i.e., curative measures, preventive measures and measures aimed to foster commitment to declared work) are considered less effective than in 2010 [25, 26]. The 2017 survey also reveals little ex-ante and ex-post evaluation of the policy measures used by the governments [26]. As such, and as the evidence presented in this paper shows, policy makers’ views do not reflect the lived realities regarding the effectiveness of policy approaches.
Conclusions and Policy Recommendations

National governments seek to reduce the share of people engaged in undeclared work using mostly the rational economic actor deterrence measures and their view is that the effectiveness of such measures has increased over time. However, this is not based on rigorous evaluations, as a survey amongst senior government officials reveals (i.e., little ex-ante and ex-post evaluation is undertaken) [26]. Meanwhile, the academic literature questions the effectiveness of this deterrence approach [18-24]. By analysing a wide range of data from surveys with citizens (conducted in different EU Member States at different points in time), the results presented in this policy brief underline that participation in undeclared work has become less affected by the perceived level of deterrents and more influenced by the level of both horizontal and vertical trust. Thus, this policy brief draws attention to a gap between the beliefs of enforcement authorities regarding what is effective for tackling undeclared work and what is effective in lived practice.

The outcome is a call to shift away from a focus upon deterrents that seek to detect and punish undeclared work and towards measures that aim to build trust at both the horizontal and vertical levels. As such, deterrents need to be supplemented by measures that alter both formal and informal institutions in order to reduce the gap between citizens, and between citizens and the state.

To alter the formal institutions, measures are needed not only to improve the structural economic and social conditions but also trust in government by improving procedural justice (the tax authority treat the citizens in a respectful, impartial and responsible manner by shifting away from a ‘cops and robbers’ approach), procedural fairness (citizens perceive that they pay a fair share compared with others), and redistributive justice (citizens believe that they receive the goods and services they deserve in return for the taxes they pay).

To alter the informal institutions, tax education and awareness raising campaigns (i.e., information about what public goods and services are paid from taxes, information about the benefits of undeclared work) or normative appeals (i.e., reminding the citizens how their taxes are used for public goods and services such as schools and hospitals) are required.

These measures will help reduce the gap between what is currently used to tackle the problem, and what is most effective, and will help governments tackle participation in undeclared work.
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