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**Explaining participation in the informal economy: a purchaser perspective**

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## Explaining participation in the informal economy: a purchaser perspective

### Abstract

#### Purpose

Participation in the informal economy has been predominantly explained from a supply-side perspective by evaluating the rationales for people working in this sphere. Recognising that many transactions in the informal economy are often instigated by customers, exemplified by purchasers asking “how much for cash?”, the aim of this paper is to explain the informal economy from a demand-side perspective by evaluating citizens’ rationales for making purchases in the informal economy. Here, we test three potential explanations for acquiring goods and services in the informal economy, grounded in rational economic actor, social actor and formal economy imperfections theoretical perspectives.

#### Methodology

To do this, a 2013 Eurobarometer survey, involving 27,563 face-to-face interviews conducted in 28 European Union member states is reported.

#### Findings

The finding is that all three rationales apply but the weight given to each varies across populations. A multinomial logit regression analysis then pinpoints the specific groups variously using the informal economy to obtain a lower price, for social or redistributive rationales, or due to the failures of the formal economy in terms of the availability, speed and quality of provision.

#### Practical Implications

The outcome is to reveal that the policy approach of changing the cost/benefit ratios confronting purchasers will only be effective for those purchasers citing a lower price as their prime rationale. Different policy measures will be required for those making informal economy purchases due to the shortcomings of the formal economy, and for social ends. These policy measures are then discussed.

#### Originality/value

The value and originality of this paper is that it explains participation in the informal economy from a purchaser, rather than the predominant supplier, perspective.

**Keywords:** informal sector; shadow economy; undeclared work; consumption; public policy; European Union.

#### Introduction

Until now, participation in the informal economy has been almost exclusively explained from a supply-side perspective that evaluates the motives for people working in this sphere (Maloney, 2004, Ponsaers et al., 2008; Rodgers et al., 2008; Williams, 2015a,b). The outcome has been a heated structure versus agency debate about whether informal workers do so out of necessity or as a matter of choice (Gerxhani, 2004; Perry and Maloney, 2007; Williams, 2014; Williams and Youseff, 2015). Until now, however, few studies have analysed the other side of the coin and adopted a demand-side perspective when seeking to explain participation in the informal economy (for exceptions, see Williams and Martinez-Perez, 2014a,b). To do so, however, is important. The informal economy results not only

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3 from people being willing to supply such work. It is also the result of the demand from  
4 purchasers for goods and services produced in the informal economy. The aim in this paper,  
5 therefore, is to evaluate purchasers' motives for acquiring goods and services in the informal  
6 economy.  
7

8 In the next section, therefore, competing ways in which one might explain the  
9 purchase of goods and services in the informal economy are reviewed. Purchasers of goods  
10 and services in the informal economy might be viewed firstly, as rational economic actors  
11 seeking a lower price, secondly, as social actors engaging in such exchanges for social or  
12 redistributive reasons and third and finally, as engaging in such transactions because of the  
13 failures of the formal economy to deliver goods and services. To evaluate these rival potential  
14 theoretical explanations, and which populations obtain goods and services in the informal  
15 economy for each reason, the third section introduces the data set, namely a survey involving  
16 27,563 face-to-face interviews conducted across the 28 member states of the European  
17 Union (EU-28), along with the multinomial logit model used to analyse the data. The fourth  
18 section then reveals the commonality of each of these explanations among purchasers across  
19 the EU-28, and which populations are most likely to state which motives. The fifth and final  
20 section then explores how this new demand-side approach advances theorisations of the  
21 informal economy and investigates the policy implications for how the informal economy is  
22 tackled.  
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26 Before commencing, however, the informal economy must be defined. In this paper,  
27 we follow the strong consensus among both academics and policy-makers that the informal  
28 economy involves monetary exchanges which are unregistered by or hidden from the state,  
29 for tax, social security and/or labour law purposes but are legal in all other respects  
30 (European Commission, 1998, 2007, OECD, 2002, Williams, 2004, Sepulveda and Syrett,  
31 2007). If exchanges are not legal in every other respect, they are not part of the informal  
32 economy. For example, if the goods and/or services purchased are illegal (e.g., illegal drugs),  
33 then such exchanges are not included in the informal economy but rather, are part of the  
34 wider criminal economy. Of course, it could be asserted that when engaging in exchanges,  
35 purchasers will not know whether suppliers declare the income for tax, social security and/or  
36 labour law purposes, and therefore whether the purchase is in the informal economy. Here,  
37 however, this is not an issue. Many transactions in the informal economy are in practice  
38 instigated by the purchaser, exemplified by them asking "how much for cash?", and this  
39 paper examines only exchanges in which the consumer deliberately initiates, or knowingly  
40 perceives themselves as participating in, the purchase of goods and services in the informal  
41 economy.  
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### 46 **Theoretical explanations for participation in the informal economy**

  
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48 Most studies of the informal economy, both in the European Union and beyond, have adopted  
49 a supply-side approach, focusing upon how to explain why people work in the informal  
50 economy and developing policies to reduce the supply of informal work (Aliyev, 2015;  
51 European Commission, 2007, OECD, 2012; Williams, 2014, 2015a,b). Little attention has so  
52 far been given to the demand-side. Indeed, the only notable exceptions report data collected a  
53 decade or so ago on who makes purchases in the informal economy (Williams, 2008,  
54 Williams and Martinez, 2014a,b). Little contemporary knowledge therefore exists on  
55 purchasers' motives for sourcing from the informal economy. To advance understanding, in  
56 consequence, and drawing upon these earlier studies, we highlight three contrasting  
57 explanations for purchasers acquiring goods and services in the informal economy.  
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### Rational economic actor theory

For the past four decades or so, and deriving from the seminal work of Allingham and Sandmo (1972), the dominant view has been that those participating in the informal economy are rational economic actors who weigh up the rewards and risks of their actions and act in a non-compliant manner when the expected probability of detection and penalty is smaller than the profits to be gained. This utility maximising view of the individual pursuing monetary gain has been widely adopted by both scholars and policy-makers. Informal workers are widely portrayed as rational economic actors doing so for the purpose of financial gain (Castells and Portes, 1989, Davis, 2006, Gallin, 2001), and purchasers represented as sourcing from the informal economy to benefit from the cheaper prices which outweigh the potential costs involved (Bajada, 2002; Fortin et al., 1996).

The outcome of this depiction of those participating in the informal economy as rational economic actors is that policy has sought to tackle this sphere by changing the cost-benefit ratio that suppliers and purchasers confront when making a decision on whether to engage in the informal economy. The way in which this has been largely achieved is by altering the perceived and/or actual costs of doing so. A deterrence approach has been employed by governments, which increases the actual and/or perceived costs and risks of participating in the informal economy. This is achieved by increasing firstly, the perceived and/or actual risks of detection and secondly, the sanctions for those caught (Grabiner, 2000, Hasseldine and Li, 1999, Richardson and Sawyer, 2001, Sandford, 1999).

Recent years, however, have witnessed the emergence of alternative ways of explaining participation in the informal economy that have begun to question whether participants in the informal economy are always rational economic actors. Purchasers, for example, are no longer assumed to be driven to make acquisitions in the informal economy purely by the lower costs and the potential for financial gain.

### Social actor theory

In stark contrast to the representation of participants in the informal economy as rational economic actors who respond to the cost/benefit ratios that they confront, recent years have witnessed the emergence of a social actor explanation for participation in the informal economy. This derives its inspiration from what is variously termed a critical, post-structuralist, post-capitalist or post-development corpus of thought which has evaluated critically the dominant 'thin' reading of monetary exchanges as always profit-driven market-oriented transactions. Rather, a 'thicker' portrayal of monetary exchange has been developed which recognises that monetary exchanges are embedded in multifarious logics, including social logics (Bourdieu, 2001, Escobar, 1995, Gibson-Graham, 2006, Granovetter, 1985; Leyshon et al., 2003; Polanyi, 1944).

The outcome has been the emergence of a social actor theorisation of participation in the informal economy. Scholars have started to bring attention to how informal work is often undertaken by and for close social relations, such as kin, friends, neighbours and acquaintances, for social ends rather than purely for market-driven profit-oriented rationales (Nelson and Smith, 1999, White and Williams, 2010). Purchasers of goods and services from the informal economy can thus be represented as social actors rather than rational economic actors. For example, it has been highlighted how such purchasers from the informal economy are often sourcing goods and services from closer social relations, and are paying them for a good or to undertake a task (e.g., a small maintenance job such as gardening or home decoration) so as to give them much needed money (e.g., when the supplier is having financial difficulties), and in recompensing them for the task, they are avoiding the potential

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3 perception that charity is involved on their part, which might well prevent the recipient from  
4 accepting money from them (Kempson 1996). These purchases of goods and services from  
5 close social relations in the informal economy are therefore embedded more in social  
6 relations akin to mutual aid than profit-oriented market-like transactions (Williams, 2004).  
7 Indeed, and as Zelizer (2005) has shown, the use of money in exchange relations does not  
8 always mean that an exchange is market-like and profit-motivated. The outcome of this social  
9 actor representation of participation in the informal economy, in consequence, has been to  
10 challenge the representation of purchasers from the informal economy as rational economic  
11 actors seeking lower costs and monetary gain.  
12  
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#### 14 15 Formal economy imperfections theory 16

17  
18 A third theory that can be used to explain why citizens make purchases in the informal  
19 economy derives from institutional theory. Every society has laws and regulations (i.e. formal  
20 institutions) that set out the legal rules of the game (North 1990, Denzau and North 1994,  
21 Baumol and Blinder, 2008, Mathias et al., 2014, Williams and Horodnic, 2015a,b,c). Every  
22 society, nevertheless, also has informal institutions, which prescribe the 'socially shared  
23 rules, usually unwritten, that are created, communicated and enforced outside of officially  
24 sanctioned channels' (Helmke and Levitsky, 2004: 727). Even if formal institutions deem  
25 participation in the informal economy by definition illegal because such activity does not  
26 adhere to the legal rules of the game, in many societies as a result of formal sector  
27 imperfections, participation in the informal economy is often viewed as a socially legitimate  
28 activity (De Soto, 1989, Williams and Horodnic, 2015a,b).  
29

30  
31 Viewed through the lens of institutional theory, in consequence, participation in the  
32 informal economy can be explained as resulting from the existence of formal imperfections.  
33 On the supply-side, informal workers can be thus viewed as deciding not to join or exiting the  
34 formal economy because of the problems they witness, such as registering a business, high  
35 taxes, the demanding of bribes by corrupt state officials and the burden of regulations (De  
36 Soto, 1989, Maloney, 2004, Small Business Council, 2004, Cross and Morales, 2007). On the  
37 demand-side, similarly, purchasers can be seen as acquiring goods and services in the  
38 informal economy because of the failures of the formal economy. These failures or  
39 imperfections relate firstly, to the lack of availability and reliability of formal economy  
40 businesses (e.g., formal businesses may not be available to do various tasks or simply fail to  
41 turn up), secondly, to the speed of provision and third and finally, to the quality of the goods  
42 and services provided. As De Soto (1989: 255) thus states, 'the real problem is not so much  
43 informality as formality', that is, the availability, speed and quality of provision in the formal  
44 economy. Unless these are solved, purchasers will thus continue to obtain goods and services  
45 in the informal economy.  
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47

48  
49 Given these competing theoretical explanations for purchasing in the informal  
50 economy, attention now turns to evaluating their validity in order that purchasers' motives for  
51 acquiring goods and services in the informal economy in the contemporary period in the EU-  
52 28 can be understood.  
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#### 54 55 **Methodology: examining motives for purchasing in the informal economy** 56

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58 To evaluate the motives for making purchases in the informal economy, special  
59 Eurobarometer survey no. 402 conducted in 2013 is reported. This involved 27,563 face-to-  
60 face interviews undertaken across the EU-28 with adults aged 15 years and older in the  
national language, with the number of interviews varying from 500 in smaller countries to  
1,500 in larger nations. Based on a multi-stage random (probability) sampling methodology,

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3 this ensured that on the issues of age, gender, region and locality size, each country as well as  
4 each level of sample was representative in proportion to its population size. For the univariate  
5 analysis, nevertheless, we used sample weighting, as recommended in the broader literature  
6 (Solon et al., 2013; Winship and Radbill, 1994) as well as the Eurobarometer methodology,  
7 in order to obtain meaningful descriptive results. For the multivariate analysis in contrast,  
8 there is debate over whether a weighting scheme should be used (Pfefferman, 1993; Solon et  
9 al., 2013; Winship and Radbill, 1994). Reflecting the dominant viewpoint, the weighting  
10 scheme was not used.  
11

12  
13 Given that this is a sensitive topic, the face-to-face interviews firstly asked  
14 participants questions about their attitudes towards participating in the informal economy and  
15 having established some rapport, then moved onto questions regarding their purchase of  
16 goods and services in the informal economy in the last 12 months along with their reasons for  
17 doing so and finally, questions regarding their supply of informal work. Here, we focus upon  
18 their responses as purchasers. Participants were first asked 'Have you in the last 12 months  
19 paid for any goods or services of which you had a good reason to assume that they included  
20 undeclared work (e.g. because there was no invoice or VAT receipt)?'. If so, they were then  
21 asked 'What made you acquire it from a source involving undeclared income, instead of  
22 acquiring it on the open market?' (lower price; faster service; better quality; in order to help  
23 someone who is in need of money; as a favour amongst friends/relatives/colleagues; good or  
24 service is not or hardly available on the regular market).  
25  
26

27 To analyse the individual-level determinants of the motives for purchasing goods and  
28 services in the informal economy, a multinomial logit model with adjusted standard errors at  
29 the country level is here employed. Given that the question gathering the reasons for  
30 purchasing in the informal sector was asked only to those reporting a purchase over the last  
31 12 months, the result is a reduced sample size. In order to better estimate the model, those  
32 reporting not having purchased in the informal economy over the last year have been  
33 included as a reference category. Therefore, the obtained dependent variable used in analysis  
34 is a categorical variable coded as follows: value 1 for respondents reporting not having  
35 purchased goods and services in the informal economy, value 2 for those purchasing for  
36 lower price alone, 3 for social and/or redistributive reasons alone, 4 for poor formal provision  
37 alone, 5 for mixture of lower price & social and/or redistributive reasons, 6 for mixture of  
38 lower price and & poor formal provision, 7 for mixture of social and/or redistributive reasons  
39 & poor formal provision, 8 for mixture of lower price, social and/or redistributive reasons &  
40 poor formal provision, and 9 for other motives, refuse to answer or do not know.  
41  
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43  
44 Meanwhile, the explanatory variables in the empirical analyses include:

- 45 • Tax morality: constructed index of self-reported tolerance towards tax non-  
46 compliance, where 1 represents higher tax morale and 10 lower tax morale. The  
47 reliability Cronbach's alpha of the index is 0.87.
- 48 • Gender: a dummy variable with value 0 for females and 1 for males.
- 49 • Age: a continuous variable indicating the exact age of a respondent.
- 50 • Marital status: a categorical variable for the marital status of the respondent with  
51 value 1 for married/ remarried individuals or living with partner, value 2 for singles,  
52 value 3 for those separated or divorced, and value 4 for widowed and for other form  
53 of marital status.
- 54 • Occupation: a categorical variable grouping respondents by their occupation with  
55 value 1 for unemployed, value 2 for self-employed, value 3 for managers, value 4 for  
56 other white collars, value 5 for manual workers, value 6 for house persons, value 7 for  
57 retired individuals, and value 8 for students.  
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- Difficulties paying bills: a categorical variable for the respondent difficulties in paying bills with value 1 for having difficulties most of the time, value 2 for occasionally, and value 3 for almost never/ never.
- People 15+ years in own household: a categorical variable for people 15+ years in respondent`s household (including the respondent) with value 1 for one person, value 2 for two persons, value 3 for 3 persons, and value 4 for 4 persons or more.
- Children: a dummy variable for the presence of children up to 14 years old in the household with value 0 for individuals with no children and value 1 for those having children.
- Area: a categorical variable for the area where the respondent lives with value 1 for rural area or village, value 2 for small or middle sized town, and value 3 for large town.
- Region: a categorical variable for the region where the respondent lives with value 1 for East-Central Europe, value 2 for Western Europe, value 3 for Southern Europe, and value 4 for Nordic Nations.

In order to facilitate the interpretation of the main results of the multivariate analysis, predicted probabilities are used to construct a ‘representative’ citizen which employs the mean and modal values across the EU28. This ‘representative’ European citizen is thus a 47 year old woman, retired, (re-) married/living with partner, with no children, lives in two person household in a small or middle town in Western Europe, who never or almost never confronts difficulties paying bills. Below, this ‘representative’ citizen will be used to analyse and better specify the variations in motives driving purchasers into the informal economy across different tax morality levels.

Before reporting the results, nevertheless, their reliability needs to be briefly discussed, especially given the sensitive subject matter involved. The finding is that in 93 per cent of the interviews conducted, the interviewers reported good or excellent cooperation from the participant and in 6 per cent of the cases the cooperation was fair or average. Cooperation was asserted to be bad in only 1 per cent of cases and this poor cooperation was largely in relation to discussing their supply of work in the informal economy, not their purchase of goods and services in the informal economy. There are thus no reasons to doubt the reliability of this demand-side data. Given this, attention can turn to an analysis of the results.

### **Results: explaining purchases from the informal economy**

Across the EU-28, 12 per cent of the survey participants (1 in 8) reported purchasing goods and services in the informal economy during the last 12 months prior to interview. Given the sensitive nature of the topic, this should be treated as a lower-bound estimate. Nevertheless, such a finding closely aligns with wider estimates that the informal economy is the equivalent of some 12-15 per cent of GDP in western economies (Williams and Schneider, 2016). Turning to the types of goods and services purchased in the informal economy, some 4.1 per cent of the participants surveyed had acquired home maintenance and improvement services from the informal economy in the year prior to the survey, 3.3 per cent had sourced car repair services, 3.0 per cent other services (not otherwise listed here), 2.6 per cent had acquired food products, 2.6 per cent other products (not otherwise listed here), 1.9 per cent had obtained housecleaning services, 1.3 per cent health care services, 1.3 per cent gardening, 0.6 per cent tutoring services, 0.6 per cent babysitting services in their home, 0.5 per cent home removal help, 0.5 per cent assistance with IT problems, 0.4 per cent ironing services, 0.4 per cent care services for the elderly, and 0.2 per cent child care services outside of their home.



Examining the propensity to purchase goods and services from the informal economy, nevertheless, the finding is that this is not evenly distributed across the EU-28. The proportion of participants making purchases in the informal economy was highest in the Nordic nations where 17 per cent had acquired goods and services informally in the past year, and was lowest is displayed in Western Europe where 11 per cent had purchased from the informal economy.

What, therefore, are their motives for making purchases from the informal economy? Is it the case that they are rational economic actors seeking to pay a lower price? Or are they social actors making purchases for social or redistributive reasons? Or alternatively, is their participation in the informal economy a result of the failings of the formal economy in terms of the availability, speed and quality of provision? To answer these questions, Table 1 reports the descriptive statistics regarding purchasers' motives. This reveals that the rational economic actor explanation of seeking a lower price is the only motive of purchasers in just 30 per cent of cases where goods and services were bought in the informal economy, one of several rationales in 31 per cent of cases and not cited as a rationale in the remaining 39 per cent of cases. Rationales other than a lower price, in consequence, exist in 70 per cent of purchases in the informal economy.

INSERT TABLE 1 ABOUT HERE

In 13 per cent of all cases where purchases were made in the informal economy, social rationales are the sole reason and in a further 23 per cent of cases, social rationales are combined with other reasons. A further 11 per cent of purchases in the informal economy, moreover, are purely due to the failings of the formal economy and in a further 23 per cent of all cases, the failings of the formal economy was cited alongside other rationales.

In the EU-28, in consequence, purchasers' use of the informal economy to acquire goods and services cannot be explained by using just one or other of these explanations. Instead, all rationales have to be used to fully explain purchasers' use of the informal economy. As Table 1 displays, nevertheless, the weight that needs to be given to each of these explanations varies across EU regions. To see this, member states are grouped into four EU regions: Western Europe (Belgium, Germany, France, Ireland, Luxembourg, Netherlands, Austria and the UK); Eastern and Central Europe (Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Croatia, Poland, Romania, Slovenia and Slovakia); Southern Europe (Cyprus, Greece, Spain, Italy, Malta and Portugal), and the Nordic countries (Denmark, Finland; Sweden). As Table 1 reveals, there are marked variations across EU regions in purchaser motives. The rationale of doing so purely to achieve a lower price is more common in Southern Europe (37 per cent) but less common in Western Europe (26 per cent). Social and/or redistributive rationales alone, meanwhile, are more commonly stated in Western Europe (17 per cent) while the imperfections of the formal economy are perhaps unsurprisingly more commonly stated as the sole reason in Eastern-Central Europe (15 per cent) but also surprisingly the Nordic nations (16 per cent), which might well be explained by the constraints resulting from labour shortages in the provision of many services.

Explanations for purchasing in the informal economy do not only differ across EU regions. They also vary across population groups. To see this, Table 2 investigates the variation in the likelihood of citing the various motives for purchasing goods and services in the informal economy. Despite the difficulties already mentioned of conducting a multivariate analysis, given the small sample size for some of the categories of the dependent variable, the results display the existence of relevant individual-level differences regarding purchasers' motives. Europeans who are more likely to cite the motive of a lower price, and thus those purchasers more susceptible to alterations in the cost/benefit ratio that they face,

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3 are men, younger people and with a lower tax morality. Compared with unemployed people,  
4 moreover, the employed such as managers, the self-employed and other white collars are also  
5 more likely to cite the motive of a lower price. So too are those living in the Nordic nations.  
6 Europeans statistically less susceptible to changes in the cost/benefit ratio are single people,  
7 and those who never or almost never face difficulties paying bills.  
8

9  
10 Analysing the social actor explanation, Table 2 reveals that those purchasing  
11 informally to help someone (i.e. social and/or redistributive reasons) are significantly more  
12 likely to hold low tax morality, to be single and self-employed or a manager. Compared with  
13 those living in East-Central Europe, those living in Nordic nations are more likely to make  
14 purchases in the informal economy for such social/redistributive reasons. Those citing both  
15 lower price and social and/or redistributive motive are their reasons for purchasing from the  
16 informal economy, moreover, are more likely to be men, the self-employed and to have a  
17 lower tax morality.  
18

19  
20 Turning to the formal economy failure explanation, this perspective is again more  
21 applicable to some populations than others. The rationale of formal economy failings alone is  
22 more likely to be cited by men, those with lower tax morality and the self-employed,  
23 managers and other white collars. Those citing both lower price and the failings of formal  
24 provision rationale, moreover, are again more likely to be men, with lower tax morale, self-  
25 employed, managers, other white collars or manual workers, and compared with those living  
26 in East-Central Europe, those living in Western Europe are less likely to purchase from the  
27 informal economy for a combination of lower price and poor formal provision rationales.  
28 Those citing a mixture of social and/or redistributive reasons and poor formal provision  
29 rationales, furthermore, are younger, with a lower tax morality, self-employed, retired and  
30 managers, although those living in Nordic nations are significantly less inclined to purchase  
31 informally for this mixture of rationales.  
32

33  
34 Those citing all three motives together, namely the lower price, the social and/or  
35 redistributive reasons and the poor formal provision, are again men, with a lower tax  
36 morality, self-employed, manual workers, managers and other white collars. Europeans  
37 statistically less susceptible to cite all three motives simultaneously are those who never or  
38 almost never face difficulties paying bills. Those citing another motive than those analysed or  
39 which declared they do not know or refused to mention the reason are more likely to be those  
40 with lower tax morale, managers and to leave in Southern Europe or Nordic nations.  
41

42  
43 Importantly, moreover, and as shown in Table 2, tax morale appears to be  
44 significantly associated with purchasers' motives for acquiring goods and services in the  
45 informal economy. Here, in consequence, we examine this by analysing the predicted  
46 likelihood of purchasing in the informal economy for various reasons according to their level  
47 of tax morale. As Figure 1 displays, across all motives for purchasing from the informal  
48 economy, the representative EU consumer with lower tax morale (i.e., 1 represents higher tax  
49 morale and 10 lower tax morale), is more likely to cite each and every reason. The only  
50 instance in which this does not occur is when purchasers cite some other motive and/or refuse  
51 to answer. In this case, the probability of citing this as their reason decreases when tax morale  
52 has a value of 8. Nevertheless, the probability of citing another motive, refusing to mention a  
53 motive or to answer remains higher than for those with lower tax morality.  
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INSERT FIGURE 1 ABOUT HERE

## Discussion and conclusions

In this paper, purchasers' motives for participating in the informal economy have been evaluated using a 2013 Eurobarometer survey of the EU-28. The descriptive statistics reveal

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3 that saving money is the sole rationale in only 30 per cent of transactions, one of several  
4 rationales in a further 31 per cent of exchanges and absent in 39 per cent of transactions.  
5 Therefore, in 70 per cent of transactions, other rationales exist besides a lower cost.  
6 Purchasers also participate in the informal economy for social and redistributive reasons, as  
7 well as because of the failures of the formal economy in terms of the availability, speed and  
8 quality of goods and services provision.  
9

10  
11 However, different types of European citizen are significantly more likely to explain  
12 their participation in particular ways. Those more susceptible to changes in the cost/benefit  
13 ratio are men, younger people, the employed, with a lower tax morality, and living in Nordic  
14 nations. Those less susceptible to alterations in the cost/benefit ratio are single people, and  
15 those who never or almost never face difficulties paying bills. Those more likely to cite social  
16 or redistributive rationales are single, self-employed or a manager, have low tax morality, and  
17 live in Nordic nations. Those citing the failings of the formal economy are more likely to be  
18 men, with lower tax morality and the self-employed, managers and other white collars.  
19

20 These findings from a purchaser perspective, rather than the predominant supplier  
21 perspective, have theoretical implications. Evaluating the rational economic actor, social  
22 actor and formal economy failure explanations, they reveal that no one explanation for  
23 making purchases in the informal economy suffices. Instead, if purchasers' motives are to be  
24 fully explained, all these theoretical explanations need to be employed. All three explanations  
25 are relevant, albeit with some groups being significantly more likely to make purchases in the  
26 informal economy for different reasons. Whether similar patterns prevail elsewhere beyond  
27 the European Union regarding the groups significantly more likely to purchase informally for  
28 particular reasons now needs to be evaluated. What is certain, however, is that studies can no  
29 longer simply treat participants in the informal economy as always being either rational  
30 economic actors, social actors or doing so solely due to the failings of the formal economy.  
31  
32

33 This has important implications for policy. To tackle the informal economy, the  
34 conventional approach, based on the rational economic actor model, has been to change the  
35 cost/benefit ratio confronting participants by focusing upon the cost side and increasing the  
36 penalties and likelihood of detection (e.g., Hasseldine and Li, 1999, Grabiner, 2000,  
37 Richardson and Sawyer, 2001). The outcome has been a focus upon deterrence policy  
38 measures. Recently, nevertheless, such deterrence measures have begun to be complemented  
39 by additional measures seeking to improve the benefits of, or provide incentives for,  
40 operating formally, including amnesties and tax subsidies for those purchasing formal goods  
41 and services, such as service vouchers (European Commission, 2007; Small Business  
42 Council, 2004; Williams, 2014). This paper, however, displays that this policy approach of  
43 changing the cost/benefit ratio facing purchasers will only be effective with a narrow range of  
44 purchasers (i.e., men, younger people, the employed, with a lower tax morality, and living in  
45 Nordic nations). Purchasers participating in the informal economy are not always rational  
46 economic actors, but are also pursuing social ends as well as avoiding the failings of the  
47 formal economy, namely the availability, speed, reliability and quality of formal provision.  
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50 To more fully tackle purchasing in the informal economy, therefore, not only will the  
51 imperfections in the formal economy need to be tackled but how to tackle those making  
52 purchases for social ends will also need to be given consideration. On the one hand, and to  
53 tackle formal economy imperfections, the lack of availability and speed of formal sector  
54 provision could be addressed using local phone hotlines, web portals and one-stop shops for  
55 customers to access formal sector suppliers, whilst tackling the reliability and quality of the  
56 formal economy can be addressed using quality assurance systems, such as kite-marks. This  
57 paper displays how these measures are required not only in East-Central Europe but also need  
58 to be targeted at the employed, men and those with a lower tax morality. On the other hand,  
59 tackling exchanges conducted for social ends, which is concentrated among single people, the  
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self-employed, managers, those with a low tax morality, and Nordic nations, requires consideration of whether to adopt a laissez-faire approach, whether tax regulations need to change (e.g., introducing a system whereby suppliers can earn up to maximum annual amount tax free or a system of vouchers to subsidise purchasers declaring such transactions), or whether new institutions are required so that people can undertake these paid favours legitimately, such as Local Exchange and Trading Schemes (LETS) or time banks (Aldridge et al., 2001). Such options will require further evaluation.

If this paper therefore results in a shift beyond simplistic one-dimensional theorisations of purchaser motives and towards a more nuanced theorisation that is appreciative of the multifarious logics and drivers in different populations, then it will have met one of its major intentions. If this consequently leads to recognition of the diverse policy measures required to tackle purchasing in the informal economy, then the fuller intention of this paper will have been achieved. What is certain, however, is that research on the informal economy can no longer focus upon solely the supply-side and ignore explaining and tackling the demand-side of the informal economy.

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Table 1 Purchasers' motives for participating in the informal economy: by EU region

	Lower price alone	Social and/or redistributive reasons alone	Poor formal provision alone	Mixture of lower price & social and/or redistributive reasons	Mixture of lower price and & poor formal provision	Mixture of social and/or redistributive reasons & poor formal provision	Mixture of lower price, social and/or redistributive reasons & poor formal provision	Other motive/ Refusal/ DK
EU 28	30	13	11	12	12	4	7	11
Western Europe	26	17	12	13	10	5	8	9
East-Central Europe	27	8	15	10	18	5	8	9
Southern Europe	37	11	7	12	10	3	5	15
Nordic nations	29	12	16	7	14	2	5	15

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Table 2. Multinomial logit regression of purchasers' motives for participating in the informal economy, EU-28 (Reference category: not having purchased good or services over the last 12 months)

Variables	Lower price alone	Social and/or redistributive reasons alone	Poor formal provision alone	Mixture of lower price & social and/or redistributive reasons	Mixture of lower price and & poor formal provision	Mixture of social and/or redistributive reasons & poor formal provision	Mixture of lower price, social and/or redistributive reasons & poor formal provision	Other motive/ Refusal/ DK
Tax morality	0.293*** (0.026)	0.228*** (0.033)	0.162*** (0.036)	0.357*** (0.035)	0.277*** (0.035)	0.206*** (0.038)	0.314*** (0.040)	0.0730* (0.042)
Gender (CG: Female)								
Male	0.454*** (0.073)	0.001 (0.155)	0.184** (0.089)	0.320*** (0.123)	0.157** (0.074)	-0.073 (0.153)	0.420*** (0.116)	-0.023 (0.101)
Age (exact age)	-0.010* (0.005)	0.006 (0.004)	0.003 (0.007)	-0.005 (0.006)	-0.006 (0.006)	-0.010** (0.005)	-0.010* (0.006)	-0.005 (0.005)
Marital status (CG: (Re-) Married/ Living with partner)								
Single	-0.340** (0.153)	0.268* (0.163)	-0.295 (0.193)	0.025 (0.204)	-0.168 (0.213)	-0.154 (0.143)	-0.056 (0.239)	0.163 (0.169)
Divorced or separated	-0.076 (0.140)	-0.084 (0.197)	-0.008 (0.150)	-0.268 (0.287)	-0.130 (0.165)	0.174 (0.216)	0.137 (0.268)	0.214 (0.163)
Widow/ other	-0.252 (0.193)	-0.283 (0.211)	-0.211 (0.161)	-0.083 (0.284)	-0.150 (0.195)	-0.112 (0.256)	0.046 (0.270)	0.016 (0.213)
Occupation (CG: Unemployed)								
Self-employed	0.547** (0.215)	0.903*** (0.203)	0.698*** (0.245)	0.841*** (0.280)	1.079*** (0.213)	1.525*** (0.445)	1.006*** (0.225)	0.350 (0.238)
Managers	0.624*** (0.143)	0.614*** (0.215)	1.254*** (0.198)	0.300 (0.262)	0.761*** (0.237)	1.666*** (0.426)	1.119*** (0.269)	0.681*** (0.251)
Other white collars	0.495*** (0.142)	0.066 (0.241)	0.465* (0.260)	0.306 (0.237)	0.599*** (0.190)	0.728 (0.551)	0.788*** (0.282)	0.062 (0.203)
Manual workers	0.104 (0.157)	0.130 (0.192)	0.142 (0.226)	0.235 (0.222)	0.365** (0.172)	0.591 (0.469)	0.649*** (0.229)	-0.100 (0.213)
House persons	0.275 (0.171)	0.173 (0.318)	0.246 (0.271)	0.127 (0.328)	0.126 (0.207)	-1.039 (0.738)	0.434 (0.402)	0.014 (0.243)
Retired	-0.025 (0.224)	-0.039 (0.247)	0.240 (0.236)	0.094 (0.307)	0.242 (0.238)	0.984** (0.425)	0.356 (0.269)	0.239 (0.293)
Students	0.262* (0.143)	-0.078 (0.211)	0.425 (0.161)	0.130 (0.284)	0.098 (0.195)	0.406 (0.256)	0.364 (0.270)	0.046 (0.213)

	(0.156)	(0.238)	(0.263)	(0.328)	(0.331)	(0.549)	(0.329)	(0.226)
Difficulties paying bills (CG: Most of the time)								
From time to time	-0.240**	0.021	0.042	0.092	-0.084	-0.011	-0.173	0.074
	(0.103)	(0.197)	(0.150)	(0.185)	(0.134)	(0.295)	(0.166)	(0.199)
Almost never/ never	-0.413**	0.205	0.029	-0.093	-0.150	0.014	-0.549**	0.259
	(0.172)	(0.162)	(0.216)	(0.192)	(0.147)	(0.265)	(0.239)	(0.262)
People 15+ years in own household (CG: One)								
Two	0.011	0.256*	0.069	0.049	0.113	-0.214	0.065	-0.019
	(0.107)	(0.141)	(0.159)	(0.173)	(0.159)	(0.159)	(0.193)	(0.162)
Three	-0.108	0.167	-0.058	0.008	0.206	-0.153	0.018	0.095
	(0.125)	(0.169)	(0.235)	(0.228)	(0.270)	(0.226)	(0.210)	(0.187)
Four and more	-0.149	-0.040	-0.097	-0.166	0.118	-0.196	0.262	-0.109
	(0.099)	(0.207)	(0.258)	(0.263)	(0.219)	(0.268)	(0.221)	(0.257)
Children (CG: No children)								
Having children	-0.001	0.024	0.039	0.139	0.180	0.332*	0.155	0.029
	(0.064)	(0.112)	(0.106)	(0.139)	(0.131)	(0.175)	(0.127)	(0.093)
Area (CG: Rural area or village)								
Small or middle sized town	0.013	-0.140	0.112	-0.028	-0.062	-0.394*	0.070	0.112
	(0.112)	(0.118)	(0.095)	(0.143)	(0.122)	(0.211)	(0.160)	(0.146)
Large town	0.139	-0.149	0.170	-0.058	0.063	-0.243	0.012	0.141
	(0.158)	(0.139)	(0.123)	(0.174)	(0.114)	(0.182)	(0.202)	(0.172)
Region (CG: East-Central Europe)								
Western Europe	-0.110	0.449	-0.533	0.209	-0.574**	-0.244	-0.109	-0.145
	(0.326)	(0.282)	(0.358)	(0.289)	(0.286)	(0.275)	(0.411)	(0.259)
Southern Europe	0.539	0.210	-0.252	0.198	-0.307	-0.435	-0.309	0.971***
	(0.372)	(0.242)	(0.423)	(0.377)	(0.422)	(0.385)	(0.342)	(0.303)
Nordic nations	0.612*	0.626*	-0.135	0.263	0.107	-0.781***	-0.140	0.600***
	(0.332)	(0.344)	(0.224)	(0.490)	(0.353)	(0.262)	(0.340)	(0.170)
Constant	-3.558***	-5.508***	-4.669***	-5.214***	-4.307***	-5.160***	-5.100***	-4.627***
	(0.367)	(0.255)	(0.608)	(0.543)	(0.521)	(0.500)	(0.577)	(0.586)
Observations					24,356			
Pseudo R <sup>2</sup>					0.044			

Notes:

Significant at \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 (Standard errors in parentheses, clustered by country).

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

We kept in the analysis only respondents for whom data on each and every independent variable is available.

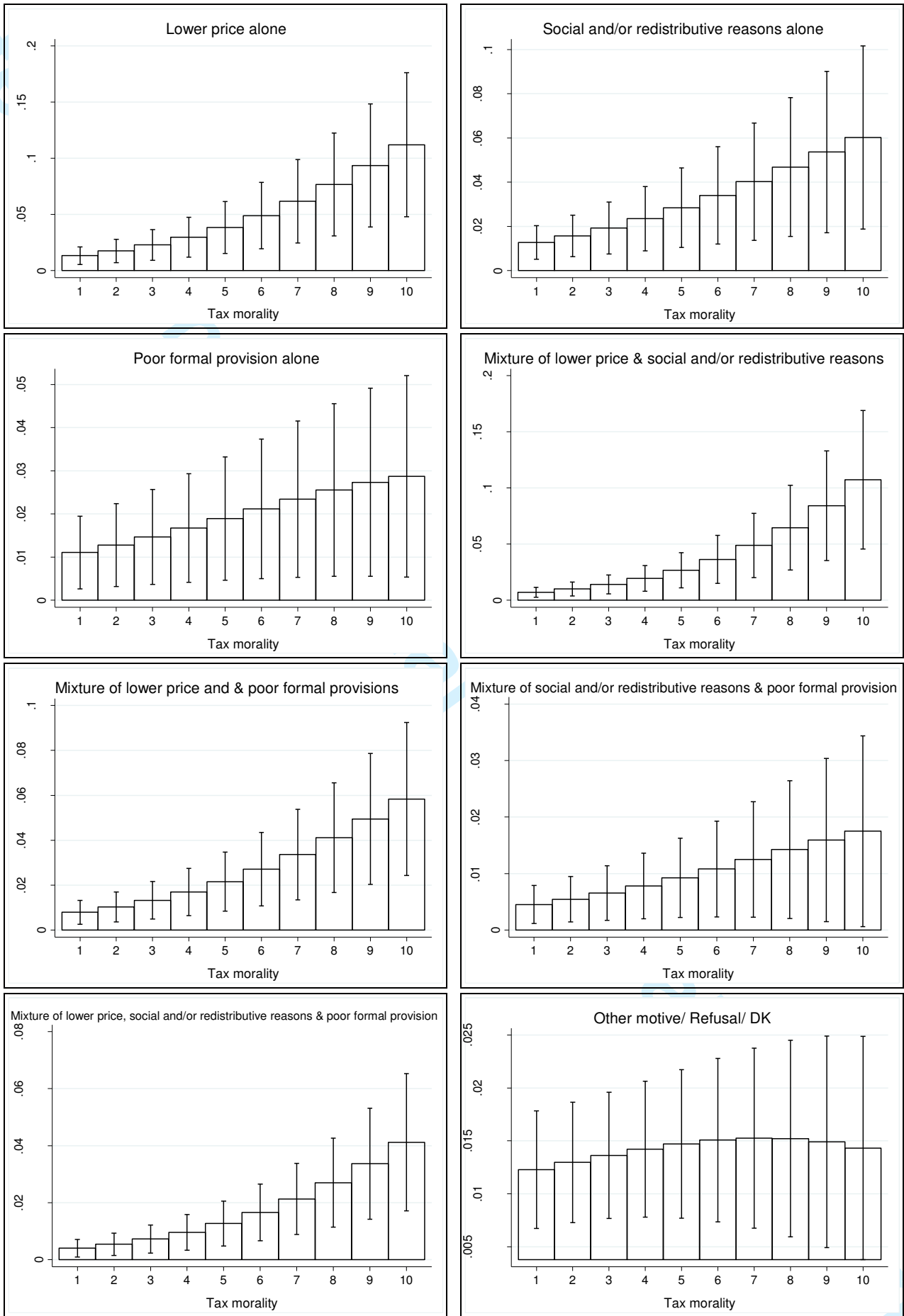


Figure 1. Predicted probability of reasons for a 'representative citizen' purchasing goods and services in the informal economy in Europe: by level of tax morality (with 95% CI).

## Appendix

Table A1. Variables used in the analysis: definitions and descriptive statistics (N = 24,356)

Variables	Definition	Mode or mean	Min/ Max
Dependent variable			
Motives for purchasing goods and services in the informal economy	Respondent motives for purchasing goods and services in the informal economy in the last 12 months in categories (respondents reporting not purchasing goods and services in the informal economy were considered as a reference category).	Not purchase undeclared goods and services (88%)	1 / 9
Independent variables			
Tax morality	Constructed index of self-reported tolerance towards tax non-compliance	2.3	1 / 10
Gender	Dummy for the gender of the respondent	Female (52%)	0 / 1
Age	Respondent exact age	47 years	15 / 98
Marital status	Respondent marital status in categories	(Re-)Married/ Living with partner (64%)	1 / 4
Occupation	Respondent occupation in categories	Retired (25%)	1 / 8
Difficulties paying bills	Respondent difficulties in paying bills in categories	Almost never/ never (60%)	1 / 3
People 15+ years in own household	People 15+ years in respondent`s household (including the respondent) in categories	Two (48%)	1 / 4
Children	Dummy for the presence of children (up to 14 years old) in the household	No children (71%)	0 / 1
Area	Size of the area where the respondent lives in categories	Small or middle sized town (41%)	1 / 3
Region	Region where the respondent lives in categories	Western Europe (49%)	1 / 4