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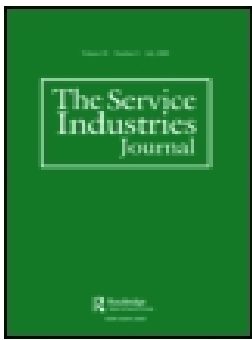
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Revisiting the undeclared service economy as a dual labour market: lessons from a 2019 Eurobarometer survey

将未宣布的服务经济重新视为双重劳动力市场

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ABSTRACT

The aim of this paper is to transcend the long-standing depiction that workers universally participate in the undeclared service economy out of necessity due to their exclusion from the formal labour market, by proposing and evaluating the existence of a dual undeclared labour market in the service sector composed of an 'upper-tier' of voluntary exit-driven and 'lower-tier' of exclusion-driven undeclared service sector workers. Reporting a 2019 Eurobarometer survey conducted in 28 European countries, a dual labour market in the undeclared service economy is validated. Three-quarters of undeclared service workers report either purely exit- or exclusion driven rationales. For every lower tier undeclared service worker, 6.7 are in the upper tier, with those in the voluntary exit-driven upper tier more likely to be older, self-employed, having spent time in full-time education, and to be living in Western Europe and Nordic countries. The theoretical and policy implications are then discussed.

本文的目的是通过提出和评估服务中存在双重未声明劳动市场的存在，超越长期存在的描述，即由于工人被排除在正式劳动力市场之外，他们普遍参加了未声明服务的经济。由自愿退出驱动的'上层'和排斥驱动的未声明服务部门的'下层'组成。据报道，2019年欧洲晴雨表在28个欧洲国家进行了调查，结果证实了未宣布服务经济中的双重劳动力市场。四分之三的未申报服务人员报告的是纯粹出于退出或排斥的原因。对于每个较低级别的未声明服务的工作人员，有6.7位在上层，而自愿退出驱动的上层工作的人则年龄较大，自雇，接受过全日制教育并居住在西部地区。欧洲和北欧国家。

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Introduction

For many decades, service industry scholars have largely focused upon service work in the declared economy. Much less attention has been paid to work in the service industries that is not declared to, and/or is unregistered by, the state authorities for tax, social

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security and/or labour law purposes, although there are some notable exceptions, particularly in this journal (see Ekici & Besim, 2018; Kahyalar et al., 2018; Karabchuk & Zabirova, 2018; Kedir et al., 2018; Littlewood et al., 2018) and also on specific service industries such as tourism (e.g. Çakmak et al., 2018; Çakmak & Çenesiz, 2020; Williams, 2021). When it is recognised that the majority (61.2%) of the world's employed population have their main job in the undeclared economy (ILO, 2018), it becomes obvious that this lacunae in scholarship needs to be addressed. To advance understanding of undeclared work in the service economy, this paper focuses upon how the participation of workers in the undeclared service economy can be explained. The intention is to evaluate the long-standing depiction that workers are universally driven out of economic necessity into the undeclared economy by evaluating the validity of conceptualising a dual undeclared labour market in the service sector composed of an 'upper-tier' of voluntary exit-driven and 'lower-tier' of exclusion-driven undeclared service sector workers along with the prevalence and characteristics of workers in each tier.

To do this, the next section reviews the dominant competing theories explaining participation in the undeclared economy, followed by the small literature which has sought to integrate these competing theories by proposing that both exit- and exclusion-driven explanations are required to fully understand participation in the undeclared economy. Secondly, and to begin to evaluate the validity of depicting the undeclared service economy as composed of a dual labour market with an exit-driven upper tier and exclusion-driven lower tier, along with the prevalence and characteristics of workers in each tier, the data and methodology used is set out, namely a probit regression analysis of a Eurobarometer survey involving 27,565 face-to-face interviews in 28 European countries. The fourth section then reports the findings, followed in the fifth and final section by a discussion of the theoretical and policy implications, along with some limitations of this study and the future research required to further advance understanding of the undeclared service economy as a dual labour market.

Before commencing, a few words are required on what is meant by the undeclared economy. Reflecting the consensus among academics and practitioners across Europe, undeclared work refers to paid work that is not declared to the authorities for tax, social security and/or labour law purposes but which is otherwise legal (European Commission, 2007; Horodnic et al., 2020; Kedir et al., 2018; OECD, 2012, 2017; Williams & Kayaoğlu, 2020). If the paid work possesses other absences of deficiencies, then it is not treated as undeclared work. For example, if the goods and/or services produced or sold are illegal (e.g. human trafficking, the production or trafficking of illegal firearms or drugs), then this paid activity belongs to the 'criminal' economy. Meanwhile, if the economic activity is unpaid, it is part of the separate unpaid informal economy (Williams, 2019; Windebank & Martinez-Perez, 2018). It should be noted, moreover, that undeclared service work can be conducted as undeclared or under-declared waged employment or as undeclared self-employment.

Explaining participation in the undeclared economy

Until the 1970s, the undeclared economy was predominantly portrayed as a historical legacy and therefore a pre-modern production system that was naturally and inevitably disappearing with economic development and modernisation (Geertz, 1963; Lewis,

1959). However, for the past half century, empirical studies have revealed that undeclared work remains an extensive and enduring feature of economies across the world (ILO, 2018; OECD, 2017; World Bank, 2019). Here, the three predominant theories that have emerged to explain participation in the undeclared economy are reviewed followed by the small stream of thought that has sought to integrate these competing theories and has provided inspiration for the conceptualisation of the undeclared economy as a dual labour market.

Undeclared work as exclusion-driven activity

Writing from a political economy perspective, a group of scholars have argued that the view of the undeclared economy as a separate 'traditional' or 'premodern' economy needs to be replaced by a recognition that the undeclared economy is an inherent feature of contemporary capitalism (Bhattacharya, 2014; Castells & Portes, 1989; Dibben & Williams, 2012; Dibben et al., 2015; Moser, 1977; Portes & Haller, 2004; Slavnic, 2010). The emergence of a de-regulated global economy is seen to have resulted in the growth of outsourcing and subcontracting that has not only integrated the undeclared economy into capitalist production, but also reduced production costs and caused a downward spiral in wages and social protection (Fernandez-Kelly, 2006; Hammer, 2019; Portes & Roberts, 2005; Meagher, 2010; Rakowski, 1994; Slack et al., 2017). The outcome has been the growing use of undeclared work in supply chains and the replacement of dependent employment by 'bogus self-employment' by employers so that they evade paying not only tax and social security contributions but also providing paid holidays, sick pay, parental leave and other rights attached to dependent employment (Williams & Horodnic, 2019).

Indeed, the declines in state economic intervention and social protection that have accompanied de-regulation are perceived by these scholars to result in those excluded from the declared labour market and social protection being pushed into the undeclared economy to make a living in the absence of alternative means of survival (Chen, 2012; Davis, 2006; ILO, 2015; Meagher, 2010; Sasaki et al., 2016; Taiwo, 2013). In other words, the undeclared economy is explained as a means of livelihood for those excluded from the declared labour market and social protection benefits (Tokman, 2001). As such, it is a low-paid exploitative employment relationship sitting at the bottom of a hierarchy of types of employment (Aliyev, 2015; Gallin, 2001; Harriss-White, 2014). Therefore, from this political economy viewpoint, the rationales for workers participating in undeclared work include: employers insisting on such an employment relationship; no declared jobs being available; participants entering the undeclared economy because they cannot live on the social welfare benefits available; and workers having no alternative means of livelihood.

Undeclared work as an exit-driven rational economic decision

For other scholars, participation in undeclared work is a matter of choice rather than due to a lack of choice; undeclared workers make a voluntary decision to 'exit' the declared economy. From a neo-liberal viewpoint, this is a rational economic decision made by

workers facing high tax rates, complex regulatory systems and corrupt public officials extracting bribes (De Soto, 1989, 2001; Maloney, 2004; Perry & Maloney, 2007).

From this neo-liberal perspective, therefore, participation in the undeclared economy is a populist reaction to the over-regulation of the declared economy. Workers enter the undeclared economy to escape what these neo-liberals see as an over-intrusive state apparatus and high taxes (Becker, 2004; De Soto, 1989, 2001; London & Hart, 2004). As Nwabuzor (2005, p. 126) asserts, 'informality is a response to burdensome controls, and an attempt to circumvent them'. It is a way of evading the pecuniary costs associated with formal registration along with the time and effort required to do so (De Soto, 1989, 2001; Perry & Maloney, 2007).

For these neo-liberal scholars, the rationales for participating in undeclared work include: bureaucracy or red tape being seen as too complicated for not only regular economic activities but also for minor or occasional activities; operating on a declared basis is too complicated; they can ask for a higher fee; everybody is seen to benefit from operating undeclared; taxes and/or social security contributions are too high; and it is unclear to them whether the work should be declared, signalling complex regulatory systems.

Undeclared work as exit-driven due to disagreement with the formal rules

Another loose grouping of agency-oriented scholars conceptualises workers voluntarily exiting the declared economy not as rational economic actors but as social actors (Cross, 2000; Gërkhani, 2004; Snyder, 2004). From this neo-institutionalist perspective, institutions represent 'rules of the game' that prescribe and define what is socially acceptable behaviour (Baumol & Blinder, 2008; North, 1990). All economies have not only formal institutions (i.e. laws and regulations) that prescribe the formal rules of the game but also informal institutions that represent the 'socially shared rules, usually unwritten, that are created, communicated and enforced outside of officially sanctioned channels' (Helmke & Levitsky, 2004, p. 727).

Undeclared work is from this perspective illegal but socially legitimate activity. It does not conform to the formal rules of the game but does conform to the norms, values and beliefs of citizens about what is acceptable and their preference as a lifestyle choice (Çakmak et al., 2018; Godfrey, 2011; Siqueira et al., 2016). In consequence, the argument is that when formal institutional failings cause a lack of alignment between the norms, values and beliefs about what is acceptable and the formal laws, codes and regulations, the outcome is undeclared work (Damayanti & Martono, 2018; Webb & Ireland, 2015; Webb et al., 2009; Williams & Horodnic, 2017a, 2018). The greater the degree of non-alignment, the higher is the likelihood of participation in undeclared work (Horodnic, 2018; Williams, 2019; Williams et al., 2015, 2017).

For this variant of neo-institutionalist thought, the rationales for participating in undeclared work include: the belief that intentionally not declaring small secondary income is a perfectly acceptable behaviour; that the state does nothing for them so they see no reason to pay their taxes; that undeclared work is a common practice and part of the accepted culture in their region or sector, and/or is an accepted and common practice among their friends, neighbours or relatives.

Beyond singular universal explanations

Most scholars adopt one or other of these explanations. Indeed, those advocating these explanations perceive them as competing theorisations. However, some scholars have sought to overcome the use of singular universal explanations. Instead, they have sought to integrate them. Perry and Maloney (2007, p. 2), for example, focus upon the exclusion-driven explanation of political economy scholars and the neo-liberal rational economic actor exit view and argue, 'These two lenses, focusing, respectively, on informality driven by exclusion from state benefits and on voluntary exit decisions resulting from private cost–benefit calculations, are complementary rather than competing analytical frameworks'. Indeed, scholars have asserted that one way of integrating these contrasting explanations is to reconceptualise the undeclared economy as a dual labour market. Williams and Windebank (1998, pp. 32–3) argue that alongside the declared labour market is a dual undeclared labour market composed of 'core' exit-driven and 'peripheral' exclusion-driven workers, whilst Fields (1990, 2005) similarly conceptualises a dual undeclared labour market comprised of what he terms 'upper tier' exit-driven and 'lower tier' exclusion-driven workers.

One reason this re-conceptualisation of the undeclared economy as a dual labour market has not gained greater traction in the literature is that few empirical studies have evaluated this re-reading. One of the first studies highlighting this dual undeclared labour market was a study by Lozano (1989) of 50 traders at North Californian flea markets. She identified that one-fifth had voluntarily become flea market traders and had chosen to leave their job or worked as traders simply to generate extra income above and beyond what they required to meet their living expenses. The remaining 80% were involuntary traders who had either lost their formal job, were seeking income to cover their normal living expenses and indebtedness or were unable to find a formal job.

In Europe, in contrast, a more extensive 2013 study of 27 countries evaluating this dual undeclared labour market reveals that exit-driven rationales are more common than exclusion-driven rationales (Williams et al., 2017). Some 24% of all undeclared workers were found to be purely exclusion-driven, 45% purely exit-driven and 31% displayed mixed exclusion- and exit-driven rationales (i.e. a hybrid category of undeclared workers who express both sets of motives). Those stating exclusion-driven rationales were significantly more likely to be unemployed and living in East-Central Europe whilst exit-driven undeclared workers were significantly more likely to be those with few financial difficulties and living in Nordic nations. This study neither identified nor differentiated between rational economic actor and social actor exit rationales.

The only other known empirical evidence is a 2015 survey in three South-East European countries (Bulgaria, Croatia and North Macedonia) which identifies that 17% of undeclared workers are solely exclusion-driven, 54% solely exit-driven, 27% have mixed exclusion- and exit-driven reasons, and 2% did not answer. Those solely exit-driven are significantly more likely to be in declared employment, retired and not struggling financially compared with the exit-driven (Williams & Bezeredi, 2018b).

Beyond this, no other known studies provide empirical evidence of whether it is valid to read the undeclared economy as a dual labour market composed of an upper exit-

driven tier and lower exclusion-driven tier, or analyse the prevalence and characteristics of workers in each tier. Here, therefore, the intention is to use a contemporary source of evidence to do so for the undeclared service sector.

Methodology

To evaluate the validity of portraying the undeclared service economy as a dual labour market, along with the prevalence and characteristics of workers in each tier, data from Eurobarometer special survey 92.1 is reported, which was conducted in September 2019 and comprised 27,565 interviews in 28 European countries (the 27 EU member states and the UK). To achieve a representative sample of the European population, a multi-stage random (probability) sampling methodology was used. This ensured that the sample was representative on the variables of gender, age, region and locality size in each country. In every nation, the interviews were conducted in the national language of that country with the adult population aged 15 years and older, which is standard practice in all Eurobarometer surveys.

To evaluate whether citizens had engaged in undeclared work in the service sector, the dependent variable is a dummy variable with value 1 for participants who answered the question of *'Which of the following activities have you carried out undeclared in the last 12 months?'* by responding 'yes' to any service sector activity listed and value 0 otherwise. The service sector activities listed are: professional services; creative, multimedia or software services; transport services; administrative and clerical tasks or IT assistance; writing or translation services; waiter-waitress services; domestic cleaning or ironing; babysitting; elderly care; tutoring; gardening services; selling farm food; helping move house, and selling other goods or services.

If they engaged in the undeclared provision of services, participants were then asked *'What were the reasons for doing these activities undeclared?'* followed by a list of 16 reasons (based on the three theorisations) with participants informed that they could agree with all that applied to their situation. Collating their responses on these 16 rationales, the undeclared service workers were grouped into the following categories:

- *Lower-tier purely exclusion-driven workers:* a dichotomous variable recorded value 1 for participants stating one or more of the following 'exclusion-driven' reasons (i.e. you could not find a regular job; it is difficult to live on social welfare benefits; you would lose your social welfare benefits if you declared it; you have no other means of income; the person who acquired it insisted on non-declaration) and no 'exit-driven' motives, and recorded value 0 otherwise.
- *Upper-tier purely exit-driven rational economic actors:* a dichotomous variable recorded value 1 for participants stating one or more of the following 'exit' motives (i.e. bureaucracy or red tape for minor or occasional activities is too complicated; bureaucracy or red tape for a regular economic activity is too complicated; taxes and/or social security contributions are too high; you were able to ask for a higher fee for your work; both parties benefited from it; it was not clear whether the work needed to be declared) and none of the 'exclusion-driven' reasons or social actor 'exit-driven' reasons, and recorded value 0 otherwise.

- *Upper-tier purely exit-driven social actors*: a dichotomous variable recorded value 1 for those who reported one or more of the following 'exit' motives (i.e. believe that intentionally not declaring small secondary income is perfectly acceptable; this is common practice in my region or sector; this is a common practice among friends, neighbours or relatives; the state does not do anything for me, so why should I pay taxes) and none of the 'exclusion-driven' motives or the other neo-liberal 'exit-driven' rationales, and recorded value 0 otherwise.
- *All upper-tier purely exit-driven workers*: a dichotomous variable recorded value 1 for those reporting purely any exit rationale and no 'exclusion-driven' reasons, and recorded value 0 otherwise.
- *'Hybrid' workers*: a dichotomous variable recorded value 1 for undeclared service workers stating both 'exclusion-driven' and 'exit-driven' reasons, and recorded value 0 otherwise.

Similar to previous studies analysing the 2007 and 2013 Eurobarometer surveys (Williams & Horodnic, 2017b, 2020; Williams et al., 2015), the control variables selected

Table 1. Control variables used: definitions.

| Variables | Definition |
|---------------------------------------|---|
| Gender | A dummy variable with value 0 for females and 1 for males |
| Age | A categorical variable indicating the age interval of a respondent with value one for those aged 15–24, value 2 for aged 25–39, value 3 for aged 40–54, and value 5 for those who are aged 55 or above. |
| Marital status | A categorical variable for the marital status of respondents with value 1 for (re)married, value 2 for single living with a partner, value 3 for single, value 4 for divorced or separated, value 5 for widow, and value 6 for others. |
| Household type | A categorical variable for the household composition with value 1 for single adult without children, value 2 for single adult with children, value 3 for multiple adults without children, and value 4 for multiple adults with children. |
| Number of children under 10 years old | This is a truncated variable for the number of children in households who are younger than 10 years old. If there is no children aged below 10 in a household than it is equal to 0 which is the first category whereas it is always equal to value 5 if there are more than and equal to 4 children below age 10 in a household. |
| Stopped full-time education | A categorical variable for the education level of respondents. It is equal to 1 if s/he stopped full-time education below age 15, value 2 if stopped between 16 and 19, value 3 if stopped at an age older than 19, value 4 if s/he still studies, and value 5 if s/he does not have any full-time education. |
| Labour market status | A categorical variable grouping respondent by their socio-professional category with value 1 for self-employed, value 2 for managers, value 3 for other white collars, value 4 for manual workers, value 5 for house persons, value 6 for unemployed, value 7 for retired, and value 8 for students. These are labour market categories of individuals in the formal labour market. Thus, it does not exclude the possibility of undeclared work for any of the categories. |
| Difficulties paying bills | A categorical variable for the respondents' difficulties in paying bills with value 1 for almost never/never, value 2 for occasionally, and value 3 for having difficulties most of the time. |
| Urban/rural | 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. |
| Southern Europe | A dummy variable equals to 1 if the respondent is from Greece, Spain, Portugal, Cyprus, Italy or Malta |
| Western Europe | A dummy variable equals to 1 if the respondent is from Belgium, Luxembourg, the Netherlands, Austria, Ireland, the United Kingdom, France or Germany |
| East-Central Europe | A dummy variable equals to 1 if the respondent is from Latvia, Croatia, Romania, Slovakia, Bulgaria, Hungary, Lithuania, Czech Republic, Estonia, Poland or Slovenia. |
| Nordic nations | A dummy variable equals to 1 if the respondent is from Denmark, Finland or Sweden. |

cover a range of socio-demographic, socio-economic and spatial variables included as standard practice in Eurobarometer surveys (see [Table 1](#)).

We employed two different models to understand the characteristics of participants associated with different motives for engaging in undeclared service work. Firstly, we used separate binary regression probability models for each motive namely exclusion-driven, exit-driven, rational economic exit-driven, social actor exit-driven and hybrid motives. These binary models are informative about the characteristics of workers by their reasons for engagement in undeclared service work and compares each motive for engaging in undeclared service activity compared with the rest of the motives. It does not present a comparison of different motives for a certain individual. Therefore, we also used a multinomial logit model which has three categories in its dependent variable namely purely exclusion-driven, purely exit-driven and hybrid motives. These estimates provide information about the impact of different socio-demographic, economic and spatial characteristics of respondents on the probability of adopting a different type of motive when participating in undeclared service work. Since we have three categories in the dependent variable, the following equations are estimated using the multinomial logit regression model:

$$\ln \left\{ \frac{\Pr(\text{exit}|X)}{\Pr(\text{exclusion}|X)} \right\} = \beta_{0,\text{exit/exclusion}} + X' \beta_{\text{exit/exclusion}}$$

$$\ln \left\{ \frac{\Pr(\text{hybrid}|X)}{\Pr(\text{exclusion}|X)} \right\} = \beta_{0,\text{hybrid/exclusion}} + X' \beta_{\text{hybrid/exclusion}}$$

where X is the vector of independent variables. Estimates from these models are then used to calculate the predicted probabilities with the base outcome of purely exclusion-driven motives as a comparison group. Both binary and multinomial models include heteroskedasticity-robust standard errors. The results of these models are discussed in the following section.

Findings

Some 3.5% (one in 28) of the European citizens surveyed report engaging in undeclared work in the 12 months prior to the survey, and 80% of these (2.9% of all European citizens, or one in 35) engaged in undeclared service provision. Examining the services provided, 27% of all undeclared workers participated in the personal services sector (including childcare, elder care, and domestic cleaning services), 17% in the hospitality sector, 10% in the retail sector or repair service sector, 8% in education, health and social work services, and 5% in transport services. Analysing the more precise activities conducted, 14% of all undeclared workers had provided babysitting, 14% work as a waiter or waitress, 12% household cleaning or ironing, 12% gardening services, 10% assistance for a dependent or elderly person, 10% tutoring, 6% household removal services, 5% professional services (e.g. accounting, consulting, project management), 5% writing or translation services, 5% creative, multimedia and software services (e.g. design, marketing support, web or software development), 4% IT assistance or administrative and clerical tasks, and 3% passenger transport services.

Table 2. Descriptive statistics of characteristics of dual undeclared labour market in Europe, 2019.

| Variable | Types of undeclared service worker (%) | | | | | | | |
|--|--|---------------------------------------|-----------------------------|------------------------|---|--------------------------------------|-----------------------------------|-----------------------------------|
| | All sample | All undeclared service sector workers | Lower-tier exclusion-driven | Upper-tier exit-driven | Upper-tier exit-driven rational economic actors | Upper-tier exit-driven social actors | Hybrid exit- and exclusion-driven | Ratio of upper-tier to lower-tier |
| No. of Obs. | 27,100 | 686 | 54 | 412 | 131 | 115 | 186 | – |
| Whole sample | 100.0 | 2.85 | 8.3 | 63.2 | 20.1 | 17.6 | 28.5 | 7.6:1 |
| <i>Gender</i> | | | | | | | | |
| Men | 45.3 | 50.3 | 40.7 | 52.9 | 51.1 | 53.9 | 48.4 | 9.8:1 |
| Women | 54.7 | 49.7 | 59.3 | 47.1 | 48.9 | 46.1 | 51.6 | 6.1:1 |
| <i>Age</i> | | | | | | | | |
| 15–24 | 8.7 | 20.6 | 35.2 | 17.5 | 15.3 | 23.5 | 21.0 | 3.8:1 |
| 25–39 | 20.1 | 30.8 | 25.9 | 32.3 | 29.0 | 33.9 | 31.2 | 9.5:1 |
| 40–54 | 23.8 | 24.2 | 13.0 | 24.3 | 28.2 | 21.7 | 29.0 | 18.5:1 |
| 55+ | 47.3 | 24.5 | 25.9 | 26.0 | 27.5 | 20.9 | 18.8 | 7.6:1 |
| <i>Marital status</i> | | | | | | | | |
| (Re)Married | 52.4 | 36.1 | 18.5 | 41.3 | 42.8 | 42.6 | 31.2 | 17.0:1 |
| Single living with partner | 12.1 | 19.8 | 25.9 | 19.2 | 20.6 | 20.0 | 21.5 | 5.6:1 |
| Single | 16.9 | 29.3 | 37.0 | 28.2 | 22.9 | 33.9 | 26.9 | 5.8:1 |
| Divorced or separated | 8.0 | 9.6 | 11.1 | 6.3 | 6.1 | 1.7 | 16.1 | 4.3:1 |
| Widow | 10.1 | 3.9 | 5.6 | 3.9 | 6.1 | 1.7 | 3.8 | 5.3:1 |
| Other | 0.5 | 1.2 | 1.9 | 1.2 | 1.5 | – | 0.5 | 5.0:1 |
| <i>Household Type</i> | | | | | | | | |
| Single adult without children | 29.9 | 36.3 | 45.3 | 32.7 | 25.6 | 34.5 | 38.9 | 5.5:1 |
| Single adult with children | 5.3 | 7.1 | 9.4 | 6.14 | 10.1 | 1.8 | 8.1 | 5.0:1 |
| Multiple adult without children | 35.5 | 29.9 | 24.5 | 31.9 | 31.8 | 35.4 | 28.1 | 10.1:1 |
| Multiple adults with children | 29.5 | 26.7 | 20.8 | 29.2 | 32.6 | 28.3 | 24.9 | 10.9:1 |
| <i>Number of Children below age 10</i> | | | | | | | | |
| 0 | 83.0 | 81.3 | 79.6 | 79.4 | 75.6 | 80.9 | 84.4 | 7.6:1 |
| 1 | 10.2 | 11.8 | 16.7 | 11.6 | 14.5 | 8.7 | 11.3 | 5.3:1 |
| 2 | 5.6 | 5.1 | 1.9 | 6.8 | 6.1 | 8.7 | 3.2 | 28.0:1 |
| 3 | 0.9 | 0.7 | – | 1.2 | 2.3 | 8.7 | – | – |
| 4+ | 0.3 | 1.0 | 1.8 | 1.0 | 1.5 | 8.7 | 1.1 | 4.0:1 |

(Continued)

Table 2. Continued.

| Variable | Types of undeclared service worker (%) | | | | | | | |
|----------------------------------|--|---------------------------------------|-----------------------------|------------------------|---|--------------------------------------|-----------------------------------|-----------------------------------|
| | All sample | All undeclared service sector workers | Lower-tier exclusion-driven | Upper-tier exit-driven | Upper-tier exit-driven rational economic actors | Upper-tier exit-driven social actors | Hybrid exit- and exclusion-driven | Ratio of upper-tier to lower-tier |
| <i>Stopped Full-time</i> | | | | | | | | |
| <i>Education</i> | | | | | | | | |
| 15– | 13.3 | 8.31 | 9.4 | 6.7 | 3.9 | 8.0 | 12.4 | 5.6:1 |
| 16–19 | 43.3 | 37.5 | 35.8 | 36.0 | 33.1 | 34.8 | 45.5 | 7.9:1 |
| 20+ | 35.0 | 34.7 | 22.6 | 40.2 | 47.2 | 37.5 | 29.8 | 13.8:1 |
| Still studying | 6.14 | 15.5 | 30.2 | 16.1 | 15.0 | 19.6 | 10.7 | 4.1:1 |
| No full-time education | 0.85 | 1.17 | 1.9 | 1.0 | 0.8 | – | 1.7 | 4.0:1 |
| <i>Labour Market Status</i> | | | | | | | | |
| Self-employed | 6.92 | 10.2 | 7.4 | 12.1 | 13.0 | 9.6 | 7.5 | 12.5:1 |
| Managers | 10.6 | 8.16 | 3.7 | 10.4 | 12.2 | 9.6 | 4.8 | 21.5:1 |
| Other white collars | 12.8 | 13.1 | 11.1 | 13.6 | 13.7 | 13.0 | 11.8 | 9.3:1 |
| Manual workers | 20.1 | 23.2 | 14.8 | 28.0 | 21.4 | 30.4 | 18.8 | 14.4:1 |
| House person | 5.3 | 4.52 | 3.7 | 3.2 | 0.8 | 2.6 | 6.5 | 6.5:1 |
| Unemployed | 4.9 | 13.1 | 20.4 | 5.8 | 10.7 | 3.5 | 29.6 | 2.2:1 |
| Retired | 33.1 | 12.2 | 9.3 | 13.1 | 13.7 | 12.2 | 10.8 | 10.8:1 |
| Students | 6.14 | 15.5 | 29.6 | 15.8 | 14.5 | 19.1 | 10.2 | 4.1:1 |
| <i>Difficulties paying bills</i> | | | | | | | | |
| Almost never/never | 68.4 | 53.0 | 51.9 | 58.8 | 61.8 | 63.7 | 37.8 | 8.6:1 |
| From time to time | 24.0 | 28.0 | 20.4 | 28.5 | 22.1 | 26.6 | 29.7 | 10.6:1 |
| Most of time | 7.7 | 18.9 | 27.8 | 12.7 | 16.0 | 9.7 | 32.4 | 3.5:1 |
| <i>Urban/rural</i> | | | | | | | | |
| Rural area or village | 34.3 | 34.1 | 31.5 | 35.4 | 35.9 | 34.8 | 31.2 | 8.6:1 |
| Small or medium sized town | 37.2 | 39.8 | 51.9 | 40.1 | 41.2 | 40.0 | 37.6 | 5.9:1 |
| Large town | 28.5 | 26.1 | 16.7 | 24.5 | 22.9 | 25.2 | 31.2 | 11.2:1 |
| <i>EU region</i> | | | | | | | | |
| Southern | 18.4 | 16.2 | 27.8 | 12.9 | 12.2 | 16.5 | 21.0 | 3.5:1 |
| Western | 30.1 | 35.9 | 29.6 | 39.1 | 39.7 | 39.1 | 28.0 | 10.0:1 |
| East-Central | 40.3 | 34.7 | 35.2 | 31.8 | 32.1 | 28.7 | 42.4 | 6.9:1 |
| Nordic nations | 11.2 | 13.2 | 7.4 | 16.3 | 16.0 | 15.7 | 8.6 | 16.8:1 |

Source: Authors' calculations based on the 2019 Eurobarometer 92.1 survey.

Examining who provides undeclared services, [Table 2](#) reveals that participation is not evenly distributed across the population. Those more likely to engage in undeclared service work are men, younger age groups, single people and those who are divorced/separated, living in single person households, students, the self-employed, manual workers and the unemployed, those who most of the time have difficulty paying the bills, those living in small- or medium-sized towns and in Western Europe and Nordic countries.

Analysing the validity of depicting the undeclared economy as a dual labour market composed of an exclusion-driven 'lower tier' and exit-driven 'upper tier', the finding is that 8.3% explain their engagement solely in terms of exclusion-driven rationales, 63.2% give purely exit-driven rationales and the remaining 28.5% are in a hybrid category stating both exit and exclusion rationales. This refutes the use of a single universal logic to explain participation in undeclared service provision. It also reveals the validity of using exit- and exclusion-driven logics in a dual undeclared labour market model since nearly three-quarters (71.5%) describe their engagement in undeclared services as either solely exit- or exclusion-driven. Analysing the relative distribution of undeclared service workers across these upper and lower tiers in Europe, the finding is that for every undeclared service worker in the exclusion-driven lower tier, there are 7.6 in the exit-driven upper tier. Breaking down this upper tier that predominates in Europe, 20.1% of all undeclared service workers state solely rational economic actor exit rationales, 17.6% solely social actor exit motives and the remaining 25.5% solely exit rationales but a mixture of rational economic actor and social actor rationales.

Nevertheless, some population groups are more likely to be in the upper and lower tier than others. As the final column of [Table 2](#) reveals, those undeclared service workers most likely to be in the upper tier include those aged 40–54 years old, who stopped full-time education at aged 20 years old or older, the self-employed and managers, living in multiple adult households, who less often have difficulties paying the bills, and live in Nordic nations. In contrast, the undeclared service workers most likely to be in the lower tier include younger people aged 15–24 years old, those with no full-time education or who left full-time education at 15 years old or younger, who most of the time have difficulties paying the bills, the unemployed and students and those living in Southern Europe.

To examine whether these associations remain the same when other variables are introduced and held constant, the marginal effects of the probit regression analysis are reported in the first column of [Table 3](#) which has a binary dependent variable that is equal to 1 if an individual engaged in undeclared service work and zero otherwise. Commencing with who is more likely to engage in undeclared service work, the finding is that men have a 34.7% significantly greater probability of engaging in undeclared service work than women, as do single person households, those who left full-time education aged 16–19 (compared with those who finished full-time education at 15 years old or younger), and self-employed persons (relative to manual workers), but their probability of doing so is 20 percentage points lower than white collar workers other than managers. Those having difficulty paying the bills most of the time are significantly less likely to provide undeclared services than those who never or nearly never have difficulties, and those in Southern and Western Europe have a higher probability of providing undeclared

Table 3. Marginal effects of the probit models on reasons for participating in undeclared service work in Europe, 2019.

| | All | Lower-tier exclusion- driven | Upper-tier exit-driven | Upper-tier exit- driven rational economic actor sub-group | Upper-tier exit-driven social actor sub-group | Hybrid exclusion- and exit-driven |
|---|--------------------|------------------------------------|-----------------------------|--|--|---|
| <i>Gender</i> | | | | | | |
| <i>(Reference Category(RC): Women)</i> | | | | | | |
| Men | -.347*** (.039) | -.034 (.022) | .009 (.037) | -.004 (.033) | -.010 (.034) | .038 (.035) |
| <i>Age (Ref. category: 15–24)</i> | | | | | | |
| 25–39 | .015 (.050) | -.055 (.038) | .178** (.071) | .039 (.070) | .011 (.062) | -.127** (.064) |
| 40–54 | -.039 (.054) | -.066 (.043) | .194** (.076) | .094 (.075) | .020 (.072) | -.150** (.069) |
| 55+ | -.033 (.059) | .023 (.044) | .228*** (.085) | .116 (.080) | -.027 (.073) | -.276*** (.077) |
| <i>Marital status (RC: (Re)Married)</i> | | | | | | |
| Single living with partner | -.057* (.035) | .067** (.034) | -.062 (.057) | .019 (.044) | -.046 (.045) | .004 (.052) |
| Single | -.027 (.076) | -.009 (.054) | -.015 (.109) | -.106 (.084) | .124 (.124) | -.039 (.101) |
| Divorced or separated | .025 (.077) | .002 (.053) | -.148 (.108) | -.182** (.090) | – | .093 (.099) |
| <i>Household Type (RC: Single adult without children)</i> | | | | | | |
| Single adult with children | -.145** (.062) | .009 (.046) | -.008 (.069) | .130** (.063) | -.094 (.118) | -.002 (.068) |
| Multiple adults without children | .035 (.076) | -.052 (.057) | .047 (.104) | -.047 (.078) | .149 (.120) | -.027 (.095) |
| Multiple adults with children | -.054 (.079) | -.060 (.057) | .041 (.114) | -.045 (.090) | .120 (.131) | -.004 (.105) |
| <i>Number of Children below age 10 (RC: 0)</i> | | | | | | |
| 1 | .064 (.058) | .063* (.035) | -.043 (.061) | -.038 (.062) | -.039 (.065) | -.028 (.062) |
| 2+ | -.011 (.068) | .013 (.055) | .236*** (.089) | .092 (.067) | .106 (.077) | -.230*** (.092) |
| <i>Stopped Full-time Education (RC: 15–)</i> | | | | | | |
| 16–19 | -.121** (.048) | .006 (.043) | -.036 (.064) | .092 (.072) | -.083 (.063) | .029 (.059) |
| 20+ | -.076 (.053) | .020 (.046) | -.018 (.069) | .164** (.074) | -.110 (.069) | .010 (.063) |
| Still studying | .104 (.095) | .075 (.066) | .058 (.113) | .180* (.106) | -.036 (.107) | -.128 (.106) |
| No full-time education | -.074 (.113) | .131 (.098) | -.336* (.180) | .008 (.178) | – | .258* (.144) |
| <i>Labour Market Status (RC: Self-employed)</i> | | | | | | |
| Managers | .051 (.061) | -.022 (.074) .023 (.049) | .056 (.098) -.047 (.078) | .014 (.066) -.016 (.063) | .051 (.077) .041 (.069) | -.079 (.094) .029 (.072) |

(Continued)

Table 3. Continued.

| | All | Lower-tier exclusion- driven | Upper-tier exit-driven | Upper-tier exit- driven rational economic actor sub-group | Upper-tier exit-driven social actor sub-group | Hybrid exclusion- and exit-driven |
|--|-------------------|------------------------------------|---------------------------|--|--|---|
| Other white collars | .206*** (.066) | | | | | |
| Manual workers | -.076* (.041) | .001 (.048) | .031 (.073) | -.016 (.057) | .085 (.062) | -.045 (.067) |
| House person | -.030 (.114) | -.019 (.070) | -.264*** (.102) | -.347** (.161) | -.058 (.121) | .176* (.092) |
| Unemployed | .003 (.050) | .048 (.049) | -.352*** (.078) | -.055 (.072) | -.154 (.100) | .254*** (.067) |
| Retired | -.042 (.053) | -.022 (.057) | -.080 (.086) | -.026 (.064) | .085 (.075) | .092 (.083) |
| <i>Difficulties paying bills</i> (RC: Almost never/never) | | | | | | |
| From time to time | -.013 (.030) | -.027 (.026) | .036 (.043) | -.038 (.039) | -.012 (.039) | .019 (.040) |
| Most of time | -.077* (.041) | .020 (.029) | -.083 (.052) | .017(.051) | -.122** (.061) | .097** (.048) |
| <i>Urban/rural</i> (RC: Rural area or village) | | | | | | |
| Small or medium sized town | .005 (.029) | .024 (.024) | .018 (.041) | -.001 (.036) | .036 (.038) | -.030 (.038) |
| Large town | -.040 (.033) | -.041 (.031) | -.012 (.048) | -.027 (.042) | .014 (.044) | .039 (.044) |
| <i>EU region</i> (RC: East-Central) | | | | | | |
| Southern | .067* (.040) | .030 (.030) | -.015 (.053) | -.016 (.053) | .044 (.050) | -.025 (.049) |
| Western | .051* (.031) | -.036 (.028) | .120*** (.044) | .026 (.038) | .043 (.042) | -.088** (.043) |
| Nordic nations | .020 (.043) | -.053 (.044) | .130* (.066) | .013 (.047) | .050 (.055) | -.106* (.064) |
| <i>N</i> | 816 | 632 | 632 | 636 | 564 | 632 |
| Pseudo <i>R</i> ² | 0.2559 | 0.1249 | 0.1480 | 0.0700 | 0.0578 | 0.1433 |
| <i>χ</i> ² | 146.11 | 43.72 | 106.42 | 39.49 | 26.01 | 99.75 |
| <i>p</i> > | 0.0000 | 0.0505 | 0.0000 | 0.1408 | 0.6249 | 0.0000 |

Notes: Statistically significant at *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (robust standard errors in parentheses). All coefficients are compared to the reference category, shown in parentheses. Individuals were kept in the analysis for which data on each and every independent variable are available. When the models are regressed with clustering the individuals by country, the direction of the associations and the significances do not change for any independent variable discussed in the paper (with $p < 0.05$ or $p < 0.01$).

Source: Authors' calculations based on the 2019 Eurobarometer 92.1 survey.

services than those in East-Central European countries, perhaps due to the higher costs of declared services in the former countries.

Turning to the characteristics of undeclared service workers in the lower tier of the undeclared labour market, it is revealed in column 2 of Table 3 that gender, household composition, years in full-time education, labour market status, difficulties paying the bill, urban/rural vicinity and European region have no significant impact. However, single people living with a partner have a 6.7% greater probability than (re)married people of providing undeclared services, and those with one child a 6.3% greater probability than those with no children *ceteris paribus*.

Examining the characteristics of undeclared service workers in the upper tier, it is revealed in column 3 that gender, marital status, household composition, difficulties paying the bills, and urban/rural vicinity have no significant impact. Those aged over 25 years old are significantly more likely to be in this upper tier than those aged 15–24 years old, as are those with two children, and those with no full-time education 33.6% significantly less likely to be in the upper tier of the undeclared labour market than those who finished their full-time education at 15 years old or younger. House persons are 26.4% less likely to be in the upper tier than self-employed persons and the unemployed are 35.2% less likely than the self-employed. Meanwhile, those living in Western Europe are 12% more likely and those in Nordic nations 13% more likely than those living in East-Central Europe to be in the upper tier.

In consequence, those in the lower tier are significantly more likely to be single people living with a partner, and with a child, and those in the upper tier significantly more likely to be older, to have spent time in full-time education, be self-employed, and to be living in Western Europe and the Nordic countries.

Breaking down the undeclared service workers in the upper tier by whether they exit as a rational economic decision or as social actors due to disagreeing with the formal rules, there are some differences in their characteristics. The major differences between these two sub-groups in the upper tier are that those operating in such a manner as a rational economic decision are more likely to be single without children, to have stayed in full-time education until 20+ years old, and to be students. Meanwhile, those doing so as social actors are more likely to have children, and to never or almost never have difficulties paying the bills.

Finally, those hybrid workers between the upper and lower tiers and reporting a mix of exclusion- and exit-driven rationales are more likely to be younger people aged 15–24 years old, without children, house persons, unemployed and to have difficulties paying the bills most of the time and to live in East-Central Europe. They therefore have many similar characteristics that might be assumed to be associated with the lower tier of the undeclared labour market, which are not displayed in those expressing purely exclusion-driven reasons. This may well be due to their exclusion from the declared economy leading them to conceptualise their participation in undeclared service provision also as a rational economic decision and to disagree with the formal rules.

In addition to understanding the characteristics of those more likely to participate in undeclared service work for each motive, [Table 4](#) presents the marginal effects of a weighted multinomial logit model. We have three mutually exclusive categories in the model which are the lower-tier exclusion-driven motive, upper-tier exit-driven motive and hybrid motive. Firstly, regression output shows that the upper-tier exit driven has the predicted probability of 68%, the hybrid motive has the predicted probability of 26% and the lower-tier exclusion-driven motive has the smallest predicted probability (only 6%). Secondly, being older has opposite effects of engaging for upper-tier exit-driven motives compared with other characteristics. Older individuals have a higher probability of engaging in undeclared service work with a purely exit-driven motive whereas it is the younger individuals who have higher probabilities of engaging for purely exclusion-driven or hybrid motives. Thirdly, we find individuals with more than 1 child have a higher probability of having a purely exit-driven motive although it has the opposite effect for

Table 4. Marginal effects of the Multinomial Logit models on reasons for participating in undeclared service work in Europe, 2019.

| | Lower-tier exclusion-driven | Upper-tier exit-driven | Hybrid exclusion- and exit-driven |
|---|-----------------------------|------------------------|-----------------------------------|
| <i>Gender (Reference Category (RC): Women)</i> | | | |
| Men | -.030 (.033) | .029 (.073) | .001 (.067) |
| <i>Age (Ref. category: 15–24)</i> | | | |
| 25–39 | -.052* (.030) | .235*** (.089) | -.183** (.064) |
| 40–54 | -.086*** (.026) | .313*** (.074) | -.227*** (.069) |
| 55+ | -.059*** (.021) | .374*** (.054) | -.315*** (.049) |
| <i>Marital status (RC: (Re)Married)</i> | | | |
| Single living with partner | .032 (.054) | .056 (.090) | -.088 (.074) |
| Single | -.062 (.065) | .248* (.149) | -.185 (.140) |
| Divorced or separated | .016 (.084) | -.040 (.187) | .024 (.172) |
| <i>Household Type (RC: Single adult without children)</i> | | | |
| Single adult with children | -.016 (.047) | .074 (.119) | -.058 (.105) |
| Multiple adults without children | -.068 (.042) | .087 (.145) | -.020 (.140) |
| Multiple adults with children | -.056 (.040) | .027 (.172) | .029 (.167) |
| <i>Number of Children below age 10 (RC: 0)</i> | | | |
| 1 | .100 (.075) | -.062 (.108) | -.038 (.084) |
| 2+ | .030 (.092) | .203** (.104) | -.233*** (.050) |
| <i>Stopped Full-time Education (RC: 15–)</i> | | | |
| 16–19 | .061 (.044) | -.047 (.120) | .108 (.115) |
| 20+ | -.038 (.045) | -.010 (.127) | .029 (.120) |
| Still studying | -.017 (.071) | .207 (.149) | -.190 (.133) |
| No full-time education | .062 (.185) | -.477*** (.160) | .414* (.223) |
| <i>Labour Market Status (RC: Self-employed)</i> | | | |
| Managers | -.068*** (.019) | .083 (.152) | -.015 (.151) |
| Other white collars | -.040 (.029) | .057 (.134) | -.016 (.130) |
| Manual workers | -.042 (.034) | .088 (.121) | -.046 (.114) |
| House person | .005 (.086) | -.100 (.236) | .095 (.228) |
| Unemployed | -.011 (.042) | -.431*** (.144) | .442*** (.145) |
| Retired | -.021 (.050) | -.220 (.173) | .241 (.179) |
| <i>Difficulties paying bills (RC: Almost never/never)</i> | | | |
| From time to time | .025 (.050) | .019 (.090) | -.044 (.081) |
| Most of time | .015 (.045) | -.024 (.095) | .009** (.088) |
| <i>Urban/rural (RC: Rural area or village)</i> | | | |
| Small or medium sized town | -.001 (.001) | -.057 (.075) | .058 (.067) |
| Large town | -.027 (.031) | -.215** (.048) | .242** (.104) |
| <i>EU region (RC: East-Central)</i> | | | |
| Southern | .101 (.070) | -.065 (.094) | -.036 (.081) |
| Western | -.005 (.044) | .053 (.086) | -.048 (.080) |
| Nordic nations | -.042 (.028) | .080 (.089) | -.038 (.085) |
| <i>N</i> | 624 | | |
| Pseudo R^2 | 0.2213 | | |
| χ^2 | 125.43 | | |
| $p >$ | 0.000 | | |
| Predicted Probabilities | .06 | .68 | .26 |

Notes: Statistically significant at *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (robust standard errors in parentheses). All coefficients are compared to the reference category, shown in parentheses. Individuals were kept in the analysis for which data on each and every independent variable are available. When the models are regressed with clustering the individuals by country, the direction of the associations and the significances do not change for any independent variable discussed in the paper (with $p < 0.05$ or $p < 0.01$). Sample weights are used for the EU28.

Source: Authors' calculations based on the 2019 Eurobarometer 92.1 survey.

the hybrid motive. Fourthly, those without a full-time education have a 47.7% lower probability of engaging in undeclared service work for a purely exit-driven motivation whereas it has the opposite association for those who has a hybrid motive. Fifthly, self-employed individuals have a higher probability of reporting a purely exit-driven motive compared

Table 5. Comparison of different reasons for engaging in undeclared service work.

| | Age 25–39 | Age 40–54 | Age 55+ | # of children 1 | # of children 2+ | No full-time education | Managers | Unemployed | Living in large town | Southern Europe |
|----------------------------------|--------------|--------------|------------|-----------------------|---------------------|---------------------------|----------|------------|-------------------------|--------------------|
| Exit-driven vs. Exclusion-driven | 1.375* | 2.757*** | 2.282** | -1.169* | | | 2.818** | | | -1.366* |
| Hybrid vs. Exit-driven | -1.152** | -1.639*** | -2.995*** | | -1.969** | 2.163** | | 2.039*** | 1.270** | |
| Hybrid vs. Exclusion-driven | | | | -1.228* | | | 2.642* | | 1.109* | -1.410* |

Notes: Statistically significant at *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (robust standard errors in parentheses). Only statistically significant coefficient estimates are listed in this table. Sample weights are used in the multinomial logit models for the EU28.

Source: Authors' calculations based on the 2019 Eurobarometer 92.1 survey.

with the unemployed. Lastly, those who live in large towns have a 21.5% lower probability of engaging in undeclared service work for a purely-exit driven motive compared with those who live in rural areas.

Finally, and importantly, [Table 5](#) compares different motives with each other. We only present the statistically significant coefficient estimates in [Table 5](#). It shows that individuals over 25 years old have a higher probability to report an exit-driven motive compared with an exclusion-driven motive and this probability increases as individuals get older. Age, however, has the opposite effect when we compare the hybrid motive with exit-driven reasons. Moreover, individuals with a child have a higher probability to display an exclusion-driven motive compared with exit-driven and hybrid reasons. Furthermore, those without any full-time education have a higher likelihood of having hybrid motives compared with a pure exit-driven motive, and this is the same for unemployed individuals and those living in larger towns. Lastly, a pure exclusion-driven motive is found to be more prevalent in Southern Europe compared with other reasons.

Discussion and conclusions

Reporting data from a 2019 survey in 28 European countries, a dual labour market has been identified in the undeclared service economy. Some 8.3% of European undeclared service workers are in the purely exclusion-driven lower tier, whilst 63.2% are in the purely exit-driven upper tier (where slightly more explain this exit as a purely rational economic decision rather than purely due to their disagreeing with the formal rules). The remaining 28.5% explain their participation in terms of a mix of exit- and exclusion-driven rationales. Through a probit regression analysis, those in the exclusion-driven lower tier are significantly more likely to be single people living with a partner, and with a child, whilst those in the exit-driven upper tier are more likely to be older, to have spent time in full-time education, be self-employed, and to be living in Western Europe and the Nordic countries.

The outcome is that three theoretical advances have been made in understanding the undeclared services economy. First, this study has shown that the competing explanations need to be integrated if the undeclared service economy is to be fully understood. When undeclared service workers' rationales for participation are analysed, all theoretical explanations are needed if participation is to be fully explained. Second, this study uncovers that it is valid to theorise the undeclared service economy as a dual labour market using these exit- and exclusion-driven rationales to differentiate the upper and lower tiers, given that nearly three-quarters of all informal workers state either purely exit- or exclusion-driven reasons for their engagement. However, and thirdly, the finding that a quarter of all undeclared service workers state a mix of both exclusion- and exit reasons displays the need for a more variegated depiction of the undeclared labour market as a spectrum from solely exit-driven undeclared service workers at one end to solely exclusion-driven undeclared service workers at the other end.

This reconceptualising of undeclared service workers as a dual labour market also has important policy implications and practical applications. This is because how undeclared service work is tackled will vary by whether the upper or lower tier of workers is being targeted. For the lower exclusion-driven tier, greater social protection and active labour market intervention policies targeting vulnerable groups is required to reduce the necessity of workers having to participate in undeclared service work, especially if also

complemented by increased sanctions and detection measures targeted at their employers. This proposal is supported by an evidence-base that shows how participation in undeclared work is lower in countries spending more on social protection and active labour market interventions to support vulnerable groups (Horodnic, 2018; Williams, 2014; Williams & Horodnic, 2020). This study reveals that in Europe such initiatives should target not only those in the purely exclusion-driven lower tier, namely single people living with a partner and with a child, but also perhaps those in the hybrid mixed realm possessing both exit- and exclusion-driven rationales, namely younger people aged 15–24 years old, without children, house persons, unemployed and to have difficulties paying the bills most of the time and to live in East-Central Europe. The proposal to also increase the penalties and detection risk for employers is also supported by the evidence. Although past studies reveal that using repressive sanctions and detection measures has little impact on workers likelihood of engaging in undeclared work (Williams & Horodnic, 2020), the expected fines and likelihood of detection have been found to significantly impact on employers' propensity to operate in the undeclared economy (Williams & Bezeredi, 2018a, 2019).

For upper tier undeclared service workers, in contrast, there is a need for policy measures that make it easier and beneficial to function in the declared economy (for those participating as a rational economic decision), along with reducing the asymmetry between the formal and informal institutions through education and awareness raising and addressing the formal institutional failings (for those doing so as social actors). Policy measures to make formality easier and beneficial for those operating undeclared as a rational economic decision can include making compliance simpler (Alstadsæter & Jacob, 2013; Richardson, 2006), such as tax administrations pre-filling for taxpayers their self-assessment returns (Jensen & Wöhlbier, 2012), providing formalisation advice and support, and regularisation initiatives to enable employers and workers to voluntarily declare their previous undeclared work and transform it into declared work without penalisation (Williams, 2021). Meanwhile, to reduce institutional asymmetry, a first option is to use education and awareness raising initiatives to change norms, values and beliefs about the acceptability of undeclared work (see European Commission, 2020) and a second option is to reform formal institutions by improving redistributive and procedural fairness and justice. This would result in citizens, workers and employers perceiving formal institutions as treating them respectfully and impartially, a belief that they pay their fair share of taxes and social contributions relative to others, and that the public goods and services they receive are an adequate return for the contributions made (Molero & Pujol, 2012; Murphy, 2005). The finding of the current study is that all these initiatives need to target those who are older, have spent time in full-time education, are self-employed, and living in Western Europe and the Nordic countries. In Europe, given how the upper tier is much larger than the lower tier, more weight will need to be given to these latter policy initiatives.

Notwithstanding these advances in relation to theory and policy, there are limitations to this study and further research opportunities. First, these findings apply only to Europe. Research is now needed in specific countries and additional global regions on whether using exclusion- and exit-driven rationales to depict a dual undeclared labour market is valid, the distribution of undeclared service workers between these upper and lower tiers and the characteristics of workers in each tier. Second, it would be useful in future research to analyse not only the socio-demographic, socio-economic and spatial characteristics but also the types of undeclared service work in each tier, including both an

analysis of the employment relations (e.g. whether such undeclared service provision is primarily undeclared waged employment in the lower tier and undeclared self-employment in the upper tier) and how wage rates vary between the tiers. Third and finally, future studies might analyse the degree to which the dual labour market in undeclared service provision reflects the dual labour market in declared service provision, and therefore whether the undeclared labour market consolidates, rather than diminishes, the inequalities of the declared labour market.

In sum, if this paper facilitates the shift beyond the use of singular logics when explaining undeclared service provision and stimulates further research on the existence of a dual labour market in the undeclared service economy in specific nations and additional global regions, then one intention of this paper will have been accomplished. If it also inspires governments to recognise that variegated policy approaches are required to tackle undeclared service provision in the upper and lower tiers, then the fuller intention of this paper will have been realised.

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