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Evaluating the participation of marginalized populations in undeclared work in the Baltic Sea countries

Colin C Williams* and Ioana A Horodnic**

*School of Management, University of Sheffield, Conduit Road, Sheffield, S10 1FL, UK

**Department of Management, Marketing and Business Administration, Alexandru Ioan Cuza University of Iasi, Romania.

Abstract

To evaluate the ‘marginalization thesis’ which asserts that marginalized populations are more likely to participate in undeclared work, we analyse a 2013 Eurobarometer survey of eight Baltic Sea countries, namely four Western countries (Denmark, Finland, Germany and Sweden) and four post-Soviet countries (Estonia, Latvia, Lithuania and Poland). Finding that across both the western and post-Soviet Baltic Sea countries, some marginalized populations (e.g., those having difficulties paying household bills, younger people) are significantly more likely to participate in undeclared work, and others are not (e.g., women, those with a high level of tax morality), a more nuanced and variegated understanding of the marginalization thesis is developed that is valid across both western and post-Soviet Baltic Sea countries. The paper concludes by discussing the theoretical and policy implications.

Key words: informal economy, underground sector, shadow economy, marginalized, Baltic Sea region.

Introduction

Since the turn of the millennium, a growing literature has emerged which displays the role that undeclared work plays in helping people get-by in both Baltic countries and well beyond (Abbot and Wallace 2009; Kapelyushnikov, Kuznetsov and Kuznetisova 2012; Kukk and Staehr 2014; Meriküll and Staehr 2010; Sauka and Putniņš 2011; Wallace and Latcheva 2006; Williams and Round 2007, 2008a,b,c; Williams, Round and Rodgers 2013). The dominant view has been that participation in the undeclared economy is more likely amongst people who are relatively marginalized from the declared economy (Arnstberg and Boren 2003; Castree et al. 2004; Rubić 2013; Sasunkevich 2014; Surdej and Ślęzak 2009). Known as the ‘marginalization thesis’, this dominant view asserts not only that people living in marginalized areas, such as less affluent countries and peripheral rural areas, are more likely to participate in undeclared work (ILO 2012, 2013), but also marginalized socio-economic groups, including unemployed people and those in financial difficulty (Morris and Polese 2014; Round and Williams 2008; Round, Williams and Rodgers 2010a,b; Slavnic 2010; Taiwo 2013). However, the evidence supporting this dominant marginalization thesis is weak, consisting of either small-scale surveys of particular localities or population groups (Round, Williams and Rodgers 2010a,b; Sedlenieks 2003; Smith and Stenning 2006; Stănculescu 2005; Surdej and Ślęzak 2009; Williams and Round 2008a,b, 2010) or out-of-date surveys conducted in mid-transition during the late 1990s (Meriküll and Staehr 2010). In consequence, the aim of this paper is to evaluate critically this marginalization thesis by introducing a fresh contemporary extensive data set, namely a cross-national survey conducted in 2013 in eight Baltic Sea countries involving 8,548 face-to-face interviews.

To do this, the first section examines competing perspectives on whether marginalized populations are more likely to participate in undeclared work. This reveals the existence of two competing theorisations, namely a dominant ‘marginalization thesis’ which asserts that populations who are relatively marginalized from declared employment are more likely to

engage in undeclared work, and an emerging ‘reinforcement thesis’, which asserts that marginalized populations are less likely to do so, with the result that the undeclared economy consolidates, rather than diminishes, the socio-spatial disparities produced by the declared economy. Displaying that the evidence-base to support these theses currently largely consists only of a small number of small-scale surveys of specific localities or populations, the second section then starts to fill this gap by introducing the methodology used in an extensive contemporary 2013 Eurobarometer survey of participation in undeclared work across eight Baltic Sea countries, namely four Western Baltic Sea countries (Denmark, Germany, Finland, and Sweden) and four post-Soviet Baltic Sea countries (Estonia, Latvia, Lithuania and Poland). The third section reports the results. This reveals the need for a more nuanced understanding which recognises that although some populations who are relatively marginalized from declared employment are more likely to engage in undeclared work, others are not. The fourth and final section concludes by discussing the implications for theory and policy of these findings.

Throughout this paper, and reflecting the widespread consensus, undeclared work is defined as paid activities not declared to the authorities for tax, social security and/or labour law purposes (European Commission 2007; OECD 2012; Schneider 2013; Schneider and Williams 2013; Vanderseypen et al. 2013; Williams 2014; Williams and Windebank 1998). If a paid activity possesses other absences or shortcomings, then this activity is not here defined as part of the undeclared economy. For instance, if the good and/or service traded is illegal (e.g., illegal drugs), then this paid activity is here deemed to be part of the broader “criminal” economy rather than the undeclared economy, and if the activity is unpaid, then it is part of the separate unpaid economy. However, and as with all definitions, blurred edges exist regarding what might be included as undeclared work, such as whether to include work which is reimbursed with gifts or in-kind favours. Here, activity reimbursed with gifts or in-kind is excluded. This

paper also excludes work conducted by declared employees in declared jobs who sometimes receive part of their wage as a declared salary and an additional undeclared (“envelope”) wage (Williams 2009a,b). Instead, only paid activities that are wholly undeclared for tax, social security and/or labour law purposes are defined as undeclared work.

Competing views on the participation of marginalized populations in undeclared work

Reviewing the literature, two competing perspectives can be identified regarding the relationship between marginalized populations and participation in the undeclared economy.

Marginalization thesis

The dominant marginalization thesis that engagement in undeclared work is concentrated in marginalized populations arises out of, and is central to, two theorizations of the undeclared economy. Modernisation theory views the undeclared economy as a legacy of a previous mode of production and persisting in marginal enclaves awaiting modernization. The undeclared economy is thus seen as a separate realm concentrated in marginalized populations such as uneducated groups (La Porta and Schleifer, 2014). For political economy scholars, meanwhile, undeclared work is seen to directly arise from the advent of a deregulated open world economy, where diminishing state involvement in social protection and economic intervention result in those excluded from the declared economy and social protection being pushed into undeclared work to survive (Castells and Portes, 1989; Davis, 2006; ILO, 2014; Slavnic, 2010).

From both theoretical perspectives, therefore, marginalized populations are viewed as more likely to participate in undeclared work (Ahmad 2008; Arnstberg and Boren 2003; Castree et al 2004; Rubić 2013; Sasunkevich 2014; Surdej and Ślęzak 2009). This is asserted to apply not only to marginalized spaces but also marginalized population groups. Commencing with the spatial variations, the long-standing perspective that is prevalent at all spatial scales is

that there is greater participation in undeclared work in marginal and less affluent areas. This applies whether discussing global regions (ILO 2012; Williams 2014), cross-national variations (Roberts 2013; Schneider 2013; Schneider and Williams 2013), local and regional variations (Williams and Round 2008a, 2010) or urban-rural variations (Button 1984; Williams 2014). It is similarly the case when discussing participation in undeclared work across population groups that groups marginalized from the declared economy are widely asserted to be more likely to participate in undeclared work. For example, unemployed people are claimed to be more likely to participate in undeclared work than those in declared employment (Castells and Portes 1989; Slavnic 2010; Taiwo 2013), women more likely to engage in the undeclared economy than men (ILO 2013; Stănculescu 2004) and those with financial difficulties more likely to conduct such work than affluent population groups (Barbour and Llanes 2013; Smith and Stenning 2006).

Reinforcement thesis

During the last few decades nevertheless, this dominant marginalization thesis has started to be contested by those who view undeclared work as a means to supplement income by otherwise well-off populations. A reinforcement thesis has thus emerged which argues that marginalized populations are less likely to participate in undeclared work, and thus that the undeclared economy does not diminish the disparities produced by the declared economy but rather, consolidates them. It has been argued for example that populations living in more affluent places are more likely to participate in the undeclared economy than populations in less affluent places (van Geuns, Mevissen and Renooy 1987; Williams, Round and Rodgers 2013), that unemployed people are less likely to participate in undeclared work than people who have declared jobs (Blalabanova and McKee 2002; Kaitedlidou et al. 2013; MacDonald 1994; Moldovan and Van de Walle 2013; Pahl 1984; Renooy 1990; Williams 2001; Williams and Round 2007, 2008c), that women are less likely to participate in undeclared work than men

(McInnis-Dittrich 1995; Williams 2011; Williams and Round 2008b) and that those with financial difficulties participate less than more affluent population groups (Neef 2002; Williams 2004; Williams, Round and Rodgers 2013).

Analysing the evidence base to support these marginalization and/or reinforcement theses, what instantly becomes apparent is that the only evidence available to test them are either small-scale surveys of specific localities and/or population groups (Karjanen 2014; Kováč 2014; Moldovan and van de Walle 2013; Morris and Polese 2014a,b; Mróz 2012; Müller and Miggelbrink 2014; Onoshchenko and Williams 2013) or more extensive surveys but conducted some time ago (Meriküll and Staehr 2010; Williams 2010). Several of these smaller-scale studies involve a study of just one person (Polese 2013; Woolfson 2007) whilst a survey conducted in Riga is based on just 15 interviews (Sedlenieks 2003) and even larger surveys involve only for example 400 interviews in Ukrainian localities (Williams 2007; Williams and Round 2008c) and 311 interviews in deprived and affluent districts in Moscow (Williams and Round 2010). As such, they are largely insufficient in size to test the validity of the marginalization thesis.

The extensive surveys reported in the Baltics potentially capable of testing this marginalization thesis moreover, are from 1998 and 2002 (Meriküll and Staehr 2010) and 2007 (Williams 2010), which both reveal that firm-related characteristics (e.g., sector, firm size) are important factors in all Baltic countries in explaining the prevalence of undeclared work. Socio-demographic characteristics (e.g., gender, age, education) are found to be less important in explaining the size of the undeclared economy and to vary substantially across countries (Meriküll and Staehr 2010; Williams 2010). These studies however, do not test the marginalization thesis. As such, they neither reflect the contemporary situation and nor do they evaluate the validity of the marginalization (or reinforcement) thesis, which is the aim of this paper.

The significant contribution of this paper therefore, is that it advances knowledge on undeclared work on two fronts. Firstly, it reports a contemporary survey of the undeclared economy in the Baltic Sea region, providing more up-to-date evidence of who engages in undeclared work. Secondly, and in theoretical terms, the significant contribution of this paper is that it is the first known evaluation of the validity of the marginalization thesis. This is crucial if theorisations are to be advanced beyond the current sweeping general statements of the marginalization thesis, and also important to enable policy to identify the specific groups which need to be targeted rather than simply target all marginalized populations based on crude assumptions about who conducts such work. In the next section therefore, this paper begins to fill these major gaps in knowledge by reporting the results of an extensive contemporary survey in order to evaluate the validity of the marginalization thesis.

Methodology

To evaluate the validity of the marginalization thesis across the Baltic Sea countries, we here report Special Eurobarometer No. 402. This survey on participation in undeclared work was conducted in April and May 2013 and includes 27,563 face-to-face interviews in all 28 European Union member states, of which 8,548 were conducted in the Baltic Sea countries that are member states of the European Union, namely four established western economies (Denmark, Finland, Germany and Sweden) and four post-Soviet transition economies (Estonia, Latvia, Lithuania and Poland). In each country, the interviews were conducted in the national language. For each country, a multi-stage random (probability) sampling method was used (the number of interviews varying from 1,000 in smaller countries to 1,449 in Germany). This ensured that on the issues of gender, age, region and locality size, a representative sample was collected. For the univariate analysis therefore, we employed the sampling weighting scheme as the literature suggests (Sharon and Liu 1994; Solon, Haider and Wooldridge 2013; Winship and

Radbill 1994). For the multivariate analysis however, a debate exists over whether to use a weighting scheme (Pfefferman, 1994; Sharon and Liu, 1994; Solon et al., 2013; Winship and Radbill, 1994). Reflecting the dominant viewpoint, the decision was taken not to do so.

Given that undeclared work is a sensitive subject due to its illicit nature, the interview schedule followed best practice (see Ram and Williams 2008) by building rapport with the participants before asking more sensitive questions regarding their participation in undeclared work. Pursuing a gradual approach to these more sensitive questions, the interview schedule commenced with questions about their attitudes towards undeclared work, followed by questions on whether they had purchased goods and services on an undeclared basis. Only following this were questions asked regarding their own participation in undeclared work. Analysing the responses of interviewees regarding the perceived reliability of the interviews, the finding is that cooperation was deemed bad in only 1.1% of the interviews. Cooperation was deemed excellent in 64.4%, fair in 28.4% and average in 6.1%.

To analyse the results, the hypothesis is tested that participation in undeclared work varies according to socio-demographic variables (gender, age, marital status, age when stopped full time education, people 15+ years in own household, number of children, tax morality), socio-economic variables (employment status, household financial circumstances) and spatial characteristics (urban-rural character of the area in which the respondent lives). To investigate the validity of this hypothesis, we here use a logistic regression analysis. The dependent variable measures whether participants engaged in undeclared work using the following question: ‘Apart from regular employment, have you yourself carried out any undeclared paid activities in the last 12 months?’. The shortcoming of this measurement is that the amplitude of the phenomena is not captured (i.e. how much undeclared work) but only the engagement in such a practice. The independent variables used to analyse whether marginalized populations are more likely to engage in undeclared work are as follows (see Table A2 in the Appendix):

- Gender: a dummy variable with value 1 for men and 0 for women.
- Age: a categorical variable for the age of the participant with value 1 for those aged 15-24, value 2 for those aged 25-34, value 3 for those aged 35-44, value 4 for those aged 45-54, value 5 for those aged 55-64, and value 6 for those over 65 years old.
- Marital Status: a categorical variable for the marital status of the participant with value 1 for married/ remarried and cohabiters individuals, value 2 for singles, and value 3 for those separated or divorced, widowed and other forms of marital status.
- Social class: a categorical variable for the participants perception of the social class to which s/he belongs with value 1 for the working class, value 2 for the middle class, and value 3 for higher class.
- Age when stopped full time education: a categorical variable for the age the participant stopped full time education with value 1 for 15 years old and under, value 2 for 16-19 years old, value 3 for 20 years old or over, and value 4 for “still studying”.
- People 15+ years in own household: a dummy variable for people 15+ years in the participant’s household (including the participant) with value 1 for one person and 0 for two persons or more.
- Children (up to 14 years old in the household): a categorical variable with value 1 for individuals with no children, value 2 for the presence of children less than 10 years old in the participant’s household, value 3 for the presence of children aged 10 to 14 years old in the participant’s household and value 4 for the presence of children less than 10 years old and children aged 10 to 14 years old in the participant’s household.
- Tax morality index: Constructed index of self-reported tolerance towards tax non-compliance based on the individual ratings for six behaviours, namely: an individual is hired by a household for work and s/he does not declare the payment received to the tax or social security authorities even though it should be declared; a firm is hired by a household

for work and it does not declare the payment received to the tax or social security authorities; a firm is hired by another firm for work and it does not declare its activities to the tax or social security authorities; a firm hires an individual and all or a part of the wages paid to him/her are not officially declared; someone receives welfare payments without entitlement, and someone evades taxes by not declaring or only partially declaring their income. The index is created by collating participants' responses to each of the six questions. The Cronbach's Alpha coefficient is 0.86 which shows an excellent internal consistency of the scale (Kline, 2000). The index has been represented here in the 10-point Likert scale original format (where 1 means absolutely unacceptable and 10 means absolutely acceptable). The higher the index value, the lowest the individual tax morality .

- Employment status: a dummy variable with value 1 for employed participants and 0 for unemployed participants.
- Difficulties paying bills: a categorical variable for whether the participant witnessed 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.
- Area respondent lives: a categorical variable for the urban/rural area where the participant lives with value 1 for rural area or village, value 2 for small or middle sized town, and value 3 for large urban area.

Below, we report the findings.

Findings: participation of marginalized populations in undeclared work

Table 1 displays the descriptive results of the 8,548 face-to-face interviews, revealing that 3.35% of participants report that they participated in undeclared work in the 12 months prior to the interview. A further 2.6% of participants refused to answer or stated that they did not know.

Even if participation in undeclared work is a sensitive subject and the differences between the situation participants report and lived practice may significantly differ, this survey nevertheless reveals that 1 in 29 citizens of these eight Baltic Sea countries were willing to self-report that they had participated in undeclared work during the 12 months prior to the survey. Examining how much they earned from their work in the undeclared economy, the mean earnings are €676, with 23% earning in the range of €1-100, 9% €101-200 and 20% between €201-500. Therefore, over half (52%) of those working in the undeclared economy in these Baltic Sea countries earn €500 or less. A further 10% earn €501-1000 and 10% earned more than €1000. However, 28% of participants do not remember how much they earned, do not know or refused to answer.

INSERT TABLE 1 HERE

To start to evaluate the validity of the marginalization thesis, Table 1 reports cross-national variations, examining whether the poorer post-Soviet Baltic Sea countries have higher participation rates than the more affluent Western Baltic Sea countries, as the marginalization thesis purports. This reveals that participation rates are highest in Estonia and Latvia (11%), Denmark (9%), Lithuania (8%) and Sweden (7%) and lowest in Finland and Poland (3%) and Germany (2%). Examining whether there is a statistically significant relationship between cross-national variations in the level of participation in undeclared work and cross-national variations in GDP in purchasing power standards (as a measure of whether poorer post-Soviet countries are more likely to undertake undeclared work as the marginalization thesis purports), the finding is that there is no significant relationship ($p > 0.05$). The consequence is that there is no support for the marginalization (or reinforcement) thesis when examining cross-national variations in participation in undeclared work in the Baltic Sea region. It is similarly the case when average earnings are examined. Those living in Sweden, Estonia, Denmark, Lithuania

earn more from undeclared work than the Baltic Sea countries average of €676 (€1346, €885, €821 and €696 respectively) and those living in Germany, Latvia, Poland and Finland earn less than the Baltic Sea countries average (€479, €478, €438 and €420 respectively). However, there is again no statistically significant relationship between average undeclared earnings and the level of affluence of Baltic Sea countries (measured in terms of personal purchasing power). As such, neither the marginalization nor reinforcement thesis is valid in relation to cross-national variations in undeclared work.

Turning to the socio-demographic, socio-economic and other forms of spatial variation, Table 2 displays that for Baltic Sea countries region as a whole, contrary to the marginalization thesis, participation in undeclared work is higher amongst men than women (4% of men participated over the prior 12 months but only 2% of women) and women earn significantly less than men from such work (i.e., their earnings in the undeclared economy are 80% the amount earned by men). Similarly, the unemployed are slightly less likely to participate in undeclared work than the employed and when they do, they earn less. Neither do respondents living in rural areas participate in undeclared work to a greater extent than respondents living in urban areas but when they do, they earn more. The tentative suggestion from these descriptive statistics therefore, is that the marginalization thesis does not apply when discussing women compared with men, the unemployed compared with the employed, and those living in rural areas compared with urban areas. Instead, the reinforcement thesis tentatively appears to be valid so far as gender, employment status and the urban-rural divide are concerned.

INSERT TABLE 2 ABOUT HERE

However, when examining other population groups for the Baltic Sea region as a whole, it is the marginalization thesis that tentatively appears to be valid. Not only are younger age groups

more likely to participate in undeclared work than older age groups, but so too those who are still studying, those single compared with (re)married/cohabitating participants, those living in single person households, those who self-define themselves as working class compared with those defining themselves as middle or higher class, those with more than one child, and those who have difficulty paying bills compared with those who seldom have difficulties. For all these population groups, the marginalization thesis seems to be valid.

Analysing these descriptive statistics therefore, the tentative conclusion is that it is not possible to assert that either the marginalization or the reinforcement thesis is universally applicable at all spatial scales and across all socio-demographic and socio-economic groups. Instead, the marginalization thesis appears to be applicable when analysing some population groups but the reinforcement thesis for others.

Analysis: are marginalized populations more likely to participate in undeclared work?

To analyse whether the above relationships regarding who participates in undeclared work remain valid when other the variables are held constant, we conduct a multivariate analysis using a logistic regression (see Table 3). We do this at three spatial scales, namely for Baltic Sea countries as a whole (Model 1), for Western Baltic Sea Countries (Model 2) and for post-Soviet Baltic Sea countries (Model 3).

INSERT TABLE 3 HERE

Model 1 in Table 3 displays that in the Baltic Sea region as a whole, when other variables are taken into account and held constant, not only are younger people significantly more likely to participate in undeclared work, doubtless due to their greater exclusion from the formal labour

market (European Commission 2014a), but so too are those holding non-conformist attitudes towards tax compliance. This is important because it shows that those marginalized in the sense that their norms, values and beliefs regarding undeclared work do not conform to the formal institutions (i.e., the codes, regulations and legislation) are more likely to engage in such work (Williams and Martinez 2014a,b). The implication therefore, is that tax morality may well be a useful proxy indicator of the level of participation in undeclared work. So too are those having difficulties paying the household bills more likely to participate in undeclared work. In other words, they are more likely to be forced into undeclared work out of necessity to make ends meet and as a last resort than those with fewer financial difficulties.

Contrary to the marginalization thesis and in support of the reinforcement thesis however, men are revealed to be significantly more likely in the Baltic Sea region as a whole to participate in undeclared work than women, reflecting how the exclusion of women from the declared economy is reinforced when examining the undeclared economy. No evidence is found to support the marginalization (or reinforcement) thesis however, when analysing the employment status, marital status, the age people stopped full-time education, the number of children in the household and whether they live in an urban or rural area. For example, and notably, the unemployed are not significantly more likely to engage in undeclared work than the employed. As such, the finding is that a variegated understanding of the validity of the marginalization thesis is required. The marginalization thesis is valid in relation to some marginalized population groups (e.g., younger people, those with non-conformist attitudes to tax compliance and those having difficulties paying the household bills), but not others (e.g., women).

It might be assumed that when comparing the western Baltic Sea countries and post-Soviet Baltic Sea countries, different results will be found about who is more likely to participate. However, comparing models 2 and 3 in Table 3, which report the results for each of

these sets of countries, the finding is that there are no significant differences. The associations and the directions of the associations are the same. Regardless of whether one examines Western Baltic Sea countries or post-Soviet Baltic Sea countries, younger people, people holding non-conformist attitudes towards tax compliance and those facing difficulties paying bills are more likely to engage in undeclared work. The validity of the marginalization thesis, therefore, only applies to these specific marginalized populations, and there is no evidence that the marginalized populations engaged in undeclared work differs between Western and post-Soviet Baltic Sea countries.

Discussion and Conclusions

To evaluate the validity of the marginalization thesis, this paper has reported the results of a 2013 survey of participation in undeclared work in eight Baltic Sea countries, namely four western Baltic Sea countries (Denmark, Finland, Germany and Sweden) and four post-Soviet Baltic Sea countries (Estonia, Latvia, Lithuania and Poland). Using logistic regression analysis, this has displayed support for the marginalization thesis in relation to some marginalized population groups. Younger age groups are significantly more likely to participate in undeclared work, as are those more tolerant of undeclared work (who are marginalized in the sense that their values and attitudes do not conform to those of the codes, regulations and laws of the formal institutions) and those who have difficulties most of the time paying the household bills. Contrary to the marginalization thesis and in support of the reinforcement thesis meanwhile, men are found to be significantly more likely to engage in undeclared work than women. No evidence is found to support the marginalization (or reinforcement) thesis however, so far as marital status, educational level, the number of children in the household or the urban-rural divide is concerned. Neither is any difference found between the Western and post-Soviet Baltic Sea countries in terms of who is more likely to engage in undeclared work.

This has implications for theorizing participation in undeclared work. Firstly, it reveals the need to transcend the notion that the marginalization thesis is valid across all marginalized populations who are relatively excluded from the declared economy. This survey of the Baltic Sea region displays that although the marginalization thesis applies so far as the age, tax morality and household financial circumstances are concerned, when gender is analysed, the finding is that the reinforcement thesis is valid in the sense that participation in undeclared work is found to reinforce the gender disparities in the formal economy. When other characteristics are analysed moreover, such as employment status, education level, the urban-rural divide, social class, marital status and number of children, no evidence is found to support either the marginalization or reinforcement thesis. The result is the need for a more nuanced understanding of the validity of the marginalization thesis. Secondly, this analysis reveals that exactly the same findings are valid regarding which marginalized groups are more likely to participate in undeclared work, when examining the Western Baltic Sea countries and post-Soviet Baltic Sea countries separately. There are no differences. Whether the same findings are valid regarding the marginalization thesis at other spatial scales and in other regions beyond the Baltic Sea countries, such as in Southern Europe, now needs to be evaluated.

Turning to the implications for policy of these findings, the first important consequence is that this study reveals the specific populations that need to be targeted when tackling the undeclared economy. In recent years for example, there has been an emphasis in the European Union on targeting poorer EU nations when allocating resources through European structural funds to tackling undeclared work (Dekker et al. 2010, European Commission 2014b). However, the findings of this survey reveal that the poorer Baltic Sea countries are not disproportionately engaged in undeclared work. There is thus a need to rethink the spatial allocation of European funds for tackling undeclared work. This survey also reveals that the

present targeting of the unemployed by many governments in Baltic Sea countries when tackling undeclared work is a mistake. The unemployed are not significantly more likely to participate. Popular policy initiatives such as seeking to smooth the transition from unemployment to self-employment therefore, do not appear as worthwhile as many Baltic Sea governments assume. However, this survey does reveal that it might be worthwhile targeting other marginalized populations when tackling undeclared work, such as younger people as well as men rather than women. Put another way, this analysis provides a useful risk assessment of the different marginalized populations which enables the validity of the currently targeted populations to be evaluated and the identification of possible groups that might be targeted in future policy initiatives.

There are however limitations to these findings. This 2013 Eurobarometer survey provides a first step towards understanding who engages in undeclared work by identifying the varying levels of participation in this sphere across different populations. The problem however, is that with only 1 in 29 reporting that they participate in undeclared work, the number of observations needs to be increased in future studies. This paper usefully identifies the characteristics of the populations that might be targeted for such booster samples (e.g., younger men). Future surveys moreover, could usefully ask about the frequency of engagement so as to provide more insight into the level of involvement in such work and identify better the sectors and occupations conducive to such work.

In sum, this paper reveals for the first time the need for a more nuanced understanding of the validity of the marginalization thesis. Although this thesis is valid when considering some marginalized populations who are more likely to participate in undeclared work, it is not valid in relation to other marginalized populations. If this paper thus stimulates the emergence of a more variegated interpretation of the marginalization thesis, and a testing of whether this is also valid in other European regions (e.g., Southern Europe), then it will have fulfilled a major

intention. If it also encourages a shift in policy as a result of this more variegated understanding, not least in terms of reviewing the populations targeted by the authorities when tackling undeclared work and how resources are allocated, then it will have fulfilled its wider intention.

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Table 1. Participation in undeclared work in Baltic Sea nations, prior 12 months

	Sample size	% engaged in undeclared work	Earnings from undeclared work:					Don't remember/know; refusal (%)	Mean (€)	GDP in PPS (EU28=100), 2013
			€1-100 (%)	€101-200 (%)	€201-500 (%)	€501-1000 (%)	€1000+ (%)			
Baltic Sea nations	8,548	3.35	23	9	20	10	10	28	676	-
Estonia	1,003	11	29	12	11	7	16	25	885	72
Latvia	1,006	11	36	6	15	13	6	24	478	67
Denmark	1,004	9	14	11	13	31	16	15	821	125
Lithuania	1,027	8	13	16	12	12	11	36	696	74
Sweden	1,006	7	17	5	29	13	29	7	1346	127
Finland	1,003	3	32	21	24	13	6	4	420	112
Poland	1,000	3	9	4	24	9	4	50	438	68
Germany	1,449	2	36	11	19	3	8	23	479	124

Table 2. Participation in undeclared work in Baltic Sea nations: socio-demographic, socio-economic and spatial variations

		% engaged in undeclared work	Earnings from undeclared work:					Don't remember/know; Refusal (%)	Mean (€)
			€1-100 (%)	€101-200 (%)	€201-500 (%)	€501-1000 (%)	€1000+ (%)		
Gender	Male	4	16	6	25	12	10	31	734
	Female	2	34	14	12	7	10	23	586
Age	15-24	7	35	10	17	11	12	15	543
	25-34	5	14	7	28	18	13	20	782
	35-44	4	18	10	16	9	13	34	1127
	45-54	4	27	11	19	2	6	35	357
	55-64	2	5	2	25	9	9	50	866
	65+	1	15	8	15	12	3	47	343
Marital status	(Re)Married/Cohabiting	3	20	9	25	10	8	28	624
	Single	6	23	11	19	12	14	21	683
	Divorced/Separated/Widowed/ Other	3	32	1	4	8	12	43	951
Social class	Working class	4	15	9	20	10	11	35	840
	Middle class	3	28	9	21	10	11	21	571
	Higher class	2	54	5	29	7	1	4	246
Age education ended	<15	1	12	7	18	15	0	48	407
	16-19	4	24	8	20	5	10	33	695
	20+	3	19	13	19	12	17	20	868
	Still studying	6	24	5	24	21	3	23	411
Adults in household	One	5	21	10	19	8	8	34	600
	Two and more	3	24	8	21	11	11	25	706
Children	<10 years old	4	9	6	16	15	22	32	1401
	10-14 years old	4	48	18	14	5	1	14	211
	<10 and 10-14	5	35	3	23	3	8	28	367
	No children	3	21	9	22	10	9	29	604
Employment	Unemployed	3	17	5	23	13	7	35	495
	Employed	4	27	11	18	8	13	23	787
Difficulties paying bills	Most of the time	12	26	4	19	15	4	32	423
	From time to time	5	10	6	25	5	9	45	876
	Almost never/never	2	27	12	19	12	13	17	674
Area	Rural area or village	2	11	3	36	8	14	28	799
	Small or middle sized town	4	22	13	18	8	10	29	638
	Large town	4	33	6	12	16	8	25	640

Table 3. Logistic regression of participation in undeclared work in Baltic Sea countries

Variables	All Baltic Sea Countries			Western Baltic Sea Countries			Post-Soviet Baltic Sea Transition Countries		
	β	Robust se(β)	Exp(β)	β	Robust se(β)	Exp(β)	β	Robust se(β)	Exp(β)
Gender (CG: Women):									
Men	0.775 ***	0.112	2.171	0.621 ***	0.175	1.861	0.891 ***	0.145	2.438
Age (CG: 15-24):									
25-34	-0.321	0.234	0.726	-0.624	0.390	0.536	-0.300	0.291	0.741
35-44	-0.609 **	0.246	0.544	-0.684 *	0.395	0.505	-0.624 **	0.314	0.536
45-54	-0.776 ***	0.238	0.460	-0.757 **	0.381	0.469	-0.843 ***	0.301	0.430
55-64	-1.077 ***	0.254	0.341	-0.928 **	0.391	0.396	-1.218 ***	0.337	0.296
65+	-1.556 ***	0.295	0.211	-1.308 ***	0.450	0.270	-1.826 ***	0.431	0.161
Marital status (CG: (Re)Married/ Cohabiting):									
Single	-0.189	0.180	0.828	-0.273	0.325	0.761	-0.133	0.224	0.876
Divorced/Separated/ Widowed/ Other	-0.033	0.177	0.967	-0.158	0.334	0.854	0.0186	0.213	1.019
Social class, self-assessment (CG: Working class of society):									
Middle class of society	-0.194	0.121	0.824	-0.245	0.202	0.783	-0.182	0.156	0.833
Higher class of society	0.144	0.353	1.155	-0.038	0.465	0.963	0.247	0.543	1.281
Age stopped full time education (CG: 15- years):									
16-19	0.103	0.242	1.109	0.123	0.344	1.130	0.036	0.359	1.037
20+	0.297	0.247	1.345	0.442	0.341	1.556	0.181	0.375	1.198
Still Studying	0.060	0.347	1.062	0.789	0.505	2.202	-0.519	0.498	0.595
Number 15+ years in household (CG:2+ persons):									
1 person	0.340 **	0.164	1.405	0.375	0.316	1.456	0.346 *	0.201	1.413
Number of children (CG: No Children):									
Children < 10	-0.109	0.174	0.897	0.051	0.290	1.052	-0.147	0.221	0.863
Children 10-14	0.069	0.210	1.071	0.100	0.318	1.105	0.053	0.287	1.054
At least one child<10 and at least one 10-14	-0.078	0.262	0.925	0.057	0.422	1.058	-0.116	0.342	0.890
Tax morality	0.355 ***	0.025	1.426	0.378 ***	0.044	1.460	0.338 ***	0.031	1.402
Employment (CG: Unemployed):									
Employed	0.101	0.153	1.107	0.120	0.279	1.127	0.127	0.181	1.136
Difficulties paying bills last year (CG: Most of the time):									
From time to time	-0.547 ***	0.169	0.578	-0.902 **	0.376	0.406	-0.463 **	0.190	0.629
Almost never/never	-0.766 ***	0.166	0.465	-1.011 ***	0.345	0.364	-0.724 ***	0.191	0.485
Area respondent lives (CG: Rural area or village):									
Small/middle sized town	-0.024	0.129	0.976	0.182	0.212	1.200	-0.139	0.173	0.870
Large town	0.020	0.140	1.020	0.114	0.238	1.121	-0.027	0.177	0.974
Region (CG: Western countries)									
Post-Soviet countries	0.127	0.127	1.136						
Constant	-3.140 ***	0.373	0.043	-3.012 ***	0.582	0.049	-2.990 ***	0.505	0.050
N			7,298			4,083			3,215
Pseudo R ²			0.1325			0.1017			0.1425
Log likelihood			-1413.2146			-623.0792			-772.2909
χ^2			444.66			197.50			216.73
p>			0.0000			0.0000			0.0000

*** p<0.01, ** p<0.05, * p<0.1

APPENDIX

Table A1. Variables used in the analysis: definitions and descriptive statistics

Variables	Definition	Mode or mean (Standard deviation)	Min / Max
Undeclared activities (dependent variable)	Dummy variable of undeclared paid activities carry out in the last 12 months, apart from a regular employment	No undeclared activities (96.55%)	0 / 1
Gender	Dummy for the gender of the respondent	Female (51.57%)	0 / 1
Age	Respondent age in intervals	65+ (21.77%)	1 / 6
Marital status	Respondent marital status in categories	(Re)Married/ Cohabiting (67.1%)	1 / 3
Social class	Respondent perception regarding social class of society to which it belongs in categories	Middle class of society (58.54%)	1 / 3
Age when stopped full time education	Respondent age when stopped full time education in categories	20+ years old (33.83%)	1 / 4
People 15+ years in own household	Dummy variable for the number of adults in household	Two and more (78.60%)	0 / 1
Children	Presence of children (up to 14 years old) in the household in categories	No children (73.11%)	1 / 4
Tax morality index	Constructed index of self-reported tolerance towards tax non-compliance	2.34 (1.47)	1 / 10
Employment	Dummy for the employment status of the respondent	Employed (52.10%)	0 / 1
Difficulties paying bills	Respondent difficulties in paying bills in categories	Almost never/never (76.08)	1 / 3
Area respondent lives	Size of the area where the respondent lives in categories	Small or middle sized town (40.17%)	1 / 3
Country	Respondent country in categories	Germany (54.17%)	1 / 8

Source: Eurobarometer 79.2 (2013): Undeclared Work in the European