**Beyond conflict: long-term labour market integration of internally displaced persons in post-socialist countries**

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**Abstract**

The break-ups of the former Soviet Union and Yugoslavia were accompanied by some of the worst military conflicts in modern history, claiming lives of thousands of people and forcibly displacing millions. We study how people displaced by war and conflict within these countries fare on the labour market in the long term – 10 to 15 years after their displacement. Our conceptual framework draws on the theory of cumulative disadvantage and the notion of unemployment ‘scarring’. Data come from the *Life in Transition II* survey, conducted in post-conflict, post-socialist countries in 2010(n=10,328). Multiple regression analysis reveals a significant long-term labour market disadvantage of forced displacement: people who fled conflict 10-15 years ago are more likely to be long-term unemployed, experience a recent job loss and work informally. We also find that people affected by conflict (both displaced and non-displaced) are more willing to acquire further education and training. These results are not uniform across demographic groups: displaced women consistently experience a greater labour market disadvantage than displaced men, and people affected by conflict in the younger age group (18-34) are particularly keen to acquire extra education and training. Overall, our results highlight a long-lasting vulnerability of the forcibly displaced in developing and transition economies, and advance the emerging literature on the effects of internal displacement on labour market outcomes and human capital accumulation. We also discuss how forced internal displacement extends the theory of cumulative disadvantage.

Keywords: internally displaced persons, post-socialist countries, conflict, labour market outcomes, education, cumulative disadvantage

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1. **Introduction**

The recent refugee crisis, fuelled by the war in Syria, has drawn immense public attention and become one of the most pressing international policy issues of our times. Fleeing conflict and violence and continuing to put their lives at risk, refugees embark on perilous cross-border journeys in hope to find safety abroad. However, *international* refugees represent only the tip of the iceberg. Conflict and violence displace millions of people *within countries*. In 2016, among the 65.6 million people forcibly displaced worldwide, 40.3 million, or more than six out of ten, were internally displaced persons (IDPs) - people fleeing conflict, violence or persecution, but staying in their own country (IDMC, 2016; UNHCR, 2017). The recent wars in Syria and Ukraine alone led to the internal displacement of 7.1 and 1.8 million of people, respectively.

The IDPs are the invisible majority of the forcibly displaced. For decades, they have remained under the radar of the public debate, largely unnoticed by the international policymaking community, often ignored by national authorities and overlooked by academic research. One reason for this is the lack of information on the location and activities of IDPs, as they are found predominantly in developing/lower-income countries (IDMC, 2016; UNHCR; 2017), where the quality of statistics and registry data is generally low. In addition, the overwhelming majority of IDPs live in non-camp, dispersed settings (Beyani, 2013; World Bank, 2016), which makes it difficult to sustain a degree of public attention comparable to that received by refugees.

Yet, as any other group of people forcibly displaced by conflict or violence, IDPs are likely to face considerable challenges of socio-economic integration in host communities. For example, the prospects of IDPs will be hampered by the displacement- and conflict-related loss of assets, human and social capital, and psychological trauma. In this respect, IDPs are no different from refugees. Similarly, any type of forced displacement is characterised by uncertainty, which shortens people’s horizons and lowers aspirations, resulting in counter-productive decisions, prolonged periods of inactivity, and, ultimately, poverty traps and marginalisation (Ibanez and Moya, 2010b; World Bank, 2016). While one might argue that, contrary to refugees, IDPs at least do not face the challenges of cultural and linguistic integration and have no legal barriers to work and move within their own country, the reality is more nuanced. Stigma, prejudice, discrimination, lack of institutional support and various institutional barriers, often prevent IDPs from successfully rebuilding their lives after conflict.

Against this backdrop, the objective of this paper is to analyse how IDPs fare after displacement in terms of their labour market outcomes. This question is important, as having a job – a primary indicator of labour market integration – is crucial for recovering lost assets, rebuilding human capital, confidence and dignity, overcoming psychological trauma and re-establishing social networks (World Bank, 2015). In addition to having a job, and in order to get a more complete picture of labour market integration, we also consider other labour market and vocational outcomes of IDPs: the probability of working informally, the level of job satisfaction, the willingness to undertake training, and the challenges in finding training opportunities. We are particularly interested in whether internal displacement has a lasting effect on people’s lives, and study the long-term (10 to 15 years after the conflict) labour market disadvantage of IDPs.

Our conceptual framework draws on the theory of cumulative disadvantage, complemented with the theoretical explanations of the long-term effects of unemployment. The empirical analysis focuses on nine post-socialist countries of Eastern Europe and Central Asia (Armenia, Azerbaijan, Bosnia and Herzegovina, Croatia, Former Yugoslav Republic of Macedonia, Kosovo, Russia, Serbia and Tajikistan), which, throughout the 1990s, witnessed some of the worst military conflicts of modern history that led to the internal displacement of millions of people. Specifically, we use data from a large representative survey, *Life in Transition II*, conducted by the World Bank and the European Bank for Reconstruction and Development (EBRD) in 2010.[[1]](#footnote-1) Alongside extensive information on labour market, job and socio-demographic characteristics, the dataset contains information on whether respondents had to move because of a conflict, allowing for a nuanced pursuit of our research question.

This paper contributes to the literature on the integration of the forcibly displaced people in several ways. First, while there is a substantial body of evidence on the labour market integration of international refugees (see Bevelander (2016) for a review of this literature), relatively little is known about the labour market experiences of IDPs. The few studies that exist on this question are single-country analyses focusing on standard labour market outcomes, such as the probability of being unemployed (Kondylis, 2010) or self-employed (Bozzoli et al., 2013), or economic activity choices, such as cultivation, crafting or trading (Bozzoli et al., 2015). Our study is the first to provide a combined perspective from several countries (we are confident to pool several post-socialist countries together, as they share similar historical, political and social backgrounds, as well as the timing and nature of conflicts) and also to use an explicit theoretical framework (the theory of cumulative disadvantage) to frame the analysis. In addition, we contribute to the literature by considering a range of labour market outcomes, which allows painting a more complete picture of the IDPs’ long-term, labour-market-related integration, needs and experiences. In this regard, our study is the first, for example, to explore the willingness of IDPs to acquire further education and training.

Second, it is often forgotten that the current refugee crisis, and forced displacement more generally, is centred in the developing world: the overwhelming majority of all IDPs (99%), as well as 89% of all refugees, are found in low or middle-income countries (World Bank, 2016). Yet, much of the existing literature and public debate focus primarily on the reception, experiences and outcomes of the forcibly displaced (refugees) in developed countries. This paper helps redress this imbalance, contributing to a better understanding of how successful the ‘invisible majority’ of the forcibly displaced are in rebuilding their lives and careers after conflict.

Finally, the literature on the socio-economic integration of IDPs considers predominantly select Latin American and African countries, such as Colombia and Uganda, mainly because of the availability of suitable and reliable data in these countries. The experiences and integration of the forcibly displaced in the post-socialist world remain underexplored. We fill this knowledge gap by providing evidence for nine countries of the region.

The remainder of the paper is structured as follows. Section 2 provides the theoretical framework, reviews possible channels through which IDPs are likely to acquire a labour market disadvantage and accumulate it over time, and outlines the hypotheses to be tested in the empirical analysis. Section 3 comments on the geo-political context of the study. Section 4 describes the dataset, variables and empirical strategy. Section 5 presents the results, while section 6 discusses the results, outlines implications for theory and policy as well as the limitations of our study, and concludes the paper.

**2. Long-term labour market disadvantage of the IDPs: theoretical perspectives and hypotheses**

 To frame our analysis of the long-term labour market outcomes of IDPs, we use the theory of cumulative disadvantage (see, e.g., DiPrete and Eirich (2006) for a comprehensive review), complementing it with the theoretical explanations of the ‘scarring effects’ of unemployment. The cumulative disadvantage theory holds that an unfavourable relative position experienced by an individual at some point in life would form a basis for further relative losses, producing increasing inequality between those affected and those unaffected by the initial shock. The theory was originally developed by Merton (1968) to explain how special opportunities received by some scientists early in their careers contribute to academic advancement later in life. Although initially conceived as a theory of cumulative *advantage*, the framework has since been extensively applied to the study of the long-term effects of unfavourable initial conditions (i.e. the theory can be used to address both cumulative advantage and cumulative disadvantage), focusing on a variety of outcomes (e.g. employment, career choices, education, and health) and a variety of group settings (e.g. gender, ethnicity, and race).

 Within the broad framework of cumulative disadvantage, one type of unfavourable initial conditions that has received much attention, and is of particular interest to us, is that of unemployment. Specifically, there is now a broad consensus of the ‘scarring effects’ of unemployment: it has been found, for example, that past unemployment spells reduce the chances of future employment (Arulampalam et al., 2000), and have a detrimental effect on wages, job quality and well-being if re-employment occurs (Gregory and Jukes, 2001; Dieckhoff, 2011; Knabe and Rätzel, 2011). But why does unemployment scar? According to the human capital theory (Becker, 1964), unemployment incurs a permanent loss of firm-specific human capital and experience, as well as a depreciation of more general skills; people may thus struggle, after an unemployment spell, to find another job or be forced to accept job offers with requirements that are lower than their pre-unemployment qualifications and experience (Dieckhoff, 2011). In addition, following the market signalling approach (Spence, 1974), a previous unemployment experience may convey to an employer a signal about worker’s low productivity, making it more likely that the employer will offer a lower salary and more precarious jobs with limited growth opportunities. Finally, it has also been argued that the unemployed would accept inferior job offers because, in accordance with the job search theory, they have limited information about available job opportunities (Mortensen, 1979) and/or little bargaining power due to financial constraints (i.e. they cannot decline a job offer and wait until a more suitable option will appear) (Burdett, 1979).

 Concerning the long-term labour-market experiences of the forcibly displaced, a large strand of the literature has looked at the evolution of the gap in wages and employment between (international) refugees and other types of (international) migrants (see Bevelander, 2015, for a review). This literature suggests that refugees have a persistently lower labour market performance than economic migrants, but the gap between refugees and family re-unification migrants tends to close over time. The loss of assets and human capital, as well as the psychological trauma and institutional barriers that refugees face in host countries have been used to explain these findings; however, an explicit theoretical model has rarely been applied to frame these analyses. An exception to this is the work of Bakker et al. (2016), who use the theory of cumulative disadvantage to frame the analysis of the labour market participation rates of refugees in the Netherlands.

 Turning to IDPs – people displaced by conflict within their own country and the primary focus of our study – we note a general scarcity of evidence on their long-term labour market integration and we are not aware of any attempt to analyse the evolution of IDPs’ labour market outcomes in a formal theoretical model (which is not surprising given that the related literature is in its infancy). We believe that the cumulative disadvantage theory, together with the explanations concerning unemployment scarring, can be effectively employed to study the long-term labour market outcomes of IDPs – and this is the purpose of the remainder of this section.

 Central to the cumulative disadvantage theory is the presence of a shock, some type of unfavourable initial conditions. In our case, the shock is represented by the forced internal displacement. By definition, it implies an interruption of one’s activity (working, studying, training, or housekeeping), and there is little expectation that IDPs will be involved in labour-market-related activities immediately after the move. Instead, private savings, support from host communities, and support from state and humanitarian organisations, if any, would help IDPs meet basic needs in the aftermath of the conflict. As soon as the minimum level of security is attained, and savings dry out, it is reasonable to expect that IDPs will seek employment opportunities. Significant falls in household consumption that people experience after internal displacement (Fiala, 2015; Ibáñez and Moya, 2010a; Ibáñez and Moya, 2010b; Ibáñez and Vélez, 2015; Oruc, 2015) would only contribute to the willingness to find work.

 Consistent with the explanations of unemployment scarring, the displacement-related inactivity spell alone would be enough to set in motion the mechanism of cumulative disadvantage: simply because they were displaced, IDPs can be expected to face challenges of re-entering the labour market and building successful careers at a later stage, with the gap between the displaced and non-displaced potentially increasing over time. However, several factors – at the individual, community and country level – are likely both to exacerbate the initial, displacement-related shock (in particular, make the initial loss-of-activity spell longer) and hamper the subsequent labour market integration efforts of IDPs. This will deepen the disadvantage of IDPs and slow down any convergence/broaden the gap in labour market outcomes relative to people not affected by conflict. In what follows, we identify and discuss these factors (which we cluster into eight groups: loss of assets; psychological trauma; uncertainty; reception at host communities; institutional and administrative barriers; loss of education; gender-related considerations; selection into moving and selection into destinations) and, drawing on this discussion, outline the hypotheses that will be tested in the empirical analysis.

Loss of assets. The loss of assets, such as housing, land or livestock, has been documented in various contexts of forced displacement (Engel and Ibáñez, 2007; Fiala, 2015; JIPS, 2012; Ibáñez and Moya, 2010a; Kett, 2005; World Bank, 2013). At the extreme, the destruction or confiscation of assets may be the very cause for displacement (Engel and Ibáñez, 2007; World Bank, 2016). The prospects of recovering lost assets are small: selling a house or land before the move is unlikely to be successful in a conflict environment[[2]](#footnote-2) and getting a compensation after the conflict may also be problematic if asset ownership was not documented or if laws are not enforced. The latter aspects are common across the developing world and particularly relevant for our study, as the institution of private property had only started to develop during the early stages of post-socialist transition.

The loss of assets will exacerbate the initial loss-of-activity shock, and thus contribute to the cumulative disadvantage of IDPs, in a number of ways. First, left without shelter, land and livestock, IDPs will spend disproportionately large amounts of time making sure that the basic needs (food, shelter) of the household members are satisfied. Activities here will range from dealing with administrative institutions to begging (Bobic, 2009; Calvi-Parisetti, 2013; Steffen, 2012; Sundal, 2010). Time spent catering for basic needs comes at the expense of working, searching for work and training, and from this perspective one would expect IDPs to be less likely to engage in labour market activities relative to non-displaced people. On the other hand, the same pressure to satisfy basic needs may force IDPs to take up any available employment – often fixed-term, informal and not matching their qualifications, skills and experience. We would therefore expect that, among the working population, IDPs are more likely to be involved in more precarious and less desirable types of work.

Second, the loss of particular assets may mean the loss of a particular way of life, with questionable prospects of adapting to new labour market realities in host communities. For example, Kirchhoff and Ibanez (2001) find that IDPs from rural areas who lost agricultural land find it difficult to secure work they are not trained for and end up being long-term unemployed. Similarly, the loss of cattle implied the loss of social status and an entirely altered way of life for conflict-displaced pastoralists in Sahel (World Bank, 2016). From this perspective, we would expect IDPs to be more likely to be long-term unemployed.

Psychological trauma. Armed conflict, forced displacement and settling down in host communities are accompanied by a range of stressful and traumatic experiences (World Bank, 2016). People fleeing conflict zones are likely to have witnessed or been direct victims of violence, experienced extreme levels of insecurity, the threat of death, seen their family members killed or injured, and/or been victims of rape and sexual violence. In addition, the displacement itself often brings about separation from relatives and family members. There is vast evidence that these experiences leave profound psychological impacts, such as post-traumatic stress disorder, depression, anxiety, fatigue and sleeping problems (see Porter and Haslam (2005) and Steel et al. (2009) for summaries of this literature). There is also evidence that trauma from forced displacement is felt long after the move (Matsunaga, 2006; World Bank, 2014). Sharp falls in consumption and social status, insecurity about the future, and prejudice and discrimination that IDPs often experience after displacement further exacerbate the stress and mental health issues (World Bank, 2014; World Bank, 2016).

The psychological disorders experienced by IDPs generate the sense of detachment, helplessness and defeat, irrational fear, impaired judgement, and loss of self-confidence and identity (Akhunzada et al., 2015; World Bank, 2014), all of which are likely to have negative effects on labour market participation. Ibáñez and Moya (2010b), for example, report that Colombian IDPs with mental health issues are scared to venture out of homes and look for jobs. The trauma of internal displacement may be accompanied by excessive smoking and alcohol consumption, especially in the post-socialist countries (Kett, 2005; Roberts et al., 2013; Roberts et al., 2014), i.e. behaviours that further limit the chances of a successful labour market integration. It is also likely that there exists a circular relationship – a vicious circle – between mental health disorders and poor labour market integration of IDPs: mental health issues prevent them from finding jobs, which, in turn, exacerbates mental health issues.

Furthermore, there is evidence that the psychological trauma related to conflict and displacement lowers aspirations and increases risk aversion, leading to overly pessimistic prospects of upward mobility, perceptions of inability to move out of poverty, and suboptimal decisions, for example in the choice of agricultural activity (Akhunzada et al., 2015; Bundervoet, 2007; Callen et al., 2014; Moya and Carter, 2014; Moya, 2017). Implicitly, this would affect the labour market integration of the forcibly displaced – one could expect IDPs to have lower willingness to find work, upgrade jobs and undertake training.

Uncertainty. The initial moves made by IDPs are rarely final (Beytrison and Kalis, 2013; Kett, 2005; World Bank, 2016). IDPs may need to move multiple times because there are new threats to their lives at destinations, they may decide to move again in search of places offering better living conditions, they may return back to what used to be their homes (and then flee again because conflict has resumed), or they may move abroad becoming international refugees (most international refugees are former IDPs; World Bank, 2016). In addition, IDPs are increasingly likely to be caught up in long-term, protracted displacement (Zetter, 2011), for example because they generally want to return home but the conflict there has not been fully resolved (‘frozen’). Such displacement is often experienced as ‘waiting’, ‘permanent impermanence’, and “a present that [IDPs] do not want to inhabit, awaiting a future they cannot reach” (Brun, 2015: 19).

Whether the subsequent moves are actually made or only planned/contemplated, uncertainty is inherent to such contexts. Uncertainty shortens horizons and orients people towards the past rather than the future. Inevitably, it also affects labour market integration: people are less motivated to invest in local jobs and corresponding skills and build social capital if their future is highly uncertain. Normal re-integration into the labour market can only begin once IDPs settle down – not least in their minds. Depending on the context, this can take many years and affect several generations (World Bank, 2016; Najafizadeh, 2015). However, even when IDPs eventually settle down, the damage inflicted by ‘protracted uncertainty’ (Brun, 2015) on human capital, skill accumulation and labour market experience can be long lasting.

Reception at host communities. The livelihoods of the forcibly displaced may crucially depend on the generosity of people living in host communities. That said, tensions and conflicts might also develop between IDPs and hosts, for a number of reasons. First, the arrival of the forcibly displaced means increased competition for scarce resources, such as land and water, and a strain on public services (Brun, 2010; World Bank, 2013; World Bank, 2015). Second, IDPs arriving in large numbers can increase competition for local jobs and depress wages (Das et al., 2016; Duncan, 2005; Hill et al. 2006; World Bank, 2016). Third, locals may resent the fact that IDPs receive humanitarian aid/ government assistance that is denied to them; local populations can effectively find themselves less well-off than the displaced (World Bank, 2016). Furthermore, members of host communities may have developed stigmatised perceptions of IDPs (‘lazy’, ‘criminals’, ‘peasants’, ‘not truly displaced’) and discriminate/ have prejudice against particular groups of them, such as the racial and ethnic minorities (Feijen, 2005; Hill et al., 2006; Holland, 2004; López et al., 2011; Sundal, 2010; World Bank, 2016). Both social cohesion and a sustainable labour market integration of IDPs in such environments would be compromised.

Institutional and administrative barriers. While one would naturally expect IDPs to have the same rights as other citizens of their country, the reality is sometimes different: IDPs may face substantial institutional and administrative barriers in their own countries. In extreme cases, for example in Azerbaijan, the state continues to impose legal restrictions to the employment, accommodation and schooling of IDPs – almost two decades after the peak of displacement (World Bank, 2016). Recovering lost or destroyed documents and registering children born in displacement can be problematic due to complex, inaccessible and expensive bureaucratic procedures (IDMC, 2015; UNHCR, 2007). More broadly, the governments of many developing countries lack the capacity to protect their IDPs and, in extreme cases, support direct attacks against them (Yin, 2005). Overall, institutional and administrative barriers faced by IDPs in their own countries represent additional obstacles for successful labour market (re)integration.

All the factors discussed so far – the loss of assets, psychological trauma, uncertainty, reception in host communities, institutional and administrative barriers – suggest inferior labour market outcomes for IDPs relative to people not affected by conflict. Our first expectation is that the unemployment ‘scar’, received by IDPs during displacement and exacerbated by a range of post-displacement experiences and factors hampering their labour market integration, reduces the IDPs’ chances of entering the labour market after displacement. This leads us to the first hypothesis:

*H1: Relative to people not affected by conflict, IDPs are more likely to be long-term unemployed.*

The discussion above also suggests that, if employed, IDPs will tend to occupy more precarious and less desirable jobs. This could manifest itself in a number of ways, including a greater likelihood of short-term unemployment, working informally and lower job satisfaction. We, therefore, propose the following hypotheses:

*H2: Relative to people not affected by conflict, IDPs are more likely to be short-term unemployed.*

*H3: Relative to people not affected by conflict, IDPs are more likely to work informally.*

*H4: Relative to people not affected by conflict, IDPs have lower job satisfaction.*

Loss of education. 51% of the forcibly displaced are children (UNHCR, 2016), and displacement may have particularly detrimental effects of their future careers and labour market outcomes. For children and young people, who were in formal education or training prior to conflict (pupils, students, trainees), forced displacement implies, at a minimum, a temporary disruption of schooling and training activities and the necessity to adapt to new educational environments. Both can negatively affect long-term schooling outcomes: for example, Gómez Soler (2016) shows that the IDP children perform less well at the national high school exit examinations in Colombia. In addition, children of IDPs often lack equal opportunities to access quality education (Das et al., 2016; Ferris and Winthrop, 2010), which corroborates broader evidence that sharp falls in household consumption reduce children’s school attendance (Duryea et al., 2007; De Janvry et al., 2006; Jensen, 2000).[[3]](#footnote-3)

The deficiency of schooling experienced by IDPs during young age will undoubtedly affect their long-term labour market outcomes. However, IDPs may be aware of this link and, therefore, be particularly willing to undertake extra/further schooling or training. The willingness of younger IDPs to do so is also supported by their potentially more optimistic outlook for the future, as forced displacement has a less damaging mental health effect for younger than older people (Porter and Haslam, 2005). These considerations lead us to the following hypothesis:

*H5: IDPs who were of schooling age during displacement are more willing to undertake further education and training relative to their counterparts not affected by conflict.*

Gender-related considerations. Women may experience conflict and forced displacement and be affected by them differently from men, which could have implications for the long-term labour market integration of the two groups. On the positive side, women may enjoy better access to employment and schooling if they relocate to more liberal environments within their country (World Bank, 2016). In addition, women’s skills may be more transferable than men’s (Buscher, 2009), meaning that women would find employment faster. On the negative side, forcibly displaced women display worse mental health outcomes than forcibly displaced men (Porter and Haslam, 2005), meaning that women’s labour market integration would be particularly disadvantaged by the traumatic experiences of conflict and displacement. In addition, women and girls are more likely to experience rape and sexual abuse during conflict and displacement and may even have to engage in prostitution at destinations to provide a livelihood for household members (World Bank, 2016). Such experiences leave deep psychological scars and can result in social exclusion, contributing to a greater labour market disadvantage of women relative to men. Whether the positive or negative gender effects dominate is an empirical question which we will try to answer by testing the following hypothesis:

*H6: Displaced women have inferior long-term labour market outcomes than displaced men.*

Our final point about the sources of IDPs’ labour market disadvantage concerns selection into moving and selection into destinations. People in the same conflict zone may not be subject to the same levels of violence and may non-randomly select into displacement. For example, in Colombia, holders of larger plots of land and households headed by women are more likely to receive direct death threats from violent actors, while households with younger heads as well as less educated people are more likely to move (Engel and Ibáñez, 2007). Household decisions on whether and where to move may also depend on the way armed groups target civilians (collective, i.e. based on shared group characteristics, versus selective targeting) (Steele, 2009). Such non-random selection into displacement based on socio-demographic characteristics could contribute to the difference, or the absence thereof, in the labour market outcomes of IDPs relative to people not affected by conflict. In other words, any observed disadvantage of IDPs could technically be due to the differences in their socio-demographic characteristics, such as age, gender and education, rather than the effect of forced displacement as such. Similarly, no observed IDPs disadvantage could be the result of an adverse effect of forced displacement counterbalanced by a favourable selection into displacement based on individual characteristics. In practice, isolating the effect of forced displacement can be achieved in multiple regression analysis by including relevant individual-level control variables.

It should also be noted that in many cases IDPs would have some control over where to move within their countries, and, where possible, they would choose destinations offering better opportunities for the fulfilment of basic needs as well as finding a job (Czaika and Kis-Katos, 2009; Lozano-Gracia et al., 2010). From a technical point of view, such self-selection is not an issue if one compares the labour market outcomes of IDPs with those of hosts within the same area. However, caution should be applied when comparing the outcomes of IDPs (as observed in host communities) and people who were affected by conflict but stayed in conflict areas. In other words, the outcomes of IDPs and stayers may be different because the two categories live in areas with different labour market opportunities. Again, a practical solution for the empirical analysis is to differentiate between the conflict-affected non-movers and movers, which enables clear comparisons between the two groups, as well as comparisons with people not affected by conflict.

We should add here that, as such, the category of conflict-affected non-movers is also of interest to us: it is a potentially large group of people, yet practically nothing is known about their post-conflict long-term labour market performance and vocational behaviour. As conflicts tend to interrupt economic activity in the affected areas, it is likely that conflict-affected non-movers have also suffered from an unemployment/inactivity spell, which can form a basis for future labour market disadvantage. However, this disadvantage would not be amplified by displacement (as in the case of IDPs), and the non-movers’ prospects of re-integration into the labour market would depend on how fast economic and social activity recovers in the post-conflict area. We also expect that the non-movers who were of schooling age during conflict experienced a loss/disruption of education and training and, similarly to their displaced counterparts, would be willing to undertake additional schooling in the longer term to redress this disadvantage. This leads us to the final set of hypotheses:

*H6: Relative to people not affected by conflict, conflict-affected non-movers have inferior labour market outcomes.*

*H7: Conflict-affected non-movers* *are more willing to undertake further education and training relative to their counterparts not affected by conflict.*

**3. Context**

Before moving to the empirical part of the study, we briefly present the context – the parameters of conflict and forced displacement in the nine post-socialist countries that we examine (see Table 1 the actual numbers of IDPs). The wars and violent conflicts that took place during the 1990s across the former Yugoslavia and in the several former USSR republics (Armenia, Azerbaijan, Russia and Tajikistan)[[4]](#footnote-4) cost thousands of human lives and led to the displacement of millions of people. It is important to highlight two features that are common to these wars/conflicts. First, they unfolded in parallel with the breakdown of former Yugoslavia and USSR, the emergence of new nation-states, and a transition from planned to market economy. These transformations were accompanied by an initial economic shock (sharp falls in GDP, hyperinflation, surge in unemployment), subsequent economic depression, contraction of the welfare state, and weak governance. In these times of economic, political and social turmoil, the needs of the forcibly displaced and their labour market integration rarely emerged as a top priority for policymakers.

Second, besides hosting large populations of the internally displaced people, various countries (Armenia, Azerbaijan, Croatia, and Serbia) received large numbers of the forcibly displaced from the neighbouring states, which were affected by related conflicts. For the most part, these people – technically, cross-border refugees – belonged to the ethnic majority of the host country (for example, ethnic Croats moving from Bosnia and Herzegovina to Croatia) and would, therefore, be somewhat different from typical cross-border refugees moving between developing countries or from developing to developed countries. It should also be noted that only shortly before the conflicts, both Yugoslavia and the USSR were single national entities with fluid internal borders, meaning that the distinction between IDPs and incoming international refugees at that time would be less than clear-cut.

**Table 1. Conflict and forced displacement in the post-socialist countries, 1990s**

|  |  |  |
| --- | --- | --- |
| Country | War/conflict | Number of the forcibly displaced |
| Armenia | Armenia-Azerbaijan conflict over Nagorno-Karabakh (1988-1994) | 77,000 IDPs and 334,000 incoming refugees (mainly ethnic Armenians from the Nagorno-Karabakh region in Azerbaijan) |
| Azerbaijan | Armenia-Azerbaijan conflict over Nagorno-Karabakh (1988-1994) | 778,000 IDPs and 230,000 incoming refugees (mainly ethnic Azeris from Armenia) |
| Bosnia and Herzegovina | Bosnian War (1992-1995) | 1,100,000 IDPs |
| Croatia | Croatian War of Independence (1991-1995); Bosnian War (1992-1995) | 200,000 IDPs and 187,000 incoming refugees (ethnic Croats fleeing ethnic cleansing in Bosnia and Herzegovina) |
| Former Yugoslav Republic of Macedonia | Violent conflict between ethnic Macedonians and ethnic Albanians; 2001 | 74,000 IDPs and 97,000 outgoing refugees to neighbouring countries; most forcibly displaced were able to return subsequently.  |
| Kosovo | Kosovo-Serbia conflict (1998-1999); NATO airstrikes forcing the withdrawal of Yugoslav troops from Kosovo (1999) | 260,000 IDPs before 1999; 800,000 ethnic Albanians fleeing to neighbouring countries (Montenegro, FYR Macedonia, and Albania) after the airstrikes, most returned subsequently. |
| Russia | 1994 and 1999 Wars in Chechnya (1994 and 1999) | 800,000 IDPs |
| Serbia | Croatian War; Bosnian War (1992-1995); NATO air strikes forcing the withdrawal of Yugoslav troops from Kosovo (1999) | 650,000 incoming refugees (ethnic Serbs from Croatia and Bosnia) and 210,000 IDPs from Kosovo. |
| Tajikistan | Civil War (1992-1997) | 520,000 IDPs |

Source: UNHCR (2000); UNHCR Statistics Database.

**4. Data and Methods**

*4.1. Data*

The data for this study come from the *Life in Transition-2* survey, conducted by the European Bank of Reconstruction and Development and the World Bank in 2010. The survey covered 29 post-socialist countries of Central and Eastern Europe and Central Asia, Turkey, and five Western European countries (France, Germany, Italy, Sweden and the UK). Our focus is on nine post-socialist countries, which, in the 1990s, were affected by a major military conflict (see Table 1 above) that generated large flows of forcibly displaced people: Armenia, Azerbaijan, Bosnia and Herzegovina, Croatia, Former Yugoslav Republic of Macedonia, Kosovo, Russia, Serbia, and Tajikistan.

The nationally representative samples consisted of 1,000 face-to-face interviews in each country (1,500 respondents in the case of large countries: Russia and Serbia). In each country, households were selected according to a two-stage clustered stratified sampling procedure. In the first stage, the frame of primary sampling units was established using information on local administrative units. In the second stage, a random walk fieldwork procedure was used to select households within primary sampling units. Respondents within households were selected randomly using a selection grid. In addition, the interviewer asked the head of the household, or another knowledgeable person, a series of questions about the household composition, housing and expenses. A detailed account of survey design and implementation, as well as information on how to access the dataset, is provided on the survey’s website.[[5]](#footnote-5)

*4.2. Variables*

This section outlines the variables that we will use in our empirical analysis, the main objective of which is to estimate the effects of forced displacement (main regressor) on different labour market performance variables (outcome).

Outcome variable(s). The respondents were asked a series of questions about their labour market participation and vocational training. First, all respondents were asked: “Did you work for income in the last 12 months?” We use this question to construct a dichotomous variable *long-term unemployment/inactivity*, which is equal to 1 if the answer was ‘no’ and 0 if the answer was ‘yes’. Then, respondents who said they worked in the 12 months prior to the interview were asked a follow-up question: “Are you still working in this job?” We use this question to construct a dichotomous variable *short-term unemployment,* which is equal to 1 if the answer is ‘no’ and 0 if the answer is ‘yes’ (respondents who did not work in the 12 months prior to the interview are excluded from this measure).

The dichotomous variable *short-term unemployment* is likely to capture job losses due to the global economic crisis, which hit the post-socialist world in 2009 (Ivlevs and Veliziotis, 2016). In this respect, using this variable will help us determine whether the forcibly displaced are more vulnerable to major macroeconomic shocks (i.e. whether they are more likely to lose jobs in times of crises) than people not affected by conflict. In addition, *the Life in Transition-2* survey contains a separate section on the household-level effects of the global economic crisis. Among other things, all respondents – regardless of their labour market status – were asked whether, as a result of the crisis, 1) the head of their household lost job; 2) someone else in the household lost job, and 3) someone in the household experienced a wage reduction. We use these questions to construct three dichotomous variables capturing the *crisis-related job loss* and *salary reduction*.

Next, those respondents who were working in the 12 months prior to the interview were asked whether they had a contract or labour book for their job. We use this information to construct a dichotomous variable *working informally,* which equals 1 if the answer was ‘no’ and 0 if the answer was ‘yes’. The respondents having a job at the time of the interview also indicated in a subsequent question to what extent they agreed with the statement “I am satisfied with my job as a whole”. We use this information to create the variable *job satisfaction*, which takes five values ranging from 1 (strongly disagree) to 5 (strongly agree).

Finally, the survey contains questions on further education and vocational training needs. Specifically, respondents who in the 12 months prior to the interview were not in formal (full- or part-time) education or training (89% of the sample) were asked: “Would you have liked to study or acquire additional training during the past 12 months?” If the answer was affirmative, a follow-up question probed into the reasons for not undertaking study or training, with four possible answers: 1) not available in the locality; 2) too expensive; 3) quality of education offered not good enough; and 4) other reason. Drawing on this information, we construct a dichotomous variable capturing *willingness to acquire further education/training,* as well as a categorical variable capturing various *barriers* for doing so.

Main regressor(s). With reference to the conflicts listed in Table 1, respondents were asked: “Did your household have to move as a result of the conflict?” We use this question to create a dichotomous variable *forcibly* *displaced*, which is equal to 1 if the answer was ‘yes’ and 0 if the answer was ‘no’. This is our main regressor of interest. Given that the interviews were conducted in the countries where the conflicts took place, it captures some form of internal displacement.[[6]](#footnote-6)

In addition, and in reference to the same conflicts, all respondents were asked: “Were you or any member of your household physically injured as a result of the conflict?” and “Was any member of your household killed as a result of the conflict?”. We use these two questions, in conjunction with the dichotomous variable *forcibly* *displaced*, to create another conflict-related dichotomous variable, *conflict-affected non-mover*. This equals to 1 if the respondent said a household member was either injured or killed as a result of the conflict *and*, at the same time, the household did not have to move as a result of the conflict, and 0 otherwise (i.e., the forcibly displaced and those answering ‘no’ to all three conflict-related questions). By including this variable in the analysis, we ensure that the reference group, to which the forcibly displaced will be compared to, consists of people who were not directly affected by conflict.

Overall, in our sample of nine countries, 6% of respondents said they were directly affected by conflict (household member injured or killed) but they did not have to move, a further 9% said they had to move as a result of the conflict,[[7]](#footnote-7) while the remaining 85% answered ‘no’ to the three conflict-related questions above – we will call this group *not affected by conflict*.[[8]](#footnote-8)

Control variables. The following control variables, potentially correlated with forced displacement, labour market/vocational outcomes, or both, will be included in the multiple regression analysis: gender, six age groups, three education levels (primary, secondary, tertiary), household consumption level (lower, middle, upper), ethnic minority status, and type of residence (rural, urban, metropolitan). In addition, country fixed effects (dichotomous variables for each country)[[9]](#footnote-9) will be included to capture any country-wide influences on both the likelihood of being forcibly displaced and the labour market/vocational training outcomes. The use of country fixed effects also ensures that the results draw on within- rather than between-country relationships of the variables of interest.

*4.3. Empirical strategy*

A relatively large number of respondents affected by conflict allows us to conduct a meaningful statistical analysis of the long-term labour market disadvantage of being a forcibly displaced person. To this end, we will first examine the raw differences in the labour market/vocational outcomes (being employed, working informally etc.) between the forcibly displaced and those not affected by conflict. This will give us an initial picture regarding the labour market integration of the forcibly displaced. Second, we will regress different labour market and vocational outcomes on the dichotomous variable *forcibly displaced* (and include the *conflict-affected non-mover* dichotomous variable to ensure that only respondents not affected by conflict act as the reference group), controlling for a number of socio-demographic characteristics and all possible country-wide influences (country fixed effects). In this way, we will effectively isolate the impact of forced displacement on labour market outcomes from other relevant covariates. Formally, the model to be estimated can be expressed as follows:

 *Outcomeij = α\*forcibly displacedij + β\*conflict affected non moversij +*

*Γ\*individual-level controlsij + Δ\*country fixed effectsj + random error termij* (1)

where, for individual *i* in country *j*, *outcome* stands for a specific labour market outcome, individual-level controls are as described above, and *α*, *β*, *Γ* and *Δ* are parameters (or parameter vectors) to be estimated.

Given that all our outcome variables are categorical, we will estimate the models with binary probit (long and short-term unemployment; effects of crisis; working informally; willing to undertake further education/training), ordered probit (job satisfaction) or multinomial probit (barriers to acquiring further education/training).

We will start the statistical analysis by estimating the model for the full sample, and then perform sub-group analyses for women and men, and younger and older respondents.

**5. Results**

*5.1. Descriptive statistics*

Table 2 reports the socio-demographic characteristics and labour market outcomes of respondents affected by conflict (displaced and non-displaced) and those not affected by conflict. The three groups of respondents appear similar in terms of average age, gender, as well as levels of household consumption. However, the forcibly displaced have lower education levels relative to people not affected by conflict, which could be a reflection of a negative selection into displacement on the basis of education (rather than lower education levels in conflict zones, as the conflict-affected non-movers tend to have similar levels of education with people not affected by conflict). Relative to those not affected by conflict, the forcibly displaced are also more likely to be found in urban (but not metropolitan) areas, while the conflict-affected non-movers are more likely to be located in rural areas. This supports a general tendency of the forcibly displaced to move to urban areas, especially in middle-income country contexts (World Bank, 2016). We also notice that, compared to both people not affected by conflict and the conflict-affected non-movers, a lower proportion of the forcibly displaced are members of an ethnic minority.

Concerning the labour market and vocational outcomes, the forcibly displaced stand out as a particularly disadvantaged group. Specifically, relative to people not affected by conflict, a greater proportion of the displaced did not work in the 12 months prior to the interview, have stopped working in the 12 months prior to the interview, or have worked informally. On the other hand, no statistically significant group differences are observed for the crisis-related outcomes and job satisfaction. Relative to people not affected by conflict, a greater proportion of both the forcibly displaced and the conflict-affected non-movers wish they had undertaken further study or training the 12 months prior to the interview. Finally, among the reasons for not acquiring education or training, a greater proportion of the forcibly displaced say that what is offered is not of good quality, while relatively more of the conflict-affected non-movers say it is too expensive.

The descriptive statistics reported in Table 2 would suggest that the forcibly displaced suffer from a substantial labour market disadvantage and are keener to undertake additional education/training. However, any conclusion at this stage would be premature, as differences in outcomes may be driven by confounding factors (socio-demographic characteristics and country-wide influences) rather than conflict and displacement. In the following section, we report the results of the multiple regression analysis, one of the main objectives of which is to isolate the effects of potential confounding variables.

**Table 2. Descriptive statistics**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Not affected by conflict (n = 8,741) | Displaced (n = 920) | Conflict-affected non-movers(n = 666) |
| *Socio-demographic characteristics* |  |  |  |
| Age (average) | 44.389 | 43.385\* | 44.113 |
| Woman | 0.605 | 0.590 | 0.608 |
| Education level |  |  |  |
| *Primary*  | 0.299 | 0.415\*\*\* | 0.330\* |
| *Secondary*  | 0.532 | 0.463\*\*\* | 0.521 |
| *Tertiary* | 0.169 | 0.122\*\*\* | 0.149 |
| Consumption group |  |  |  |
| *Lower*  | 0.332 | 0.326 | 0.326 |
| *Middle*  | 0.332 | 0.322 | 0.368\* |
| *Upper*  | 0.336 | 0.352 | 0.306 |
| Area of residence |  |  |  |
| *Rural* | 0.428 | 0.411 | 0.473\*\* |
| *Urban* | 0.478 | 0.557\*\*\* | 0.438\*\* |
| *Metropolitan* | 0.094 | 0.033\*\*\* | 0.089 |
| Ethnic minority | 0.161 | 0.110\*\*\* | 0.164 |
|  |  |  |  |
| *Labour market outcomes* |  |  |  |
| Has not worked in the last 12 months | 0.580 | 0.680\*\*\* | 0.604 |
| Has stopped working in the last 12 monthsa | 0.089 | 0.134\*\*\* | 0.098 |
| Effects of the global economic crisis |  |  |  |
| *Head of household lost job* | 0.114 | 0.13 | 0.129 |
| *Other household member lost job* | 0.131 | 0.137 | 0.150 |
| *Wages reduced* | 0.295 | 0.303 | 0.314 |
| Working without contracta  | 0.244 | 0.319\*\*\* | 0.275 |
| Job satisfaction (1 low …. 5 high)b | 3.266 | 3.365 | 3.200 |
| Willing to undertake further study/trainingc | 0.089 | 0.183\*\*\* | 0.142\*\*\* |
| Barriers for further study/trainingd |  |  |  |
| *Not available locally* | 0.109 | 0.11 | 0.071 |
| *Too expensive* | 0.486 | 0.425 | 0.600\*\* |
| *Not good quality* | 0.017 | 0.041\* | 0.024 |
| *Other reason* | 0.388 | 0.425 | 0.306 |

Notes:

\*, \*\*, and \*\*\* indicate the results of the group mean comparison tests (for *p-values* lower of equal to 0.01, 0.05 and 0.10, respectively)

a – Asked to respondents who worked in the last 12 months prior to the interview.

b – Asked to respondents working at the time of the interview.

c – Asked to respondents who were not in education/training in the last 12 months prior to the interview.

d – Asked to respondents who were not in education/training in the last 12 months prior to the interview but who would have wanted to acquire further education/training.

*5.2. Regression results*

Table 3 reports the first set of regression results. We only report the estimates of the variables of interest (displacement and conflict); the complete regression output is available in the Supplementary Information document.

The results support the conjecture that the forcibly displaced experience a long-term labour market disadvantage. Controlling for other factors and compared to people not affected by conflict, the forcibly displaced are 4.1 percentage points more likely to say they did not work in the 12 months prior to the interview (Specification 1). This corresponds to a 7% increase in long-term unemployment/inactivity relative to the sample average (0.588) – a substantial effect that supports H1. The forcibly displaced are also more likely to be short-term unemployed: they are 3.4 percentage points more likely to say they have stopped working in the 12 months prior to the interview (Specification 2). Evaluated against the sample average (0.093), forced displacement raises short-term unemployment by 37% – a very large effect. Moreover, the forcibly displaced are 2.7 percentage points more likely to report that their head of household lost their job due to the crisis (a 23% increase relative to the sample average) (Specification 3). As for the models explaining the crisis-related job loss or salary reduction of other household members (Specifications 4 and 5), the estimates of the forced displacement variable are statistically insignificant. These findings support H2. Finally, the forcibly displaced are 6.8 percentage points (27% relative to the sample average) more likely to work informally than people not affected by conflict (Specification 6),[[10]](#footnote-10) providing support for H3.

We also notice that people who were not displaced by conflict, but had a household member injured or killed as a result of it, are in most respects similar to people not affected by conflict. Among the labour market outcomes presented in Table 3, the coefficient of the conflict-affected non-movers is statistically significant (and positive) only in the model explaining the crisis-related job loss of other-than-the-head household members (the marginal effect is equal to 2.6 percentage points, which corresponds to a 20% increase in the dependent variable relative to the sample average). These findings provide only limited support for H7.

**Table 3. Displacement, conflict and labour market outcomes; binary probit marginal effects**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Inactive/long-term unemployed (not worked in the last 12 months) | Short-term unemployed (stopped working in the last 12 months) | Effects of the global economic crisis | Working informally |
|  | Head of household lost job | Someone else in the household lost job | Wages reduced |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
|  |  |  |  |  |  |  |
| **Forcibly displaced** | 0.041\*\*\* | 0.034\*\* | 0.027\*\* | 0.015 | -0.018 | 0.068\*\*\* |
|  | (0.016) | (0.016) | (0.011) | (0.012) | (0.016) | (0.023) |
| Affected by conflict but not displaced | 0.001 | 0.005 | 0.014 | 0.026\*\* | 0.024 | 0.018 |
| (0.018) | (0.018) | (0.013) | (0.013) | (0.018) | (0.025) |
|  |  |  |  |  |  |  |
| *Individual controls* | Yes | Yes | Yes | Yes | Yes | Yes |
| *Country-fixed effects* | Yes | Yes | Yes | Yes | Yes | Yes |
|  |  |  |  |  |  |  |
| Average of the dependent variable | 0.588 | 0.093 | 0.116 | 0.132 | 0.297 | 0.251 |
|  |  |  |  |  |  |  |
| Observations | 10,328 | 4,249 | 10,328 | 10,328 | 10,328 | 4,251 |
| Pseudo R2 | 0.199 | 0.052 | 0.040 | 0.032 | 0.054 | 0.139 |
| Chi2 | 1858 | 129.7 | 289.5 | 251.3 | 643.0 | 551.5 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

Note: \*\*\* *p*<0.01, \*\* *p*<0.05, \* *p*<0.1. Robust standard errors in parentheses. All models estimated with binary probit; average marginal effects reported. Individual controls include gender, age group, education, consumption group, ethnic minority status and area of residence. See the Supplementary Information document for the complete regression output.

Table 4 presents the results of the models explaining job satisfaction and willingness to acquire further education/training. There is no statistically significant difference in job satisfaction levels between people affected by conflict (either displaced or not) and those not affected by conflict (Specification 1); hence, there is this no support for H4. However, both conflict-affected groups – the displaced and non-movers – are significantly more likely to report that they would have liked to acquire extra education/training in the 12 months prior to the interview (Specification 2). The marginal effects for the two groups are similar in size (4.3 and 4.5 percentage points, corresponding to a 43-45% increase in the dependent variable relative to the sample average) and are highly statistically significant (*p*<0.001). The analysis of the specific barriers for obtaining further education/training, presented in the four right-most columns of Table 4, suggests that among those who wished to (but did not) acquire further education/training, the forcibly displaced were 8.5 percentage points less likely to mention the costs reason, and 1.9 percentage points more likely to state that the available educational/training offer was not of sufficient quality. These effects are large relative to the respective sample averages (0.085/0.487 and 0.019/0.022, respectively), although only significant at 10%.

**Table 4.** **Displacement, conflict, job satisfaction and further education/training; ordered probit coefficients and binary/multinomial probit marginal effects**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Job satisfaction | Wish have acquired education/ training | Reasons for not acquiring education/training |
| VARIABLES | Not available locally | Too expensive | Quality not good enough | Other reason |
|  | (1) | (2) | (3) |
|  |  |  |  |  |  |  |
| **Forcibly displaced** | 0.002 | 0.043\*\*\* | 0.040 | -0.085\* | 0.019\* | 0.026 |
|  | (0.069) | (0.009) | (0.028) | (0.048) | (0.011) | (0.046) |
| Affected by conflict but not displaced | -0.077 | 0.045\*\*\* | -0.033 | 0.083 | 0.011 | -0.061 |
| (0.073) | (0.011) | (0.038) | (0.056) | (0.014) | (0.056) |
|  |  |  |  |  |  |  |
| *Individual controls* | Yes | Yes | Yes | Yes | Yes | Yes |
| *Country-fixed effects* | Yes | Yes | Yes | Yes | Yes | Yes |
|  |  |  |  |  |  |  |
| Average of the dependent variable | - | 0.100 | 0.106 | 0.487 | 0.022 | 0.385 |
|  |  |  |  |  |  |  |
| Observations | 4,039 | 9,194 | 917 |
| Pseudo R2 | 0.040 | 0.167 | - |
| Chi2 | 391.6 | 823.7 | 11940 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 |

Note: \*\*\* *p*<0.01, \*\* *p*<0.05, \* *p*<0.1. Robust standard errors in parentheses. Models (1), (2) and (3) estimated with ordered, binary and multinomial probit, respectively. Coefficients are reported for model (1), while average marginal effects are reported for models (2) and (3). Individual controls include gender, age group, education, consumption group, ethnic minority status and area of residence. See the Supplementary Information document for the complete regression output.

To test hypotheses 5, 6 and 8, we have estimated our models by age and gender. Graph 1 summarises the estimates for the variables of interest[[11]](#footnote-11) when the models are separately estimated for men and women and three different age groups (18-34, 34-54 and 55+). Given that the subgroups are based on individual-level characteristics, we focus on the individual-level outcomes: long-term unemployment/inactivity, short-term unemployment, working informally, job satisfaction, and willingness to acquire education/training (the three household-level crisis-related outcomes are excluded from the analysis here). We also do not perform the sub-group analysis for the model explaining barriers for obtaining education/training, as the number of respondents choosing certain outcome categories is too small for the multinomial probit model to converge in estimation.

Concerning the results by gender, the forcibly displaced women appear to be experiencing a greater labour market disadvantage than the forcibly displaced men, strongly supporting H6. Specifically, it is the forcibly displaced women – and not men – who are more likely to be long-term unemployed/inactive, short-term unemployed and working informally: the marginal effects for women are positive and significant at least at the 5% confidence level, while the estimates for men are statistically insignificant (Panels *a-c*). For the job satisfaction outcome, the point estimate of the displacement variable is negative for women and positive for men, although it is statistically insignificant in both cases (Panel *d*).

The results also provide strong support for H5 and H8: both IDPs and the conflict-affected non-movers in the younger age group (18-34), who were of schooling age at the time of conflict and displacement (10-15 years prior to the interviews), are significantly more likely to be willing to acquire further education and training (Panels *e* and *f*) than their counterparts not affected by conflict. In terms of magnitude, the point estimates for conflict-affected groups exceed 10 percentage points, which represents a substantial increase of over 50% relative to the average willingness to pursue further education among people aged 18-34 (19.8%). Finally, note that, for those aged 35-54 and 55+, the displacement and conflict coefficients get progressively smaller and in most cases are statistically insignificant, meaning that, for these age groups, there is no difference in the willingness to acquire further education/training between those affected and not affected by conflict.

**Graph 1. Forced displacement, conflict, and labour market/vocational outcomes, by gender and age**

Notes: The graphs show point estimates and 95% confidence intervals for binary probit marginal effects (Panels *a-c, e* and *f*) and ordered probit coefficients (Panel *d*), based on the estimation of the full model (see equation 1) for different respondent subgroups. Panels *a-e* show the estimates for the *forced displacement* variable and Panel *f* shows the estimates for the *conflict-affected-non-mover* variable.

**6. Discussion, implications for theory and policy, limitations, and conclusion**

*6.1. Discussion of findings*

Our results reveal that IDPs in nine post-socialist countries experience a significant long-term labour market disadvantage. In particular, we find that people who were displaced by a war or conflict ten to fifteen years ago are more likely be long- and short-term unemployed. The long-term disadvantage that IDPs experience in the labour market conforms to our expectations. As discussed in Section 2, conflict and forced displacement can affect subsequent labour market integration in several ways – for example, through the loss of assets, psychological trauma, uncertainty, institutional barriers – and virtually all of these channels suggest a negative effect. The fact that these inferior labour market outcomes of IDPs are observed more than a decade after the conflicts took place supports the main insight of the cumulative disadvantage theory: an unfavourable relative position experienced by an individual at one point in life forms a basis for a relative disadvantage later on.

Our results also show that IDPs more likely to work informally. This could suggest that, even more than a decade after conflict and displacement took place, IDPs need to take up any available jobs in order to avoid poverty and destitution. Importantly, informal work represents an additional source of vulnerability for the forcibly displaced, as those working without a contract would, arguably, be the first to be fired in times of economic crises. We have tested this proposition by including the dichotomous variable *informal work* in the model explaining recent job loss (Specification 2 of Table 3). The informal work, indeed, turned out to be a very strong predictor of recent job loss (marginal effect equal to 11 percentage points, *p*<0.001), while the estimate of the forced displacement became statistically insignificant (but remained positive). This suggests that IDPs are more likely to experience a recent (crisis-related) job loss *because* they were more likely to work informally.

It should also be noted that, contrary to the forcibly displaced, the conflict-affected non-movers are not different from people not affected by conflict in terms of labour market inactivity/long-term unemployment, recent job loss or informal work. This suggests that it is the forced displacement, rather than the conflict per se, that leaves a long-lasting negative impact on labour market integration.

The long-term labour market disadvantage of IDPs, taken as a whole, is robust to the inclusion of a range of socio-demographic controls and all possible country-wide influences. It is, however, not uniform across different groups of IDPs. Specifically, one of the most consistent – and disturbing – messages of our empirical analysis is that the forcibly displaced women experience a greater long-term labour-market disadvantage than the forcibly displaced men. When the models are estimated for women, the estimates of the forcibly displaced variable are statistically significant at least at the 5% level for all three labour-market outcomes (long-term unemployment/inactivity, recent job loss, and working informally), while they are never statistically significant when the models are estimated for men. Such a gender difference could be due to the greater negative impact of forced displacement on the mental health of women than men (Porter and Haslam, 2005). It should also be kept in mind that most post-socialist countries that were affected by conflict in the 1990s witnessed a return to traditional gender norms, not least because of religious revivals (Tajikistan, Azerbaijan, Kosovo, and Bosnia and Herzegovina). It is, therefore, possible that a combination of forced displacement and an increasingly conservative environment generates a long-lasting labour market disadvantage for women.

Concerning vocational outcomes, our analysis confirms that IDPs who were of schooling age at the time of conflict/displacement express greater willingness to acquire further education and training, relative to their counterparts not affected by conflict. This result most likely reflects the desire of IDPs to make up for the conflict- and displacement-inflicted breaks in formal education, as well as the necessity to update or acquire new skills that are relevant for the labour markets of host communities. When asked about obstacles to undertaking further education/training, a large proportion of IDPs (42.5%) mention the high cost reason, which is however significantly less than the average for people not affected by conflict (48.6%). Interestingly, the IDPs are also more likely to say that the barrier to obtaining further education/training is the low quality of the local educational offer. It could be because many IDPs need to acquire completely new skills to re-enter or progress in the local labour markets, but the educational institutions only offer a limited range of training options. Without further information, however, this explanation remains purely hypothetical.

Furthermore, we find that, similarly to the forcibly displaced, the non-displaced people who were affected by conflict (household member killed or injured) also express significantly higher willingness to acquire further education/training. The highest effect is again observed in the younger age group (18-34), which could be explained by the destruction of educational infrastructure in conflict zones and the resulting breaks in formal education (most of these respondents in this age group were children at the time of the conflict).

Finally, our results indicate that both displacement and conflict are insignificant predictors of job satisfaction. This result holds for the whole sample, as well as for the different socio-demographic groups. Several explanations for this finding are possible. First, even if the forcibly displaced need to take up less desirable jobs (which would generally reduce job satisfaction), having any job would increase job satisfaction for people who are extremely vulnerable to poverty. Second, in the long-term people reconsider their expectations and may adapt to whatever job they have.

*6.2. Implications for theory*

Overall, our findings confirm the main prediction of the cumulative disadvantage theory: a conflict-related shock experienced by IDPs in the past forms a basis for a long-term labour market disadvantage of IDPs relative to people not affected by conflict. The framework of cumulative disadvantage thus appears appropriate for studying the long-term effects of forced internal displacement on labour market outcomes, and can potentially be applied to analyse the dynamic effects of displacement on other life domains (e.g. health). There is also an important way in which our findings may extend the theory of cumulative disadvantage. Specifically, we find that children affected by conflict (either displaced or not) are more willing to undertake further education and training as young adults, 10 to 15 years after the end of the conflict. We explain this finding by the conflict-inflicted loss of formal education and people’s awareness that education is key for succeeding in the labour market. This suggests that people recognise the source of their labour-market disadvantage (lack of human capital) and may be trying to mitigate or reverse it. From a theoretical perspective, this suggests that individuals do not necessarily succumb to unfavourable initial conditions which are likely to accumulate over time and adversely affect their long-term wellbeing; they may seek to overturn the source of their initial disadvantage.

*6.3. Implications for policy*

Our work has important policy implications. First, we identify a substantial labour market disadvantage that IDPs experience 10 to 15 years after conflict and displacement. Special support should be provided to IDP women, who experience a greater labour market disadvantage than men in terms of both not working and working informally. Second, our results reveal a greater-than-average desire of younger IDPs, as well as their non-displaced counterparts in the conflict zones, to acquire further education and training. In the localities with large numbers of IDPs, as well as in the former conflict zones, decision makers could subsidise and improve the education/training offered to those affected by conflict in the past.

*6.4. Limitations and future research*

Our work is not without limitations. The first relates to the representativeness of the IDP respondents in our sample. While the survey we use for the empirical analysis consists of nationally representative samples of respondents, this does not automatically imply that the survey is representative of the IDP populations in the respective countries. If IDPs are over-represented in particular regions of their country, nationally representative samples may exclude large numbers of them. This may lead to biased results, especially if the under-represented IDPs have distinct labour market outcomes. Future research could pay particular attention to the actual and sampled distributions of IDPs within countries. It is, however, unlikely that data of high quality on the actual distributions of IDPs will be readily available for developing and post-socialist countries; in other words, it may be difficult to know where the IDPs are located in the first place.

Second, we have implicitly assumed that the legal, institutional and administrative environments of the nine-post socialist countries would affect the long-term labour market integration of IDPs in similar ways, and our analysis has essentially identified a common trend in the IDPs long-term labour market disadvantage in these countries. We justified a pooled-country analysis by the similar historical and political backgrounds of the post-socialist countries we looked at, as well as by the similarities in the nature and timing of conflicts. However, it would be premature to dismiss the potential influences of national contexts on the outcomes of interest. Future work could explore whether such contexts matter, for example by comparing and contrasting the contextual parameters of different countries and then estimating the models separately for each country.

Third, while our analysis has focused on a range of labour market outcomes (inactivity/long-term unemployment, recent job loss, informal work, job satisfaction, willingness to acquire further education and training), there remains very little knowledge on the effects of forced displacement on other, equally important labour market outcomes, such as under-utilisation of skills, barriers to finding jobs for the unemployed, self-employment, entrepreneurship, and regional mobility. Adding these outcomes to our study would be too ambitious (even if the data allowed us to do so), and we leave these explorations for future research.

*6.5. Conclusion*

Six out of ten people fleeing conflict and violence do not cross the borders of their country, yet the long-term effects of such internal displacement on people’s lives are still poorly understood. This paper has looked at the effects of internal displacement on a range of labour market and vocational outcomes in nine post-socialist countries, 10 to 15 years after the conflict. Drawing on the cumulative disadvantage theory and the explanations of unemployment scarring, and using data from a large multi-country survey, *Life in Transition II*, we have uncovered a significant long-term labour market disadvantage of internal displacement. Relative to people not affected by conflict, the forcibly displaced are more likely to be long-term unemployed, suffer from a crisis-related job loss and work informally, with displaced women being the most disadvantaged group. People who were of schooling age at the time of conflict – regardless of whether they were displaced or not – report a significantly higher willingness to acquire further education and training. This suggests that conflict victims feel the necessity to replenish human capital lost as a result of conflict. Overall, the results of this paper highlight the long-lasting labour market vulnerability of the internally displaced people and the educational needs of people affected by conflict. By addressing these issues, policy makers are likely to improve the well-being of millions of people affected by conflict in the past.

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**SUPPLEMENTARY INFORMATION**

**This document contains complete econometric output for the results presented in the main article and will be available to readers as online appendix.**

**Table S3. Correlates of labour-market outcomes, binary probit marginal effects; corresponds to Table 3 in the main article**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Inactive/long-term unemployed (not worked in the last 12 months) | Short-term unemployed (stopped working in the last 12 months) | Effects of the global economic crisis | Working informally |
|  | Head of household lost job | Someone else in the household lost job | Wages reduced |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
|  |  |  |  |  |  |  |
| Forcibly displaced | 0.041\*\* | 0.034\*\* | 0.027\*\* | 0.015 | -0.018 | 0.068\*\*\* |
|  | (0.016) | (0.016) | (0.011) | (0.012) | (0.016) | (0.023) |
| Affected by conflict but not displaced | 0.001 | 0.005 | 0.014 | 0.026\*\* | 0.024 | 0.018 |
|  | (0.018) | (0.018) | (0.013) | (0.013) | (0.018) | (0.025) |
| Female | 0.150\*\*\* | 0.018\*\* | -0.013\*\* | -0.013\* | 0.007 | -0.051\*\*\* |
|  | (0.008) | (0.009) | (0.006) | (0.007) | (0.009) | (0.012) |
| Age 18-24 | 0.183\*\*\* | 0.115\*\*\* | -0.008 | 0.016 | -0.032\*\* | 0.099\*\*\* |
|  | (0.015) | (0.015) | (0.011) | (0.012) | (0.016) | (0.022) |
| Age 25-34 | 0.025\*\* | 0.049\*\*\* | -0.008 | 0.037\*\*\* | -0.019 | 0.020 |
|  | (0.013) | (0.013) | (0.010) | (0.010) | (0.014) | (0.017) |
| Age 45-54 | 0.010 | 0.017 | 0.029\*\*\* | 0.029\*\*\* | -0.005 | -0.003 |
|  | (0.013) | (0.014) | (0.010) | (0.011) | (0.014) | (0.018) |
| Age 55-64 | 0.210\*\*\* | 0.034\*\* | -0.004 | 0.029\*\* | -0.069\*\*\* | 0.004 |
|  | (0.014) | (0.016) | (0.011) | (0.012) | (0.015) | (0.022) |
| Age 65+ | 0.501\*\*\* | 0.028 | -0.109\*\*\* | -0.045\*\*\* | -0.170\*\*\* | 0.182\*\*\* |
|  | (0.017) | (0.028) | (0.013) | (0.013) | (0.016) | (0.034) |
| Primary education | 0.124\*\*\* | 0.007 | 0.013\* | -0.007 | -0.041\*\*\* | 0.124\*\*\* |
|  | (0.010) | (0.013) | (0.008) | (0.008) | (0.011) | (0.016) |
| Tertiary education | -0.149\*\*\* | -0.039\*\*\* | -0.038\*\*\* | -0.048\*\*\* | 0.003 | -0.118\*\*\* |
|  | (0.012) | (0.011) | (0.010) | (0.010) | (0.013) | (0.017) |
| Lower consumption group | 0.032\*\*\* | -0.005 | 0.014\* | 0.012 | -0.013 | 0.009 |
|  | (0.011) | (0.011) | (0.008) | (0.008) | (0.011) | (0.015) |
| Upper consumption group | -0.053\*\*\* | -0.008 | -0.012 | -0.036\*\*\* | 0.012 | -0.030\*\* |
|  | (0.010) | (0.011) | (0.008) | (0.008) | (0.011) | (0.015) |
| Ethnic minority | -0.017 | -0.039\*\* | 0.005 | 0.007 | 0.016 | 0.045\*\* |
|  | (0.013) | (0.016) | (0.010) | (0.010) | (0.013) | (0.018) |
| Rural | 0.020\*\* | 0.009 | 0.006 | -0.004 | -0.043\*\*\* | 0.064\*\*\* |
|  | (0.010) | (0.010) | (0.007) | (0.008) | (0.010) | (0.014) |
| Metropolitan | 0.018 | 0.001 | 0.011 | 0.007 | 0.004 | 0.082\*\*\* |
|  | (0.018) | (0.019) | (0.013) | (0.014) | (0.019) | (0.024) |
| Azerbaijan  | 0.069\*\*\* | 0.015 | 0.019 | 0.005 | 0.008 | 0.010 |
|  | (0.020) | (0.023) | (0.013) | (0.015) | (0.023) | (0.029) |
| Bosnia and Herzegovina | -0.016 | 0.006 | -0.085\*\*\* | -0.035\*\* | 0.205\*\*\* | -0.067\*\* |
|  | (0.021) | (0.025) | (0.016) | (0.017) | (0.024) | (0.031) |
| Croatia  | -0.091\*\*\* | 0.073\*\*\* | -0.054\*\*\* | -0.013 | 0.337\*\*\* | -0.234\*\*\* |
|  | (0.021) | (0.022) | (0.015) | (0.017) | (0.022) | (0.033) |
| FYR of Macedonia | -0.007 | 0.028 | -0.006 | 0.075\*\*\* | 0.160\*\*\* | -0.042 |
|  | (0.021) | (0.023) | (0.015) | (0.016) | (0.023) | (0.030) |
| Kosovo  | 0.071\*\*\* | -0.012 | -0.040\*\*\* | 0.005 | 0.199\*\*\* | 0.001 |
|  | (0.021) | (0.025) | (0.015) | (0.016) | (0.023) | (0.031) |
| Russia  | -0.190\*\*\* | -0.009 | -0.062\*\*\* | -0.050\*\*\* | 0.214\*\*\* | -0.134\*\*\* |
|  | (0.019) | (0.021) | (0.014) | (0.016) | (0.021) | (0.027) |
| Serbia  | -0.161\*\*\* | 0.025 | -0.042\*\*\* | 0.010 | 0.302\*\*\* | -0.015 |
|  | (0.019) | (0.021) | (0.014) | (0.015) | (0.021) | (0.026) |
| Tajikistan  | 0.101\*\*\* | 0.047\* | -0.011 | 0.039\*\* | 0.150\*\*\* | 0.126\*\*\* |
|  | (0.021) | (0.024) | (0.014) | (0.016) | (0.024) | (0.031) |
|  |  |  |  |  |  |  |
| Observations | 10,328 | 4,249 | 10,328 | 10,328 | 10,328 | 4,251 |
| Pseudo R2 | 0.199 | 0.052 | 0.040 | 0.032 | 0.054 | 0.139 |
| Chi2 | 1858 | 129.7 | 289.5 | 251.3 | 643.0 | 551.5 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

Notes: Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. The reference group is not affected by conflict, male, age 35-44, secondary education, middle consumption group, ethnic majority, urban, living in Armenia.

**Table S4. Correlates of job satisfaction and willingness to acquire further education/training; ordered probit coefficients and binary/multinomial probit marginal effects; corresponds to Table 4 in the main article**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Job satisfaction | Wish have acquired education/ training | Reasons for not acquiring education/training |
| VARIABLES | Not available locally | Too expensive | Quality not good enough | Other reason |
|  | (1) | (2) | (3) |
|  |  |  |  |  |  |  |
| Forcibly displaced | 0.002 | 0.043\*\*\* | 0.040 | -0.085\* | 0.019\* | 0.026 |
|  | (0.069) | (0.009) | (0.028) | (0.048) | (0.011) | (0.046) |
| Affected by conflict but not displaced | -0.077 | 0.045\*\*\* | -0.033 | 0.083 | 0.011 | -0.061 |
|  | (0.073) | (0.011) | (0.038) | (0.056) | (0.014) | (0.056) |
| Female | 0.039 | 0.002 | -0.010 | 0.014 | -0.016 | 0.012 |
|  | (0.034) | (0.006) | (0.019) | (0.033) | (0.010) | (0.032) |
| Age 18-24 | 0.065 | 0.085\*\*\* | -0.026 | -0.016 | 0.016 | 0.025 |
|  | (0.062) | (0.010) | (0.029) | (0.050) | (0.014) | (0.048) |
| Age 25-34 | -0.014 | 0.038\*\*\* | -0.043 | 0.029 | 0.007 | 0.007 |
|  | (0.047) | (0.008) | (0.026) | (0.044) | (0.012) | (0.042) |
| Age 45-54 | 0.009 | -0.033\*\*\* | -0.052 | 0.078 | -0.001 | -0.025 |
|  | (0.050) | (0.009) | (0.033) | (0.055) | (0.017) | (0.054) |
| Age 55-64 | -0.008 | -0.124\*\*\* | 0.048 | -0.022 | 0.005 | -0.031 |
|  | (0.059) | (0.013) | (0.047) | (0.092) | (0.023) | (0.091) |
| Age 65+ | 0.129 | -0.162\*\*\* | -1.322\*\*\* | 0.868\*\*\* | -0.330\*\*\* | 0.784\*\*\* |
|  | (0.095) | (0.016) | (0.109) | (0.124) | (0.067) | (0.152) |
| Primary education | -0.231\*\*\* | -0.035\*\*\* | 0.011 | 0.052 | -0.033\* | -0.030 |
|  | (0.049) | (0.007) | (0.023) | (0.042) | (0.018) | (0.041) |
| Tertiary education | 0.243\*\*\* | 0.045\*\*\* | 0.019 | -0.055 | 0.019\* | 0.016 |
|  | (0.042) | (0.008) | (0.027) | (0.045) | (0.011) | (0.043) |
| Lower consumption group | -0.180\*\*\* | -0.009 | 0.006 | -0.006 | 0.005 | -0.005 |
|  | (0.043) | (0.007) | (0.023) | (0.040) | (0.011) | (0.040) |
| Upper consumption group | 0.064 | -0.001 | -0.004 | -0.097\*\* | -0.002 | 0.103\*\*\* |
|  | (0.041) | (0.007) | (0.025) | (0.039) | (0.009) | (0.038) |
| Ethnic minority | 0.029 | -0.039\*\*\* | 0.087\*\*\* | -0.118\*\* | 0.011 | 0.019 |
|  | (0.057) | (0.009) | (0.029) | (0.056) | (0.015) | (0.055) |
| Rural | -0.042 | -0.023\*\*\* | 0.097\*\*\* | -0.006 | -0.016 | -0.075\*\* |
|  | (0.040) | (0.006) | (0.022) | (0.036) | (0.010) | (0.036) |
| Metropolitan | -0.163\*\* | -0.046\*\*\* | - | - | - | - |
|  | (0.066) | (0.013) |  |  |  |  |
| Azerbaijan  | 0.713\*\*\* | -0.005 | 0.039 | 0.136\* | -0.025 | -0.150\*\* |
|  | (0.077) | (0.013) | (0.047) | (0.077) | (0.020) | (0.074) |
| Bosnia and Herzegovina | 0.692\*\*\* | 0.035\*\* | -0.042 | 0.275\*\*\* | -0.009 | -0.224\*\*\* |
|  | (0.092) | (0.014) | (0.048) | (0.078) | (0.017) | (0.077) |
| Croatia  | 0.974\*\*\* | -0.028\* | -0.044 | 0.144 | -0.025 | -0.074 |
|  | (0.088) | (0.016) | (0.063) | (0.092) | (0.024) | (0.088) |
| FYR of Macedonia | 0.775\*\*\* | 0.013 | -0.058 | 0.182\*\* | -0.034 | -0.090 |
|  | (0.085) | (0.015) | (0.051) | (0.085) | (0.024) | (0.082) |
| Kosovo  | 0.878\*\*\* | 0.084\*\*\* | -0.073 | 0.165\*\* | -0.014 | -0.078 |
|  | (0.093) | (0.013) | (0.047) | (0.073) | (0.017) | (0.070) |
| Russia  | 0.687\*\*\* | -0.022 | 0.037 | 0.188\*\* | -0.024 | -0.201\*\*\* |
|  | (0.070) | (0.014) | (0.046) | (0.078) | (0.020) | (0.075) |
| Serbia  | 0.547\*\*\* | 0.029\*\* | -0.023 | 0.292\*\*\* | -0.042\* | -0.227\*\*\* |
|  | (0.075) | (0.013) | (0.048) | (0.073) | (0.023) | (0.071) |
| Tajikistan  | 0.972\*\*\* | -0.062\*\*\* | 0.070 | 0.095 | -0.007 | -0.159 |
|  | (0.086) | (0.016) | (0.056) | (0.103) | (0.022) | (0.099) |
|  |  |  |  |  |  |  |
| Observations | 4,039 | 9,194 | 917 | 917 | 917 | 917 |
| Pseudo R2 | 0.040 | 0.167 |  | - |  |
| Chi2 | 391.6 | 823.7 |  | 11940 |  |
| Prob > chi2 | 0.000 | 0.000 |  | 0.000 |  |

Notes: Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. The reference group is not affected by conflict, male, age 35-44, secondary education, middle consumption group, ethnic majority, urban (specifications 1 and 2) and urban/metropolitan (specification 3), living in Armenia.

**Table S5a. Correlates of long-term unemployment/inactivity, by socio-demographic group, binary probit marginal effects; corresponds to Panel *a* of Graph 1 of the main article**

|  |  |  |  |
| --- | --- | --- | --- |
|  | All | Women | Men |
|  |  |  |  |
| Forcibly displaced | 0.041\*\* | 0.046\*\* | 0.033 |
|  | (0.016) | (0.020) | (0.026) |
| Affected by conflict but not displaced | 0.001 | -0.027 | 0.043 |
|  | (0.018) | (0.022) | (0.030) |
| Female | 0.150\*\*\* | - | - |
|  | (0.008) |  |  |
| Age 18-24 | 0.183\*\*\* | 0.145\*\*\* | 0.233\*\*\* |
|  | (0.015) | (0.019) | (0.023) |
| Age 25-34 | 0.025\*\* | 0.036\*\* | 0.012 |
|  | (0.013) | (0.015) | (0.022) |
| Age 45-54 | 0.010 | 0.002 | 0.030 |
|  | (0.013) | (0.016) | (0.024) |
| Age 55-64 | 0.210\*\*\* | 0.203\*\*\* | 0.223\*\*\* |
|  | (0.014) | (0.018) | (0.024) |
| Age 65+ | 0.501\*\*\* | 0.467\*\*\* | 0.543\*\*\* |
|  | (0.017) | (0.022) | (0.026) |
| Primary education | 0.124\*\*\* | 0.141\*\*\* | 0.102\*\*\* |
|  | (0.010) | (0.013) | (0.017) |
| Tertiary education | -0.149\*\*\* | -0.155\*\*\* | -0.121\*\*\* |
|  | (0.012) | (0.014) | (0.020) |
| Lower consumption group | 0.032\*\*\* | 0.025\* | 0.039\*\* |
|  | (0.011) | (0.013) | (0.017) |
| Upper consumption group | -0.053\*\*\* | -0.059\*\*\* | -0.045\*\*\* |
|  | (0.010) | (0.013) | (0.017) |
| Ethnic minority | -0.017 | -0.013 | -0.018 |
|  | (0.013) | (0.016) | (0.020) |
| Rural | 0.020\*\* | 0.042\*\*\* | -0.010 |
|  | (0.010) | (0.012) | (0.016) |
| Metropolitan | 0.018 | 0.010 | 0.028 |
|  | (0.018) | (0.021) | (0.032) |
| Azerbaijan  | 0.069\*\*\* | 0.098\*\*\* | 0.015 |
|  | (0.020) | (0.024) | (0.035) |
| Bosnia and Herzegovina | -0.016 | -0.055\*\* | 0.050 |
|  | (0.021) | (0.027) | (0.035) |
| Croatia  | -0.091\*\*\* | -0.138\*\*\* | -0.019 |
|  | (0.021) | (0.026) | (0.035) |
| FYR of Macedonia | -0.007 | -0.050\* | 0.056 |
|  | (0.021) | (0.026) | (0.034) |
| Kosovo  | 0.071\*\*\* | 0.013 | 0.157\*\*\* |
|  | (0.021) | (0.026) | (0.035) |
| Russia  | -0.190\*\*\* | -0.216\*\*\* | -0.122\*\*\* |
|  | (0.019) | (0.022) | (0.033) |
| Serbia  | -0.161\*\*\* | -0.198\*\*\* | -0.099\*\*\* |
|  | (0.019) | (0.024) | (0.032) |
| Tajikistan  | 0.101\*\*\* | 0.076\*\*\* | 0.146\*\*\* |
|  | (0.021) | (0.026) | (0.036) |
|  |  |  |  |
| Observations | 10,328 | 6,234 | 4,094 |
| Pseudo R2 | 0.199 | 0.212 | 0.166 |
| Chi2 | 1858 | 1116 | 731.5 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 |

Notes: Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. The reference group is not affected by conflict, middle consumption group, ethnic majority, urban, living in Armenia.

**Table S5b.** **Correlates of short-term unemployment, by socio-demographic group, binary probit marginal effects; corresponds to Panel *b* of Graph 1 of the main article**

|  |  |  |  |
| --- | --- | --- | --- |
|  | All | Women | Men |
|  |  |  |  |
| Forcibly displaced | 0.034\*\* | 0.054\*\*\* | 0.007 |
|  | (0.016) | (0.021) | (0.024) |
| Affected by conflict but not displaced | 0.005 | -0.001 | 0.010 |
|  | (0.018) | (0.025) | (0.026) |
| Female | 0.018\*\* | - | - |
|  | (0.009) |  |  |
| Age 18-24 | 0.115\*\*\* | 0.126\*\*\* | 0.101\*\*\* |
|  | (0.015) | (0.021) | (0.021) |
| Age 25-34 | 0.049\*\*\* | 0.044\*\* | 0.051\*\*\* |
|  | (0.013) | (0.018) | (0.018) |
| Age 45-54 | 0.017 | 0.003 | 0.029 |
|  | (0.014) | (0.019) | (0.020) |
| Age 55-64 | 0.034\*\* | 0.038\* | 0.029 |
|  | (0.016) | (0.022) | (0.024) |
| Age 65+ | 0.028 | 0.038 | 0.013 |
|  | (0.028) | (0.040) | (0.038) |
| Primary education | 0.007 | 0.011 | 0.004 |
|  | (0.013) | (0.019) | (0.017) |
| Tertiary education | -0.039\*\*\* | -0.037\*\* | -0.041\*\* |
|  | (0.011) | (0.016) | (0.017) |
| Lower consumption group | -0.005 | -0.023 | 0.015 |
|  | (0.011) | (0.016) | (0.015) |
| Upper consumption group | -0.008 | -0.006 | -0.009 |
|  | (0.011) | (0.014) | (0.015) |
| Ethnic minority | -0.039\*\* | -0.049\*\* | -0.033\* |
|  | (0.016) | (0.024) | (0.020) |
| Rural | 0.009 | 0.008 | 0.006 |
|  | (0.010) | (0.014) | (0.014) |
| Metropolitan | 0.001 | 0.035 | -0.032 |
|  | (0.019) | (0.025) | (0.029) |
| Azerbaijan  | 0.015 | -0.008 | 0.022 |
|  | (0.023) | (0.037) | (0.030) |
| Bosnia and Herzegovina | 0.006 | 0.046 | -0.028 |
|  | (0.025) | (0.037) | (0.034) |
| Croatia  | 0.073\*\*\* | 0.106\*\*\* | 0.041 |
|  | (0.022) | (0.032) | (0.029) |
| FYR of Macedonia | 0.028 | 0.050 | 0.007 |
|  | (0.023) | (0.034) | (0.031) |
| Kosovo  | -0.012 | 0.033 | -0.050 |
|  | (0.025) | (0.036) | (0.035) |
| Russia  | -0.009 | 0.026 | -0.055\* |
|  | (0.021) | (0.029) | (0.030) |
| Serbia  | 0.025 | 0.063\*\* | -0.010 |
|  | (0.021) | (0.031) | (0.028) |
| Tajikistan  | 0.047\* | 0.027 | 0.049 |
|  | (0.024) | (0.039) | (0.031) |
|  |  |  |  |
| Observations | 4,249 | 2,192 | 2,057 |
| Pseudo R2 | 0.0518 | 0.0682 | 0.0566 |
| Chi2 | 129.7 | 92.30 | 65.51 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 |

Notes: Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. The reference group is not affected by conflict, middle consumption group, ethnic majority, urban, living in Armenia.

**Table S5c.** **Correlates of informal employment, by socio-demographic group, binary probit marginal effects; corresponds to Panel *c* of Graph 1 of the main article**

|  |  |  |  |
| --- | --- | --- | --- |
|  | All | Women | Men |
|  |  |  |  |
| Forcibly displaced | 0.068\*\*\* | 0.107\*\*\* | 0.023 |
|  | (0.023) | (0.031) | (0.036) |
| Affected by conflict but not displaced | 0.018 | 0.026 | 0.022 |
|  | (0.025) | (0.032) | (0.040) |
| Female | -0.051\*\*\* | - | - |
|  | (0.012) |  |  |
| Age 18-24 | 0.099\*\*\* | 0.122\*\*\* | 0.068\*\* |
|  | (0.022) | (0.028) | (0.033) |
| Age 25-34 | 0.020 | -0.000 | 0.034 |
|  | (0.017) | (0.023) | (0.027) |
| Age 45-54 | -0.003 | 0.005 | -0.018 |
|  | (0.018) | (0.022) | (0.029) |
| Age 55-64 | 0.004 | 0.016 | -0.002 |
|  | (0.022) | (0.028) | (0.034) |
| Age 65+ | 0.182\*\*\* | 0.172\*\*\* | 0.183\*\*\* |
|  | (0.034) | (0.044) | (0.051) |
| Primary education | 0.124\*\*\* | 0.136\*\*\* | 0.114\*\*\* |
|  | (0.016) | (0.021) | (0.024) |
| Tertiary education | -0.118\*\*\* | -0.079\*\*\* | -0.163\*\*\* |
|  | (0.017) | (0.020) | (0.027) |
| Lower consumption group | 0.009 | 0.004 | 0.015 |
|  | (0.015) | (0.020) | (0.024) |
| Upper consumption group | -0.030\*\* | -0.041\*\* | -0.017 |
|  | (0.015) | (0.019) | (0.023) |
| Ethnic minority | 0.045\*\* | 0.049\*\* | 0.054\* |
|  | (0.018) | (0.024) | (0.028) |
| Rural | 0.064\*\*\* | 0.083\*\*\* | 0.039\* |
|  | (0.014) | (0.017) | (0.021) |
| Metropolitan | 0.082\*\*\* | 0.107\*\*\* | 0.052 |
|  | (0.024) | (0.029) | (0.039) |
| Azerbaijan  | 0.010 | -0.040 | 0.059 |
|  | (0.029) | (0.039) | (0.044) |
| Bosnia and Herzegovina | -0.067\*\* | -0.034 | -0.108\*\* |
|  | (0.031) | (0.040) | (0.048) |
| Croatia  | -0.234\*\*\* | -0.276\*\*\* | -0.219\*\*\* |
|  | (0.033) | (0.049) | (0.049) |
| FYR of Macedonia | -0.042 | -0.013 | -0.071 |
|  | (0.030) | (0.037) | (0.045) |
| Kosovo  | 0.001 | -0.064 | 0.066 |
|  | (0.031) | (0.041) | (0.048) |
| Russia  | -0.134\*\*\* | -0.102\*\*\* | -0.175\*\*\* |
|  | (0.027) | (0.032) | (0.044) |
| Serbia  | -0.015 | 0.015 | -0.047 |
|  | (0.026) | (0.032) | (0.041) |
| Tajikistan  | 0.126\*\*\* | 0.076\* | 0.166\*\*\* |
|  | (0.031) | (0.039) | (0.047) |
|  |  |  |  |
| Observations | 4,251 | 2,193 | 2,058 |
| Pseudo R2 | 0.139 | 0.162 | 0.120 |
| Chi2 | 551.5 | 288.2 | 253.4 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 |

Notes: Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. The reference group is not affected by conflict, middle consumption group, ethnic majority, urban, living in Armenia.

**Table S5d.** **Correlates of job satisfaction, by socio-demographic group, ordered probit coefficients; corresponds to Panel *d* of Graph 1 of the main article**

|  |  |  |  |
| --- | --- | --- | --- |
|  | All | Women | Men |
|  |  |  |  |
| Forcibly displaced | 0.002 | -0.058 | 0.058 |
|  | (0.069) | (0.107) | (0.092) |
| Affected by conflict but not displaced | -0.077 | 0.025 | -0.200\* |
|  | (0.073) | (0.098) | (0.109) |
| Female | 0.039 | - | - |
|  | (0.034) |  |  |
| Age 18-24 | 0.065 | 0.118 | 0.027 |
|  | (0.062) | (0.092) | (0.087) |
| Age 25-34 | -0.014 | 0.032 | -0.068 |
|  | (0.047) | (0.064) | (0.070) |
| Age 45-54 | 0.009 | -0.056 | 0.071 |
|  | (0.050) | (0.068) | (0.076) |
| Age 55-64 | -0.008 | -0.066 | 0.041 |
|  | (0.059) | (0.081) | (0.088) |
| Age 65+ | 0.129 | 0.008 | 0.262\*\* |
|  | (0.095) | (0.140) | (0.133) |
| Primary education | -0.231\*\*\* | -0.338\*\*\* | -0.140\*\* |
|  | (0.049) | (0.073) | (0.068) |
| Tertiary education | 0.243\*\*\* | 0.230\*\*\* | 0.263\*\*\* |
|  | (0.042) | (0.056) | (0.062) |
| Lower consumption group | -0.180\*\*\* | -0.198\*\*\* | -0.149\*\* |
|  | (0.043) | (0.062) | (0.061) |
| Upper consumption group | 0.064 | 0.084 | 0.043 |
|  | (0.041) | (0.057) | (0.060) |
| Ethnic minority | 0.029 | 0.105 | -0.055 |
|  | (0.057) | (0.084) | (0.079) |
| Rural | -0.042 | -0.160\*\*\* | 0.075 |
|  | (0.040) | (0.055) | (0.057) |
| Metropolitan | -0.163\*\* | -0.150 | -0.186\*\* |
|  | (0.066) | (0.092) | (0.091) |
| Azerbaijan  | 0.713\*\*\* | 0.759\*\*\* | 0.669\*\*\* |
|  | (0.077) | (0.112) | (0.108) |
| Bosnia and Herzegovina | 0.692\*\*\* | 0.612\*\*\* | 0.750\*\*\* |
|  | (0.092) | (0.130) | (0.135) |
| Croatia  | 0.974\*\*\* | 1.087\*\*\* | 0.874\*\*\* |
|  | (0.088) | (0.122) | (0.129) |
| FYR of Macedonia | 0.775\*\*\* | 0.722\*\*\* | 0.831\*\*\* |
|  | (0.085) | (0.120) | (0.123) |
| Kosovo  | 0.878\*\*\* | 0.936\*\*\* | 0.815\*\*\* |
|  | (0.093) | (0.136) | (0.132) |
| Russia  | 0.687\*\*\* | 0.628\*\*\* | 0.800\*\*\* |
|  | (0.070) | (0.096) | (0.104) |
| Serbia  | 0.547\*\*\* | 0.623\*\*\* | 0.463\*\*\* |
|  | (0.075) | (0.104) | (0.109) |
| Tajikistan  | 0.972\*\*\* | 1.033\*\*\* | 0.919\*\*\* |
|  | (0.086) | (0.121) | (0.123) |
|  |  |  |  |
| Observations | 4,039 | 2,115 | 1,924 |
| Pseudo R2 | 0.0402 | 0.0509 | 0.0362 |
| Chi2 | 391.6 | 271.0 | 172.7 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 |

Notes: Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. The reference group is not affected by conflict, middle consumption group, ethnic majority, urban, living in Armenia.

**Table S5e.** **Correlates of willingness to acquire further education/training, by socio-demographic group, binary probit marginal effects; corresponds to Panels *e* and *f* of Graph 1 of the main article**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| VARIABLES | All | Age 18-34 | Age 35-54 | Age 55+ |
|  |  |  |  |  |
| Forcibly displaced | 0.043\*\*\* | 0.107\*\*\* | 0.039\*\* | -0.005 |
|  | (0.009) | (0.024) | (0.016) | (0.008) |
| Affected by conflict but not displaced | 0.045\*\*\* | 0.109\*\*\* | 0.031\* | 0.005 |
|  | (0.011) | (0.028) | (0.018) | (0.010) |
| Female | 0.002 | 0.010 | 0.009 | -0.007 |
|  | (0.006) | (0.015) | (0.010) | (0.005) |
| Age 18-24 | 0.085\*\*\* | 0.082\*\*\* | - | - |
|  | (0.010) | (0.016) |  |  |
| Age 25-34 | 0.038\*\*\* | Ref. | - | - |
|  | (0.008) |  |  |  |
| Age 45-54 | -0.033\*\*\* | - | -0.036\*\*\* | - |
|  | (0.009) |  | (0.010) |  |
| Age 55-64 | -0.124\*\*\* | - | - | 0.008\* |
|  | (0.013) |  |  | (0.005) |
| Age 65+ | -0.162\*\*\* | - | - | Ref. |
|  | (0.016) |  |  |  |
| Primary education | -0.035\*\*\* | -0.040\*\* | -0.044\*\*\* | -0.015\*\* |
|  | (0.007) | (0.018) | (0.013) | (0.006) |
| Tertiary education | 0.045\*\*\* | 0.052\*\* | 0.047\*\*\* | 0.024\*\*\* |
|  | (0.008) | (0.021) | (0.013) | (0.006) |
| Lower consumption group | -0.009 | -0.008 | -0.016 | -0.002 |
|  | (0.007) | (0.018) | (0.012) | (0.006) |
| Upper consumption group | -0.001 | 0.011 | -0.003 | -0.003 |
|  | (0.007) | (0.019) | (0.012) | (0.005) |
| Ethnic minority | -0.039\*\*\* | -0.035 | -0.063\*\*\* | -0.024\*\*\* |
|  | (0.009) | (0.023) | (0.017) | (0.009) |
| Rural | -0.023\*\*\* | -0.033\*\* | -0.026\*\* | -0.012\*\* |
|  | (0.006) | (0.016) | (0.011) | (0.006) |
| Metropolitan | -0.046\*\*\* | -0.054\* | -0.082\*\*\* | -0.004 |
|  | (0.013) | (0.031) | (0.024) | (0.008) |
| Azerbaijan  | -0.005 | 0.007 | -0.007 | -0.015 |
|  | (0.013) | (0.032) | (0.022) | (0.012) |
| Bosnia and Herzegovina | 0.035\*\* | 0.069\* | 0.037 | 0.011 |
|  | (0.014) | (0.037) | (0.024) | (0.010) |
| Croatia  | -0.028\* | -0.027 | -0.023 | -0.025\*\* |
|  | (0.016) | (0.042) | (0.024) | (0.012) |
| FYR of Macedonia | 0.013 | 0.057 | 0.004 | -0.009 |
|  | (0.015) | (0.038) | (0.023) | (0.011) |
| Kosovo  | 0.084\*\*\* | 0.160\*\*\* | 0.064\*\*\* | 0.042\*\*\* |
|  | (0.013) | (0.032) | (0.023) | (0.011) |
| Russia  | -0.022 | -0.026 | -0.024 | -0.010 |
|  | (0.014) | (0.035) | (0.022) | (0.008) |
| Serbia  | 0.029\*\* | 0.093\*\*\* | 0.018 | 0.001 |
|  | (0.013) | (0.035) | (0.021) | (0.009) |
| Tajikistan  | -0.062\*\*\* | -0.132\*\*\* | -0.039 | - |
|  | (0.016) | (0.039) | (0.025) |  |
|  |  |  |  |  |
| Observations | 9,194 | 2,728 | 3,466 | 2,858 |
| Pseudo R2 | 0.163 | 0.0802 | 0.0638 | 0.182 |
| Chi2 | 823.7 | 203.7 | 132.6 | 84.00 |
| Prob > chi2 | 0.000 | 0.000 | 0.000 | 0.000 |

Notes: Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. The reference group is not affected by conflict, middle consumption group, ethnic majority, urban, living in Armenia.

1. To the best of our knowledge, this survey has not been used before to study the effects of internal displacement. However, the survey was used in other contexts, see e.g. Ivlevs and Veliziotis (2017) and the references therein. [↑](#footnote-ref-1)
2. Engel and Ibanez (2007) report that, in Colombia, only 2% of IDPs who held land for agricultural purposes (80% of all IDPs) were able to sell or rent their land prior to displacement; 94% said that they had to abandon it or that it was confiscated. [↑](#footnote-ref-2)
3. That said, in very poor contexts, children’s access to education may actually improve after displacement if the conflict area was characterised by educational poverty (Ferris and Winthrop, 2010). It should also be noted that conflict can severely damage school infrastructure (Gómez Soler, 2016), meaning that moving from a conflict to a non-conflict area potentially provides better schooling opportunities relative to staying in the conflict zone. [↑](#footnote-ref-3)
4. Georgia also witnessed two major conflicts: 1) the Abkhaz-Georgian conflict (1992-1993) and 2) the Russian-Georgian conflict (2008), both of which resulted in large numbers of forcibly displaced persons. However, we cannot include Georgia in our analysis as the survey question about forced displacement referred to the most recent conflict (2008) and we study the long-terms effects of conflict/displacement. For the same reason, we exclude Kyrgyzstan, where 300,000 people were displaced as a result of ethnic violence in 2010. [↑](#footnote-ref-4)
5. See <http://microdata.worldbank.org/index.php/catalog/1533/>. [↑](#footnote-ref-5)
6. Unfortunately, we do not have information about any onward and return moves (including to and from other countries, as well as returns to the conflict zone) that the forcibly displaced might have undertaken between the first move and the time of the survey; what we know is that they were displaced by a particular conflict at least once and currently reside in the country where the conflict took place. [↑](#footnote-ref-6)
7. Out of those who had to move, 48% said that their household members was killed or injured as a result of the conflict. [↑](#footnote-ref-7)
8. They are not affected by the conflict in the sense that nobody in their household was killed or injured and they did not have to move because of it. It is, however, possible that these respondents lived in conflict areas and had their assets (house, land, or livestock) destroyed or damaged. [↑](#footnote-ref-8)
9. Recall that, by definition, IDPs do not cross the borders of their country. [↑](#footnote-ref-9)
10. We also checked whether this result is driven by a possible selection of the forcibly displaced into particular sectors and occupations where informal work is more common. Augmenting the model with dichotomous variables for 13 industries, nine occupations and self-employment, we still obtain a statistically significant (*p*=0.011) and positive marginal effect, which is, however, smaller in size (5.0 versus 6.8 percentage points). This finding implies that the forcibly displaced are more likely to work informally, even after controlling for industry and occupation type. [↑](#footnote-ref-10)
11. The complete regression output for this section can be found in the Supplementary Information document. [↑](#footnote-ref-11)