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## Experts' Expectations of Future Vulnerability at the Peak of the "Refugee Crisis"

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# WORKING PAPERS

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**EXPERTS' EXPECTATIONS OF FUTURE  
VULNERABILITY AT THE PEAK OF THE  
"REFUGEE CRISIS"**

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## **Abstract**

Immigrant inflows in 2015 triggered manifold reactions all over Europe. Questions about the integration capacities of nation states dominated media coverage. Fears of negative consequences for host societies were widespread. But what did experts (scientists, practitioners, and policy-makers) think? Using 203 assessments of experts collected through a questionnaire sent in late 2015 and early 2016, the present article addresses expected effects of refugee flows on future vulnerability in European societies. As many young families and minors are among asylum-seekers, we focused on the expected development of economic, psychological and social vulnerability of families with children. On average, experts assumed that their vulnerability would increase in the context of current and future refugee flows especially in the upcoming years. In line with affectedness by displaced people (i.e. asylum applicants per inhabitant), estimations differed by country. Expected mean increases in vulnerability are largest in German-speaking and Nordic countries. With regard to long-term consequences (until 2050), a rise in social vulnerability seemed most likely indicating experts worry about stigmatisation, discrimination, and social cohesion in European societies.

## **Keywords**

Migration, asylum, refugee, vulnerability, family, inequality, future, Europe, expert opinion.

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# Experts' Expectations of Future Vulnerability at the Peak of the "Refugee Crisis"

Bernhard Riederer

## 1. Introduction

The economic and social integration of immigrant populations is an important topic of public debate in many countries. With flows of displaced people entering the European Union during the second half of 2015, the issue even gained in relevance. Asylum-seekers from Syria and Afghanistan dominated the news for weeks. The term "refugee crisis" reflected the overload for public authorities in Europe not able to find a common strategy to manage the massive income of people looking for sanctuary.<sup>1</sup> Authorities and officials frequently appeared to be overburdened. The phenomenon that hundreds of thousands unauthorized migrants entered the European Union within a short period of time caused challenges for many European societies and their governments.<sup>2</sup>

During the period of the massive inflow of foreign people in 2015, politicians, media representatives, and large parts of the public seemed to be shocked by current events. Many people were worried that large numbers of immigrants would take jobs and social benefits but would not be willing to integrate themselves into host societies (Dalla Zuanna, Hein, & Pastore, 2015; Esses, Hamilton, & Gaucher, 2017). Publications also discussed economic challenges (e.g., Aiyar et al. 2016; Melander & Pichelmann, 2015). In the mass media, "refugees and migrants have tended to be framed negatively as a problem, rather than a benefit to host societies" (Berry et al., 2015, p.5). Politics reacted by focusing on boarder management and security issues (Carrera et al., 2015; Fargues, 2015; Göbl et al., 2016) and corresponding reforms of asylum procedures (e.g. Eurofound, 2016). This article wants to contribute to the discussion of assumed consequences of asylum-seekers and refugees. In particular, it addresses their expected impact on economic, psychological and social vulnerability in European societies focusing on future vulnerability of families with children. Children are not only overrepresented among societal subgroups most affected

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<sup>1</sup> Strictly speaking, the term "refugee crisis" is misleading as "refugee" refers to people fleeing from conflict or prosecution who have already received asylum. Asylum-seekers, on the other hand, are requesting for protection but their claims still have to be processed. Pictures in the media usually showed fleeing people without a clear legal status. But refugees are those allowed to stay and thus most relevant for the future of the host countries.

<sup>2</sup> The change in numbers of asylum applications from 2014 to 2015 was massive in several European countries: Figures increased by a factor of nine in Finland and trebled in Austria, Belgium or Norway. In total, 1.2 million asylum applications were counted EU-wide in 2015 (cf. Eurostat, 2016a).

by vulnerability (Eurofound, 2015), they also amount to about half of all refugees worldwide (Esses et al., 2017, p. 79).

In particular, we are interested in the following question: What did experts think about the consequences of refugee flows at the time when authorities seemed to be overburdened, when right-wing demagogues and parts of the media saw mainly threats to the welfare system and dominant European culture? Answering this question, we exploit the knowledge of 176 family experts – i.e. scientists, practitioners (e.g. psychologists working with parents and/or children), and policy-makers – who provided their opinion about the likely influence of refugees on family vulnerability in Europe. The expert questionnaire was conducted in late 2015 and early 2016 when the public debate about the “refugee crisis” reached its peak. Experts contributed educated guesses about the consequences for the periods until 2020 and 2050. Family vulnerability refers to all families living in European societies. Our discussion is not restricted to refugee families. Needless to say, total vulnerability increases if vulnerable families and children immigrate. In addition, however, vulnerability of European families may be affected by refugees in many other ways (e.g. via consequences for social cohesion in European societies). The findings of the expert survey will thus surely enhance our awareness about expected consequences of the “refugee crisis”. Furthermore, they may prepare the ground for future policy debates and research.

First, the present paper gives a definition of vulnerability and summarizes relevant literature to establish a link between family vulnerability and the situation of refugees. This is done for each of the three dimensions of vulnerability under consideration (i.e. economic, psychological and social vulnerability). Next, the expert survey and the analytic strategy are explained before finally results of our analyses are presented and discussed.

## **2. Literature Review**

### **2.1. Vulnerability of Families and Immigrants**

Vulnerability can be broadly described as “the capacity to be wounded” (Patterson, 2013, p. 1) and implies some sort of “weakness” (Hanappi et al., 2015, p. 2). It remains often latent until critical events or pressures from outside reveal the limits of available resources. In other words, the concept combines “the possibility of a certain harm and a kind of inability to deal with it” (Zimmermann, 2017, p. 1). As there are many ways in which people may be (at risk to be) wounded, there are also numerous sources of vulnerability. In the present paper, we distinguish three dimensions of family vulnerability as follows: Economic vulnerability refers to financial aspects. It covers poverty and economic hardship. Psychological vulnerability includes strong feelings of stress, anxiety or depression. Such problems for children and families might be attributable to overburdened parents, conflicts within families, child neglect or violence. Social vulnerability comprises aspects such as stigmatisation, discrimination and a lack of social support. Families can be vulnerable with regard to one or more dimensions. For instance, families lacking financial resources often

perceive also strong emotional and social pressures (Holand et al., 2011). Previous research repeatedly demonstrated that children are frequently among the groups with high vulnerability risks. This is, at least in part, due to high risks for specific family types—in particular single-parent families and large families (e.g. Avramov, 2002; Eurofound, 2015).

Although migration is often associated with an improvement of living conditions (IOM, 2015), families of immigrants and ethnic minorities are also among the most vulnerable groups (e.g. Beiser et al., 2002; Hooijer & Picot, 2015; IOM, 2015). Their vulnerability is moreover often multidimensional, referring to financial issues as well as psychological and social aspects. Difficulties stem from missing language skills, inadequacy of skills or non-recognition of educational certificates, labour market discrimination, insufficient access to social networks, lacking knowledge of the local social context, xenophobia as well as legal and administrative barriers (see Bertrand & Mullainathan, 2004; Blume et al., 2007; IOM, 2015; Jargowsky, 2009; Kazemipur & Halli, 2001; Nazroo, 1998; 2003). An additional reason for high immigrant vulnerability is that vulnerable family types (i.e. single-parent families and large families) are overrepresented in many migrant communities. Recent research has shown that some immigrant groups are characterized by large shares of families with three to four children (e.g. families of Turkish origin in France, Belgium, Sweden, and Germany or those of North African origin in France, Belgium, Sweden, and Spain) while others have low marriage levels and high separation rates (e.g. immigrants from Caribbean countries in the UK or those of Sub-Saharan origin in Western Europe) (cf. Hannemann et al., 2014; Kulu et al., 2015; Kulu & Hannemann, 2016).

## **2.2. Refugees and Vulnerability**

Emigration may change many life characteristics: climate, language, culture, social relations, status etc. Immigrants are thus generally facing a variety of challenges when they arrive in a new country, exposing them to a high risk of vulnerability at least in the short run. This includes the immigrant-common risk of social vulnerability due to small networks or xenophobia. Other risks, however, concern only specific groups of immigrants (e.g. legal status problems). Refugees are usually particularly vulnerable. The term “refugee” implies “a rupture of ‘normal’ social, economic and cultural relations” (Black 2001, p. 63). In addition, refugees have distinctive needs (Castles et al., 2002): Family separation, health problems, missing documentations or waiting periods during asylum and recognition procedures are specific to displaced people seeking for protection (UNHCR, 2013).

### **2.2.1 Economic Vulnerability**

Asylum-seekers have no or only very restricted rights (and possibilities) to work and are usually not (fully) covered by social services and welfare benefits (Carta et al., 2005; Eurofound, 2016; Rosenberger & König, 2011). Savings often dried up during the long journey to the host country. Therefore, their financial situation is usually difficult.

For most refugees, it is hard to enter European labour markets. Many of them arrive with qualifications and work experience gained in a very different cultural and economic context. They have frequently difficulties to document their experience and skills or problems with the recognition of educational certificates (Nohl, 2010; OECD, 2016; UNHCR, 2013). Due to multiple disadvantages (including health problems), refugees often lag behind labour market performance of other migrant groups. Thus, the risk of unemployment and dependence on social benefits is particularly high among refugees (Renner & Senft, 2013; OECD, 2016).

Recent evidence (Buber-Ennsner et al., 2016; UHNCR, 2015) indicates that the 2015 refugees' education is—though not on European level—much higher than the average levels in their countries of origin. Most of the interviewed refugees had some work experience and intended to participate in the host society's labour market. But even for highly skilled refugees, legal barriers impede re-entering their professions (e.g. Piętka-Nykaza, 2015). Downward professional mobility and under-employment are frequently observed among refugees (UNHCR, 2013). Employed refugees may also suffer from pressures to send money home.

### 2.2.2 Psychological Vulnerability

Every person emigrating perceives affective losses (Carta et al., 2005). For the specific group fleeing from danger, however, the psycho-social process of loss, grief and change is even more complex—not to mention the harm for children who are not always accompanied by their families but often separated from them or even orphaned (Derluy & Broekaert, 2008; Eide & Hjern, 2013; Huemer, Karnik, & Steiner, 2009). Specific stressors for forced migrants comprise traumatic experiences both in the country of origin as well as during an often difficult and risky journey.<sup>3</sup> Children are especially vulnerable “given the fact that their parents or guardians are themselves often overwhelmed and unable to attend to their emotional needs” (Pumariega et al., 2005, p. 583).

Psychological vulnerability is a serious challenge for many asylum-seekers and refugees who are generally at a high risk of mental health problems. Frequent diagnoses comprise depression disorders, anxiety disorders and mood disorders—particularly post-traumatic stress disorders or the so-called chronic and multiple stress syndrome where symptoms of depression arise jointly with anxious, somatoform and dissociative symptoms (Carta et al., 2005; Keller et al., 2003; Wenzel & Kinigadner, 2016). Stress can re-activate symptoms initially caused by past traumatic experiences (made before or during their journey). Even years later children may suffer from serious problems due to indirect traumatization or because of being snatched from familiar surroundings (Pumariega et al., 2005; Wenzel & Kinigadner, 2016).

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<sup>3</sup> Examples are war, torture, rape, famine, forced separation from family and friends, crossing rivers or open water, capsizing in rafts, witnessing deaths (cf. Carta et al., 2005; Pumariega et al., 2005).

Times of arrest and detention, stressful interviews with officials and long periods of waiting for asylum decisions are huge burdens. Living in refugee camps with restricted opportunities for privacy becomes frustrating with time. Insecurity about the present and the future contribute to the demanding situation (cf. Robjant, Hassan, & Katona, 2009; UNHCR, 2013; Wenzel & Kinigadner, 2016). In addition, social, linguistic, educational and vocational challenges all produce acculturative stresses (Murray, Davidson, & Schweitzer, 2010). Regarding the reproduction of psychological vulnerability, economic and social vulnerability are relevant as risks for the second generation increase with chronic stressors created by unemployment and poverty as well as experiences of marginalisation and discrimination.

### 2.2.3 Social Vulnerability

Aggravating their difficult situation, social marginalisation and discrimination often complicate the living of refugees (Carta et al., 2005). The problem starts at the very beginning. Collective facilities for asylum-seekers and strict regulations usually prevent intensive social contacts with locals (Rosenberger & König, 2011), leading to later difficulties with acculturation. Due to their financial situations at the time leaving the reception centres, refugees are frequently living in neighbourhoods with (for the host society) comparatively low living standards and high rates of crime (Pumariega et al., 2005; UNHCR, 2013). This, in turn, fosters existing prejudices among natives.

Stereotypes, prejudices, and a fear of cultural difference are another source of social vulnerability. Since the year 2015, Europe appears to be torn. A culture of welcoming displaced people, emphasizing the moral duty of supporting people in need, co-exists with xenophobic claims for closed borders (Holmes and Castañeda, 2016). Worries about alleged “welfare shopping” and fears of “importing terrorists” are widespread (Dalla Zuanna, Hein, & Pastore, 2015; Esses et al., 2017). Labelling procedures have ever been relevant for the social acceptance of immigrants and the situation of refugees in particular (Zetter, 1991; 2016).<sup>4</sup> In public discourse, asylum-seekers are categorised into those deserving help and those with predominantly economic motives, those willing to adapt to the culture of host societies and those open to implication in terrorist organisations (Holmes & Castañeda, 2016). The resulting potential for social vulnerability is reflected in public opinion polls, media coverage, the rise of right-wing parties and anti-Muslim movements (cf. Berry, Garcia-Blanco, & Moore, 2015; Esses et al., 2017). Right-wing media and politicians labelling refugees not only as outsiders but as “plagues” and “parasites” (cf. Esses et al., 2017, p. 87), or even terrorist threat (potential murderers) (Carrera et al., 2015, pp. 15 f.) more than ever foster feelings of alienation. This weakens social cohesion from both sides – by unsettling natives as well as refugees.

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<sup>4</sup> Labelling procedures refer to how individuals are classified and social groups are perceived. They usually include stereotyping. Labels influence the self-awareness, self-esteem, and behaviour of individuals (of group members themselves as well as others).



There is indeed firm reason to believe that vulnerability of European societies may rise at least in the short run. Per definition, refugees are people in need who experienced traumatic events. However, vulnerability is not necessarily a permanent status. Vulnerable people can overcome problematic situations (e.g. escape poverty). In the medium and long run, successful economic and social integration of refugees could result in economic advantages for host countries and enrich cultural life in Europe (e.g., Eurofound, 2016, Melander & Pichelmann, 2015). Research has repeatedly shown that immigration can have positive consequences for host societies (e.g., Fratzscher & Junker, 2015; Prettenthaler et al., 2017; Refugee Council of Australia, 2010). Because immigrants are usually younger than the population, for instance, immigration is likely contributing to relief social security and health care systems of ageing European societies (Spahl et al., 2017). What did experts think at the peak of the "refugee crisis"?

### **3. Present Research: Data, Method, and Analytic Approach**

#### **3.1. The Expert Survey**

##### **3.1.1 Background Information**

In general, the expert survey in the *FamiliesAndSocieties* project asked about important societal developments, future family vulnerability in Europe, and the role of family policy.<sup>5</sup> Our research primarily aimed at exploring possible challenges for social policy that might appear in the future. All assessments in the questionnaire had to be made for a particular European country and vulnerability dimension (economic, psychological or social vulnerability). Experts answered only for countries and vulnerability dimensions they are familiar with. Because we contacted experts with quite different background, the questionnaire made clear that economic vulnerability refers to financial aspects and poverty risks while psychological vulnerability summarises feelings of stress, anxiety or depression, and social vulnerability comprises aspects like stigmatisation, discrimination and a lack of social support.<sup>6</sup>

All questions aimed at future developments in European societies (until 2020 or 2050, respectively). According to leading psychologists, such "prospection" is an extremely difficult task (see Gilbert, 2006; Kahneman, 2011). Even for experts, it is hard to anticipate (all) future developments and imagine future states in sufficient detail to answer concrete questions. Although it is impossible to tell us how the future will look like, several forecast and foresight activities are continuously conducted. Accordingly, different methods and analytical tools have been developed and proved to be useful (see Aichholzer, 2009; EC-JRC, 2007; Eurofound, 2003; Linstone & Turoff, 1975; Schulz & Renn, 2009). Nowadays,

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<sup>5</sup> For more details on the questionnaire see Riederer, Philipov, and Rengs (2017). In addition, a demo version of the expert questionnaire is available online at [bit.ly/ffeexpsrvy](http://bit.ly/ffeexpsrvy).

<sup>6</sup> The meaning of "vulnerability" varies between academic disciplines (Hanappi et al., 2015; Zimmermann, 2017) and the literature sometimes discusses other dimensions (cf. Radcliff et al., 2012; Roelen et al., 2012).

studies dealing with the future often employ a multi-method-mix. While qualitative methods exploiting opinions of experts aim at collecting as much information as possible, quantitative methods based on assumptions and/or collected data are used to concretize results of qualitative research. The *FamiliesAndSocieties* expert survey was also part of a larger research frame. Its content resulted from a prior focus group study that was conducted between November 2014 and June 2015. The expert survey itself was conducted online between December 2015 and March 2016.

In general, online surveys have both advantages and disadvantages (see Bryman & Bell, 2011; Van Selm & Jankowski, 2006). An important advantage in the context of the present study was that experts could answer the questions at their own pace and schedule. If necessary, they could stop the survey several times and complete it later (whenever they had time to continue). They were not forced to show any uncertainties to an interviewer and could even choose to remain completely anonymous if they wanted to. To anticipate problems resulting from the absence of interviewers, we did several feedback rounds and pre-tests to avoid misunderstanding (for details, see Riederer, Philipov, and Rengs 2017). Moreover, the respondents had the possibility to send a question related to the questionnaire via e-mail.

### 3.1.2 Dependent Variable(s): Future Vulnerability Development

The expert questionnaire was part of a well-developed research scheme and based upon results of the prior focus group study. Focus group participants, however, did not foresee the upcoming "refugee crisis". Although migration was mentioned in the discussions, the issues raised differed widely (including also youth emigration, immigration of high-skilled labour from other EU member states etc.). It was during the preparation of our questionnaire in summer and autumn 2015 when the refugee topic gained in relevance. Deviating from our research framework, we decided to add questions on refugees to the expert questionnaire. Our main aim was to identify potential future challenges for social policy. The "refugee crisis" could not be ignored.

Experts were requested to *assess the effect of the current and future flows of refugees on future vulnerability of families with children*. They assessed the effect of refugee flows on family vulnerability separately for the periods 2015 to 2020 and 2020 to 2050 on seven point rating scales ranging from "the share of vulnerable families will strongly decrease" (later coded as -3) to "the share of vulnerable families will strongly increase" (+3). Ratings referred to the country and vulnerability dimension selected (see above).

These ratings reflect assumed consequences of current and future refugee flows for two different periods of time. We do not know why participants assumed decreases or increases of family vulnerability caused by refugee flows (for instance, whether they expect refugee flows to decrease/ increase or whether they expect good/ bad policy reactions). A much more elaborated analytical and methodological setting would be needed to address potential consequences of refugee flows with and without possible policy adaptations. As already mentioned, we initially aimed at identifying potential future challenges for social

policy. Therefore, we only needed to know expectations about consequences (not necessarily about the factors assumed to cause them). In this paper, we are interested to what extent experts shared the concerns about negative consequences spread by right-wing media and politicians in the context of the "refugee crisis". Despite its obvious restrictions, the two questions asked should suffice to give a rough impression of what experts thought in late 2015 and early 2016.

### 3.1.3 The Experts: Sample Description

Restricting access to the survey in a way to allow absolute control over participants was not possible due to conflicting aims of anonymity and confidentiality. In order to minimise the risk of getting participants who were not experts, invitations were sent out via e-mail only and the survey included questions about the background of participants and their fields of expertise. Invitations to experts were distributed by well-known organisations (e.g. family NGOs) and professionals as well as by scientific associations who contacted their members. Nevertheless, our sample of experts is very likely to be not representative.

Table 1: Regions and number of assessments

Region	Countries included (n)	Total N	(%)	Economic vulnerability	Psychological vulnerability	Social vulnerability
German-speaking and Nordic countries	Austria (29), Denmark (2), Finland (3), Germany (14), Norway (5), Sweden (11), Switzerland (3)	67	(38)	28	15	31
Western Europe	Belgium (7), France (13), Ireland (3), Luxembourg (1), Netherlands (9), Northern Ireland (1), United Kingdom (7)	41	(23)	13	16	19
Southern Europe	Cyprus (1), Greece (1), Italy (20), Portugal (1), Spain (17)	40	(23)	22	11	13
Eastern Europe	Bulgaria (4), Czechia (3), Estonia (2), Hungary (4), Lithuania (1), Macedonia (1), Poland (1), Romania (7), Russia (3), Slovenia (2)	28	(16)	13	10	12

Note: The total number of vulnerability assessments can be higher than the number of assessments for regions as experts could answer for more than one dimension of vulnerability.

Source: *FamiliesAndSocieties* Expert Survey, authors' own computations.

Between December 2015 and March 2016, we collected 176 opinions and views from experts all over Europe (see Table 1). As some experts chose to make assessments for two or three dimensions of vulnerability and as one expert made assessments for two countries, in total 203 assessments of future vulnerability developments were made. Economic vulnerability was covered by 76 assessments, social vulnerability by 75 and psychological vulnerability by 52. Altogether, we got assessments of future vulnerability developments for 29 European countries. For ten countries five or more experts provided assessments,

with Austria being the most frequently considered country (29 assessments), followed by Italy (20), Spain (17), Germany (14), France (13) and Sweden (11).<sup>7</sup>

The majority of participants in the expert questionnaire study were mainly or exclusively working in academia (61 per cent). Almost one-fifth of participants worked for NGOs. Ten experts (six per cent) were policy-makers. The remaining 13 per cent worked for administrative authorities, regional or (inter)national organisations, in the health sector, in the educational sector or in the private sector (business, industry or banking).<sup>8</sup> Some of them did research or were involved in policy areas but they were mainly practitioners.

Among academics, the most prominent disciplines were sociology (mentioned 27 times), demography (13), economics (10) and psychology (7). A large number of academics, however, characterised themselves just as “social scientists” without any specific denomination. Dominant research interests referred to the following topics: family (incl. fertility), childhood (incl. child development), education, inequality (incl. poverty and stratification), and gender. Participants working in the area of policymaking were mainly engaged in family policy. One expert each also mentioned labour market policies, youth policy or welfare policy. Finally, participants worked for NGOs focussing on parents and parenting, education, children, gender issues or specific family forms (e.g. rainbow families, single-parent families, large families).

### 3.2. Analytic Strategy

Our analytic strategy combines a detailed presentation of results (by different dimensions of vulnerability and/or countries) and more general analyses using a pooled sample allowing for the estimation of multivariate models. For some analyses, assessments for single countries were furthermore grouped referring to four European regions (Table 1). This grouping was mainly influenced by theoretical considerations and countries’ different roles in the “refugee crisis” (see below). The composition of expert groups was slightly dominated by scientists in all regions: Their share amounted to 54 per cent in western European countries (22 out of 41), 61 per cent in the German-speaking and Nordic countries (41/ 67), 64 per cent in eastern European countries (26/ 40), and 64 per cent in southern European countries (18/ 28).

In a *first step*, we discuss expectations by experts in general. In our analyses, we distinguish between three dimensions of vulnerability (economic, psychological, social) and two time periods (2015-2020, 2020-2050). Assessments were made by experts on a 7-point rating scale ranging from -3 (strong decrease of vulnerability due to refugees) to +3 (strong increase). We will provide them in detail. In the *second step*, analyses are conducted

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<sup>7</sup> These countries are also among those with highest numbers of asylum applications per million inhabitants (e.g. Sweden or Austria; see Table A.1 in the Appendix) or those where large numbers of displaced enter the EU (e.g. Italy).

<sup>8</sup> This refers, for instance, to experts of social insurance or statistic agencies working on family and/or vulnerability issues as well as to people participating in NGO activities.

by regions. Simplifying the descriptive comparison between four European regions, we use shares of experts expecting increases in future vulnerability due to refugees (values between 1 and 3).

Considering regional differences is highly relevant, as European countries differ in terms of welfare state regime and family policy (e.g. Esping-Andersen 1990; 1999; Ferrarini, 2006; Korpi, 2000; Mau & Verwiebe, 2010) as well as in migration history, immigration law, and integration policy (e.g. Castles et al., 2002; Carta et al., 2005; Mau & Verwiebe, 2010; Müller, 2010). On the one hand, welfare states matter for vulnerability. In particular in northern and central European countries with strong welfare states, social transfers and benefits reduce poverty risks significantly (EAPN, 2014; Verwiebe, 2012; 2015). Therefore, especially *economic* vulnerability of families is lowest among them. But more extensive public support regarding health and social welfare also reduces *psychological* and *social* vulnerability. On the other hand, welfare states matter for immigration. Emigration by refugees is motivated by push factors (e.g. war or persecution). Nevertheless, pull factors may influence their choice of host countries (in case they have one).<sup>9</sup> Countries with immigrant-friendly welfare and integration policies may be more attractive destinations. As a consequence, the role of European countries and their affectedness by asylum-seekers has varied in 2015 (cf. Eurostat, 2016a).

Many asylum-seekers arriving in Southern Europe (e.g. Italy or Greece) preferred to request asylum in northern or central Europe (Fargues, 2015; UHNCR, 2015). In particular, Germany and Sweden were considered as target countries of hundreds of thousands of people seeking for international protection (Germany recorded 441,800 first time asylum applicants in 2015, Sweden 156,110; cf. Eurostat, 2016a). Several Eastern European countries, for instance the Baltic States, were neither affected as entry countries nor as target countries. Others, like Slovenia, were transit countries facing a serious humanitarian challenge during the large influx of displaced people but do not expect severe long-term consequences through immigration (Göbl et al., 2016).

For this reason, we distinguish between four different European regions. Nordic and German speaking countries are characterised by strong welfare states, low vulnerability of families and high inflow of refugees. Southern European countries comprise entry and transit countries with often already high levels of vulnerability but not that high numbers of new asylum applications (at least not per million of inhabitants).<sup>10</sup> Many western and eastern European countries have less extensive public welfare systems and/ or strict migration laws. They are characterised by medium to high vulnerability and rather low numbers of asylum applicants (see Table A.1 in the Appendix).

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<sup>9</sup> According to Lee (1966), *push factors* at the country of origin trigger emigration (e.g. religious or political persecution) while *pull factors* at the destination attract people (e.g. better job opportunities or living standards).

<sup>10</sup> Among southern European countries, Italy recorded the largest number of first time asylum applications in 2015 (83,245). Relative to population size, however, Malta was most affected (3,948 per million of inhabitants; Italy: 1,369; Sweden: 16,016; cf. Table A.1 in the Appendix).

In addition to descriptive analyses, multivariate analyses are conducted to prove whether observed differences between regions are confirmed under the control of expert characteristics and other controls. These estimations use again the original assessments (ranging from -3 to +3). Building a larger sample of assessments for multivariate analyses, they are pooled across different dimensions of vulnerability and time periods. Five models (numbered M1 to M5) are built up stepwise, including more and more additional controls. The final model M5 comprises type of expert (practitioner or scientist), period of reference (2015-2020 or 2020-2050), dimensions of vulnerability (economic, psychological or social), opinions and attitudes regarding the role of the government and the relevance of tradition,<sup>11</sup> the general assessment of future vulnerability development (decreases or increases on a scale from -3 to +3),<sup>12</sup> and gender of respondent (male or female).

All five models are estimated with (a) pooled ratings for both periods and all vulnerability dimensions, (b) pooled ratings for all vulnerability dimensions for 2015-2020, (c) pooled ratings for all vulnerability dimensions for 2020-2050, (d) pooled ratings for economic vulnerability for both periods, (e) pooled ratings for psychological vulnerability for both periods, and (f) pooled ratings for social vulnerability for both periods. A comparison of results will allow in-depth conclusions regarding main differences between regions. All multivariate regression analyses consider that several ratings were done by one and the same expert (important for estimation of standard errors and significance tests).<sup>13</sup>

Analyses for regions are more robust due to higher case numbers of single comparison groups. Nevertheless, they may veil differences between countries and/ or interesting findings for single countries. In the *third step*, therefore, mean ratings are used to conduct a comparison between countries. Positive (negative) means indicate expectations of increases (decreases) in vulnerability due to current and future refugee flows. Mean ratings for single vulnerability dimensions are only computed for countries with at least three expert ratings for the respective dimension. Ratings are also pooled across dimensions allowing for more countries to be included in the analyses. In this case, at least five expert ratings across dimensions are required.

In the *final step*, we analyse how prior immigration and asylum seekers in 2015 are related to vulnerability and experts' expectations. Therefore, we use the following indicators (Eurostat 2016a; 2017a): The *share of the foreign-born* in the total population of a country largely reflects prevailing migration regimes while the *number of first time asylum*

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<sup>11</sup> Experts were asked whether they agree or disagree to the following statements: (1) The government should take more responsibility to ensure that everyone is provided for. (2) It is important to hold on tradition, i.e. the customs handed down by one's religion or family.

<sup>12</sup> This rating is a general estimate how future vulnerability of families will develop. It is *not* the same as the question how current and future refugees will affect future vulnerability developments (i.e. whether it will decrease or increase due to immigration of displaced people).

<sup>13</sup> Significance testing with a convenience sample of experts is meaningless in as far as we do not know the population of experts these tests refer to. Applications of Monte Carlo or bootstrapping techniques would be appropriate in such a case. It was, however, not possible to use such techniques and to control for dependency of estimates in one and the same step of analysis.

*applicants* by million inhabitants in 2015 measures the degree of affectedness by the refugee crisis. These macro level indicators will be correlated with indicators capturing family vulnerability prior to the “refugee crisis” and mean expert assessments of consequences of refugees for future vulnerability (data shown in Tables A.1 and A.2 in the Appendix). Indicators for all three dimensions of vulnerability are provided by Eurostat (2016b; 2017b). Our indicator of economic vulnerability (share of people at risk of poverty or social exclusion) is well established. Approaches measuring psychological vulnerability (share of people reporting no meaning in life: life not worthwhile) and social vulnerability (share of people who lack social support: no one to rely on) are less advanced. Although the respective indicators do not cover the whole range of both concepts, they will still allow rough conclusions. Focussing on families, we use the share of *households with dependent children* who were at risk of vulnerability. Figures for economic vulnerability refer to 2015, figures for psychological and social vulnerability to 2013 (newer figures have not been available). As it is reasonable to doubt reported numbers of asylum applications in 2015 for Hungary, correlations regarding the affectedness by asylum seekers will be computed both with and without Hungary.<sup>14</sup>

## 4. Expert Questionnaire Results

### 4.1. General Analysis: Estimated Consequences of Refugee Flows for Family Vulnerability

Assessments of experts regarding the effects of refugee flows on future vulnerability of families with children refer to the short (2015 to 2020) and the long run (2020 to 2050). In the short run, the majority of experts assumes increasing shares of vulnerable families due to current and future refugee flows. This holds for all three dimensions of vulnerability. Respondents seem to be most worried about social vulnerability: Around 47 per cent of the experts assume a slight increase of social vulnerability until 2020, and an additional 11 and 5 per cent a moderate or even a strong increase (Figure 1).

In the long run, experts are generally more optimistic. Refugee flows are considered to hardly affect economic and psychological vulnerability of families with children between 2020 and 2050. In particular, 58 per cent of respondents expect the long-term development of the share of families suffering from psychological vulnerability to remain more or less unaffected by current and future refugee flows (additional 4 per cent even assumed that it will decrease). Nevertheless, estimates regarding the long-term impact of refugee flows on future social vulnerability are different than those for economic and psychological

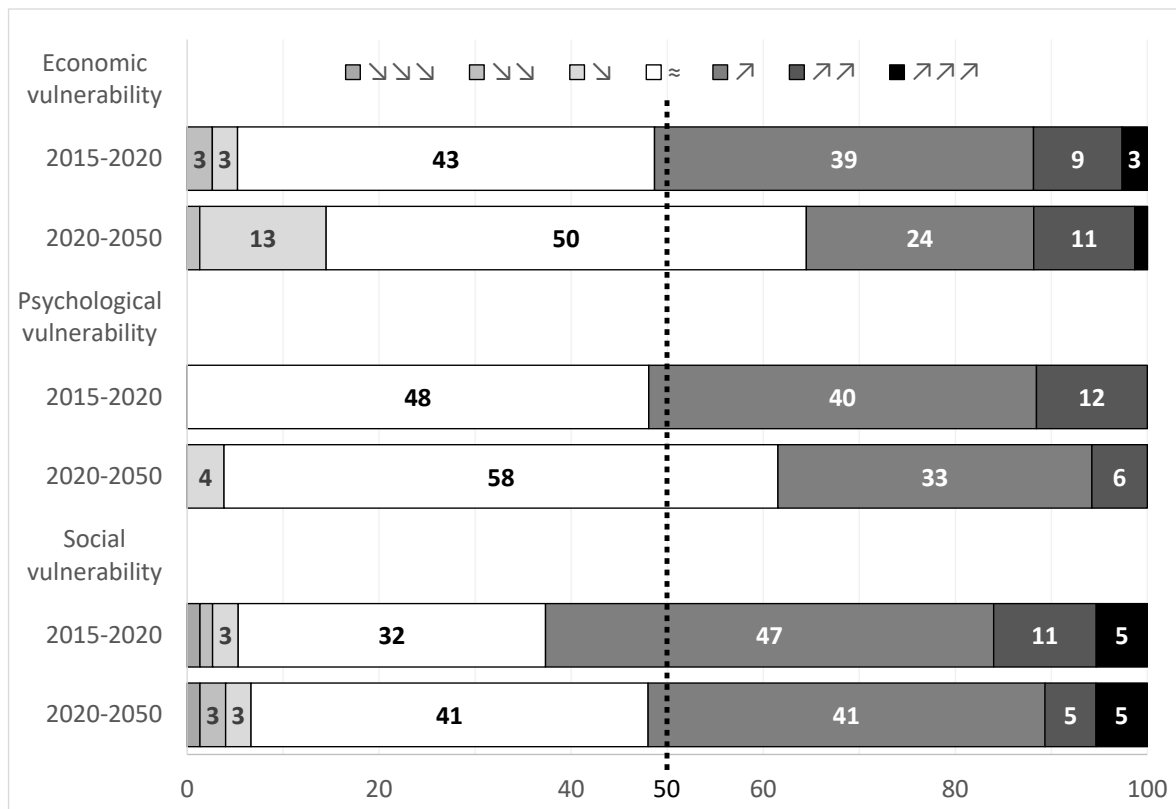
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<sup>14</sup> Reported numbers for Hungary are extraordinarily high though it was the first country introducing an official anti-migration rhetoric and respective policies (Göbl et al., 2016). Several activities of Hungary in the border zones between Hungary, Croatia, and Slovenia as well as contents of new laws on asylum, borders, police, and national defence are probably not in line with existing EU regulations (Carrera et al., 2015).

vulnerability: With 51 per cent, a narrow majority of experts assumes negative consequences of refugee flows for social vulnerability of families between 2020 and 2050.

In sum, average assessments suggest the following: First, experts assume that family vulnerability will increase due to current and future refugee flows. Second, increases in vulnerability are expected in particular in the short run and with regard to social vulnerability. Third, in contrast to economic and psychological vulnerability, further increases in social vulnerability are also expected to occur in the long run. Despite these results, a large fraction of experts does not assume that refugee flows will affect future family vulnerability in Europe.

Figure 1: Expected changes of shares of vulnerable families with children due to current and future refugee flows for 2015-2020 and 2020-2050 by vulnerability dimension (in %)



Note:  $N_{\text{economic vulnerability}} = 76$ ,  $N_{\text{psychological vulnerability}} = 52$ ,  $N_{\text{social vulnerability}} = 75$ . This figure differentiates between estimates that the share of vulnerable families will strongly decrease (↓↓↓), moderately decrease (↓↓), slightly decrease (↓), stay roughly the same (≈), slightly increase (↑), moderately increase (↑↑) or strongly increase (↑↑↑) due to current and future flows of refugees. Source: *FamiliesAndSocieties* Expert Survey, authors' own computations.



## 4.2. Regional Differences: Descriptive and Multivariate Results

Table 2 compares expected short term and long term consequences for four European regions. The increase of economic, psychological and social vulnerability due to refugees in the period 2015 to 2020 is expected to be highest for German speaking and Nordic countries.<sup>15</sup> This holds in particular with regard to economic and social vulnerability while the difference between regions is smaller for psychological vulnerability. Expected short run increases of economic and social vulnerability due to refugees are both lowest for eastern European countries. Patterns of regional differences are less clear in the long run. Only with regard to economic vulnerability, expected increases due to refugees between 2020 and 2050 are again highest for German speaking and Nordic countries and also lowest for eastern European countries. The majority of observed differences clearly reflects affectedness by asylum applications in 2015. *Nordic and German speaking countries* experienced the strongest inflow of people while *eastern European countries* with strict immigration laws were hardly chosen as destination by refugees.

Table 2: Shares of experts expecting increasing vulnerability due to refugee flows by region

Period	2015 - 2020						2020 - 2050					
	Economic		Psychological		Social		Economic		Psychological		Social	
Dimension of family vulnerability:	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
German-speaking and Nordic countries	75	(28)	60	(15)	77	(31)	54	(28)	33	(15)	55	(31)
Western Europe	46	(13)	56	(16)	63	(19)	31	(13)	50	(16)	42	(19)
Southern Europe	41	(22)	36	(11)	54	(13)	32	(22)	45	(11)	77	(13)
Eastern Europe	23	(13)	50	(10)	33	(12)	8	(13)	20	(10)	33	(12)
Europe (total)	51	(76)	52	(52)	63	(75)	36	(76)	38	(52)	52	(75)

Source: *FamiliesAndSocieties* Expert Survey, authors' own computations.

Findings of the multivariate analyses (Table 3) confirm that experts for eastern European countries are less pessimistic regarding vulnerability due to refugees than experts for German speaking and Nordic countries. This result holds under control of a variety of other variables (compare models M1 to M5) and it seems to be mainly due to differences in expectations regarding economic vulnerability (compare panels (d), (e), and (f)). In addition, part of the results are also in line with the impression that experts are more concerned about future social vulnerability than future economic vulnerability (see Table A.3 in the Appendix).<sup>16</sup>

<sup>15</sup> Especially the fraction of experts who did *not* assume that refugee flows will have *any effect at all* is much smaller in German speaking and Nordic countries than in other European regions for the short run.

<sup>16</sup> There is at least one another quite interesting results: The general degree of optimism or pessimism regarding the future vulnerability development strongly affected estimates about the effect of

Usually, expected increases of vulnerability due to refugees are lower in the long run than in the short run (Figure 1). Multivariate analyses also confirm that, on average, increases of vulnerability due to refugee flows are assumed to be larger for the period from 2015 to 2020 than for the period from 2020 to 2050 (Table A.3). The notable exception is southern Europe where increases due to refugees in psychological and social vulnerability are assumed to be even larger for 2020-2050 than for 2015-2020 (Table 2).

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refugee flows. The more experts thought that future vulnerability of families with children will increase, the more they also believed that it will increase due to current and future refugee flows.

Table 3: Possible determinants of expected effects of present and current refugee flows on future vulnerability of families with children

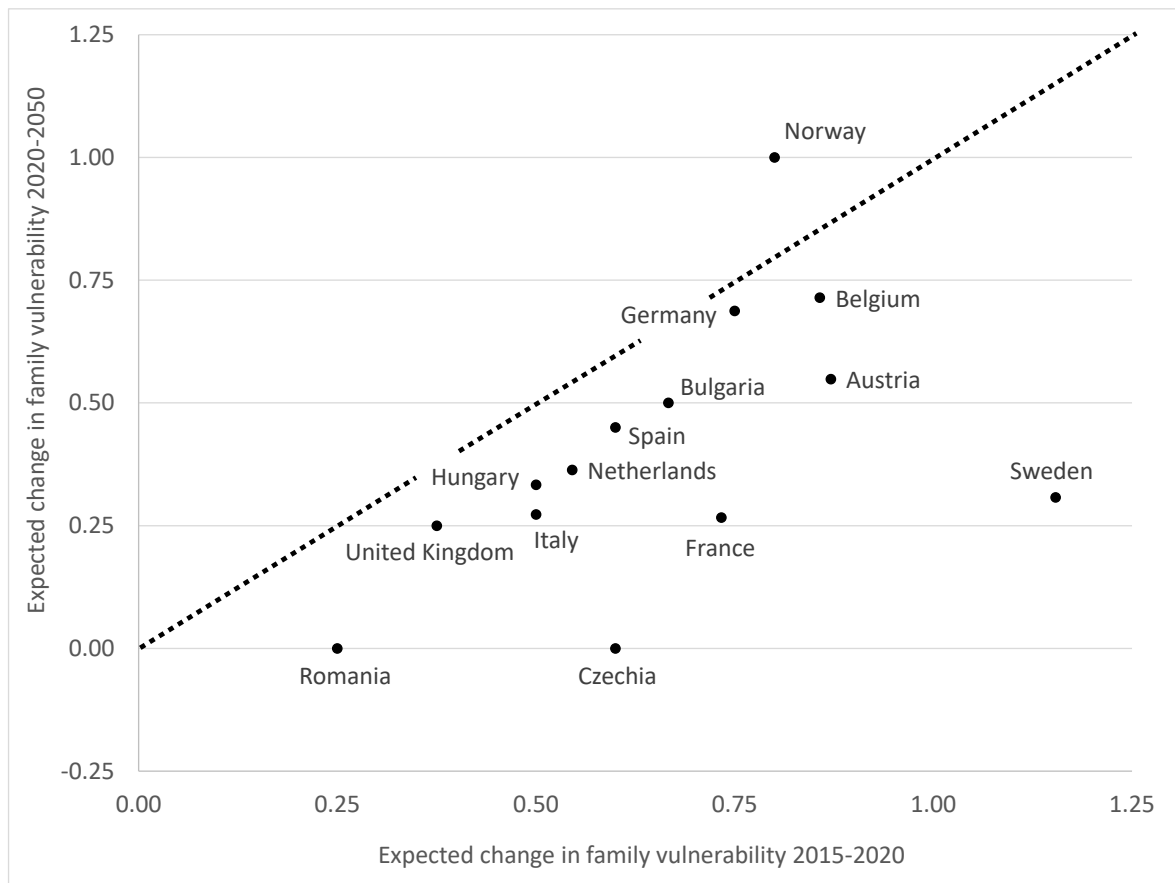
Models analysing the estimated effect of refugee flows on future vulnerability:	M1	M2	M3	M4	M5
	b (se)	b (se)	b (se)	b (se)	b (se)
<b>(a) Pooled data</b>					
Region: German speaking and Nordic countries	.00	.00	.00	.00	.00
Western Europe	-.17 (.16)	-.16 (.15)	-.17 (.15)	-.20 (.16)	-.23 (.15)
Southern Europe	-.17 (.16)	-.18 (.16)	-.15 (.16)	-.17 (.16)	-.20 (.16)
Eastern Europe	-.39 (.18)*	-.39 (.18)*	-.38 (.18)*	-.41 (.18)*	-.32 (.18) <sup>†</sup>
Controls (a):	type of expert (M2-M5), period of reference (M3-M5), dimensions of vulnerability (M3-M5), opinions and attitudes (M4-M5), general assessment of vulnerability development (M5), gender (M5)				
<b>(b) Period 2015-2020, all vulnerability dimensions</b>					
Region: German speaking and Nordic countries	.00	.00	.00	.00	.00
Western Europe	-.23 (.17)	-.22 (.17)	-.23 (.17)	-.24 (.17)	-.27 (.17)
Southern Europe	-.25 (.17)	-.26 (.17)	-.24 (.17)	-.24 (.17)	-.30 (.17) <sup>†</sup>
Eastern Europe	-.41 (.22) <sup>†</sup>	-.41 (.22) <sup>†</sup>	-.41 (.22) <sup>†</sup>	-.43 (.21)*	-.43 (.21)*
<b>(c) Period 2020-2050, all vulnerability dimensions</b>					
Region: German speaking and Nordic countries	.00	.00	.00	.00	.00
Western Europe	-.10 (.18)	-.10 (.18)	-.11 (.18)	-.16 (.19)	-.17 (.18)
Southern Europe	-.08 (.19)	-.09 (.19)	-.06 (.18)	-.11 (.19)	-.08 (.18)
Eastern Europe	-.37 (.18)*	-.37 (.18)*	-.36 (.18)*	-.39 (.19)*	-.18 (.18)
Controls (b) + (c):	type of expert (M2-M5), dimensions of vulnerability (M3-M5), opinions and attitudes (M4-M5), general assessment of vulnerability development (M5), gender (M5)				
<b>(d) Economic vulnerability, both periods</b>					
Region: German speaking and Nordic countries	.00	.00	.00	.00	.00
Western Europe	-.41 (.29)	-.35 (.27)	-.35 (.27)	-.36 (.29)	-.34 (.28)
Southern Europe	-.33 (.21)	-.40 (.22) <sup>†</sup>	-.40 (.22) <sup>†</sup>	-.40 (.22)	-.29 (.21)
Eastern Europe	-.56 (.26)*	-.58 (.25)*	-.58 (.25)*	-.58 (.27)	-.37 (.25)
<b>(e) Psychological vulnerability, both periods</b>					
Region: German speaking and Nordic countries	.00	.00	.00	.00	.00
Western Europe	.25 (.19)	.27 (.19)	.27 (.19)	.20 (.19)	.17 (.18)
Southern Europe	.03 (.25)	.10 (.24)	.10 (.24)	.03 (.21)	-.05 (.21)
Eastern Europe	-.17 (.13)	-.09 (.16)	-.09 (.16)	-.10 (.15)	-.10 (.16)
<b>(f) Social vulnerability, both periods</b>					
Region: German speaking and Nordic countries	.00	.00	.00	.00	.00
Western Europe	-.27 (.28)	-.27 (.27)	-.27 (.28)	-.28 (.27)	-.32 (.25)
Southern Europe	.00 (.25)	.01 (.26)	.01 (.26)	-.04 (.25)	-.13 (.23)
Eastern Europe	-.32 (.33)	-.30 (.33)	-.30 (.34)	-.30 (.34)	-.24 (.35)
Controls (d) to (f):	type of expert (M2-M5), period of reference (M3-M5), opinions and attitudes (M4-M5), general assessment of vulnerability development (M5), gender (M5)				

Note: For these models, ratings referring to different dimensions of vulnerability and/or different periods of time (2015-2020 and 2020-2050) were combined. The total number of ratings amounts to 406. Standard errors were adjusted for the fact that some of the ratings are not independent from each other (i.e. the 406 ratings come from 176 experts). The scale of the dependent variables indicates what experts think about how the share of vulnerable families will develop due to current and future flows of refugees. It ranges from -3 (strong decrease) to +3 (strong increase). A constant was included in all regressions. Shown are unstandardised regression coefficients (b) and standard errors (se). For instance, b=-.39 in model M1 for pooled data (panel (a)) indicates that experts for eastern Europe see a lower increase of vulnerability of families with children due to refugee flows than experts for German speaking and Nordic countries do. For more detailed results of models with pooled data see Table A.3 in the Appendix. <sup>†</sup> p < .1; \* p < 0.05.

Source: FamiliesAndSocieties Expert Survey, authors' own computations.

With regard to *psychological vulnerability*, expected short run increases due to refugees were rather low for southern Europe. Short run and long run ratings furthermore differ only for Italy that has already served as gate to Europe in the years before 2015. The expected increase in *social vulnerability*, however, seems to be more dramatic. Ten in thirteen experts expect an increase in social vulnerability due to refugees in southern European countries in the long run. Although the majority of ratings refer to Spain, increases were also expected for Italy and Greece. Not a single expert thought that social vulnerability due to refugees will decrease in southern Europe until 2050. In total, assessments for southern European, German speaking and Nordic countries explain why a majority of experts still assumes negative consequences of refugee flows for social vulnerability of families between 2020 and 2050.

Figure 2: Expected changes of future shares of vulnerable families with children due to current and future refugee flows for 2015-2020 and 2020-2050 by country



Note: The figure shows mean ratings of experts' assessments for all three considered dimensions of vulnerability. Assessments were made on a 7-point rating scale ranging from -3 (strong decrease of vulnerability due to refugees) to +3 (strong increase). Positive (negative) means indicate expectations of increases (decreases) in vulnerability due to current and future refugee flows. Source: *FamiliesAndSocieties* Expert Survey, authors' own computations.

### 4.3. Expected Developments by Country

The following graphs give some insights in expectations for single countries. For Figure 2, assessments separately made for one of three distinguished dimensions of vulnerability were pooled. The figure links vulnerability assessments for 2015-2020 with those for 2020-2050. The diagonal line marks all points where ratings for both periods are the same. Most countries are found below the diagonal: For all countries except Norway (where a single expert assumed social vulnerability to increase), average assessments that expected increases due to refugees are larger for the short run than for the long run. The absence of negative values in the graphs show that, on average, experts do not expect decreases of vulnerability due to refugee flows even for a single country.

In general, estimates of future increases in vulnerability of families due to current and future refugees are most pronounced for Austria, Belgium, Germany, Norway, and Sweden. Interestingly, short-term concerns are most pronounced in Sweden where experts are, however, quite optimistic regarding long-term developments. Austria, Germany, Hungary, and Sweden show highest average ratings regarding *economic vulnerability* (see Table A.2). Average expectations of increases in *psychological vulnerability* are highest for Belgium, France, Germany, and Spain. Concerns regarding *social vulnerability* increases are largest in Austria, Bulgaria, Germany, the Netherlands, and Spain – in the short run also for Sweden and Czechia.

Comparing assessments for different dimensions of vulnerability, average country ratings do not necessarily point in the same direction. Only short run expectations for economic and social vulnerability go often hand in hand with each other. Figure 3 demonstrates this pattern. Most countries are found above the diagonal, indicating that expected social vulnerability is larger than expected economic vulnerability. The figure thus additionally confirms on country level the observation that expected increases of social vulnerability are usually larger than expected increases in other vulnerability dimensions. Finally, the example of the Netherlands shows that assumptions about negative economic effects are not necessary to expect negative societal consequences (i.e. increases in social vulnerability).

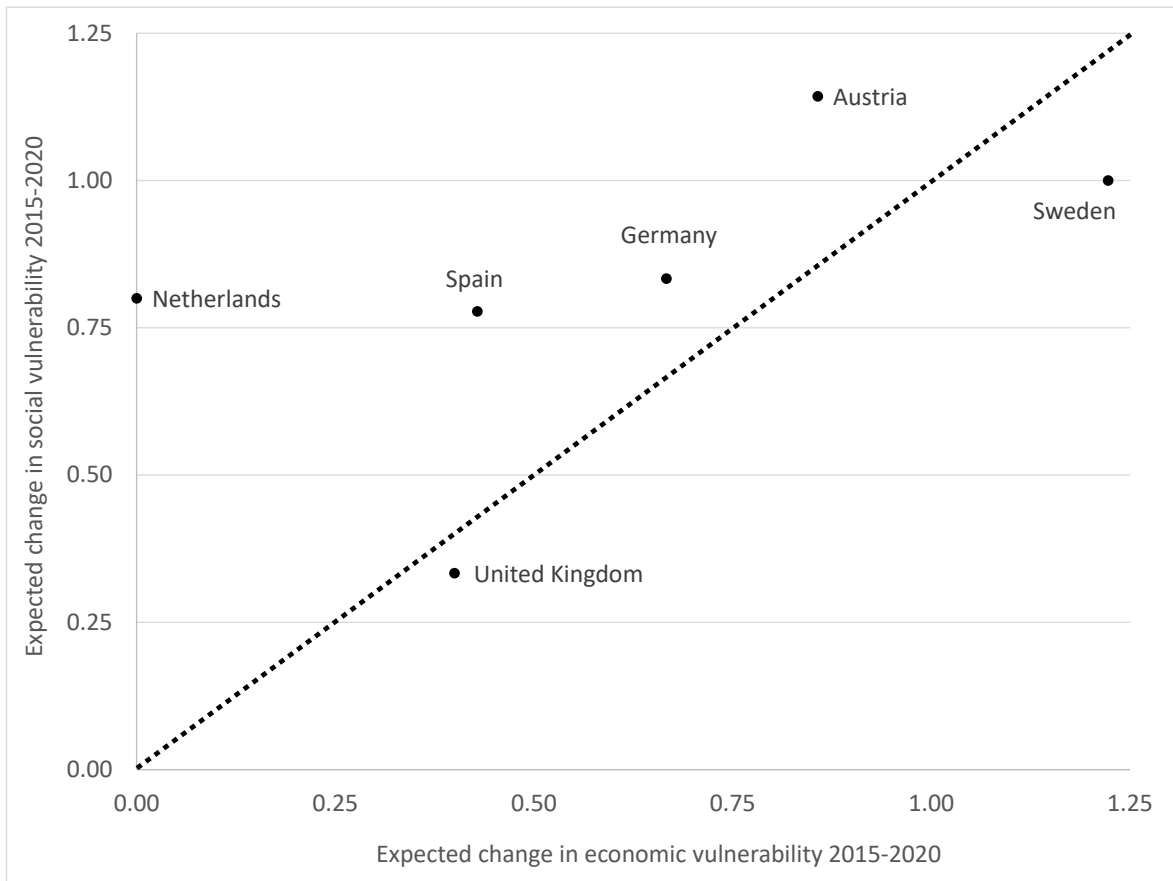
### 4.4. Present Migration Characteristics and Future Expectations

In the final research step, we analyse links between migration statistics and indicators of family vulnerability – including expectations by our experts (for respective data see Tables A.1 and A.2 in the Appendix; correlations are presented in Table 4 below). For reasons reported in the methods section, we will conduct computations including the number of asylum applicants in 2015 with and without Hungary.

Results referring to the present state indicate (a) that social vulnerability is the higher, the larger the share of foreign-born in the total population, and (b) that the number of asylum applicants per million inhabitants is the higher, the lower economic vulnerability in a country. The first finding supports the assumption that risks of social vulnerability due

to small networks or xenophobia may be relevant to all immigrant groups (not only refugees). The latter finding indicates that economic well-being of inhabitants may attract asylum seekers. Nevertheless, temporary open boarder policy of some low vulnerability countries has also contributed to this result.

Figure 3: Expected changes of shares of vulnerable families with children due to current and future refugee flows by country between 2015-2020 for economic and social vulnerability

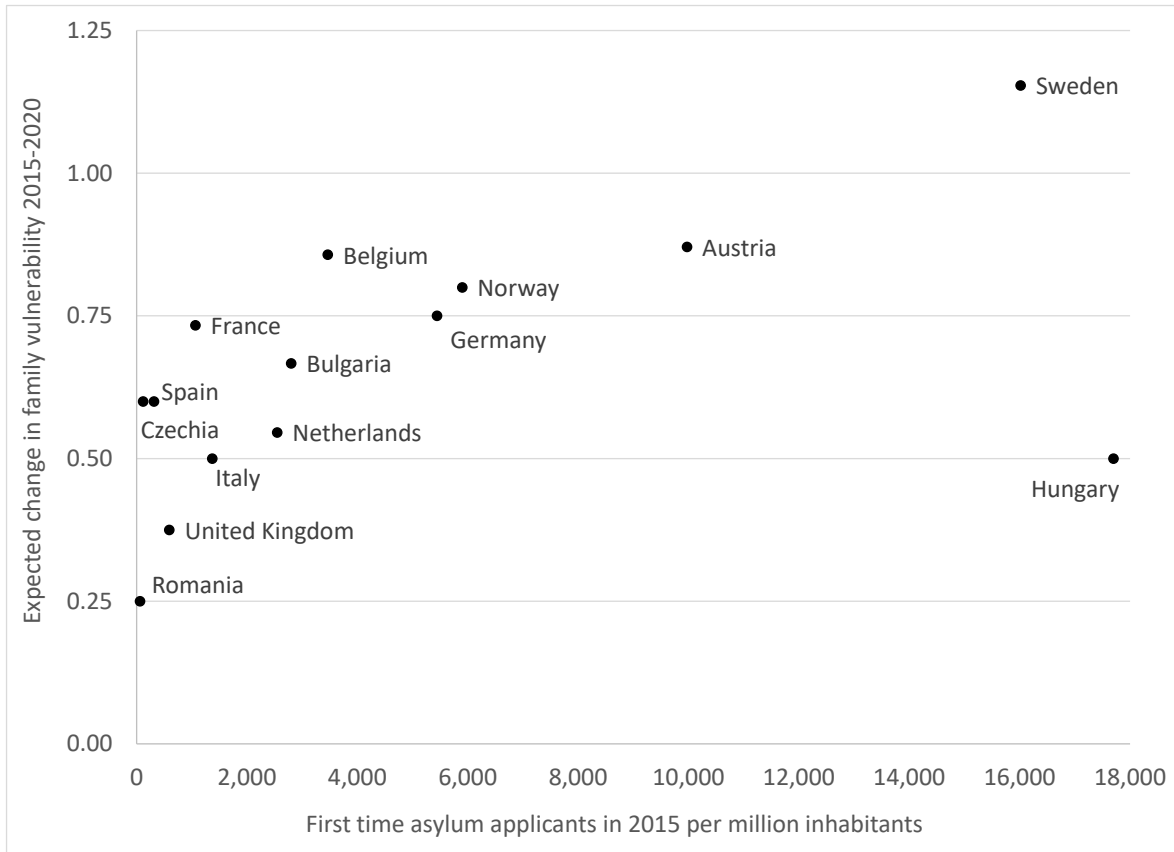


Note: The figure shows mean ratings of experts' assessments economic and social vulnerability. Assessments were made on a 7-point rating scale ranging from -3 (strong decrease of vulnerability due to refugees) to + 3 (strong increase). Positive means indicate expectations of increases in vulnerability between 2015 and 2020 due to current and future refugee flows. Source: *FamiliesAndSocieties* Expert Survey, authors' own computations.

How did the present situation regarding immigrants affected experts' expectations? First, the positive correlation between the share of the foreign-born population and the pooled rating may be interpreted as a hint that expected increases in family vulnerability are the higher, the higher the stock of immigrants. Secondly, there is strong support for a link between the affectedness by the "refugee crisis" (number of asylum applicants) and expert ratings for 2015-2020: the higher the number of asylum applicants in 2015, the higher the expected increase in vulnerability between 2015 and 2020 (see also Figure 4). This

association holds with economic and social vulnerability but —surprisingly— not with psychological vulnerability.

Figure 4: Number of asylum applicants per million inhabitants in 2015 and experts' expectations of changes in family vulnerability due to refugee flows 2015-2020



Note: The figure shows numbers of asylum applicants per million inhabitants in 2015 and mean ratings of experts' assessments for all three considered dimensions of vulnerability. Assessments were made on a 7-point rating scale ranging from -3 (strong decrease of vulnerability due to refugees) to +3 (strong increase). Positive means indicate expectations of increases in vulnerability between 2015 and 2020 due to current and future refugee flows.

Source: Eurostat (2016a) and *FamiliesAndSocieties* Expert Survey, authors' own computations.

In contrast to expectations for the short run, expectations for the long run do not reflect the affectedness by the “refugee crisis” in 2015. A higher share of the foreign-born population in 2015, however, goes along with a higher expected increase in (psychological) vulnerability due to refugees between 2020 and 2050. Interpretation of results for expected long-term developments are difficult. In addition, this trend is driven by results for Romania (very low values on both dimensions; see Table A.2).

Table 4: Possible determinants of estimations of effects of present and current refugee flows upon future vulnerability of families with children

Migration statistics	Share of foreign-born in total population	1st time asylum applicants per million inhabitants (without Hungary)		N
Family vulnerability prior to the "refugee crisis" (% of Households with dependent children)				
Economic vulnerability (% at risk of poverty or exclusion)	-.26	-.26	(-.48 **)	29-30
Psychological vulnerability (% reporting life not worthwhile)	-.28	-.06	(-.13)	29-30
Social vulnerability (% having no one to rely on)	.42 *	-.27	(-.23)	29-30
Short run expert expectations: Effect of Refugees 2015-2020 on ...				
...economic vulnerability	.49	.59	(.84 *)	7-8
...psychological vulnerability	.15	-.08	(-.08)	8
...social vulnerability	.44	.64 *	(.64 *)	10
...vulnerability (all dimensions)	.64 *	.50 †	(.84 ***)	13-14
Long run expert expectations: Effect of Refugees 2020-2050 on ...				
...economic vulnerability	.19	.47	(.51)	7-8
...psychological vulnerability	.64 †	.03	(.03)	8
...social vulnerability	-.20	-.14	(-.14)	10
...vulnerability (all dimensions)	.53 *	.21	(.34)	13-14

Note: For details see Tables A.1 and A.2 in the Appendix. †  $p < .1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

Source: Eurostat (2016a; 2016b; 2017a; 2017b) and *FamiliesAndSocieties* Expert Survey, authors' own computations.

## 5. Conclusions

Against the background of the "refugee crisis" in 2015, the present paper focused on *expected consequences* of forced migration for *future vulnerability* of families with children in destination countries. We used data from an expert questionnaire conducted at the peak of the "refugee crisis" in late 2015 and early 2016. At that time, fears and worries about negative consequences of refugees for host societies were widespread (Berry et al., 2015; Esses et al., 2017; Dalla Zuanna et al., 2015).

The literature review showed that immigrants are generally among societal groups with high risk of vulnerability (Hooijer & Picot, 2015; IOM, 2015). Refugees are usually vulnerable (e.g. Black, 2001; Keller et al., 2003; Renner & Senft, 2013). Their vulnerability is often multidimensional. They are frequently impaired by economic hardship, psychological symptoms, and missing social embeddedness in the host country. In particular, children can suffer from consequences of their flight for years (Pumariega et al., 2005; Wenzel & Kinigadner, 2016). Consistently, experts in our questionnaire study expected an increase in economic, psychological and social vulnerability of families in Europe from 2015 to 2020 due to present and future refugee flows.

In addition, our findings revealed regional differences in the expected effects of refugee flows. Although, these differences are partly in line with welfare and migration regimes of European countries, they mainly reflect their roles during the summer and fall 2015. On average, estimated increases in vulnerability between 2015 and 2020 were largest for



German-speaking and northern countries. In particular with regard to expected increases in economic vulnerability, three prominent target countries of migrants during the “refugee crisis” of 2015 stand clearly out: Sweden, Austria and Germany. The higher the number of asylum applications in 2015, the higher were expected increases in future vulnerability for the next years. The affectedness by the “refugee crisis” was, however, more or less irrelevant for long run expectations.

Focusing on estimates for long-term psychological and social vulnerability, average expected increases of vulnerability due to refugees are as large or even larger for western and southern European countries. Only estimates for vulnerability increases in eastern European countries are usually low. Vulnerability of families is already at a rather high level in many eastern European countries. In addition, many of them follow strict anti-immigration strategies.

On average, respondents also expected vulnerability increases between 2020 and 2050. However, the opinion that *economic* and *psychological* vulnerability will further increase after 2020 was supported by less than half of the experts.<sup>17</sup> One in seven experts even believed that economic vulnerability due to refugees will decrease between 2020 and 2050. This finding may reflect (a) studies suggesting that the refugees of 2015 are usually educated and willing to work (e.g. Buber-Ennser et al., 2016; UNHCR, 2015; Spahl et al., 2017) and (b) research predicting small but positive effects of refugees on national accounts in the long run (e.g. Melander & Pichelmann, 2015; Pretenthaler et al., 2017).

Noteworthy, future effects of refugee flows on the *social vulnerability* of families with children were perceived most negative. Regarding social vulnerability, the development was furthermore assumed to be negative in the near as well as in the far future: More than half of experts expected even a further increase of social vulnerability until 2050 while less than one in ten thought that it will decrease after 2020. Given the definition of social vulnerability in the questionnaire, it can be assumed that these experts expected stigmatisation and discrimination to grow, probably resulting in a lack of social support. In our opinion, this result should be interpreted as a warning that social cohesion in European societies may be at risk.

The so called “refugee crisis” already had marked societal consequences. Nationalist parties arguing against refugees by referring to economic migration and threats of terroristic attacks are on the rise in many countries. While the humanitarian challenge has hit Greece and Italy as frontline countries, several other countries struggle with the integration of the arriving people as well. As a result, social cohesion seems to be weakened on several levels: First, problems to establish a quota system demonstrated missing solidarity between EU member states. Second, the differentiation in citizens welcoming displaced people and those afraid of cultural differences and financial burden have led to more polarised societies. Third, a lack of social support for and/ or integration of arriving people may add complexity to the problem of social cohesion. This final point may be the

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<sup>17</sup> We can only speculate but many experts may think that the crisis of 2015 was exceptional. This may be due to improved conflict management, closed borders, higher capacities of integration etc.

main message of this paper. Policies need to strengthen public confidence and trust to improve the societal climate (Carrera et al., 2015; Dalla Zuanna et al., 2015; Esses et al., 2017; Holmes & Castañeda, 2016).

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## Appendix

Table A.1: Vulnerability of families with children and migration in Europe in 2015

	Family vulnerability			Migration statistics			
	Households with dependent children			Share of foreign-born in total population (in %)	1 <sup>st</sup> time asylum applicants		
	% at risk of poverty or exclusion	% reporting life not worthwhile	% having no one to rely on		Absolute number	% of EU total	Applicants per million inhabitants
<b>Central western Europe</b>							
Austria	19.1	2.1	2.2	17.2	85,505	6.8	9,970
Belgium	20.8	4.5	7.1	15.7	38,990	3.1	3,463
Germany	16.7	5.5	4.2	13.0	441,800	35.2	5,441
France	19.4	2.8	6.6	11.9	70,570	5.6	1,063
Luxembourg	21.2	.9	15.0	44.2	2,360	.2	4,194
Netherlands	15.4	.6	4.1	11.8	43,035	3.4	2,546
Switzerland	15.8	1.0	2.8	28.0	38,060	-	4,620
<b>Western Europe</b>							
Ireland	29.1	2.4	3.3	16.2	3,270	.3	707
United Kingdom	27.4	3.0	6.7	13.0	38,370	3.1	591
<b>Northern Europe</b>							
Denmark	13.4	1.2	2.3	10.5	20,825	1.7	3,679
Finland	13.0	.4	1.6	5.8	32,150	2.6	5,876
Norway	11.4	.6	3.4	13.8	30,470	-	5,898
Sweden	12.5	1.9	2.3	16.4	156,110	12.4	16,016
<b>Southern Europe</b>							
Cyprus	28.4	3.8	5.7	21.2	2,105	.2	2,486
Greece	38.4	5.7	10.7	11.4	11,370	.9	1,047
Italy	31.7	1.9	12.4	9.5	83,245	6.6	1,369
Malta	23.9	1.2	3.6	9.9	1,695	.1	3,948
Portugal	27.1	2.1	11.5	8.3	830	.1	80
Spain	32.9	1.5	4.3	12.7	14,600	1.2	314
<b>Central eastern Europe</b>							
Czechia	15.0	2.8	2.4	4.0	1,235	.1	117
Hungary	31.1	3.4	2.4	4.8	174,435	13.9	17,699
Poland	24.5	2.6	2.7	1.6	10,255	.8	270
Slovenia	15.5	1.1	2.0	11.5	260	.0	126
Slovakia	20.4	2.4	1.1	3.3	270	.0	50
<b>Baltic countries</b>							
Estonia	20.7	1.7	3.0	14.7	225	.0	172
Latvia	27.8	2.0	8.7	13.4	330	.0	165
Lithuania	27.2	2.8	2.2	4.7	275	.0	93
<b>South eastern Europe</b>							
Bulgaria	39.9	10.2	4.7	1.7	20,165	1.6	2,800
Croatia	25.5	5.3	9.4	13.3	140	.0	34
Romania	40.9	3.2	5.4	1.4	1,225	.1	62
European Union	25.1	3.1	6.1	10.5	1,255,640	100.0	2,470

Source: Eurostat (2016a; 2016b; 2017a; 2017b; vulnerability data from EU SILC 2013 - 2015).

Table A.2: Vulnerability estimates for single countries (mean ratings; scale from -3 to +3)

Period:	2015 - 2020				2020 - 2050			
Dimension of family vulnerability:	Economic	Psychological	Social	Total	Economic	Psychological	Social	Total
Central western Europe								
Austria	.86	.50	1.14	.87	.71	.20	.71	.55
Belgium		1.00		.86		.75		.71
Germany	.67	.75	.83	.75	1.00	.50	.50	.69
France		1.00	.43	.73		.50	.14	.27
Netherlands	.00	.67	.80	.55	.00	.33	.60	.36
Western Europe								
United Kingdom	.40		.33	.38	.20		.33	.25
Northern Europe								
Norway				.80				1.00
Sweden	1.22		1.00	1.15	.44		.00	.31
Southern Europe								
Italy	.57	.33		.50	.21	.17		.27
Spain	.43	.50	.78	.60	.00	.50	.78	.45
Central eastern Europe								
Czechia			.67	.60			.00	.00
Hungary	.50			.50	.50			.33
South eastern Europe								
Bulgaria			1.00	.67			1.33	.50
Romania		.67	.00	.25		.00	.33	.00

Note: Experts assessed the effect of refugee flows for future vulnerability on a 7-point rating scale ranging from -3 (strong decrease) to +3 (strong increase of vulnerability). Given are average ratings for countries with at least three expert ratings for single vulnerability dimensions and at least five expert ratings for pooled total ratings, respectively.

Source: FamiliesAndSocieties Expert Survey, authors' own computations.

Table A.3: Possible determinants of estimations of effects of present and current refugee flows upon future vulnerability of families with children (four regions)

Models analysing the estimated effect of refugee flows on future vulnerability:	M0	M1	M2	M3	M4	M5
Covariates	b (se)	b (se)	b (se)	b (se)	b (se)	b (se)
Mean (constant)	.54 (.06)***	.69 (.11)***	.65 (.12)***	.65 (.14)***	.75 (.26)**	.65 (.29)*
Region: German speaking and Nordic countries		.00	.00	.00	.00	.00
western countries		-.17 (.16)	-.16 (.15)	-.17 (.15)	-.20 (.16)	-.23 (.15)
southern countries		-.17 (.16)	-.18 (.16)	-.15 (.16)	-.17 (.16)	-.20 (.16)
eastern countries		-.39 (.18)*	-.39 (.18)*	-.38 (.18)*	-.41 (.18)*	-.32 (.18)†
Expert: practitioner			.00	.00	.00	.00
scientist (0/1)			.07 (.12)	.08 (.12)	.13 (.14)	.19 (.14)
Period: 2015-2020				.00	.00	.00
2020-2050 (0/1)				-.22 (.06)***	-.22 (.06)***	-.14 (.06)*
Dimension: economic vulnerability				.00	.00	.00
psychological vulnerability				.11 (.12)	.08 (.13)	-.04 (.13)
social vulnerability				.19 (.13)	.19 (.13)	.16 (.12)
Opinions and attitudes:						
government should take more responsibility (agreement: 1 to 7)					.03 (.03)	.03 (.03)
important to hold on to tradition (agreement: 1 to 7)					-.04 (.04)	-.04 (.04)
General assessment of future vulnerability development (-3 to 3)						.26 (.07)***
Gender: male						.00
female (0/1)						-.28 (.12)*
R <sup>2</sup> <sub>adj.</sub>	.00	2.21	2.35	4.68	5.81	14.07

Note: For these models, ratings referring to different dimensions of vulnerability and different periods of time (2015-2020 and 2020-2050) were combined. The total number of ratings amounts to 406. Standard errors were adjusted for the fact that some of the ratings are not independent from each other (i.e. the 406 ratings come from 176 experts). The scale of the dependent variables indicates what experts think about how the share of vulnerable families will develop due to current and future flows of refugees. It ranges from -3 (strong decrease) to +3 (strong increase). A constant was included in all regressions: The positive values between .54 and .75 indicate that expert ratings are slightly positive (i.e. experts on average expect a small increase of vulnerability due to current and future refugee flows). Shown are unstandardised regression coefficients (b) and standard errors (se). For instance, b=-.39 in model M1 indicates that experts for eastern Europe see a lower increase of vulnerability of families with children due to refugee flows than experts for German speaking and Nordic countries do. On the other hand, b=.19 in model M3 means that experts perceive social vulnerability to increase more than economic vulnerability due to current and future refugee flows. † p < .1; \* p < 0.05; \*\* p < .01; \*\*\* p < .001.

Source: FamiliesAndSocieties Expert Survey, authors' own computations.

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