Violence Against Women and Economic Independence

Francesca Bettio and Elisa Ticci

with the collaboration of
Monika Schröttle, Julia Habermann,
Janina Rosemeier and Silvia Sansonetti

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Table of contents

List of Tables

List of Figures

List of Boxes

Country Abbreviations

AT	Austria	FR	France	NL	Netherlands
BE	Belgium	GR	Greece	NO	Norway
BG	Bulgaria	HU	Hungary	PL	Poland
CY	Cyprus	IE	Ireland	PT	Portugal
CZ	Czech Republic	IS	Iceland	RO	Romania
DE	Germany	IT	Italy	SE	Sweden
DK	Denmark	LT	Lithuania	SI	Slovenia
EE	Estonia	LU	Luxembourg	SK	Slovak Republic
ES	Spain	LV	Latvia	UK	United Kingdom
FI	Finland	MT	Malta		

Executive Summary

Content

Economic independence and fighting gender-based violence are two key priorities in the 2016-19 Strategic Engagement for Gender Equality. Studies assessing economic and health implications of gender-based violence have been undertaken nationally in some Member States as well as for the EU as a whole. Fewer and less representative studies look at the issue the other way round, namely at how women's own financial independence and the broader economic conditions she, her partner and her household face impinge on violence. The present report addresses this knowledge gap.

The first part of the report undertakes a specialised literature review with the twin objectives of identifying key issues regarding economic independence and violence, as well as choosing theoretical perspectives to guide investigation on these issues. The review discusses selected contributions covering European and a few other countries –mainly Canada and the USA– published in the past quarter century. While several key issues emerge from the review, and a number of results are consistent across countries and time, a certain fragmentation and inconsistency of findings makes available knowledge unsatisfactory for evidence-based policy, especially at European level.

The second part of the report conducts an extensive empirical investigation using the recently released FRA survey data on violence against women (http://dx.doi.org/10.5255/UKDA-SN-7730-1). The survey was conducted in 2012 by the European Union Agency for Fundamental Rights (FRA) and the results were published in 2014. It is based on face-to-face interviews with 42,000 women randomly selected across the 28 Member States.

This empirical investigation in Part 2 is the first EU-wide attempt to address the possible influence of economic independence on violence against women (VAW). It covers physical, sexual and psychological violence against women, as well as sexual harassment: practically all types of violence against women except violence ending in murder, stalking and violence against children. A common set of indicators of economic independence and other explanatory variables is used to account for prevalence and frequency of abuse across the spectrum of violence. The analysis also shares a common set of statistical and econometric tools.

Questions put to the data include:

- whether the woman's labour status, earnings or household economic condition influence the perpetration of abuse by partners (physical, sexual or psychological abuse by partners is here referred to as intimate partner violence, IPV for short);

- whether the socio-economic condition of the perpetrator (employment and

labour force status, earnings, education) associates with violent behaviour on his part;

- what aspects of the woman's economic condition affect sexual harassment at work and in other settings; whether economic shocks engendered by sudden changes in the economic condition of the perpetrator or the victim are conducive to violence;

- whether the likelihood of IPV is influenced by her accomplishments in employment and education compared to her partner;

- to what extent financial independence increases the likelihood that a woman will quit an abusive relationship;

- to what extent availability of supporting services/provisions for VAW victims increases the likelihood that victims will quit an abusive relationship;

- whether occurrence of abuse is influenced by macroeconomic conditions, and if so, what types of abuse.

Findings

Violence against women occurs in all countries and cuts across cultural contexts and socio-economic conditions. However, the specialised investigation of this report reveals links of different intensity and in different directions between types of violence and specific socio-economic conditions.

The synoptic table below offers a graphic overview of selected main findings.

Conditions associated with change in probability of violence	Order of magnitude of estimated effect on probability					
	Physical violence		**Sexual violence**		**Psychological violence**	**Sexual harassment**
	by current partner	*by all*	*by current partner*	*by all*	*by current partner*	*by all*
Woman's own economic condition						
short term unemployed (*vs working*)	large increase					small increase
working (*vs not working*)					moderate decrease if childless	small increase
earning more than partner (*vs earning less than partner*)	moderate increase		large increase			
earning less than partner (*vs earning roughly the same*)	moderate decrease		moderate decrease		small to moderate increase	
household finding it difficult/very difficult to cope on present income (*vs living comfortably*)		moderate increase			moderate increase	moderate increase
upper secondary or tertiary education (*vs lower education*)	small decrease			moderate decrease		moderate increase

higher level of education than partner (*vs equal or lower education*)					small increase if childless	
Other conditions of woman						
age 18-29 years (*vs 30+ years*)		large increase				large increase
violence experienced in childhood (*vs no experience*)	large increase	large increase	large increase	large increase	large increase	moderate increase
ethnic or religious minority (*vs rest of population*)					moderate increase	small increase
Partner's condition						
not in labour force (*vs in labour force*)					small increase	
upper secondary or tertiary education (*vs lower education*)	moderate decrease		moderate decrease			
regularly gets drunk (vs *not regularly getting drunk*)	large increase		large increase		large increase	

Legend: the shades of blue and purple (decrease and increase, respectively) denote statistical significance at 1% (full colour), 5% (half colour) 10% (pale colour). White cells indicate results not statistically different from zero or not estimated: 'small' indicates less than 25% change in probability; 'moderate' between 25 and 50%; 'large' above 50% percent

How to read the table: With reference to the second row, a woman who works has a higher probability of suffering sexual harassment than one who does not work (second row, last column). The estimated increase in probability is less than 25% ('small') but is statistically very robust. In contrast, working correlates with lower risks of psychological abuse, but only for childless women (second row, second last column). Finally, since working is not associated with a significantly higher or lower risk of physical or sexual violence, the corresponding cells have been left blank.

In words, the importance of economic conditions for women's exposure to abuse can be summarized as follows:

- Financial independence influences probability of intimate partner violence (physical, sexual or psychological) via labour force status and earnings, but its influence is generally limited, and, more importantly, has different signs and strength depending on the type violence. The strongest influence that her financial independence exercises goes via household economic condition. Insofar as the woman gains financial independence by taking a job and her earnings significantly help to avoid or lessen household poverty, independence fences off the notable surge of violence consistently associated with households in critical economic condition. Exposure to sexual harassment by partners and non partners also increases for women belonging to these households.

- If we look at specific groups of women, the relationship between economic independence and exposure to violence is stronger and more direct. Sudden deterioration of economic condition may spur a male

partner to violence. Thus women experiencing some kind of economic shock, e.g. because they lose their job in a period of crisis, tend to be more exposed to physical violence (from partner) and/or sexual harassment. Women belonging to ethnic or religious minorities are more than twice as exposed to so-called economic violence, a specific form of psychological violence where the partner impedes access to employment, non-family or even family members, and money management tasks, including shopping. They are also more at risk of sexual harassment.

- Gaining economic independence has a clear association with sexual harassment. Working (as opposed to not working) correlates with increased probability of harassment, although the order of magnitude is limited.

- The comparative 'degree' of financial independence also matters, often with perverse effects. Specifically, how much she earns in comparison with her partner influences the risk of violence. Earning more than the partner increases exposure to both physical and sexual violence while earning less has contradictory effects, depending on the type of violence.

- The economic condition of her partner does not consistently associate with abusive behaviour. Being out of as opposed to in the labour force only associates significantly with higher likelihood of occurrence of psychological, not physical or sexual, abuse. Moreover, the increase in psychological abuse is small. What appears to be more important is the partner's level of education, with nearly double the likelihood of a low educated partner being more abusive physically or sexually than a better educated partner.

- There is some evidence in support of the assumption that VAW increased during the recent economic crisis, although the evidence is still mixed (not reported in the synoptic table, see chapter 6). Micro-level processes, such as unemployment, low earnings and household poverty, which lead to abuse during a recession, became more frequent, sustaining the expectation of a surge in violence. Judicial data on rape, sexual assault and homicide recently collected by Eurostat across countries is not inconsistent with this expectation, but trends differ across countries and types of violence. In comparison to 2008–2009 and in proportion to the female population, less women were intentionally killed in 2013–2014 in practically all reporting countries. However, more women were victims of sexual assault or rape in at least a large minority of reporting countries. Country-level evidence on the repercussions of rising unemployment and cuts to specialized services offer further indications that the crisis may have worsened exposure for women, but the evidence is still provisional.

While the importance of economic conditions varies, the findings in this report concur with the literature that two other factors consistently feature among the best predictors of abuse, especially by partners, namely the woman's experience of violence in childhood in the case of the victim, and alcohol abuse in the case of the perpetrator. Both are very strong predictors of exposure to violence in adulthood.

The findings concerning the age of the woman are also broadly in agreement with the literature, though they are more nuanced. Being young (18-29 years) is consistently associated with higher abuse across types of violence (all other things

being equal). However, differences in estimated probabilities of abuse with respect to older women are only statistically significant for physical abuse and for sexual harassment (by all perpetrators).

The report also conducted preliminary investigation of the factors that may facilitate separation from abusive relationships. A result worth noting is that the likelihood of separation increases by a non negligible (and statistically significant) amount among women who are aware of specialized services for victims of abuse (in comparison with women who are not).

Annotations for policy

Because of the inevitable limitations of the data for the kind of analysis conducted in the report, the results should be treated with caution. Some results more than others require further refinement in order to offer operational guidance for evidence-based policy.

The findings are nevertheless informative for policy and call for multi-target multi-setting policy action spanning labour market and workplace policy, educational policy, media (especially cyberspace) policy, as well as social and family policy.

With regard to labour market policy, for example, the findings help match possible target groups with specific violence reduction objectives. Women in poor households are primary targets for action to curb physical and sexual abuse by the partner, as well as sexual harassment. Women who have recently lost their jobs should be monitored for increased risk of intimate partner violence while being helped to find a job. Students should be special targets in programmes addressing sexual violence and sexual harassment. Women belonging to religious or ethnic minorities are likely to benefit most from provisions addressing economic violence rather than physical or sexual violence. High earning professional women are likely to benefit from programmes alerting them (and their partners) about the increased risk of abuse that may be triggered by reversal of traditional earning roles.

Several findings indicate a need for educational policy, first and foremost the finding that irrespective of working status or earnings, well educated women are generally better able to fence off violence from their partners, and secondly the finding that poor education of the partner possibly has a stronger bearing on his abusive behaviour than his own economic condition. Well targeted educational programmes for young children are also warranted by the fact that early experience of violence remains a major predictor of experience of violence in adulthood.

Two pieces of evidence from our investigation directly impinge on social policy: the fact that male partner alcohol abuse associates with a fourfold increase in sexual and physical violence by that partner, and evidence that being aware of specialized services helps victims of violence quit abusive relationships.

Last but not least, the report found that sexual harassment significantly correlates with conditions that foster the economic independence of women: these conditions are working and being highly educated. The association was also found positive for conditions detracting from economic independence, such as living in a 'poor' household or suffering a sudden deterioration in economic prospects. Rather than being contradictory, these findings point to the need to combine targeted action for certain women with prevention for all women within and outside the workplace.

1. Motivation and structure of the report

Gender-based violence can take many forms: violence in close relations, sexual violence outside close relations (including rape, sexual assault and harassment), trafficking in human beings, slavery, and different forms of harmful practices, such as forced marriages, female genital mutilation, and so-called 'honour' crimes. No country, rich or poor, is exempt from any form of violence, but comparative prevalence rates may differ between them. For example intimate partner violence is less common in higher income countries, whereas sexual violence from non partners is more common in some of them (WHO 2013: Tables 3 and 4).

Awareness that comprehensive data and better knowledge about violence against women are essential for the development and monitoring of policies to combat this phenomenon, motivated the EU to accomplish a major breakthrough in how it collects evidence on gender-based violence. The first EU-wide survey on women's experience of various forms of violence was carried out by the European Union Agency for Fundamental Rights (FRA) in 2012 and is based on interviews with 42,000 women. It shows that many women across the EU continue to suffer from gender-based violence, including physical and sexual violence, as well as intimate partner violence. One in three women (33%) has experienced physical and/or sexual violence since the age of 15. One in 20 women (5%) has been raped since the age of 15. Domestic violence is widespread: 22% of women have experienced physical and/or sexual violence by a partner. Among these victims, 67% did not report the most serious incident of partner violence to the police or any other organisation.

Economic independence and violence are two key priorities in the 2016-19 Strategic Engagement for Gender Equality. At European level, however, studies have been conducted on the economic consequences of violence (EIGE 2014) whereas the issue has hardly ever been addressed the other way round. In other words, there are still few solid answers as to whether, how and how strongly women's own financial independence and the broader economic conditions she or her partner face impinge on violence. Yet such answers are evidently needed for effective evidence-based policy-making in this area. The present report aims to further knowledge in this respect.

The first part of this report undertakes a specialized review of existing literature with the complementary objectives of identifying policy-relevant knowledge gaps, singling out the important issues and selecting the theoretical perspectives that must guide empirical investigation. Analysis of the literature mainly covers European countries, but also extends to countries such as the USA, where studies on violence were often pioneered.

The main novelty of the report, however, is that Part 2 carries out the first ever comprehensive empirical investigation of the FRA dataset (individual records) devoted to the link between economic independence and violence. The investigation covers all types of violence against women except violence ending in death, stalking and violence against children.

Chapter 2 in Part 1 discusses the literature. Chapters 3 and 4 in Part 2 introduce the empirical investigation by illustrating the data, identifying the questions put to the data and detailing the empirical methodology. Chapter 5 discusses the findings of the FRA survey. Chapter 6 briefly integrates these findings with information from a different data source, i.e. recently released Eurostat judicial data on homicide, rape and sexual assault. Chapter 7 wraps up the findings, and concludes by briefly examining the advantages and limitations of the analysis, as well as its policy relevance.

PART 1: The literature

2. Economic conditions and violence against women

2.1 Economic dimensions of intimate partner violence: theoretical background

This chapter undertakes a specialised selected review of the literature on violence against women: specialized because it looks specifically at contributions investigating possible repercussions of economic independence on VAW; selected because it only considers developed countries and, among the latter, prioritises Europe, the USA and some other English-speaking countries. Attention is focused on abuse perpetrated by partners – any type (this section) – and sexual harassment by partners and non partners (section 2.2).

According to the Istanbul Convention, "'*domestic violence' shall mean all acts of physical, sexual, psychological or economic violence that occur within the family or domestic unit or between former or current spouses or partners, whether or not the perpetrator shares or has shared the same residence with the victim" (article 3).* In the social science literature, domestic violence is sometimes referred to as Intimate Partner Violence (IPV) although the two concepts do not entirely coincide. IPV has received the largest theoretical attention in developed countries as it is believed to represent the most widespread form of violence against women.

The idea that IPV has roots in the economic position of women, their partners and their households is far from new. To confine analysis to social science literature in developed western countries over the last 50 years or so, **prevalence at the micro level is linked to three basic concepts: the absolute level of material resources women, their partners and the household can count on, women's relative level in comparison with their partner, and sudden change therein**. **Macroeconomic conditions** are also relevant insofar as they influence individual as well as household resources. But they may also matter for reasons other than level and distribution of resources, for example because an increase in poverty may reduce the **opportunity cost of perpetrating crimes**.

Drawing from Blood and Wolfe's (1960) resource theory, Goode (1971) articulated the idea that the **absolute level of material resources matters**. In Goode's view men command more physical force and more material resources within relationships, and use both to enforce compliance with their wants by other family members, spouses in particular. When material resources are not enough, they may

compensate by using violence or threatening to use it. Male partners with lower education, earnings, wealth or prestige are therefore expected to resort to violence more frequently.

The household bargaining approach and **resource dependency theory** look at the role of material resources from the woman's perspective. Among economists, supporters of the **household bargaining** approach typically assume it is each partner's share of economic resources (earnings, assets) that matters, because the person with the greater resources has the greatest bargaining power. One way women are able to bargain within their relationships is to threaten to leave. The effectiveness of this threat is proportional to their 'fall-back position', namely the resources they can summon at separation (McElroy and Horney 1981). If divorce is rare, the partner with higher resources can restrict access to the other partner, forcing the latter to accommodate (Lundberg and Pollak 1993). In all cases, women's own labour income or financial support from outside the partnership (welfare, divorce settlements, inheritance and so on) are expected to boost their ability to bargain and stall off violence (Farmer and Tiefenthaler 1997). The prediction is that the risk of violence should be higher for lower educated women (who can less easily find a good job in case of divorce), for non working or unemployed women and for women without adequate welfare support; the presence of dependent children is also expected to increase the risk of violence as long as upbringing remains largely women's responsibility.

In sociological research, **resource dependency theory** draws similar conclusions, starting from the assumption that what matters is not men's resources or even relative resources but women's socio-economic resources. The theory holds that fewer economic opportunities and multiple socio-economic constraints limit women's intra-household negotiating power, hence their ability to mitigate or defend themselves from domestic violence (Rodriguez-Menes and Safranoff 2012). Earlier on in the debate, Kalmuss and Strauss (1982) introduced a distinction between objective and subjective dependence, with objective dependence largely coinciding with economic dependence. According to their findings, objective rather than subjective dependence correlates with exposure to the most severe types of violence.

Relative resource theory, an extension of resource theory, challenges the expectations that IPV is more frequent if the male partner or the female partner have fewer resources. Male violence, the argument goes, may be triggered by imbalance in gender resources rather than absolutely low levels for one or the other partner (Macmillan and Gartner 1999; McCloskey 1996). Male partners tend to feel their masculinity threatened by a spouse with 'excessively high' levels of resources such as assets, earnings, occupational prestige or even education. When this happens, partners may responds with 'gender neutralisation' behaviour: the perpetrator may try to counter the threat by intensifying violence that the victim may accept in order to reaffirm her 'good wife' disposition. Hence the effect, say, of the woman's employment status on the risk of violence is conditioned by the employment status of her partner: if both are employed her employment reduces the risk of violence but the converse happens if he is unemployed or out of work. Similarly for earnings, education and other resources.

In their contribution, Macmillan and Gartner stress that imbalance in economic resources matters for violence insofar as the resources in question have symbolic meaning. With specific reference to employment, "*the primary significance of employment for spousal violence is as a measure of the relative statuses of husbands and wives within a relationship structured by gendered expectations of male authority and female dependence*" (Macmillan and Gartner 1999: 957). In other words

their argument that gender imbalance in resources against the male partner elicits IPV is premised on the assumption that expectations of traditional gender roles are universal.

Atkinson et al. (2005) challenge this premise and propose their own variant of relative resource theory. According to what the authors call **gendered resource theory**, relative resources matter only if the male partner holds traditional views about gender roles. Partners who tolerate or are supportive of women's employment, earnings and achievements need not feel threatened if they are outperformed.

We may think of the contribution by Atkinson et al. as updating sociological theory in the light of on-going cultural change. In economics, it was Anderberg et al. (2013) who recently updated the household bargaining approach and clarified its predictions. Focusing on unemployment, Anderberg et al. argue that female unemployment is likely to be associated with an increase in domestic violence while a decrease should be observed if her partner enters unemployment. Assume that, unknown to his spouse, a male partner who is prone to using violence becomes unemployed. If he is rational, he will act strategically and refrain from using violence for fear of alienating his partner on whom he is now more dependent. Conversely, if the woman becomes unemployed she will be more reluctant to leave him even if he behaves violently. While this may clarify the implications of the bargaining approach, it also marks a clearer difference with those from resource theory.

Is it a given economic condition – being financially poor or unemployed or earning less (more) than one's partner – **that enhances the risk of using (receiving) violence? Or is it change in economic conditions** that matters? Fox et al. (2002) argue that **family stress theory** (Farrington 1986) can be combined with **resource theory** to explain why experiencing change in a specific condition is more consequential for violence than being in that condition. Hence entering unemployment is more likely to elicit IPV than being unemployed; similarly, earning consistently less than the partner need not call for violence, whereas the male partner is more likely to react violently when his comparative earnings suddenly decrease, making him more dependent on his partner. In the language of economists, violence within the family is often triggered by sudden economic shocks.

Criminologists add an interesting twist to the idea that economic independence and IPV may be related. In their view, the link is indirect and hinges on time of exposure to violence. According to the **exposure reduction hypothesis** (Dugan et al. 1999), women who work face lower risks because they spend less time at home, which is where IPV is perpetrated.

Let us gather the threads up to now: whether we interrogate economic or sociological theory, we find good reasons to investigate a variety of links between IPV on one hand and the economic and financial conditions of the woman, her partner and her family on the other. Not infrequently, however, predictions about what may trigger violence are not consistent across theoretical frameworks. While this is to be expected at theory formation stage, inconsistency of empirical findings is more troublesome. Yet inconsistency will surface from the review of the empirical literature that we carry out in the next section. We return to this issue in the concluding section of Part 1 where we wrap up the literature review.

2.2 Economic dimensions of intimate partner violence: evidence

How then does theory fare when confronted with evidence? In reviewing empirical studies this section continues to focus on developed countries – mainly Europe and developed English-speaking countries – but further restricts the horizon to the last twenty years or so. We begin the review with so called 'economic violence' because of its manifest connection with economic and financial issues within households. The focus is then broadened to studies of IPV in general.

2.2.1 Economic violence

Economic violence is one of several forms of violence which can occur in intimate partner relationships, and it is often referred to as 'economic abuse'. According to Adams (Adams et al. 2008: 564), *"Economic abuse involves behaviours that control a woman's ability to acquire, use, and maintain economic resources, thus threatening her economic security and potential for self-sufficiency."*

Economic abuse takes many forms, such as the man taking his partner's money or property, he alone managing financial resources, allotting her pocket money, controlling her expenses, and forcing or forbidding her to work or to attain a certain level of education (Opferhilfe beider Basel 2015; Frauen helfen Frauen in Not e.V. 2015; Bundesministerium für Familien und Jugend 2015; Sanders 2015: 22f). He may also steal money from his partner or run up debts (Adams et al. 2008: 567).

Evidence that economic violence is widespread is perhaps the best demonstration that women's economic condition and violence are closely related, since the manifest goal of economic violence is the male partner's attempt to thwart his partner's independence. Such evidence is actually strong. Adams et al. interviewed 103 women who had recourse to one of five domestic abuse victim service agencies in a Midwestern State in the USA. All reported psychological violence, 98% reported physical violence in the last six months of the relationship and 99% stated that they had experienced economic violence. For the male partner, economic violence was a significant element for retaining power and control over his partner (Adams et al. 2008: 570f, 580).

In the 2003 German nationally representative survey on violence against women, 17% of those who had experienced physical and/or sexual violence in their current relationship (855 in all) stated that the partner controlled how much money they spent (Schröttle and Müller 2004: 249). Also, unrelated to physical/sexual violence, 8% of all partnered women (6467 in all) stated that their partner controlled exactly how much money they spent; 6% could not decide about money themselves or things they wanted to buy, and 4% stated that their partner made them feel that they were financially dependent on him. Of course the same woman often experienced more than one form of abuse.

Qualitative studies also find that economic abuse is an important component of IPV. Based on 30 in-depth interviews of low-income women with a current or recent history of domestic violence, Sanders found that financial issues often spark off physical, sexual and verbal abuse. She also found that economic violence may lower women's ability to leave abusive relationships for manifest reasons: economic violence directly impairs economic independence, hence ability to make ends meet when living on one's own; the more so if there are children (Sanders 2015: 23).

All this is consistent with resource theory and the household bargaining approach, however the findings by Brush (2003) issue a warning that such evidence cannot be taken to imply that gaining financial independence is tantamount to reducing

economic violence. <u>If the woman retains an abusive partner</u>, Brush claims, economic abuse may even increase when she enters employment. The author conducted structured interviews with 162 women on welfare benefits between 1998 and 2001 in the USA. She found that in the assessment of those women who reported economic abuse, going to work either precipitated or aggravated the abuse; at best it had no effect. Only a minority of these women (at most, 25%) reported that working reduced economic abuse or stopped it altogether. However, the same study found that among women reporting post-traumatic stress disorder (on account of violence), symptoms improved after entering employment, even if the actual frequency of abuse went up. In other words, entering employment did not reduce IPV but eased some of its worst consequences[1].

2.2.2 Partners' economic condition and intimate partner violence

Turning now to empirical investigation of all forms of IPV, contributions are organized according to broad theoretical affinity. The review begins with studies that broadly address the predictions made by resource theory and the household bargaining approach. Contributions that put relative and gendered resource theory to the empirical test are reviewed next, followed by those looking at the effect of change in economic conditions. Lastly we examine evidence on the importance of economic conditions for a woman's decision to leave an abusive partner.

One widely investigated prediction of **resource theory** is that **male partners with lower resources are more likely to become IPV perpetrators**. A representative Finnish postal survey conducted in 1997 analysed the statements of 4955 women aged 18 to 74 years. According to the results, unemployed men had been violent to their partners slightly more often in the previous twelve months than men working full-time (13% compared to 10%). Men working part-time exhibited perpetration rates similar to those of unemployed men. Irrespective of working status, frequency of abuse was also higher among less educated men (Heiskanen and Piispa 1998: 50).

The results of a French survey also confirm that male partner unemployment associates with higher risk of violence. The survey was based on a representative sample of 6970 women aged 20 to 59 years who were interviewed by telephone in 2000 (Fougeyrollas-Schwebel 2005: 4, 9). Around the same time but on the other side of the Atlantic, Benson and Fox (2002) combined U.S. Census data with data from the first two waves of the National Survey of Families and Households (NSFH) to compute the risk of IPV among women whose partner had experienced unemployment between the two waves of the survey. They found that in the case of at least two spells of unemployment, the risk was three times higher than for women whose partner was in more stable employment (National Institute of Justice 2002: 55).

Back in Europe, the 2003 German survey on prevalence of violence asked women who had experienced more than one episode of violence in their last abusive relationship what had triggered the first violent incident. Seven percent of 799 women

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1 The evidence brought by Brush can actually be given an alternative interpretation: for women in abusive relationships, entering work does not have a large 'protective' effect because for male partners, state-dependence on abuse (akin to 'habit') more than compensates any effect of the wife's employment. This is precisely the interpretation that Bowlus and Seitz (2006) gave of their findings about the effect of employment on violence among Canadian wives who did not leave abusive husbands. We discuss Bowlus and Seitz's findings below.

reported that it was related to their partner's unemployment; 3% that it first occurred when the partner was promoted at work and 2% that it developed with the partner's professional decline (Schröttle and Müller 2004: 261). Further analysis of the German survey revealed, moreover, that men without a stable job and on a very low income, as well as men in households with very limited economic resources, used (severe) violence against their partner more often.

While all these studies bring support to the classic version of resource theory, their findings are often based on simple prevalence rates, which cannot be taken as proof of causal relationships. Anderberg et al. (2013) challenge the findings from these studies concerning the role of male unemployment and do so by means of a more ambitious econometric methodology to establish causal links. They report evidence in support of their ('updated') version of household bargaining, whereby potentially violent men actually refrain from being violent to their partner when they become unemployed. Using data from the British Crime Survey and the UK Annual Population Survey, they find that an increase in male unemployment rates leads to a reduction in intimate partner violence (Anderberg et al. 2013: 23).

Turning now to **the woman's economic condition** and the prediction **that socio-economic dependence and/or lower bargaining power exposes her to violence,** support comes from the already mentioned Finnish survey. Women in the survey who were unemployed, self-employed or in maternity leave, reported experiencing IPV more often (Heiskanen and Piispa 1998: 15). The French survey, to which we also referred earlier, shows that the risk of violence increases when one of the partners has been out of work once, with repeated interruptions doubling this risk and even tripling it for very serious violence, regardless of which partner is unemployed (Fougeyrollas-Schwebel 2005: 9). An Italian survey carried out in 2002 among 510 women using social and health services in the north of the country showed that female unemployment and precarious employment was associated with violence from partners or non partners. The results of logistic regressions indicated that this finding was statistically significant (Romito and Gerin 2002).

Like other early studies for the USA, Lloyd and Taluc (1999) offered early evidence that female unemployment and job instability were correlated with a higher risk of violence for the woman. However, support for the resource hypothesis is mixed: using logistic regression, they showed that being abused did not differentiate the likelihood of being in or out of employment.

The more recent findings by Aizer (2010) are clearer. She finds that rising (potential) wages for women compared to men in the US between 1990 and 2003 helped reduce domestic violence by 9%. Given the method she employs, the author feels justified in interpreting the findings as evidence of a causal link, rather than a simple association. Her results are consistent with the household bargaining framework, since a rise in the wages a woman can command when she seeks employment (potential wages) improves her earning prospects in the case of divorce.

Bowlus and Seitz (2006) also find evidence of a causal link from working status to reduced violence for women from the 1993 Violence Against Women Survey for Canada, a national representative survey. In their account, however, this causal link only worked for young women who "*are able to reduce the likelihood of abuse through working, but only before abuse arises in marriage*". It did not work for women already in abusive marriages: as noted earlier, the authors suggest that husbands' state-dependence on abuse counteracted any positive effect of working (Bowlus and Seizt 2006: 3).

There is more than one conceptual approach upholding the idea that **poor resources are associated with a higher prevalence of violence** not only at individual level, i.e. for either partner in the relationship, but also **at household level**. Resource theory is one of them. In the considerable empirical literature investigating this idea, the evidence is generally supportive. Here we report some selected examples. According to the 2003 German survey on violence, couples with few resources are subject to more frequent as well as severe episodes of violence, especially in younger age groups. Specifically, the risk of experiencing violence or severe violence increases when both partners are in difficult economic situations: no income, unemployment and low educational level, especially in younger and older age groups (Schröttle and Ansorge 2008: 142).

Using the 2008/2009 British Crime Survey, Towers (2015) investigated bivariate and multivariate relationships between IPV on one hand and different indicators of income and of socio-economic status of women in the UK on the other. She found several statistically significant bivariate correlations, e.g. between long-term unemployment and risk of IPV. However, when violence is examined in relation to all potential determinants by multivariate analysis, only two such determinants reach a conventional level of statistical significance: household income and residential property. She also found that the economic status of the neighbourhood matters.

The above mentioned study that Benson and Fox (2002) carried out for the Washington-based National Institute of Justice also found that neighbourhood status matters alongside the level of income of the household. Specifically, their results disclosed a rather consistent pattern: as the ratio of household income to needs went up, the likelihood of violence diminished. In the case of couples reporting high financial strain, moreover, the woman's risk of experiencing violence was found to be three times higher. Last but not least, women in disadvantaged neighbourhoods were found to be more likely to be victimized repeatedly or to be injured by their domestic partners (NIJ 2004: 5-6).

Finally, Mavrikiou et al. (2014) indicate that household income is a risk factor for partner violence against women in a country as different from the USA as is Cyprus. Because household income is important for economic and social success, the authors argue, if there is not enough income available, violence will occur more frequently (Mavrikiou et al. 2014: 300).

Do resources of each partner separately matter for IPV or do comparative resources matter, as suggested by the gendered and relative resource hypotheses suggests? Prevalence studies, mostly from Europe, appear to indicate that resources matter both ways, depending on the type of resource and the nature of the violence. Some analytical studies, mostly from the USA, provide neater evidence in favour of comparative resources.

Drawing from the noted French survey on prevalence of violence, Jaspard found on one hand that among 20-24 year old women who study and are unemployed, experience of domestic abuse of all types is more frequent than among young working women (14% and 12% against 9%, respectively). For older women, however, physical violence from partners is more prevalent among higher-level employees regardless of frequency: 4% of higher level employees reported at least one instance of IPV, compared to only 2% of lower or intermediate level employees. Occasional psychological pressure is also found to be mentioned more often by students and highly qualified women (Jaspard 2001:3).

A recent survey carried out on a (random) sample of 1039 married women living in Tirana (Albania) investigated the prevalence of physical violence in the year pre-

ceding the interview (Burazeri et al. 2015). Prevalence turned out to be associated with the economic condition of the male partner as well as with comparative conditions between partners. Specifically, women were at higher risk if they were more educated than their husband or held white collar jobs. Very low education or rural background of the male partner also increased the risk.

The picture emerging from the German survey indicates that household absolute level of resources matters, whereas within households it is imbalance in favour of women that facilitates the outbreak of violence. As we noted earlier, the reported risk of experiencing violence or severe violence at the hand of the partner was found to increase when both the woman and the man were in a difficult economic situation, especially in younger and older age groups (no income, unemployment, low educational level). However, the same happened when the woman was equal or superior to her partner in terms of education, employment status or income, especially women of the middle and older generations (Schröttle and Ansorge 2008: 142).

Results akin to those for Germany are reported by Kaukinen for Canada, although the author derives her findings from multivariate logistic analysis of data from the 1999 Canadian General Social Survey rather than from simple prevalence rates (Kaukinen 2004: 458, 461). Based on the survey responses of 7408 women, she found that women with a higher educational level experienced psychological violence significantly less often than women with lower levels of education. However, this protective function of education only worked if the woman's educational level was less than that of her partner. In contrast, women with the same or higher education as/than their partner faced a high risk of psychological abuse. A similar picture was seen for income: the higher the woman's income, the less often she experienced emotional violence. However, women who earned 65% or more of the household income were at 40% greater risk of experiencing psychological violence from their partner. If the woman had a job, but the partner did not, the woman ran almost double the risk of emotional violence compared to women in other partnerships (Kaukinen 2004: 463ff).

Finally, women with higher education than their husbands were 70% more likely to experience physical violence, according to Kaukinen's results. In the case of physical violence, however, mismatch in employment status or imbalance in labour income with respect to her partner were not found to exert significant influence, possibly because the subgroup of women reporting physical violence was small (Kaukinen 2004: 464ff).

Several US studies investigate the importance of partners' comparative economic conditions, starting from the earlier contributions that articulated the relative resource hypothesis. In particular, Macmillan and Gartner (1999) analysed the statements of 12,300 women, 18 years of age or older, resident in one of the ten Canadian provinces with current legal or common-law spouses. Using latent structure analysis and multinomial regressions they found that women's employment lowered the risks of spousal abuse when their male partners were also employed but substantially increased these risks in the converse case. The authors took these findings to imply that female employment or male unemployment do not affect the risk of spousal violence per se, as suggested instead by resource theory (Macmillan and Gartner 1999: 957). McCloskey (1996) similarly found that relative income rather than family income predicted abuse (both severity and frequency).

These earlier studies are examples of a strand of literature in which explanations based on absolute levels of resources are counterposed to those rooted in comparative resources. Atkinson's more recent contribution follows in the same tradition.

The author actually reviews several studies in favour of either explanation, which we do not review here. In his own contribution, he employed information about 4,296 couples in the first wave of the National Survey of Families and Households in the USA. By logistic regressions, he estimated the likelihood of physical nonsexual abuse, reporting that (i) a husband's absolute level of earnings did not predict violence, (ii) a husband's relative earnings were negatively and significantly related to the likelihood of abuse, but not among men holding egalitarian ideas about gender roles (Atkinson 2005: 1145). This illustrates his idea of turning the relative resource explanation into the gendered resource explanation.

As noted earlier, one important question raised in the literature is how **change in economic conditions matters for domestic violence**. Benson and Fox (2002) and Benson et al. (2002) underline the importance of the kind of economic change that brings economic distress to individuals and families. Recall in particular the finding from their investigations of NSFH data that the risk of violence was three times higher for women whose partners had experienced more than one spell of unemployment between the first and the second wave of the survey (see above). While this finding is consistent with resource theory, according to the authors it is also consistent with family stress theory since unemployment is a change in status that brings distress. In their view, another result from their investigation strengthens the importance of economic distress. Reportedly, cross-sectional investigation of waves 1 and 2 of the survey (i.e. separate investigation) failed to reveal any significant influence of relative partners' earnings on occurrence of violence in either year. In contrast, the likelihood of violence increased if a shift had taken place between waves toward greater reliance on the female partner's contribution to earnings.

Riger and Staggs (2004) studied the effect of change in the woman's employment status in a rather different context. Between 1999 and 2002, they carried out three rounds of interviews with 1331 women who had received welfare benefits in Illinois in 1998. Using standard statistical tools (mainly analysis of variance) they found that women who had started working during the period of investigation tended to face higher risk of violence while the opposite was observed for women who went off work. Although the authors acknowledge that the results are somewhat inconsistent, depending on the year and the indicator of abuse used, they do find them supportive of what they call 'male backlash' hypothesis, a variant of relative resource theory whereby gains in financial independence are likely to increase risks of violence against women (Riger and Staggs: chapter 5).[2]

However, the idea of a male backlash in the USA over the period encompassing the years of Riger and Stagg's investigation (1990-2003) is challenged by the evidence summoned by Aizer (2010), whereby a relative rise in female (potential) earnings with respect to the those of men over this period was found to be actually conducive to a decrease in violence. Aizer explicitly claims that her findings challenge the view of a male backlash (Aizer 2010: 1847).

Economic conditions may help trigger violence in the course of a relationship, and may also affect the chances of **separating from an abusive relationship**. In line with dependency theory or the household bargaining assumption, we may expect financial dependency to hamper separation in both rich and poor households. In poor households she may lack very basic resources to leave, e.g. money needed to contact a shelter and move there; or moving to a shelter may even worsen economic conditions. In rich households the decision to separate is bound to lead to a significant fall in the standard of living if the woman can command few resources

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2 For a discussion of the backlash hypothesis see Riger and Krieglstein (2000).

of her own (Hagemann-White 2004: 92f). Expectations that financial independence facilitate separation are borne out by several studies, but not consistently across countries.

Zlotnick et al. (2006) examined certain predictors of the rate of separation over five years in a subsample of women reporting IPV: the subsample was drawn from a representative sample of married or co-habiting American women. They found that almost half the women in abusive relationships left their partners – a finding in line with earlier empirical literature for the USA. The women were more likely to leave if they had higher social support and significantly lower individual income before leaving the relationship. This latter finding, the authors argue, does not necessarily conflict with previous findings in the American literature, in particular with the report of Anderson and Saunders (2003) that greater economic resources helped women leave abusive partners. Allegedly this is because low income made women in the sample of Zlotnick et al. eligible for welfare, which actually boosted economic independence. This effect was not visible among the women studied by Anderson and Saunders who lived in shelters and were already on welfare.

Qualitative evidence from Sanders (2007) brings further support to the argument that being more financially independent eases separations, though the perspective taken is that of dependent not independent women. Sanders examined the records from 30 interviews with low-income American women with a current or recent history of domestic violence. The results offer strong qualitative evidence that economic dependence makes it harder to leave a partner, especially if children are present. The study suggests that women frequently have very limited material or financial resources and often go into debt when they leave their partners (Sanders 2007: 22f).

Recent evidence from Spain goes in the same direction (Montero et al. 2012: 356). The authors estimated logistic regressions on a subsample of 1469 women with recent experience of IPV, drawn from a larger sample of female patients seeking primary care in Spanish health services. They found that the probability of leaving the abusive relationship was higher if the woman was employed, if she was younger when abusive behaviour first started and if she experienced abuse for relatively short periods (less than 5 years).

However, evidence from Germany warns that leaving home for a shelter, or simply leaving, may worsen women's condition, which may act as a deterrent. In 2014, the percentage of employed women in German shelters dropped from 23% to 17% during their stay in the shelter, which implies that a considerable number of women become unemployed because they are living in a shelter. Reasons for this include change of address or a different child care situation (Hagemann-White et al. 2004: 92f). However, the data also reveals that these women lived with an elevated risk of poverty even before staying in the women's shelter and that 77% did not have a personal income.

Women also often become homeless after separating from their violent partners. German statistics on homelessness show that slightly more than a fifth of the women lost their home because of a separation or divorce from their partner; 11% of the women named IPV as the reason for losing their home (Bundesarbeitsgemeinschaft Wohnungslosenhilfe e.V. 2013: 2). Separations from violent partner relationships or separations which themselves cause violence often mean an elevated risk of poverty, loss of social status and therefore economic security for the affected woman (Brzank 2012: 56, Brandau and Ronge 1997: 5).

What holds for Germany does not seem to hold for Finland. In the Finnish sur-

vey on violence already mentioned, very few women named economic reasons for returning to a violent partner; nor did they often mention 'external' obstacles to living alone, such as not having a place to stay (Heiskanen and Piispa 1998: 29). Such diversity of results between countries may depend on differences in welfare provisions or in macroeconomic circumstances, making it more or less easy for all women to find employment.

An alternative possibility is overemphasis of the importance of employment status for leaving abusive relationships. The quoted study by Bowlus and Seitz (2006) for Canada found that in contrast to conventional wisdom, abused women divorced much more frequently than non abused women (with a rate 1.7 to 5.7 times higher). The authors also found that the (estimated) probability of divorcing an abusive husband was driven by the personal characteristics of the woman, such as age and education rather than her being employed. In their view, causation does not run from employment to probability of divorcing, rather she has a higher probability of both working and separating from violent partnerships because she is young and well educated. This is an example of how contentious the issue of causation between economic condition and violence can be.

2.3 Economic conditions and sexual harassment: theory and evidence

2.3.1 No safe haven

If the threat of violence comes primarily from **partners** within the confines of the home, in public spaces it comes primarily **from non partners**. With women gradually integrating into the labour market and public institutions, frequent, if not always ferocious, forms of violence known as **sexual harassment** have increasingly attracted attention in research and policy circles. Moreover, it is progressively acknowledged (Numhauser-Henning and Laulom 2012) that sexual harassment happens not only in the workplace but also in educational settings and digital areas (internet, social media, Whatsapp, mobile telephony).

While earlier review studies for the European Commission (Rubenstein 1987, EC 1998) focused on sexual harassment in the workplace and revealed that it occurs in virtually all places of work, albeit to a varying degree, more recent contributions analyse acts and behaviours of sexual harassment that are also common outside the work environment. Data from the **FRA survey**, for instance, indicates that **68% of acts of sexual harassment** experienced since the age of 15 years **are perpetrated by unknown persons**. Unknown perpetrators are especially mentioned for **non-physical forms of sexual harassment** and for **cyberharassment**, but also in 33% of cases of 'unwelcome touching, hugging or kissing' (FRA 2014a: 113). Young women are particularly vulnerable to sexual harassment outside the employment context and to cyberharassment. The lifetime and 12-month prevalence rates of cyberharassment for women aged between 18 and 29 years are 20% and 11%, respectively, decreasing across older age groups. At the same time, 14% of women under 30 years have experienced sexual harassment from someone in school or training compared to 6% of women aged 30 or older (authors' estimates based on FRA data).

The attention that has been paid to sexual harassment in the workplace is very telling of the conceptualization of sexual harassment and engagement in sexually

harassing behaviours, such as abuse of authority over the victim, which is easily exercised through employment relationships. From this perspective, workplaces are viewed as settings of hierarchic relationships and differences in power, authority and functions, as well as of external, occupational and organizational prestige.

Different theoretical frameworks have been put forward to understand sexual harassment (McDonald and Backstrom 2008, Maass et al. 2003). **Sociocultural frameworks** suggest that sexual harassment reflects existing societal sex-role definitions, while **organizational frameworks** emphasise the role played by work organizations in creating a climate where sexual harassing behaviour is tolerated or even encouraged. **Social-identity and power frameworks** interpret sexual harassment as intentional behaviour on the part of men to maintain a position of power and their male identity[3].

In this strand of research, frequently asked questions about the role that women's economic status and other economic conditions have in sexual harassment include:

- whether and how gender roles at societal, community and organizational level influence exposure of women to sexual harassment outside their home, i.e. in the work place or where they study;

- to what extent job-related characteristics such as sector of employment, occupational and career position or job prestige of the woman are associated with higher likelihood of sexual harassment;

- whether the interaction between socio-demographic features and employment or economic status enhances vulnerability to sexual harassment (for instance for women belonging to ethnic minorities).

2.3.2 Sociocultural determinants

According to the **sociocultural model**, sexual harassment is a manifestation of a wider socio-cultural vision of gender relationships and their asymmetric power structure (Thomas 1997, Tangri and Hayes 1997, Uggen and Blackstone 2004). This strand of theorising, which conceives sexual harassment as culturally based behaviour, endeavours to explain cross-cultural and cross-country differences in sexual harassment.

Luthar and Luthar (2007) merged two models of cross-cultural differences based on studies by Hofstede (2001) and Schwartz (1999), and adapted them to the study of sexual harassment. Their conceptual framework suggests that cross-cultural differences in the prevalence and tolerance of sexual harassment can be explained in terms of two dimensions, namely power differences between people and degree of individualism/collectivism. The first dimension influences social acceptability of inequality and hierarchy, while the second dimension is linked to the acceptability of threats to social order and the expectation of self-control to accommodate group interests. In this framework, men from cultures where power distances are large and values of hierarchy and collectivism strongly upheld are more likely to engage in sexual harassment, while female victims are more likely to under-react against their perpetrators, to whom society shows higher tolerance.

The authors cite empirical evidence in line with their theoretical framework from countries in different regions of the world. However, recent contributions reviewing empirical research (Timmerman and Bajema 1999) found that explaining differ-

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3 Natural-biological models, today largely dismissed, conceive sexual harassment as a 'natural' occurrence when men and women work together (Tangri et al. 1982).

ences in incidence rates or perceptions of sexual harassment across EU countries as being driven by cultural differences can be misleading. Recent empirical evidence across EU countries suggests that the diversity in cultural and social values might fail to predict cross-country variation in the incidence of sexual harassment even when data draw from cross-national surveys, which ensure consistency in definitions, classifications, methodologies or question design. According to FRA data, for instance, the highest prevalence rates were recorded in individualistic countries with low power distance between people (around 80% in Sweden and Denmark), while the lowest rates were reported in countries with a collectivist culture (between 32% and 24% in Poland, Romania, and Bulgaria).

At the same time, we should notice that these variations might be due to differences in propensity to report, disclose, perceive or be aware of sexual harassment rather in actual prevalence. For example, the European Working Conditions Surveys (EWCS) directly asks respondents if they have experienced sexual harassment or other adverse social behaviours at work, an approach which tends to emphasize inter-country differences in self-reporting, perceptions and so on. Data from the 2010 EWCS show that women (but also men) in Northern and Western European countries tend to report higher levels of exposure to adverse social behaviour than in Southern European countries (Eurofound 2012: 58, Eurofond 2015: 16).[4]

2.3.3 Power, social identity, stereotyping and work place organisation

Sexual harassment can be seen as a manifestation of a wider system of gender stereotyping and asymmetrical relations between men and women, but it can also be shaped **by context-specific factors**. To clarify, in the case of episodes in the **workplace, organizational culture** can influence sexual harassment. Organizational aspects studied in the literature include compliance or proactivity of organizations, male or female-dominance in work environments, priority and high values attributed to masculine qualities (power, toughness, dominance, aggressiveness and competitiveness), co-worker solidarity, workplace anonymity, work physicality or gender equality tradition in the organization (Chamberlain et al. 2008, Fink et al. 2003, Benavides-Espinoza and Cunningham 2010, Timmerman and Bajema 2000). All these factors can affect the **likelihood of 'sex-spillover', namely the carry-over of gender-based roles into the work setting** (Gutek and Cohen, 1987). This perspective can explain why some less powerful groups, such as ethnic minorities or domestic workers,   have been indicated as particularly vulnerable (Bergman and Henning 2008) since they are more often found in low-pay, low-skill working environments with higher tolerance for sexually aggressive behaviours.

In addition to sex-role spillover and organizational perspectives, other theories stress how sexual harassment can arise from men's power over women (MacKinnon 1979) and happens in **relationships of unequal power where sexual requirements are imposed on the weaker party**. Popovich and Warren (2010) propose a conceptual model showing the role of power in the values of an organization and consequently in organizational behaviours that accept or encourage power abuse, including sexual harassment. From this perspective, prevalence and tolerance of sexual harassment should be interpreted by recognizing the different sources of power across individual, organizational and societal levels.

In line with this approach, a representative survey of employees conducted in Germany in 2015 shows that women are assaulted more frequently by colleagues and supervisors from higher levels of employment hierarchies, whereas men are ha-

4 The survey is carried out every five years in 34 European countries.

rassed more often by colleagues on the same hierarchy level. Another recent study for Luxembourg explains higher incidence of sexual harassment among women in 'white collar' jobs as a result of lower autonomy and more frequent contact with the hierarchy in the working environment . Moreover, according to the review by McDonald (2012), women with irregular, contingent or precarious employment contracts are particularly vulnerable to sexual harassment, as are women in minority groups (Berdahl and Moore 2006, Buchanan and Fitzgerald 2008) who more frequently face obstacles such as ethnic prejudice and disadvantaged or precarious economic conditions. Discriminatory and unbalanced gender roles, therefore, might be amplified by iniquities in power distribution across population groupings. Data from the 2010 ECSW, for instance, finds that in the European Union, workers who were born in a foreign country and whose parents were born in a foreign country are more exposed to adverse social behaviour in the workplace than workers born in the country they work in (Eurofond 2015: 21).

Like in other forms of VAW, however, the connection between economic condition, gender inequality and sexual harassment may not be linear. The sense of entitlement associated with the masculine gender role may result in some men using sexually harassing behaviour to enforce their will or to restore and protect threatened masculine identity. Women working in male-dominated jobs, top occupational positions or high-level careers may be seen as threats to male gender stereotypes and may therefore be more exposed to men's attempts to react against women who breach the gender codes of conduct. Experimental research conducted at the University of Padua by Maass et al. (2003) found that men tend to harass women when they feel threatened, confirming the role of identity-protective motivational processes as drivers of sexual harassment. More recently, the FRA report on VAW (2014) observed that women in the highest occupational groups are more likely to report experience of sexual harassment, suggesting they are actually more exposed.

Prevalence survey evidence from Italy may be interpreted likewise (ISTAT 2010). The Italian survey on sexual harassment conducted in 2008-9 distinguished different forms of sexual harassment at work, including 'sexual blackmail', i.e. requests for sexual favours from male staff or even the employer in exchange for facilitating hiring or promotions or meeting other demands from the woman. Eight and a half percent of all the women in the sample who had ever participated in the labour market declared at least one instance of sexual harassment. In over two-thirds of the cases, harassment was identified as sexual blackmail at work and occurred most frequently among well educated women, least frequently among the poorly educated. Among women reporting instances of sexual blackmail at work in the three years preceding the survey, prevalence was highest for employees in technical, intellectual and scientific occupations (ISTAT 2010: 8-11).

2.3.4 Concluding remarks

Studies on VAW span the entire domain of social sciences – from criminology, psychology and epidemiology to anthropology, sociology, social policy, statistics and economics. Interdisciplinarity has brought richness of perspectives and findings to the debate, but certain downsides also surfaced from our review, especially fragmentation and lack of shared standards. For example, there is no shared notion of 'economic independence', hence different contributions select this or that indicator, following disciplinary 'must', data convenience or researcher's inclination. Concerning violence, theoretical perspectives tend to conceive the phenomenon as an undistinguished 'whole' with the consequence that results from empirical investigation which may apply to a specific type tend to be generalized. Methodological standards

also differ, sometimes radically, with answers to similar questions sometimes being drawn from analysis of simple measures of prevalence while ambitious econometric procedures are used in other cases.

For the purposes of this report, however, the main objective of the review was neither to provide a comprehensive account on the issue of economic independence and violence, nor to put order across disciplinary perspectives. Rather it aimed to identify questions that are still debated in the literature and potentially relevant for policies, while also selecting theoretical perspectives to guide empirical investigation.

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PART 2: Empirical investigation of the FRA Survey

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3. Investigation of the FRA survey: questions, variables and database

3.1 Research questions and database

This part of the report empirically investigates violence against women in connection with their financial independence, hence their economic condition and those of their partners and families. The investigation covers the whole of the EU and uses the newly released (individual) records from the FRA survey on violence against women in the EU (see Box 1 for a brief description of the survey). This is one of the first systematic attempts to explore individual records from the FRA survey since publication of the main report (FRA 2014a).

We address an array of questions that may be of interest to policy makers and scholars. Most of them have already been raised and are still being debated in the literature, as the review of the literature in the first part of the report indicates, but none has been investigated using a strictly comparable set of individual records across all EU countries.

The questions are:

i.   the relationship (if any) between financial (in)dependence and exposure to VAW with special attention to specific groups of women at risk (young and older women, migrants and so on);

ii.   the relationship (if any) between the economic status of the perpetrator – in particular with regard to unemployment and poverty – and the likelihood of VAW;

iii.   whether sudden changes in the economic status or labour force status of the perpetrator or the victim are more conducive to violence;

iv.   whether the likelihood of intimate partner violence is influenced by the relative economic status of the partners;

v.   to what extent financial independence increases the likelihood that a woman quits an abusive relationship;

vi. to what extent availability of supporting services/provisions for VAW victims increases the likelihood that the latter quit an abusive relationship, irrespective of their own financial self-reliance;

vii. what aspects of the woman's economic condition (if any) affect sexual harassment at work and in other public spaces;

viii. the repercussions of the recent crisis on prevalence and type of VAW.

In framing the questions, we took the possibilities and limitations of the FRA data into account. However, limitations and possibilities are such that some of these questions can be answered less satisfactorily than others, for example questions ii) and iii) concerning the perpetrator's economic condition. On the other hand, specific forms of violence that impact directly on financial and economic independence are well documented in the survey, e.g. economic violence, and they afford specific investigation.

Box 1. The FRA survey

In 2012, the European Union Agency for Fundamental Rights (FRA) conducted the first EU-wide survey on women's experience of physical, sexual and psychological violence, sexual harassment and stalking. The FRA survey collected interviews with 42,000 women across the 28 Member States of the European Union (EU) and is the first survey with an exclusive focus on VAW that has produced nationally representative and comparable data across EU countries.

Starting with the formulation of the questionnaire, EU countries shared the entire process of survey development. In order to ensure use of the most advanced and consolidated research methods to conduct statistical surveys on VAW, the FRA survey team collected inputs and organized a series of meetings with government representatives, policy, technical and academic experts and NGO practitioners. As a part of developing the questions, a draft survey questionnaire was subject to a qualitative pre-test study involving cognitive interviews and focus group discussions in six EU Member States, after which the questionnaire was also piloted in each EU Member State. The same questionnaire, with the same mode of application based on random sampling, was applied in all 28 EU countries in the full-scale survey fieldwork.

A minimum of 1500 women took part in the survey in each EU Member State, with the exception of Luxembourg where 908 women were interviewed. The random and stratified sampling approach adopted for the survey ensures that the data collected is representative of the female population aged 18 to 74 years living in each EU Member State.

Respondents were interviewed face to face by trained female interviewers to ensure strong compliance, low drop-out rates and high disclosure of sensitive experiences (UN 2013). The questionnaire takes into account the multi-dimensionality of violence through administration of separate detailed questions on psychological, physical and economic violence, as well as on sexual harassment and on the severity, chronic nature and duration of victimisation. In particular, the survey includes questions on the frequency of each type of violence experienced since the respondent was 15 years of age, as well as in the 12 months prior to the interview. It also collects background information on socio-economic and health characteristics of the respondents, on their awareness and perception of VAW and on their experience of violence in childhood.

Finally, the questionnaire asks for information about all perpetrators, but with closer attention to experiences of violence by previous partners and by the current partner: these are covered in two distinct and more detailed modules.

For a comprehensive overview of the survey's development and technical aspects, see the technical report (FRA 2014b) at: http://fra.europa.eu/en/publication/2014/vaw-survey-technical-report

One strength of FRA data is a fairly exhaustive and yet finely grained categorization of violence into types (sexual, physical and so on) and items (kicking, threatening to hurt and so on) with frequency of occurrence recorded for every item (Box1). In contrast, economic independence is a dimension that the FRA survey explores in relation to violence, without however making it the exclusive or even the main focus.

Before plunging into the data, we therefore need to clearly identify the categories of violence we shall look at, choose a strategy to aggregate frequencies and carefully select appropriate indicators for economic independence and economic conditions. This is done in the rest of the present chapter (sections 3.2 and 3.3). Chapter 4 then illustrates the statistical and econometric methodology used to process the data. Although we tried to avoid expounding technicalities as far as possible, this chapter is inevitably more technical than the rest of the report. However, readers not interested in methodology should be able to skip the chapter without losing the sense of what follows. Chapter 5 illustrates the results, which are reported by type of violence, type of estimation or type of determinant, as appropriate. Chapter 6 concludes by summarizing the results and discussing the added value and limitations of the analyses performed.

3.2 Types of violence

Although the survey does not offer an explicit definition of violence, it draws from the 1993 United Nations Declaration on the Elimination of Violence against Women (Article 1),[5] further clarified in the Beijing Declaration and Platform for Action (Article 133)[6] and reaffirmed by the Council of Europe in the Istanbul Convention in 2011 (Article 3).[7] Based on that conceptual framework, the survey acknowledges the multidimensional nature of gender violence by separating and detailing questions on **physical**, **sexual** and **psychological violence** as well as **on sexual harassment**, **stalking** and **childhood experience of violence**. Our analysis for this report looks at all types of violence in the FRA survey except stalking and childhood experience. To be more precise, we do make use of information about the occurrence of violence in childhood, but only as an explanatory variable of violence in adulthood.

For each type of violence, the survey asks questions about different 'items', e.g. 'being pushed or shoved' is a separate item from 'being burned', but both are part of physical violence. It also reports **frequency of occurrence** for each item using the following category answers: never; once; 2–5 times; six times or more; for some questions: never; sometimes; often; all the time. The number of items ranges from four for sexual violence to sixteen for psychological violence since the latter is an umbrella category comprising controlling behaviour, economic violence, abusive behaviour, and blackmail with/abuse of children. Table 1 displays the full list of items for the four types of violence we consider.

The FRA survey sample of **42,000 women EU wide** is adequate for many analyses, but can prove small when analysis is taken down to single items of violence, since in this case results would often not be meaningful even at EU level. We therefore chose to investigate each type of violence after aggregating frequency across items (see Appendix A for our aggregation algorithm). We also disregarded the fact that items may differ in terms of severity of violence, e.g. being pushed is generally considered less 'serious' than being burned. This is because there appears to be no single scale in the literature which ranks items of violence by degree of severity and which has become a standard of reference. To our knowledge, moreover, the design of the FRA survey does not specifically adhere to any of the scales that have been proposed, whereby choosing one of them and forcing survey answers into it could be controversial.[8] For all these reasons, we sum frequency across items, treating all items as equally serious.

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5 *"Art. 1: 'violence against women' means any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life"* (United Nations 1993, p. 3).

6 *"[…] (a) physical, sexual and psychological violence occurring in the family, including battering, sexual abuse of female children in the household, dowry-related violence, marital rape, female genital mutilation and other traditional practices harmful to women, non-spousal violence and violence related to exploitation; (b) physical, sexual and psychological violence occurring within the general community, including rape, sexual abuse, sexual harassment and intimidation at work, in educational institutions and elsewhere, trafficking in women and forced prostitution; (c) physical, sexual and psychological violence perpetrated or condoned by the State, wherever it occurs"* (United Nations 1995, p. 48–49).

7 *"[…] 'violence against women' is understood as a violation of human rights and a form of discrimination against women and shall mean all acts of gender-based violence that result in, or are likely to result in, physical, sexual, psychological or economic harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life"* (Council of Europe 2011, p. 8).

8 See for instance the Conflict Tactic Scale (Straus 1979).

Table 1 Types of violence considered in this report: questions from the FRA survey

Physical violence	Psychological violence	Sexual harassment
(…how often has someone…)	*(How often does your current partner/Did any previous partner ever…)*	*(…how often have you experienced any of the following?)*
• pushed you or shoved you?	• try to keep you from seeing your friends?	• unwelcome touching, hugging or kissing?
• slapped you?	• try to restrict your contact with your family of birth or relatives?	• sexually suggestive comments or jokes that made you feel offended?
• thrown a hard object at you?	• insist on knowing where you are in a way that goes beyond general concern?	• inappropriate invitations to go out on dates?
• grabbed you or pulled your hair?	• get angry if you speak with another man? (or another woman, if the partner is a woman)	• intrusive questions about your private life that made you feel offended?
• beaten you with a fist or a hard object, or kicked you?	• become suspicious that you are unfaithful?	• intrusive comments about your physical appearance that made you feel offended?
• burned you?	• prevent you from making decisions about family finances and from shopping independently?	• inappropriate staring or leering that made you feel intimidated?
• tried to suffocate you or strangle you?	• forbid you to work outside the home?	• somebody sending or showing you sexually explicit pictures, photos or gifts that made you feel offended?
• cut or stabbed you, or shot at you?	• forbid you to leave the house, take away car keys or lock you up?	• somebody indecently exposing themselves to you?
• beaten your head against something?		• somebody made you watch or look at pornographic material against your wishes?
	(How often would you say that your current partner has/Has any previous partner ever…)	• unwanted sexually explicit emails or SMS messages that offended you?
Sexual violence	• belittled or humiliated you in front of other people?	• inappropriate advances that offended you on social networking websites such as Facebook, or in internet chat rooms?
(…how often has someone..)	• belittled or humiliated you in private?	
• forced you into sexual intercourse by holding you down or hurting you in some way?	• done things to scare or intimidate you on purpose, for example by yelling and smashing things?	
• apart from this, attempted to force you into sexual intercourse by holding you down or hurting you in some way?	• made you watch or look at pornographic material against your wishes?	
• apart from this, made you take part in any form of sexual activity when you did not want to or you were unable to refuse?	• threatened to take the children away from you?	
• or have you consented to sexual activity because you were afraid of what might happen if you refused?	• threatened to hurt your children?	
	• hurt your children?	
	• threatened to hurt or kill someone else you care about?	
	• threatened to hurt you physically?	

Source: FRA – European Union Agency for Fundamental Rights (2014), *Violence against women: an EU-wide survey. Main results*, FRA, Vienna.

3.3 Economic independence

With the economic dimension taking less than central stage in the FRA Survey, the scope of the empirical analysis in this report is inevitably limited by what the questionnaire asked. Based on the questionnaire, we singled out a set of '**choice**' and '**complementary**' **indicators of economic independence**. Our choice indicators view independence from the woman's perspective, and comprise labour force status, her earnings versus her partner's, and the way she perceives the economic status of her household. The corresponding categories are summarized below, while more details will be given in Table 2 and in discussion of the analysis and results:

- **Current labour force status of the respondent over the past 12 months.** The category is based on the main activity of the respondent at the time of the survey and on employment experience outside the home in the 12 months prior to the interview.

- **Relative earnings of the respondent compared to her current partner**. Interviewees were asked whether they earned more, the same amount or less than their partner. The question was asked to all women, not only those currently with a job, hence answers may be understood as referring to usual or even potential earnings.

- **Self-perceived economic status of the respondent's household**. Respondents were asked whether their household economic condition was such that they lived comfortably, or were just able to cope or found it difficult or very difficult to cope. This is clearly a subjective indicator of household economic status.

Our complementary indicators are **labour force status of partner** and **level of education of respondent and partner**. We systematically use both sets of indicators in our estimations, but when reporting and discussing results, we largely focus on choice indicators. Information about occurrence of violence was collected for two overlapping periods, namely, occurrence since the respondent was 15 years of age and in the 12 months preceding the survey. However, economic status of the respondent, her partner and her household was only collected for the time of the interview or the 12 months immediately preceding the interview. This choice of directing attention to economic factors therefore means that significant analysis should be limited to the 12 months preceding the interview. In other words we often forego retrospective information about respondents' experience of violence since we have no retrospective information about economic condition.[9] The only backdated information about violence that we use concerns experiences of violence in childhood.

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9 Alternatively, we could refer to the whole of one's adult life, assuming, say, that a woman who currently works has worked throughout her adult life; or that she has lived, say, in a well-off household throughout her adult life. This may be justified in some cases, but not in general.

4. Methodology

4.1 A two-step approach

Precisely because this is one of the first systematic attempts to explore individual records from the FRA survey it was advisable to proceed by successive approximations in order to gradually gain knowledge of the quality and scope of information the survey offered about the questions under investigation. We proceeded in two steps. In the first step we carried out bivariate analysis of prevalence of violence on one hand and of our chosen indicators of economic independence on the other hand. In the second step, we resorted to ordered probability and other econometric models to estimate the combined effect of the **explanatory variables** on the probability of having experienced violence at a given frequency (**dependent variable**). Explanatory variable included all economic independence indicators together with other variables such as age, alcohol habits and so on, that are known to influence prevalence of violence. Separate estimation was carried for the probability of leaving a violent relationship. Box 2 gives reasons for combining bivariate analysis with multivariate econometric estimates.

For ease of communication, we talk of verifying the 'influence' of explanatory variables on the prevalence and frequency of violence, which may suggest that we are verifying a 'causal effect'. For a variety of technical reasons, however, **our results are more safely interpreted as evidence of statistical association or correlation**. For example, suppose we find that the risk of, say, physical violence is higher for a woman who has recently experienced unemployment. We cannot rule out that this reflects reverse causation, since we know from past studies that women are more likely to fall unemployed if their partner physically abuse them. But we do not allow for reverse causation in our estimation exercises.[10]

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10 For at least some women, moreover, being abused and being unemployed could both be the outcome of a third factor which we do not account for, e.g. some physical or mental disadvantage. We have included as many relevant 'explanatory variables' as our data permitted, but cannot rule out the possibility that some have been left out, e.g. indicators of the woman's or her partner's personality. In econometric estimation, if relevant variables are left out or double causation ignored, estimates should not be interpreted as being the result of causal processes but rather treated as preliminary rather than final.

Box 2. From cross tabulations to multivariate estimation

Bivariate analysis for this report mainly used cross-tabulations and t tests. When we cross-tabulate, say, prevalence of physical violence by partners and household economic status, we actually compute the frequency of physical violence for the average woman in each cell, e.g. for the average woman belonging to well-off households or the average woman belonging to poor households. Call the former alphawoman and the latter betawoman. The problem is that alphawoman may be much better educated than betawoman, hence differences in prevalence may be due to differences in education rather than household economic status. Another example would be the use of 'student or trainee' among other categories of a respondent's labour market situation, when students and trainees are probably on average younger than other women in the sample. By using cross tabulations, moreover, we are generally constrained to analysing one explanatory variable at a time. Multivariate econometric estimation overcomes both limitations. First, it can be used to verify the combined influence of the entire set of factors we suspect might influence physical violence. At the same time it can be used to distinguish the independent effect of each individual variable.

4.2 Estimation methods

4.2.1 Ordered Probability estimation

One drawback of using econometric estimation is that method and results may be difficult to convey. What follows illustrates how we proceeded from aggregation of frequency to choice of variables to actual model estimation, while Box 3 illustrates, by way of example, how to read and interpret the results of our estimations. The example in the Box refers to the econometric 'model' we used most often, the **ordered probability model**.

The first task in the estimation was to **aggregate frequency across items** of violence and into an 'ordered' frequency variable. For illustrative purposes, consider the example of physical violence by the current partner in the past 12 months. The frequency categories are aggregated as follows:

- 'never': the respondent reports no episode of physical violence across items

- 'once': the respondent reports at least one episode for any item

- '2-5 times': the respondent reports a total of 2 to 5 episodes across items

- '6+ times': the respondent reports a total of 6 or more episodes across items.

These four frequency outcomes are the variable we wish to study, our **dependent variable** in econometric jargon.

The **second task** was to **identify** all the factors that may influence prevalence and frequency of violence, i.e. the **explanatory variables**. Our selection includes all our **indicators of economic condition of the two partners** (both choice and complementary indicators), hence her and his labour force status, their relative earnings, perceived economic status of the household and the respective levels of education.

We also include so called **control variables,** which are not the main focus of this study but are indicated in the literature as possible factors contributing to prevalence of violence in adulthood. Control variables comprise the respondent's **age** and **ethnicity**, the **number of** her **children**, whether or not she **lives in a big city**, and last but not least, whether she **suffered sexual, physical or psychological violence in childhood**. Awareness on the part of respondents that **services/facilities for victims of violence** are available in the country is an additional variable, the importance of which is self-evident for policy making; it is included in our set. To account for the possibility that violence is triggered by **alcohol abuse** we also added an indicator of whether or not the partner gets drunk regularly (Abramovaite et al. 2015, Renzetti 2009, Rennison et al. 2013, WHO 2016).

The last group of control variables are the **respondent's country** of the 28 considered. The role of country warrants further explanation. It is difficult to overemphasize the importance of cultural attitudes for prevalence and perception of violence and significant variations across countries may therefore be expected. By revealing large differences in prevalence across European countries, the FRA survey effectively underscores this point, echoing what the literature already emphasized. Ideally, therefore, an estimation exercise focusing on economic factors should be conducted separately for each country in order to minimise the confounding influence of cultural differences between countries. However, this is practically unfeasible with a sample of around 1500 women per country (at most). To clarify the problem, consider women unemployed at the time of the interview but with some work during the preceding year, bearing in mind that we are interested in investigating precisely this category. The count for Germany is 95 women, only 2 of whom had suffered from sexual violence at least once in the 12 months preceding the survey.[11] With these numbers no model can predict probabilities with an acceptable degree of accuracy.

The alternative to conducting a separate estimation for each country is to use the entire EU sample and carry out estimations for the whole of the Union, including country variables among the explanatory variables. That is what we chose to do by **including all country variables in all estimations**. Inclusion of country variables means for example that if a respondent is French, the variable 'France' scores a value of 1 for her, otherwise zero. In this way the estimated probability of, say, a French woman having suffered frequently from sexual violence given that she belongs to a household living comfortably off current income, has earnings comparable to those of the partner and is young and highly educated is allowed to differ from those of, say, a Polish woman with exactly the same characteristics. The difference between France and Poland captures the 'country effect'. However, while country level variables allow us to quantify country effects, they cannot reveal exactly what lies behind such a difference, whether law, gender culture, both or indeed something else. Where adequate national data is available to construct variables capturing the influence of the legal system, gender culture and so on, it becomes possible to discriminate such factors more clearly using country by country investigation.

Table 2 summarizes the entire set of explanatory variables used, reporting absolute and relative frequencies in the sample for each variable or answer category. For example, of the 41,884 women whose age group is reported (the sum across age groups in the penultimate column), 11.7% belong to the youngest group. **We actually used this set of explanatory variables in all our estimations**, barring obvious adjustments (e.g. partners' characteristics are not included when estimating violence by non-partners).

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11 Sample frequencies, unweighted.

Country variables are excluded from Table 2 for expositional convenience, but they are briefly discussed in Appendix F. By construction, the frequency of each country variable corresponds to the number of women interviewed per country in the FRA sample. Country samples are well documented in the main survey report (FRA 2014a), besides being reproduced in Table B3 of Appendix B of this report. **All observations were weighted** to ensure representativeness of the results at EU level,[12] and Table B3 also compares the size of weighted and unweighted country samples.[13]

Table 2 Our set of 'explanatory' variables. Absolute and percentage frequency in the sample[*][§]

			Frequency	Percent
Women's char-acteristics All women in the sample	Age	age group 18-24	4,879	11.7
		age group 25-29	3,609	8.6
		age group 30-34	4,053	9.7
		age group 35-39	4,086	9.8
		age group 40-49	8,484	20.3
		age group 50-59	7,709	18.4
		age group 60-74	9,064	21.6
	Education	primary and lower secondary	15,315	36.6
		upper and post-secondary	18,036	43.2
		tertiary	8,444	20.2
	Experience in childhood	no physical violence in childhood	30,864	73.5
		physical violence once in childhood	2,323	5.5
		physical violence more than once in childhood	8,816	21.0
		no sexual violence in childhood	37,156	88.5
		sexual violence once in childhood	2,555	6.1
		sexual violence more than once in childhood	2,292	5.5
		no psychological violence in childhood	37,643	89.6
		psychological violence once in childhood	1,112	2.7
		psychological violence more than once in childhood	3,247	7.7
	Awareness	not aware of any service for VAW	8,079	19.2
		aware of at least one service for VAW	33,923	80.8
	Minority	not belonging to an ethnic or religious minority	39,823	94.8
		belonging to an ethnic or religious minority	2,179	5.2
	Labour force status	currently working	21,651	51.9
		short term unemployed**	3,167	7.6
		student or trainee	3,037	7.3
		not working	13,903	33.3
Household characteristics, All households in the sample	Household composition	no children in household	23,013	56.1
		1 child in household	8,365	20.4
		2+ children in household	9,637	23.5
	Place of resi-dence	living in big city or suburb of big city	13,218	31.5
		not living in a big city	28,784	68.5
	Self-reported economic status	living comfortably on present income	10,421	25.3
		coping on present income	18,913	46.0
		finding it difficult or very difficult on present income	11,814	28.7

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12   Recall that country samples are practically of equal size in the FRA survey irrespective of the actual size of the country. Weighting rescales country sizes in the overall EU sample in line with the actual population. We used the variable WTEUOVER for weighting. For more details see FRA technical and methodological report (FRA 2014b).

13   The two additional tables in appendix B record the frequency of the explanatory variables in two often used subgroups of women: women with partners and women with children.

Partner characteristics (subsample of women with partners)	Labour force status (partner)	neither working nor retired	8,774	28.8
		retired, employed or self-employed	21,648	71.2
	Education (partner)	primary and lower	11,821	39.4
		upper and post-secondary	12,195	40.7
		tertiary	5,956	19.9
	Relative earnings (partner)	partner earns less than respondent	3,461	12.1
		both earn roughly the same amount	5,864	20.6
		partner earns more than respondent	19,179	67.3
	Alcohol abuse (partner)	partner does not get drunk regularly	25,627	85.8
		partner gets drunk regularly	4,232	14.2

*Country variables are not included in the table although they are explanatory variables (see text for details). §Weighted frequencies and percentages. **Short term unemployed women are defined as women who worked in the past 12 months, but were not working at the time of the interview (see text). Source: FRA violence against women survey dataset 2012.

The **final task** was to use the ordered probability model to verify which explanatory variable actually contributes to explaining violence, and by how much (Box 3 for details). While we largely relied on this model for most estimates, whenever appropriate we resorted to alternative procedures (probit and selection probit models) which we briefly recall while illustrating the findings in the following sections.

Box 3. Reading and interpreting the results from ordered probability estimation

Figure 1 shows the typical use to which we put the results of ordered probit estimation. The figure compares estimated probabilities of having suffered physical violence for three types of women, all currently in employment.[14] **Types differ <u>only</u> in the balance of earnings with respect to their partner, otherwise they share characteristics**: the first type of woman earns less, the second earns more or less the same as her partner, and the third earns more than her partner. **For each type, the estimated probability of having been exposed to physical violence at least once in the preceding 12 months is recorded at the top of the corresponding bar.**

Figure 1 Estimated probability of physical violence by frequency class and earnings compared to partner

Violence by current partner in past 12 months.
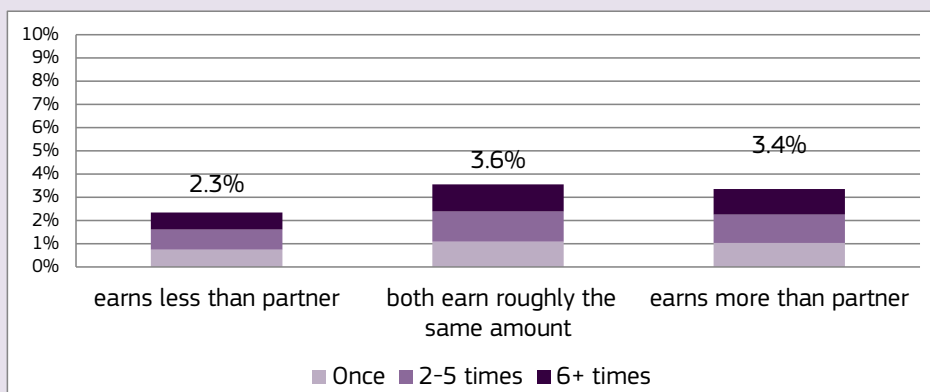
Source: FRA violence against women survey dataset 2012.

14 Average adjusted probability predictions in the econometric jargon of the STATA software (Greene 2013)

The probability (prevalence) of a woman having suffered physical violence <u>at</u> <u>least</u> once is actually the sum of the (estimated) probability of having been the victim of violence <u>exactly</u> once (pale purple, bottom stack of the bar), or 2–5 times (bright purple, middle stack of the bar) or 6+ times (dark purple, top stack of the bar). By comparing shades of colours across bars, the reader can gauge at a glance whether labour force status makes a difference not only to the probability of having suffered sexual violence at all, but also how frequently that happened. For the women in the example, earning as much as their partner is associated with higher prevalence compared to earning less (about one third higher), while there is little difference between earning more and earning as much.

Are the results trustworthy? The information conveyed by our template figure is actually incomplete. We know from the graph that prevalence goes up among women earning as much or more, but how do we know whether this increase is statistically significant? The answer is to be found in the tables included in Appendices D to G. Table D3, in particular, complements Figure 1. It shows that, all other things being equal, for women earning as much as their partner the probability of being exposed to physical violence increases, on average, in all positive frequency classes (never, once, and so on) compared to women earning less than their partner.[15] However this increase is only weakly significant, as denoted by one asterisk (asterisks number from zero to three, with zero denoting weak and three denoting strong significance). It also shows that there is no significant difference across frequency classes (no asterisk) between earning as much and earning more. While we relegated these tables to the appendix so as not to clutter the main text with too many details, our commentary of the results systematically mentions them.

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15   This increase is known as 'average marginal effect' in the jargon of the STATA software (again, see Williams 2013).

5. Findings

In the present chapter we report and discuss all the results from our investigation of the FRA dataset. In sections 5.1 to 5.5 we discuss the findings for our choice indicators – women's labour force status, their comparative earnings and the economic status of their household – and for each type of abuse. In each case we begin by assessing evidence from simple cross-tabulations and then review the econometric results. Sections 5.6 and 5.7 present the findings for the remaining explanatory variables, from characteristics of the partners to experience of violence in childhood. Finally, section 5.8 focuses on the factors that appear to influence women's decision to leave an abusive partner.

5.1 Her economic independence and physical violence

Physical violence is a frequent occurrence when observed over a person's adult life. The FRA survey estimates lifetime prevalence rates of 20% for abuse from the current partner as well as for non-partners. Prevalence goes down when measured in the 12 months preceding the survey, but the figures remain large: 8% for physical and sexual violence combined.

Labour force status. Our first indicator of economic independence is labour force status. To keep cross tabulations to a manageable proportion we constructed a binary variable where 'working women' refers to respondents in employment at the time of the interview and where 'other labour force status' bundles together the unemployed, students and trainees and other women not in paid work such as homemakers and retirees. We then unpacked this category for the purpose of econometric analysis.

Table 3 sets out the interaction between actual frequency of physical violence (all items) and binary labour force status. Panel A refers to violence by the current partner, panel B by non-partners. For each frequency category, the last column in the table shows whether the difference between the proportion of working women who have experienced violence and the corresponding proportion of 'other' women is statistically significant.[16]

Overall, the results from cross-tabulations suggest that having a job may protect women from physical violence at home (by partners) but not outside. Out of 30,422 women with a current partner in the whole of the EU and for whom information on labour force status is available, 3.1% experienced physical violence in the 12 months preceding the survey. However, the proportion goes down by nearly half a percentage point among working women and the decrease is significant at conventional level. Moreover, the difference in prevalence between working women and

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16 Three asterisks indicate a strongly significant difference (below 1%), two a difference significant at the conventional level (below 5%) and one a weakly significant difference (below 10%). There is no statistically significant difference when no asterisk is displayed.

those with other labour force status is larger (and strongly significant) for somewhat frequent violent behaviour (2–5 times: panel A, Table 3).

Physical violence by non partners (panel B) is more widespread than violence from partners, and having a job tends to be a risk factor, in contrast with what we just found for physical violence by partners. However, differences in prevalence between working and women in other labour force status (by category of frequency) are not statistically significant, which casts a doubt on the solidity of this evidence.[17]

Table 3 Frequency of physical violence, by respondent labour force status

A.   Violence by current partner in past 12 months. Partnered women

Frequency	0	1	2–5	6+	Total	
	%	%	%	%	N.	%
A: Currently working	97.3	0.8	0.9	0.9	16642	100
B: Other labour force status	96.4	1.1	1.6	1.0	13780	100
t-test: A–B	**		***			
C: All	96.9	0.9	1.2	1.0	30422	100

B.   Violence by non partners in past 12 months. All women

Frequency	0	1	2–5	6+	Total	
	%	%	%	%	N.	%
A: Currently working	94.2	2.4	2	1.4	21651	100
B: Other labour force status	94.5	2.0	2.3	1.2	20351	100
t-test: A–B						
C: All	94.4	2.2	2.2	1.3	42002	100

Source: FRA violence against women survey dataset 2012.

Do the econometric results show a similar picture? The main novelty arises from the fact that we unpacked the women in 'other labour force status' category to carry out our estimations. By doing so we found that physical violence by partners is more likely to be experienced by specific subgroups of not working women, not by all of them.

Unpacking resulted in the following four categories:

- women in employment at the time of the interview ('working');

- students and trainees at the time of the interview ('students');

- women who worked in the 12 months before the interview but not at the time of the interview (labelled 'short-term unemployed' as in the FRA survey (FRA:109));

- women who had not worked in the last 12 months ('non working women').

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17 Our default choice is to focus on the 12 months preceding the survey rather than considering the entire adult life course. Just for once, however, we made an exception and repeated the estimation for physical violence since the age of 15 so that the reader can appreciate the pros and cons of confining analysis to the year prior to the survey. The results are evidently much stronger. Predicted probabilities of physical violence are much higher, as expected, and yield more robust evidence that working protects women from physical violence at the hand of partners, while being a risk factor for violence from non-partners (Table C1 in appendix C). However, the results may be stronger simply because the number of women reporting violence increases when the horizon is pushed backward. At the same time the possibility of making mistakes increases too. A woman currently out of work may have worked in the past, but we cannot infer this from the survey unless we assume strong continuity of employment history over the years.

Estimated probabilities of physical violence from the current partner are noticeably higher among 'students' and the 'short term unemployed'. 'Working' and 'non working' women are comparatively sheltered, the latter more than the former. However, not all these difference are statistically significant. If we take working women as our term of reference, the increase in IPV displayed in Figure 2A is only significant for the 'short term unemployed', not for 'students and trainees', and even in the former case significance is low. At the same time the estimates reveal a large and statistically robust decrease in physical abuse by non partners among 'non working' women (Panel B of Figure 2; Tables D1 and D2 in Appendix D).

Figure 2 Estimated probabilities of physical violence by frequency class and respondent labour force status

A.   Violence by current partners in past 12 months

B.   Violence by non partners in past 12 months
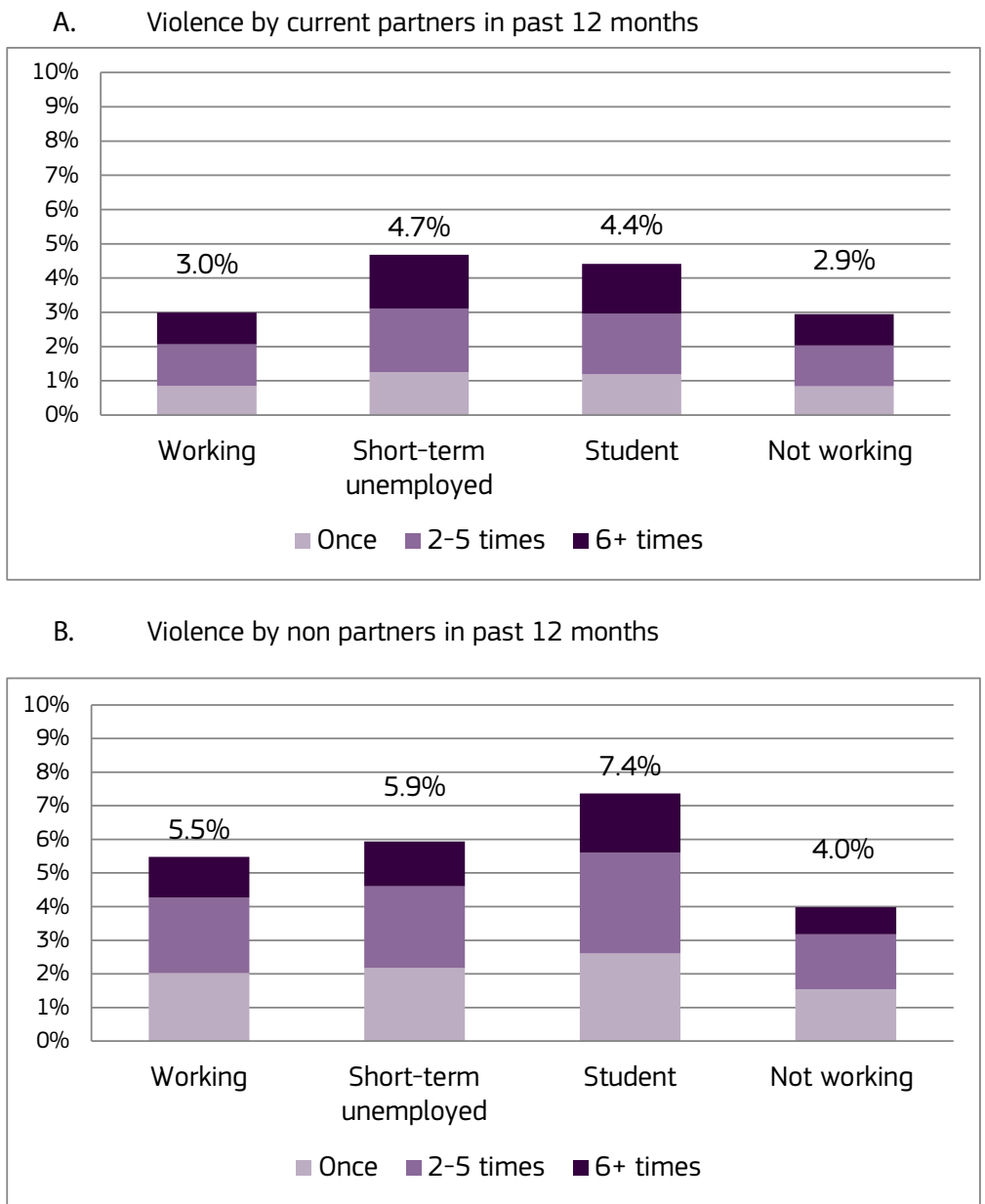
Source: FRA violence against women survey dataset 2012.

In order to gain full understanding of these findings, we need to take a small digression. 'Short term unemployed' is a composite category which may include women who lost a relatively stable job less than a year ago (short term unemployed strictu sensu). It may also include other unemployed women who nevertheless took occasional work in the course of the year which they do not consider 'proper' employment but accepted in order to supplement family income.[18] Since this is more likely to occur in an economic downturn, it is especially likely to have occurred when the FRA survey was carried out, in the depth of the European recession. We therefore propose to think of women in the 'short-term unemployed' category as having in common the experience of an economic shock: because they recently lost their job or because household income fell enough for them to seek and accept occasional employment.

'Non working' is also a composite category that bundles together retirees, women who never worked (homemakers) and unemployed women who had not worked in the last 12 months (long term unemployed). While it is plausible to assume that all of them are primarily 'homebound', they are likely to differ in own financial resources. We would therefore argue that while only imperfectly capturing differences in financial resources, this category captures symbolic differences related to working as well as differences related to time spent in public versus private spaces.

With these clarifications in mind, we can more easily relate our findings to the theoretical and empirical literature. **The one result obtained so far that inspires confidence is that 'non working' women face lower risk of physical abuse by non partners than those who work**. This is consistent with criminologists' idea that time of exposure matters, since one relevant difference between the two groups is that time of exposure to non-partner violence is lower for non working women.[19]

We also found some evidence that physical violence is associated with sudden economic shocks since women in the 'short-term unemployment' category appear to be more exposed than working or non working women. This lends limited support to the combination of stress theory and family resource theory proposed by Fox et al. (2002) among others, however, the support is statistically weak.

Comparative earnings. If dependency resource theory or the bargaining hypothesis hold, we should find that the risk of physical violence is lower for non traditional couples where she earns as much as her partner or more. Relative and gendered resource theory predicts the opposite. Our findings for physical violence yield limited support for the latter, with emphasis on 'limited'.

Table 4 considers partnered women in employment and reveals that the risk of physical abuse tends to rise with the (relative) importance of women's earning. However, differences are small and somewhat erratic across frequency categories.

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18   The FRA survey did not ask the woman whether and when she lost her job.

19   At the same time, however, we do not find support for the main prediction of this approach (the exposure reduction hypothesis: section 2.1), namely that working women are less exposed to IPV.

Table 4 Frequency of physical violence by earning position compared to partner

Violence by current partner in past 12 months. Partnered and working women

Frequency	0	1	2--5	6+	Total	
	%	%		%		%
A: Respondent earns less than partner	97.9	0.8	0.8	0.5	8790	100
B: Both earn roughly the same amount	96.8	1.2	0.9	1.1	3593	100
C: Respondent earns more than partner	96.2	0.5	1.4	2.0	1733	100
t-test: A-B						
t-test: B-C		*				

Source: FRA violence against women survey dataset 2012.

Econometric evidence points in the same direction but is somewhat more conclusive. **Estimated probabilities of physical violence are lowest for women in traditional partnerships** (Table D3). Differences in probabilities between women on low comparative earnings and other female earners turn out to be positive and **weakly significant** at all frequency levels. Women belonging to a couple where she brings home equivalent or higher earnings are also more exposed, but not at a statistically significant level.[20][21]

Figure 3 Estimated probabilities of physical violence by frequency class and earning position compared to partner

Violence by current partner in past 12 months. Partnered and working women
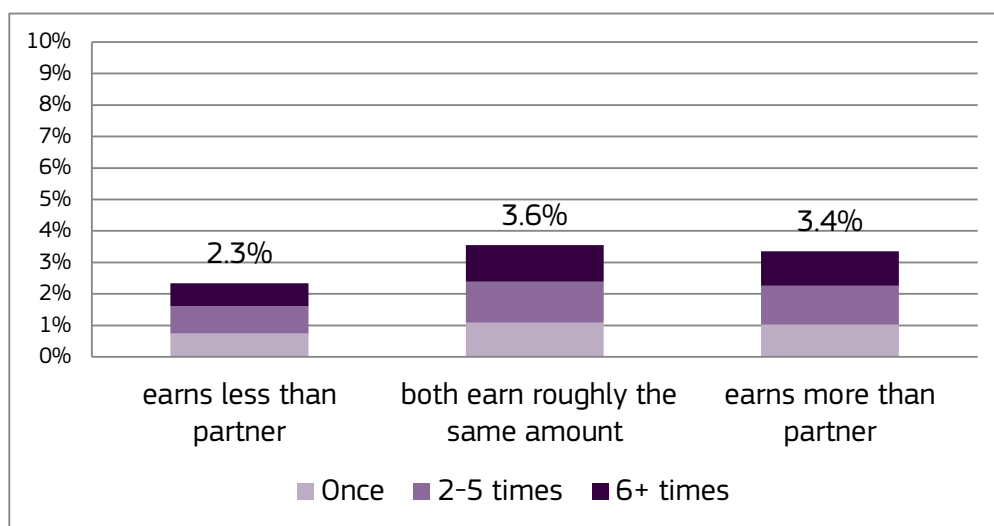
Source: FRA violence against women survey dataset 2012.

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20   See Table D3

21   In the FRA survey, all partnered women, including those out of work or retired and those whose partner was out of work, were asked about comparative earnings. We therefore replicated analysis on the entire sample of partnered women. Reassuringly, the results are broadly comparable. However, it is unclear what any comparison of earnings between partners may capture if the woman or her partner are not in employment, and this ambiguity makes it difficult to provide a clear interpretation. We therefore chose not to illustrate the results for all partnered women here in the main text, although we report the estimates in Appendix C: Table C2 and Figure C1).

Economic status of household. What seems to really matter for physical violence is perceived household economic status, as suggested by several theoretical approaches, including resource theory. Prevalence figures from cross-tabulations indicate that physical violence by partners and non partners is higher in households finding it difficult or very difficult to make ends meet with respect to better off households, the increase being statistically significant for frequent or very frequent occurrences of violence (Table 5).

Table 5 Frequency of physical violence by self-reported economic status

Violence by any perpetrator in past 12 months

Frequency	0	1	2--5	6+	Total	
	%	%	%	%	N.	%
A: Living comfortably on present income	93.5	2.4	2.3	1.8	10421	100
B: Coping on present income	94.3	2.3	1.9	1.5	18913	100
C: Finding it difficult on present income	90.4	2.8	3.7	3.1	11814	100
t-test: A-B						
t-test: B-C	***		***	***		

Source: FRA violence against women survey dataset 2012.

The econometric results broadly confirm those from cross-tabulation. The **estimated probabilit**y for a woman to have suffered from physical violence at least once and at the hands of any perpetrator (including her partner) is **one third higher in households finding it difficult or very difficult to survive on present income compared to households living comfortably** (Figure 4). This disparity is statistically significant across frequency categories (Table D4).

Figure 4 Estimated probability of physical violence by frequency class and self-reported economic status

Violence by any perpetrator in past 12 months
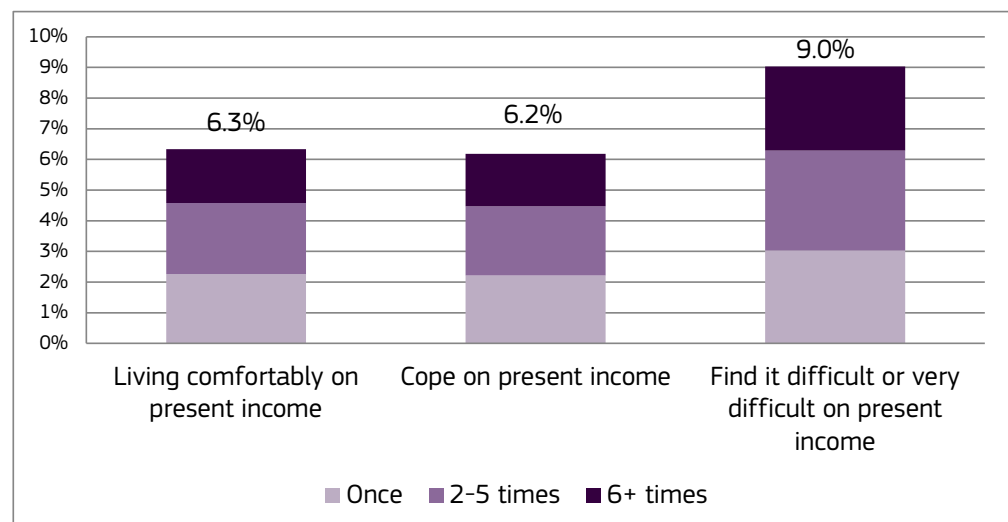
Source: FRA violence against women survey dataset 2012.

Piecing together the different strands of evidence on physical violence, we may conclude that for a woman, **having a job influences the risk of physical abuse in opposite directions. The direct effect is to increase exposure to abuse by non partners** compared to homebound, non working women. **The indirect effect works in the opposite direction** since women's earnings are known to decrease household poverty and household poverty associates positively and significantly with risk of physical abuse. The two effects need not balance out perfectly, or even largely, but **they tend to even out exposure among women with a clear working status**, those in paid work on the one hand, and those in unpaid work or retirement on the other.

Among women with transitional status (between working and not working), including students and our 'short term unemployed', higher risk of physical violence from partners adds to higher risk from non partners. Exposure to economic shocks for the 'short-term unemployed' is one possible reason, but does not provide a convincing explanation for students. Having said that, **results for transitional statuses are not sufficiently strong** to warrant further speculation.

5.3 Her economic independence and sexual violence

"Considering any form of sexual violence by a partner and non-partner since women were 15 years old, a total of 11% of women in the EU-28 experienced this type of violence. Some 2% of women experienced it in the last 12 months" (FRA, 2014: 41)

Sexual violence is still common in women's lives in Europe, but less so than other forms of violence. With a 2% prevalence in the chosen observation window (12 months), numbers can be too thin to produce meaningful results, raising the question of whether physical and sexual violence should be conflated for the purpose of analysis. We chose not do so given that motivation and behaviour may differ in the two cases. We found that the results do not mirror those we obtained for physical violence, which justifies our choice.

Labour force status. Cross-tabulations offer some insight about sexual violence and labour force status (Table 6). Actual prevalence of sexual violence by current partner is lower among women not in current employment ('other labour force status') compared to those who have a job. Although in absolute terms the difference is 'only' 0.6 percentage points, in relative terms this amounts to nearly halving the probability for non working women; moreover, the difference is robust at conventional level.[22]

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22 Similar results are obtained when perpetrators other than current partners are added to the picture (Tables C3 in Appendix C), although the magnitude involved is smaller and statistical significance is lost.

Table 6 Frequency of sexual violence by respondent labour force status

Violence by current partner in past 12 months

Frequency	0	1	2—5	6+	Total	
	%	%	%	%	N.	%
A: Currently working	98.5	0.3	0.6	0.6	16642	100
B: Other labour force status	99.1	0.3	0.3	0.3	13780	100
t-test: A–B	**					
C: All	98.8	0.3	0.4	0.5	30422	100

Source: FRA violence against women survey dataset 2012.

Econometric estimates refine these results and yield a somewhat unexpected find-
ing. According to estimated probabilities of sexual violence, any difference in ex-
posure between working women and women in 'other labour force status' is due
to students and trainees rather than homemakers or retirees (the 'non working').
Students and trainees face the lowest (estimated) probability of sexual violence
whether we look at all perpetrators or separate out partners; and this finding is
robust (Figure 5 and Tables D5-D6).

**Figure 5 Estimated probabilities of sexual violence by frequency class and re-
spondent labour force status**

A.   Violence by any perpetrator in past 12 months
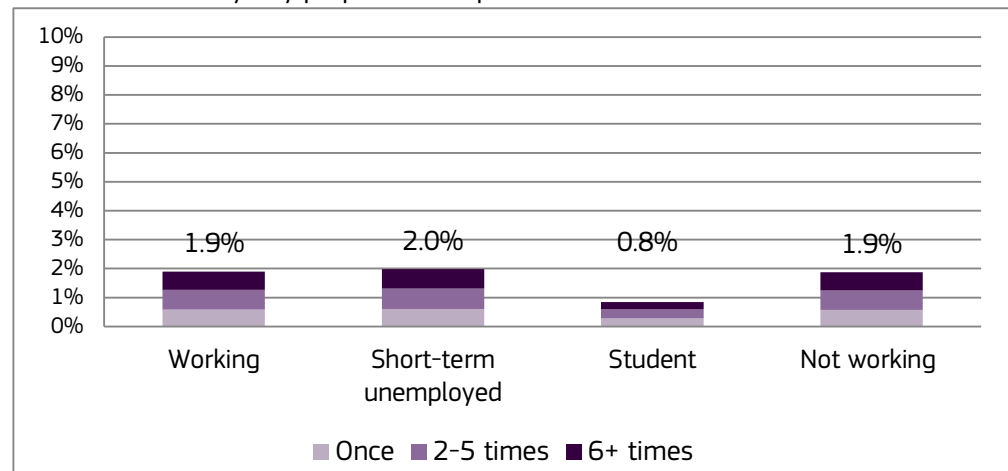
B.   Violence by current partner in past 12 months
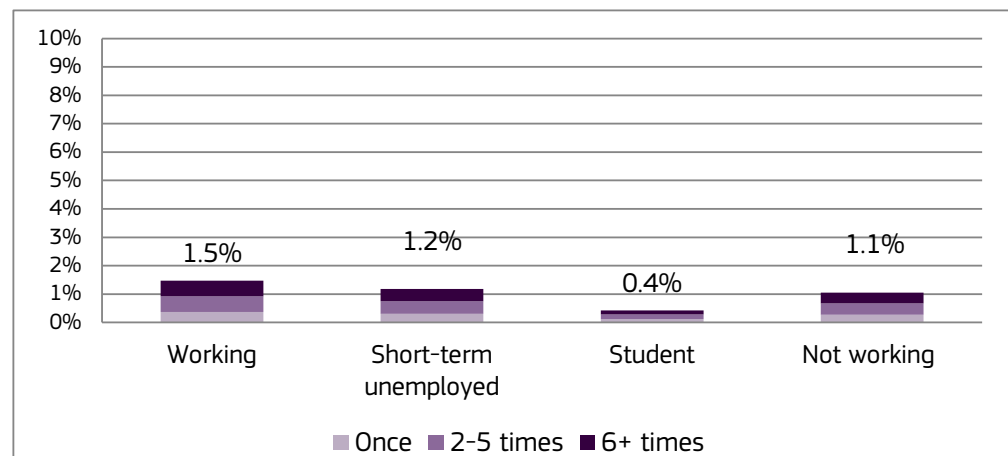
Source: FRA violence against women survey dataset 2012.

Comparative earnings. Concerning the influence of comparative earnings, for the woman **earning as much or more than the partner increases exposure to sexual abuse**. Econometric estimates yield a sufficiently clear picture in this respect, unlike cross-tabulations (respectively, Figure 6 and Table 7). **Among women earning as much or more than the partner the estimated probability that she is sexually abused doubles with respect to women in traditional partnerships** (where the partner fulfils the main earner role) and the difference is robust (Table D7). The probability is highest for women who outperform their partner, albeit not much higher than for women on a par.

It is worth pausing here to note differences and similarities with physical violence: both sets of results for comparative earnings point in the same direction, bringing support to relative resource theory while casting doubt on the household bargaining framework. However, they are much stronger for sexual violence, despite fewer available observations. This is a clear example of how important it is to keep different types of abuse separate when searching for explanations. Results for economic conditions of the household discussed below offer another example.

Table 7 Frequency of sexual violence by earning position compared to partner

Violence by current partner in past 12 months. All partnered women

Frequency	0	1	2—5	6+	Total	
	%	%	%	%	N.	%
A: Respondent earns less than partner	99	0.3	0.4	0.4	19179	100
B: Both earn roughly the same amount	98.4	0.6	0.4	0.7	5864	100
C: Respondent earns more than partner	98.1	0.23	0.94	0.75	3461	100
t-test: A–B						
t-test: B–C						

Source: FRA violence against women survey dataset 2012.

Figure 6 Estimated probabilities of sexual violence by frequency class and earning position compared to partner

Violence by current partner, all women
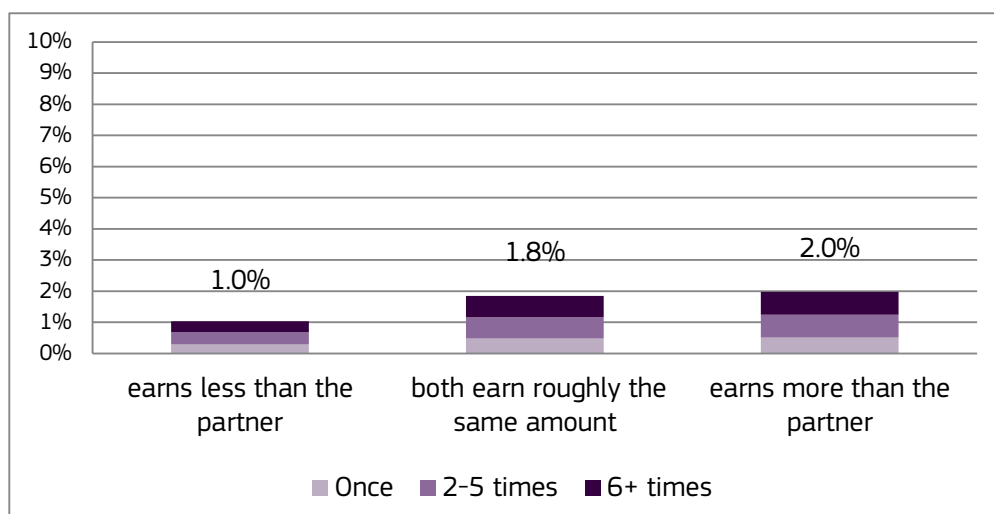
Source: FRA violence against women survey dataset 2012.

Economic status of household. Earlier on, for physical violence, we found evidence that risk increases steadily and significantly with each successive deterioration of the household economic situation. The results are much weaker for sexual violence.

One clear suggestion from prevalence rates of sexual violence (from all perpetrators: Table 8) is that women in worse off households are more at risk of sexual violence than women in other types of households, especially those living comfortably. However, estimated probabilities of sexual abuse indicate that **differences across household economic condition are not robust enough to reach statistical significance** (Figure 7 and Table D8, Appendix).

Table 8 Frequency of sexual violence by self-reported economic status

Violence by any perpetrator in past 12 months

Frequency	0	1	2–5	6+	Total	
	%	%	%	%	N.	%
A: Living comfortably on present income	98.5	0.7	0.3	0.6	10421	100
B: Coping on present income	98.5	0.4	0.6	0.4	18913	100
C: Finding it difficult on present income	97.4	0.7	1.0	0.8	11814	100
t-test: A–B			*			
t-test: B–C	***	*	*	**		

Source: FRA violence against women survey dataset 2012.

Figure 7 Estimated probabilities of sexual violence by frequency class and self-reported economic status

Violence by any perpetrator in past 12 months
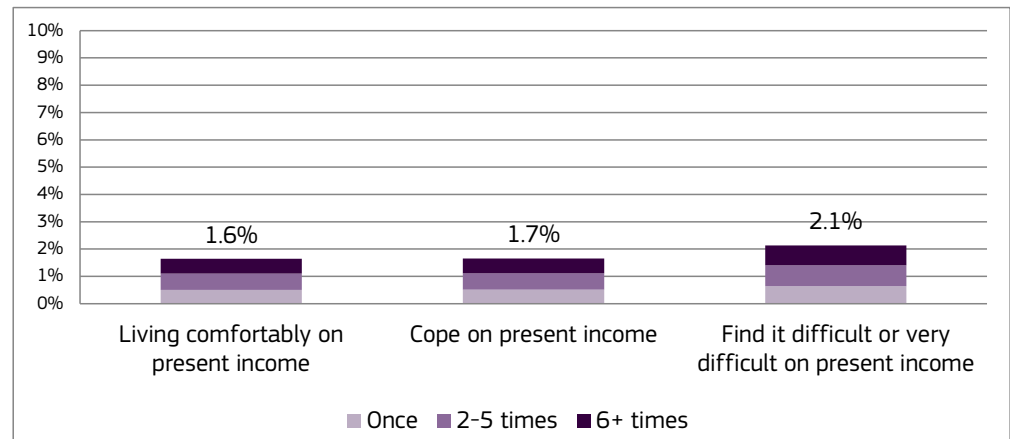
Source: FRA violence against women survey dataset 2012.

5.3 Her economic independence and psychological violence

Together with sexual harassment, psychological violence by one's partner is the most widespread type of violence according to FRA data: forty-three percent of women in the EU report having experienced some form of psychological abuse from the current or the previous partner (FRA survey: Table 4.1)[23].

The survey treats psychological abuse as more or less frequent 'habitual' behaviour rather than as a series of distinct occurrences. For this reason, women participating in the survey were not asked to distinguish between abuse experienced since youth and in recent months. We therefore disregarded time in analysing psychological violence, and because the frequency of occurrence of psychological abuse was only recorded for the current partner, we restricted analysis to partnered women.

It is known from the literature that children may be used to put psychological pressure on women (see Part 1 of the report: passim), an idea that inspired some of the questions the FRA survey asked to trace psychological violence. As a result, women in households with children answered a longer/different questionnaire than women in childless households, making it problematic to collapse the two groups for analysis. In what follows, we focus primarily on women living in households where children are present. Estimates for women in households without children are confined to the appendix and briefly mentioned in the text.

Labour force status. Results from cross-tabulations and from econometric estimates indicate that **labour force status is not a significant discriminant for psychological abuse** in households **where children are present**. The estimated risk is higher among women in 'other labour force status', thanks primarily to the 'students and trainees' and the 'short term unemployed' categories. However differences among categories are not statistically robust in cross-tabulations (Table 9) or in econometric estimates (Figure 8).

The picture changes somewhat **when children are not present.** In this case, **not being in employment** ('not working' women) **significantly adds to the chances of psychological violence** compared to being employed (Table C4 and Figure C2 in Appendix C).

Table 9 Frequency of psychological violence by respondent labour force status

Violence by current partner

Frequency	Women in households with children					
	Never	Some-times	Often	All the time	Total	
	%	%	%	%	N.	%
A: Currently working	77.3	8.2	9	5.6	12700	100
B: Other labour force	76.1	7.4	8.8	7.7	11014	100
t-test: A–B				***		
C: All	76.7	7.8	8.9	6.6	23714	100

Source: FRA violence against women survey dataset 2012.

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23 Fifty-five percent of women experienced sexual harassment since the age of 15, according to the same source.

Figure 8 Estimated probabilities of psychological violence by frequency class and respondent labour force status

Violence by current partner. Women in households with children
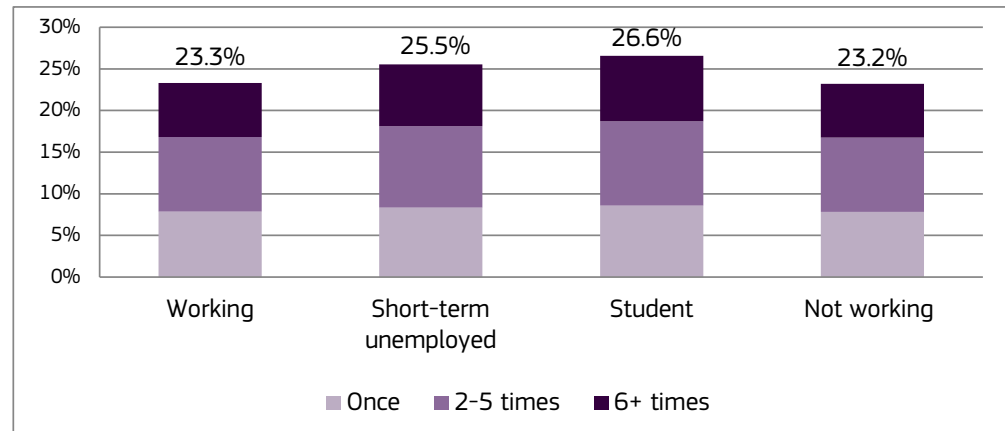
Source: FRA violence against women survey dataset 2012.

Comparative earnings. Unlike labour force status, relative earnings appear to make some difference in households with children. Inspection of Table 10 reveals that **women belonging to an egalitarian couple are more protected from psychological abuse than women who earn more or less** than their partner, with a larger difference in the latter case. In visual terms, a **U shaped pattern** emerges, with the left leg lending support to resource theory or the household bargaining approach (poor comparative earnings expose women) while the right leg tends to validate relative resource theory (higher female earnings are a threat). Econometric estimates confirm the U shaped pattern but deny significance to the right leg (Figure 9 and Table D10). The findings are similar but less clear cut for women living in households where there are no children: the one notable difference is that women in traditional couples fare even worse that their counterpart with children (Table C5 and Figure C3).

Table 10 Frequency of psychological violence by earning position compared to partner

Violence by current partner

Frequency	*Women in households with children*					
	Never	Some-times	Often	All the time	Total	
	%	%	%	%	N.	%
A: Respondent earns less than partner	76.4	8.2	8.9	6.5	15645	100
B: Both earn roughly the same amount	80.4	6.4	7.9	5.3	4457	100
C: Respondent earns more than partner	74.6	7.4	10.4	7.7	2648	100
t-test: A–B	***	***				
t-test: B–C	***		*	*		

Source: FRA violence against women survey dataset 2012.

Figure 9 Estimated probabilities of psychological violence by frequency class and earning position compared to partner

Violence by current partner. Women in households with children
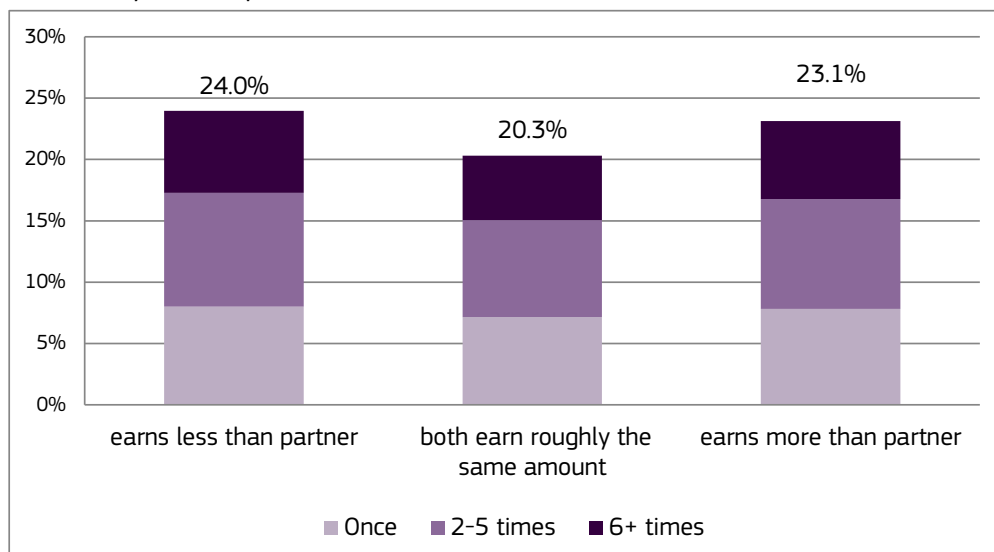
Source: FRA violence against women survey dataset 2012.

To summarize the comparative earnings results, the evidence we obtained is of an **'unbalanced' U relationship between psychological violence and women's contribution to household earnings**. The U relationship arises from the fact that exposure to abuse first decreases when women increase their share of household earnings and head towards parity. Once their share is sufficiently large to outweigh their partner's, the reverse happens and violence thickens again. However, the left leg of the U is much longer and stronger than the right leg, i.e. **earning less is definitely more 'risky' for women than earning more than their partner, especially if they are childless**.

Concerning **economic status of household,** the results echo what we found for physical violence, with econometric evidence in Figure 10 consistently mirroring results from cross-tabulations in Table 11.

Table 11 Frequencies of psychological violence by self-reported economic status

Violence by current partner

Frequency	Women in households with children					
	Never	Some-times	Often	All the time	Total	
	%	%	%	%	N.	%
A: Living comfortably on present income	81.9	7.5	6.7	3.8	6292	100
B: Coping on present income	78	8.2	8.5	5.4	10928	100
C: Finding it difficult on present income	69.1	7.7	11.7	11.5	6259	100
t-test: A–B	***		**	**		
t-test: B–C	***		***	***		

Source: FRA violence against women survey dataset 2012.

Specifically, among partnered women in households with children, **a rising trend in psychological violence**, especially regular abuse ('all the time'), **is observed in the transition from households perceived to live comfortably** to households just coping and **those that find it difficult or very difficult to cope**. Once more, we find that the better the household status, the more women are sheltered from violence (Figure 10), and once more we find that the evidence is sufficiently solid to attain statistical significance (Table D11). However, when children are not present, the picture is more confused and less easy to interpret (Table C6 and Figure C4).

Figure 10 Estimated probabilities of psychological violence by frequency class and self-reported economic status

Violence by current partner. Women in households with children
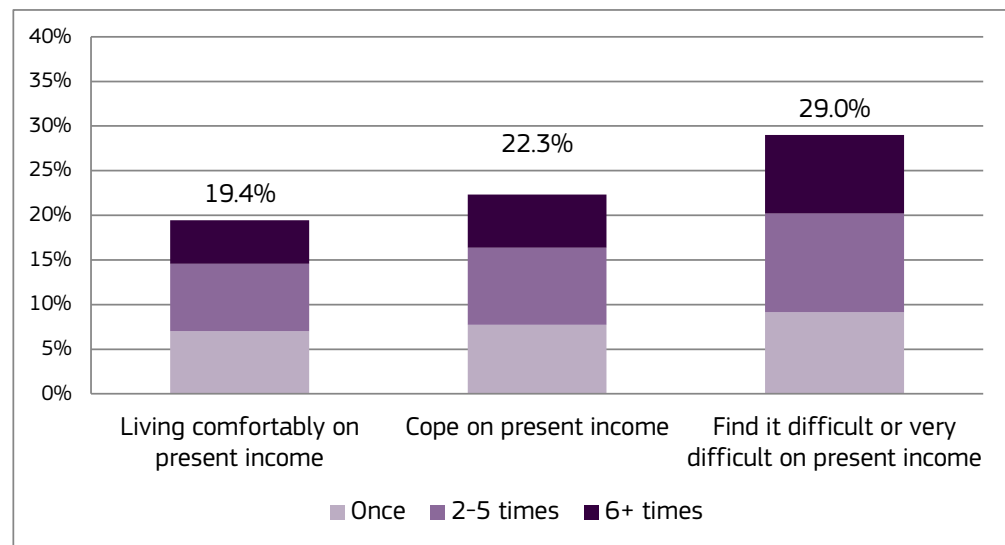
Source: FRA violence against women survey dataset 2012.

To draw all the threads of the discussion on psychological violence, for women in households with children we found that:

- **having a job does not appear to significantly help women fence off psychological abuse by partners;**

- **however, one collateral advantage of working is that it helps prevent the household from falling into critical economic conditions which decisively boost exposure to psychological abuse between partners;**

- **yet, if she earns 'too much' (i.e. more than her partner), the protection that adequate household finances afford may be partly eroded**.

The main difference when children are not present is that not working or earning less than the partner significantly increases exposure to psychological abuse. This raises the question whether children offer women in traditional relationships some shield against psychological abuse, a finding that has not been emphasized in the literature and deserves further investigation.

5.4 Her economic independence and economic violence

Economics is not the first association that comes to mind when thinking or talking about violence against women. Yet the category of **economic violence** was created precisely to denote those forms of abuse that are explicitly geared to limit the financial resources women can mobilize in order to gain autonomy in their living (see section 2.2.2, Part 1). The FRA survey sees economic violence as part of psychological violence, but separates it out, matching the concept with the following behaviour on the part of the respondent's partner: *"preventing the respondent from making decisions on family finances or shopping independently, or forbidding her to work outside the home" (FRA 2014a: 72).* Answers to the two questions devoted to this type of behaviour revealed that *"some 5% of women have experienced economic violence in their current relationship, and 13% of women have experienced some form of economic violence in past relationships" (FRA 2014a:71).*

In line with the FRA survey, we analysed economic violence as part of psychological violence (section 5.3) but here we examine it on its own. In fact, figures on prevalence of economic violence are sufficiently high to invite and justify separate analysis. In order to minimize repetitions and simplify analysis, we only discuss results from econometric estimation. Without much loss of information, moreover, we present streamlined estimates from a simple 'probit' model where probabilities are for (ever) having experienced economic abuse from the partner as opposed to not having had this experience. In other words, the frequency of abuse is ignored.[24]

Box 4. Frequency and habit in psychological abuse

As noted, there is a habit component in all types of psychological abuse, and it is especially important in economic abuse. From the point of view of the perpetrator, restricting opportunities for women to exercise financial autonomy 'makes sense' if it is repeated regularly over time. Preventing women from shopping is a clear case in point, but regularity may also take more subtle forms. Think of a woman who is denied permission to take a job. Such denial also acts as a signal that permission is likely to be denied in the future, and the implicit threat of future denials has the same effect as repeated denials. Because of the importance of habit in economic violence, adding data on frequency of occurrence need not be more informative than simply recording whether or not economic abuse occurred.[25]

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24 *Binary probit* is a special (and simpler) case of the ordered version (Box3) and can be put to similar uses.

25 The same may be said for other forms of psychological violence, but does not hold across all forms. This is why we used information about frequency in section 5.3.

Does economic violence behave in much the same way as psychological violence? The broad answer is yes. Figure 11 shows how labour force status, comparative earnings and household economic condition influence estimated values. **Women who do not work, those who work but earn less than the partner and, finally, those who belong to households in critical economic conditions are all associated with an increase in the estimated risk of abuse**. In all these cases the increase in exposure to violence is statistically robust.[26]

Notice, in particular, that what we dubbed **unbalanced U shaped relationship** in the discussion about psychological violence surfaces again from the results on economic violence: working women who out-earn their partners face higher probability of abuse than working women who earn roughly as much, and the same holds for women on comparatively low earnings. Like for psychological violence, however, only the difference between women in egalitarian couples and those in traditional couples turns out to be significant.

Two additional findings are worth mentioning. First, **students show the lowest estimated prevalence of economic violence**, even lower than working women. This is hardly surprising since students generally do not face the choice of taking up employment. They are also less likely to cohabit with their partner, and therefore share financial and household management decisions with him: this reduces opportunities for the partner to exercise economic abuse.

Second, cultural differences are rather important for economic violence, **with exposure more than doubling among women of ethnic or religious minorities**. Cultural differences and the importance of minority affiliation have been widely recognized in the literature, especially in connection with sexual harassment (see Part 1). We come back to this point with further details in the next section.

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26 In comparison with women who work, those on roughly equal earnings, and women in well-off households, respectively: see Table D12).

Figure 11 Estimated probabilities of economic violence by current partner

A.   By respondent labour force status
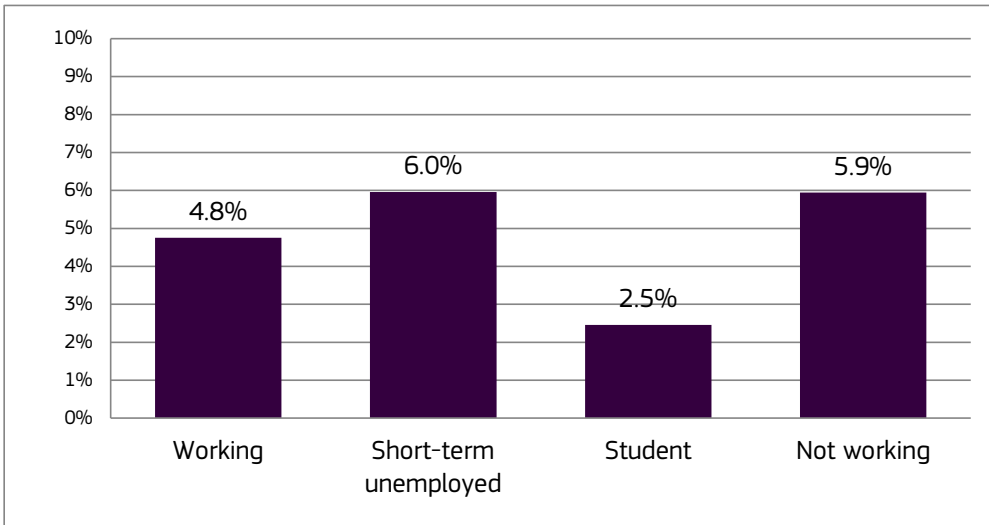
B   By earning position compared to partner
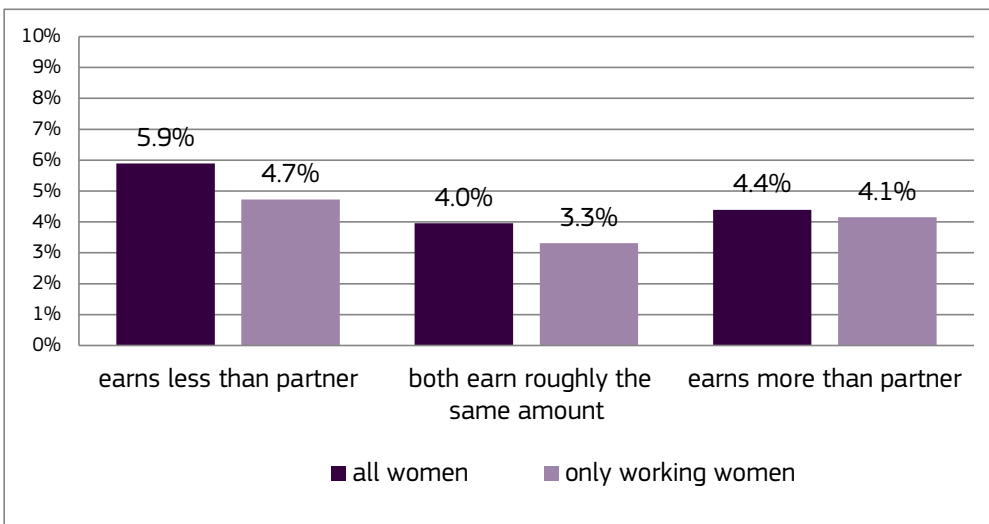
C.   By self-reported economic status
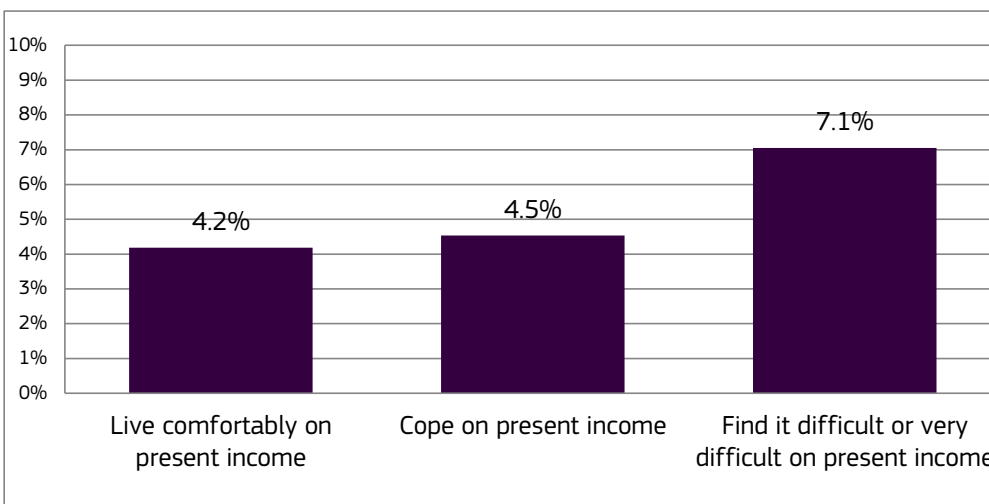
Source: FRA violence against women survey dataset 2012.

5.5 Her economic independence and sexual harassment

An estimated 24 million to 39 million women (13% to 21%) in the EU-28 experienced sexual harassment in the 12 months before the survey interview (FRA 2014a: 95). This is a major phenomenon that deserves closer attention than it has received in the literature.

Sexual harassment may come from partners, friends, acquaintances, colleagues, bosses or passers-by and we saw no strong reason for breaking down analysis by perpetrator, preferring to keep the sample as large as possible and the discussion simpler. As a result this section focuses on labour force status and household economic status while it disregards comparative earnings since the latter indicator can only be used if the sample is restricted to partners.

Labour force status. Because sexual harassment takes place in a social context, it tends to increase with the density of social interactions.   It is hardly surprising, therefore, to learn from Table 12 that **prevalence of sexual harassment among working women is almost four points higher than for women in 'other labour force status'.** This is a clear-cut result, with differences between working and 'other' women reaching statistical significance across the entire frequency scale. And it resonates with the fact that the literature on sexual harassment largely focuses on the work domain (section 2.3).

A more articulated result obtains from econometric estimates. Not only are the chances of experiencing sexual harassment higher for working than non working women (homemakers, retirees and so on). They are actually even higher for students and the short-term unemployed, although in statistical terms the difference between the latter and working women does not achieve critical significance (Figure 12 and Table D13).

Table 12 Frequencies of sexual harassment by respondent labour force status

Harassment by any perpetrator in past 12 months

Frequency	0	1	2—5	6+	Total	
	%	%	%	%	N.	%
A: Currently working	76.9	5.7	8.1	9.4	21651	100
B: Other labour force status	80.7	4.5	6.9	7.9	20351	100
t-test: A–B	***	***	**	***		
C: All	78.7	5.1	7.5	8.7	42002	100

Source: FRA violence against women survey dataset 2012.

Figure 12 Estimated probabilities of sexual harassment by frequency class and respondent labour force status

Harassment by any perpetrator in past 12 months
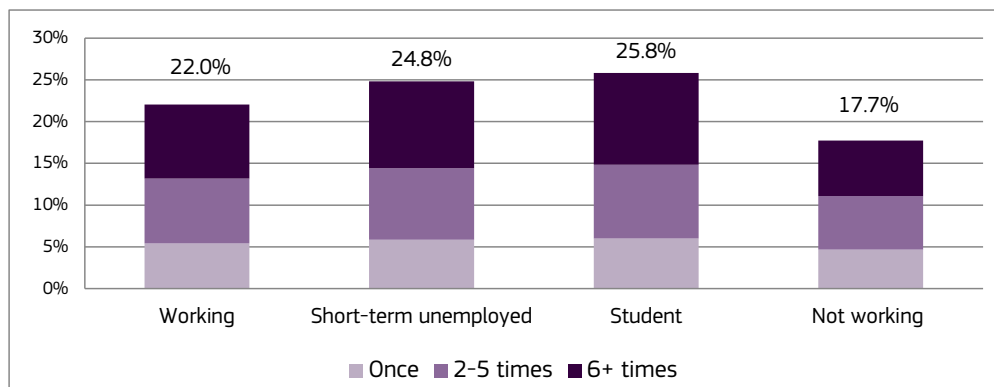
Source: FRA violence against women survey dataset 2012.

Economic status of household. When the focus is moved to household economic conditions, cross-tabulations show a puzzling U relationship which sees women from middle income households – those coping on present income – displaying the highest prevalence of sexual harassment (Table 13).

Table 13 Frequency of sexual harassment by self-reported economic status

Harassment by any perpetrator in past 12 months

Frequency	0	1	2—5	6+	Total	
	%	%	%	%	N.	%
A: Living comfortably on present income	77.1	6.1	8.6	8.2	10421	100
B: Coping on present income	80.7	4.9	6.3	8.1	18913	100
C: Finding it difficult on present income	77.3	4.5	8.5	9.7	11814	100
t-test: A-B	***	**	***			
t-test: B-C	***		***	***		

Source: FRA violence against women survey dataset 2012.

However, econometric results yield a much more familiar picture echoing a bleak déjà vu: **women from the poorest households are the most exposed to sexual harassment** (Figure 13). Specifically, the probability of having experienced sexual harassment at least once is more than five percentage points higher for women perceiving their households as finding it difficult to cope in comparison to well-off households, and clearly significant (Figure 13 and Table D14). In contrast, estimated differences between households perceived to be well off and those just coping on present income are lower and not significant across frequency categories.

Figure 13 Estimated probabilities of sexual harassment by frequency class and self-reported economic status

Harassment by any perpetrator in past 12 months
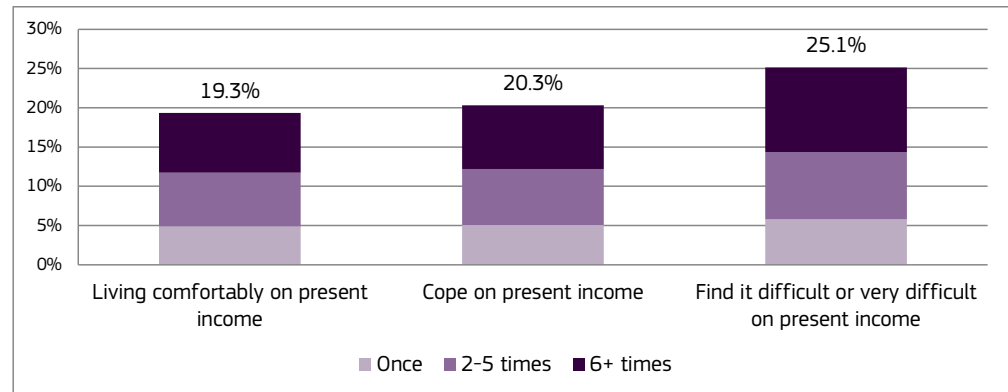
Source: FRA violence against women survey dataset 2012.

Summing up with regard to sexual harassment, the findings are sufficiently neat to inspire plausible interpretation. **Being out of employment clearly protects the woman,** but the flipside of the coin cannot be ignored. If the fact that she **does not work hinders economic betterment of the household, the 'advantage' of not working may be considerably reduced.**

What we found is generally in line with the multifarious literature suggesting that work organization inherently favours harassment because of its hierarchical and power structure (Part 1:section 3.2). In order to advance beyond such general understanding, however, detailed information is needed on work organizations and working conditions which is not available in the FRA survey.

5.6 Male partner's economic condition and intimate partner violence

Having completed analysis of 'her' economic conditions we can now turn to those of her partner. Recall that we know practically nothing about former partners, and that relevant information for current partners is scant. What we do know about the current partner includes his earnings, but only in relation to hers, and current labour force status. Given that we already systematically looked at comparative earnings in the previous sections, **what follows concentrates on labour force status.**[27]

Figure 14 compares probabilities for the woman to suffer physical or sexual violence from a partner who is employed, unemployed or out of the labour force. **Unemployed partners are shown to be more closely associated with the woman's experience of physical or sexual violence,** in line with what resource theory predicts and contrary to Anderberg's version of the household bargaining approach (Anderberg et al. 2015). **However, estimated differences with respect to partners not in the labour force or those in employment are rather limited and do not reach significance** (Table E2 and E3). For example, the estimated risk that the woman experienced sexual violence at the hands of her partner is 3.8% if he is unemployed, 3.2% if he has a job and 2.9% if he is out of the labour force.

Findings for psychological violence are not much stronger. As Figure 14 clearly suggests, **the (estimated) likelihood of psychological violence increases linearly with distance of the woman's partner from employed status**. The most violent partners are those not in the labour force (25.7% probability), followed by the unemployed and those holding a job (24.1% and 22.7%, respectively). In one case – being out of the labour force – the increase with respect to being employed is significant (Table E4).

This latter finding, too, is broadly in line with resource theory: the more a male partner can rely on his work, the less he feels the need to use violence in order to preserve power in the household and the relationship. However, none of the above findings are particularly robust, but this must be weighed against the fact that information about partners in the FRA survey is scant.

Figure 14 Estimated probabilities of violence by frequency class, type of violence and partner's employment status

Notes: For psychological violence, frequency categories are 'sometimes', 'often' and 'all the time'. Frequency of psychological violence refers to women in households with children. Frequency of sexual violence, physical violence and sexual harassment refer to occurrences in the past 12 months.

Source: FRA violence against women survey dataset 2012.

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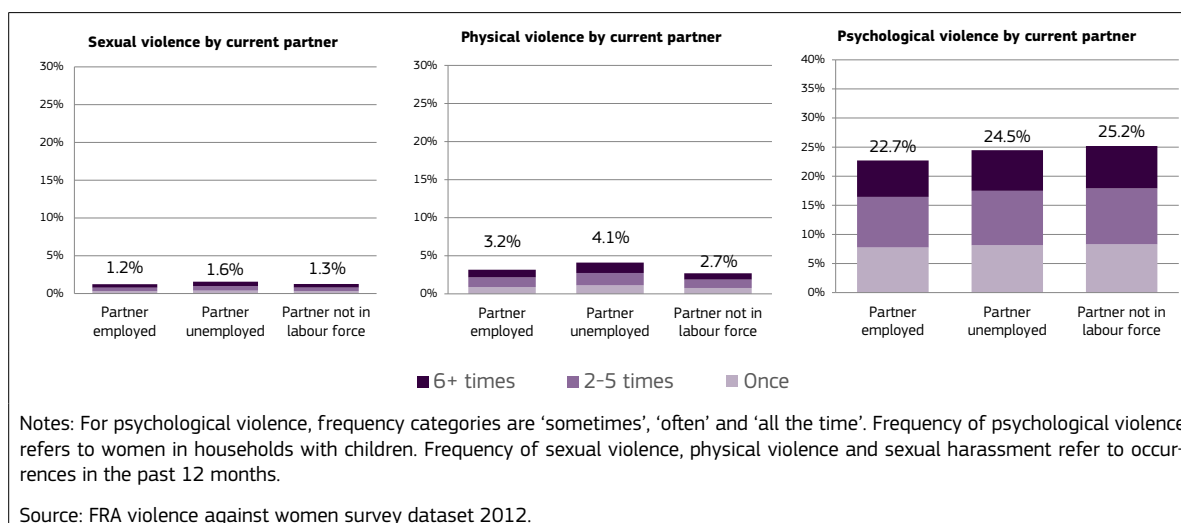
27 In order to simplify the text and keep the size of the report manageable, we only report the results of econometric estimation, foregoing those from cross-tabulations.

5.7 The importance of education, age, ethnicity, childhood violence and alcohol abuse for VAW

Economic conditions do matter, as we have learnt from the preceding sections, but they are not necessarily the best 'predictors' of abuse. This section broadens analysis to investigate the role of the remaining explanatory variables used in our estimations. The idea is to gauge how important economic conditions are compared to other factors, while providing additional evidence of potential relevance to policy making in the EU. Besides education, we shall investigate her age, ethnicity and experience of violence in childhood, as well as his drinking habits; we also consider awareness on her part that specialized services and shelter are available to shield women from violence and counter its effects. The former group of variables are especially relevant for policy targeting, while awareness of special services matters for policy design and assessment in particular.

Education. Let us start with the role of education, her education, that of her partner and comparative education (i.e. whether she is more or less educated than her partner). For economists education is a basic 'economic' variable, since it represents 'investment' in own human capital undertaken by individuals in order to gain access to higher earnings. However, education is more than investment in future earnings and this 'more' is especially relevant for analysing VAW. If knowledge bestows power, so education can empower men and women within partnerships, or social relations more generally. Such empowerment may be independent of earnings and may be used by the woman in a relationship to fence off abuse. The flip side of the coin is that education can represent a threat for men who may respond to empowerment with abuse. **Call 'shielding effect' the former and 'exposing effect' the latter.** The shielding effect is upheld by the resource dependency and household bargaining approaches, while the exposing effect has a central place in relative and gendered resources hypotheses but also in conceptual approaches to sexual harassment that emphasize socio-cultural mechanisms and social role identity (see Part 1:passim). **Both effects surface from our results, depending on the type of violence.**

The shielding effect is the rule (Figure 15). Women with medium or higher education face less exposure to sexual, physical or psychological abuse from partners or non partners compared to low educated women. However, the degree of protection that higher education affords is sufficiently large and statistically robust with regard to sexual violence by any perpetrator, but not to sexual violence by partners or physical violence in general (Table E3, E5 and E6).

The exposing effect is the exception, for it only concerns sexual harassment (from all perpetrators). Higher education is an important risk factor here, given that medium or higher education adds 5 percentage points (robust) to the risk of sexual harassment compared to low education (17.9% to 23.2%: last panel of Figure 15 and Table E7). A contributing factor to this result is that women of higher education are more likely to be present and prominent in social and political life, as well as in the labour market.

Figure 15 Estimated probabilities of violence by frequency class, type of violence and women's education

Notes: For psychological violence, frequency categories are 'sometimes', 'often' and 'all the time'. Frequency of psychological violence refers to women in households with children. Frequency of sexual violence, physical violence and sexual harassment refer to occurrences in the past 12 months. Source: FRA violence against women survey dataset 2012.
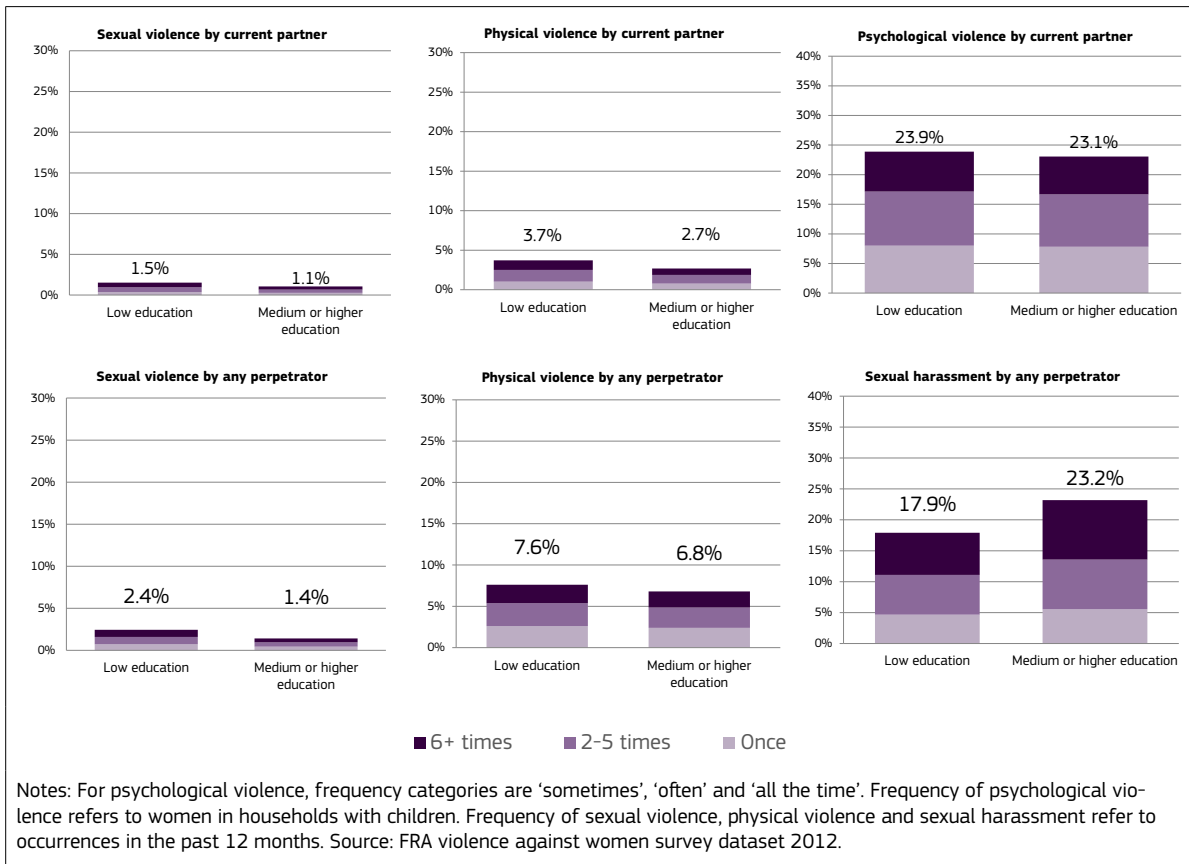
Partners' level of education behaves more or less in line with expectations from classical resource theory. **Across types of violence and frequency, low educated partners display comparatively higher propensity to be physically, sexually or psychologically abusive** (Table E2-E4). However, the difference loses robustness in the case of psychological violence where lower education raises the chances of violence by too little to attain significance (Figure 16, last panel).

Figure 16 Estimated probabilities of violence by frequency class, type of violence and partner's education

Notes: For psychological violence, frequency categories are 'sometimes', 'often' and 'all the time'. Frequency of psychological violence refers to women in households with children. Frequency of sexual or physical violence and sexual harassment refer to occurrences in past 12 months. Source: FRA violence against women survey dataset 2012.
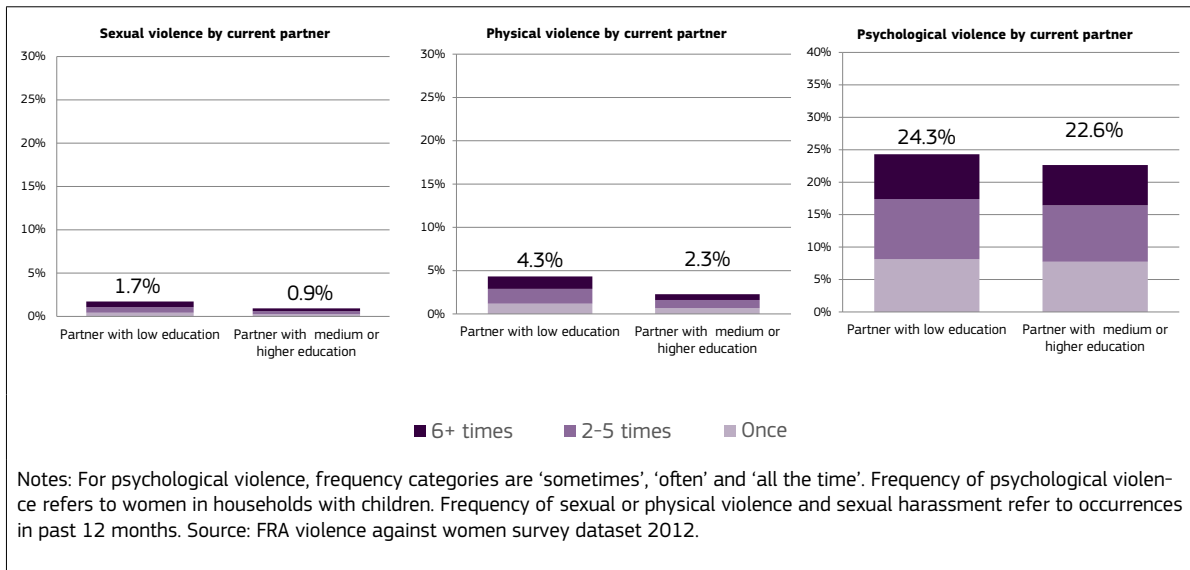
As we just noted, **a highly educated woman could be seen as a threat by a domineering, less educated husband with the result of fuelling violence**. Figure 17 accordingly compares estimated probabilities of violence for women who are more educated and less or equally educated with respect to their partners. Estimated differences are noticeably small and statistically uninfluential for physical and sexual abuse, larger and fairly robust for psychological violence (26.5% for women better educated than their spouse compared to 22.7% for other women: see also Tables E2–E4). Once again, **the exposing effect appears to be at play in psychological violence.**

Figure 17 Estimated probabilities of violence by frequency class, type of violence and comparative level of education

Violence by current partner

Notes: For psychological violence, frequency categories are 'sometimes', 'often' and 'all the time'. Frequency of psychological violence refers to women in households with children. Frequency of sexual or physical violence and sexual harassment refer to occurrences in past 12 months. Source: FRA violence against women survey dataset 2012.
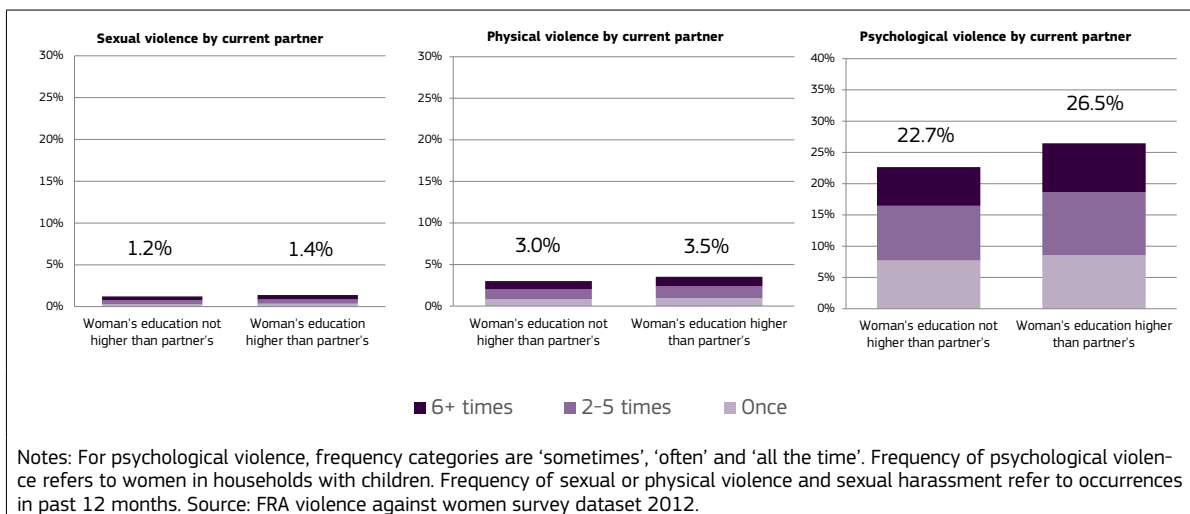
Let us arrange the clips of the mosaic on education we have been exploring bit by bit. **For women in partnerships, the risk of physical and sexual violence nearly doubles if the spouse is low educated.** However, **being more educated than the partner** need not reduce such risk, while it **increases that of psychological abuse** by some four percentage points. **In non intimate relationships, being better educated works both ways for women**, keeping sexual abuse at bay while exposing women to more sexual harassment. The intricate, non linear relationship between education and (different kinds of) abuse echoes that between economic conditions and abuse. It is yet another example of how crucial it is to distinguish between types of violence and perpetrators: failure to do so can easily produce seemingly inconsistent results.

Age. Being young has often been found to aggravate the risk of abuse in the VAW literature. Our results broadly confirm this view. Figure 18 compares women aged 18-29 with older women and reveals a consistent pattern. **Estimated probabilities for all types of violence** and by any perpetrator **are higher for women under 30 years of age, except in the case of sexual abuse from the current partner**. However, the results are only statistically robust for physical violence and sexual harassment, and only if all perpetrators are considered (Tables E2-E7). In both these cases, robustness holds across frequency categories.

Figure 18 Estimated probabilities of violence by frequency class, type of violence and women's age

Notes: For psychological violence, frequency categories are 'sometimes', 'often' and 'all the time'. Frequency of psychological violence refers to women in households with children. Frequency of sexual violence, physical violence and sexual harassment refer to occurrences in the past 12 months. Source: FRA violence against women survey dataset 2012.
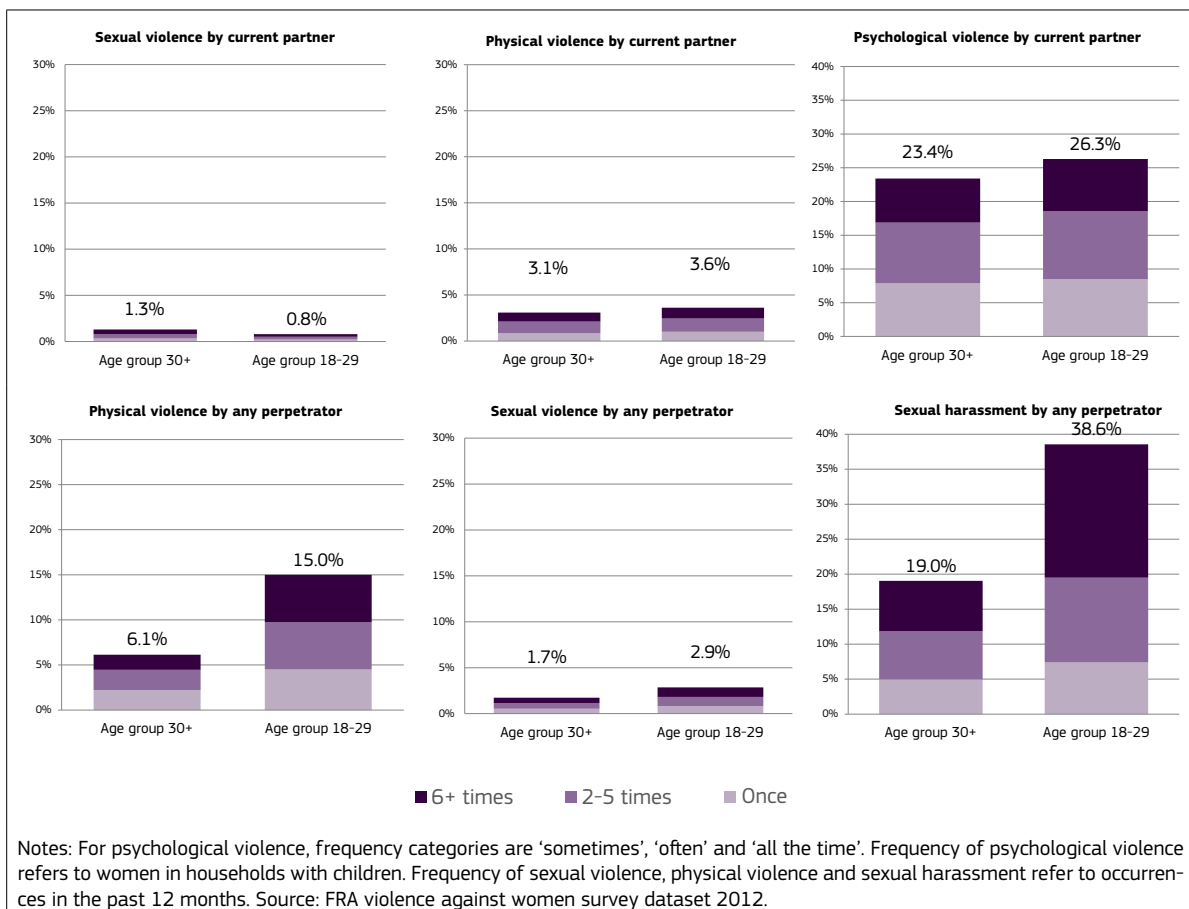
Ethnicity. One of the results of the FRA survey that attracted wide attention when the report was first issued is differences in prevalence of VAW across European countries. With hindsight, the finding should have caused less surprise since Europe is rich in cultural diversity and a large body of literature links gender, culture and violence, especially sexual harassment (section 2.3).

In this report, we are specifically interested in the role that ethnic or religious minority affiliation plays in relation to VAW. Earlier we mentioned that minority affiliation more than doubles the risk of economic violence among European women. Figure 19 shows that, far from being an exception, economic violence strongly exemplifies a pattern that recurs across all types of violence and perpetrators.

Consistency of pattern does not imply statistical solidity: in our estimates **minority affiliation is associated with a large and statistically significant rise in exposure only with regard to psychological violence by the current partner and sexual harassment by all perpetrators** (Tables E2-E7). In the specific instance of economic violence that we examined earlier, the estimated probability of abuse rises from 5.5% for an 'average' woman not affiliated with any minority to 11.6% in the case of affiliation.

Figure 19. Estimated probabilities of violence by frequency class, type of violence and women's affiliation with an ethnic or religious minority

Notes: For psychological violence, frequency categories are 'sometimes', 'often' and 'all the time'. Frequency of psychological violence refers to women in households with children. Frequency of sexual violence, physical violence and sexual harassment refer to occurrences in the past 12 months. Source: FRA violence against women survey dataset 2012.
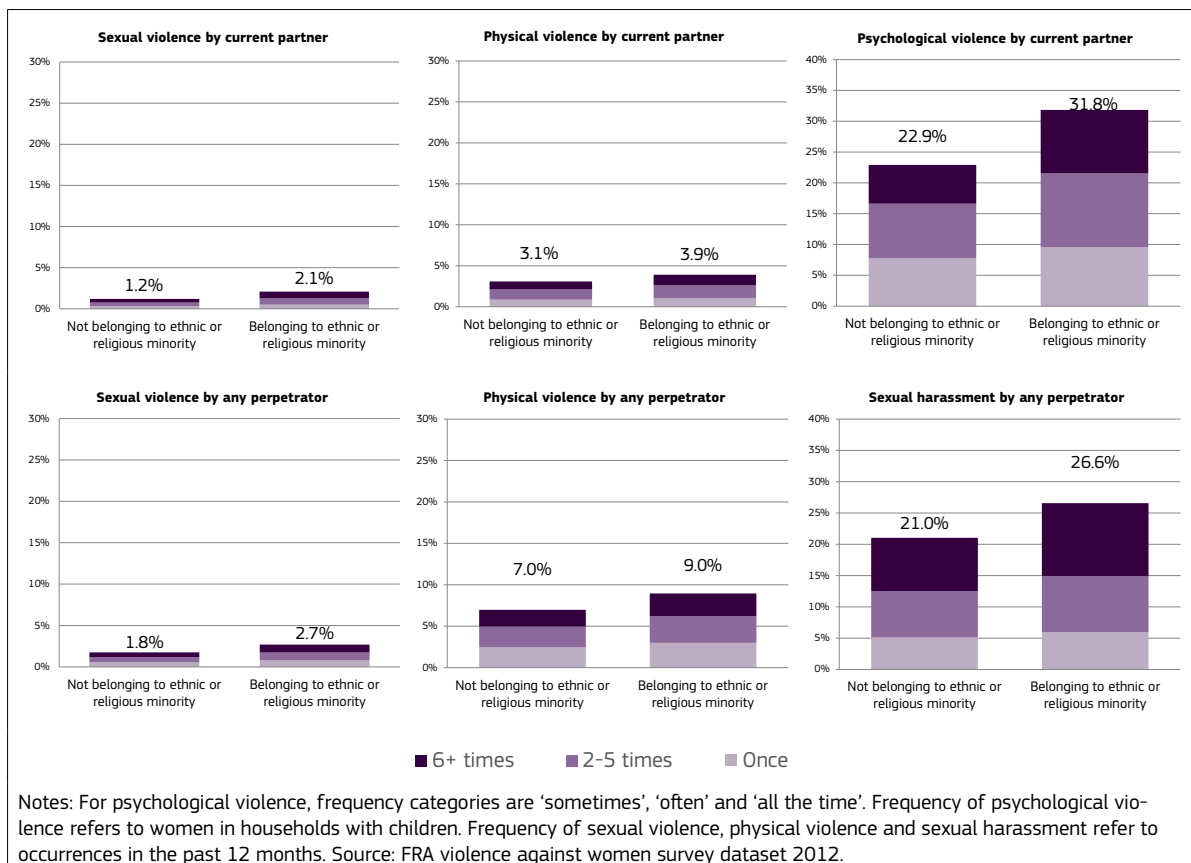
Violence in childhood. The importance of physical or sexual abuse during childhood in relation to violence in adulthood can hardly be overemphasised. In this respect, too, the FRA report confirms what has been reiterated in the literature time and again (FRA 2014a, Abramovaite et al. 2015).

So do our findings: **women** (with otherwise average characteristics) **are nearly two to four times as likely to have experienced violence in the past 12 months if they were exposed to physical or sexual violence at least twice during childhood** (Figure 20). For example, the likelihood of physical violence from the current partner goes up from 1.9% to 6.4% if the respondent was abused as a child, while that of sexual harassment (by all perpetrators) increases from 17.4% to 31.5%! The surge in probabilities is highly significant over types of violence (from partners or non partners) and over frequency class: **abuse in childhood is the best predictor of abuse in adulthood.**

Figure 20 Estimated probabilities of violence by frequency class, type of violence and women's experience of violence in childhood

Notes: For psychological violence, frequency categories are 'sometimes', 'often' and 'all the time'. Frequency of psychological violence refers to women in households with children. Frequency of sexual violence, physical violence and sexual harassment refer to occurrences in the past 12 months. Source: FRA violence against women survey dataset 2012.
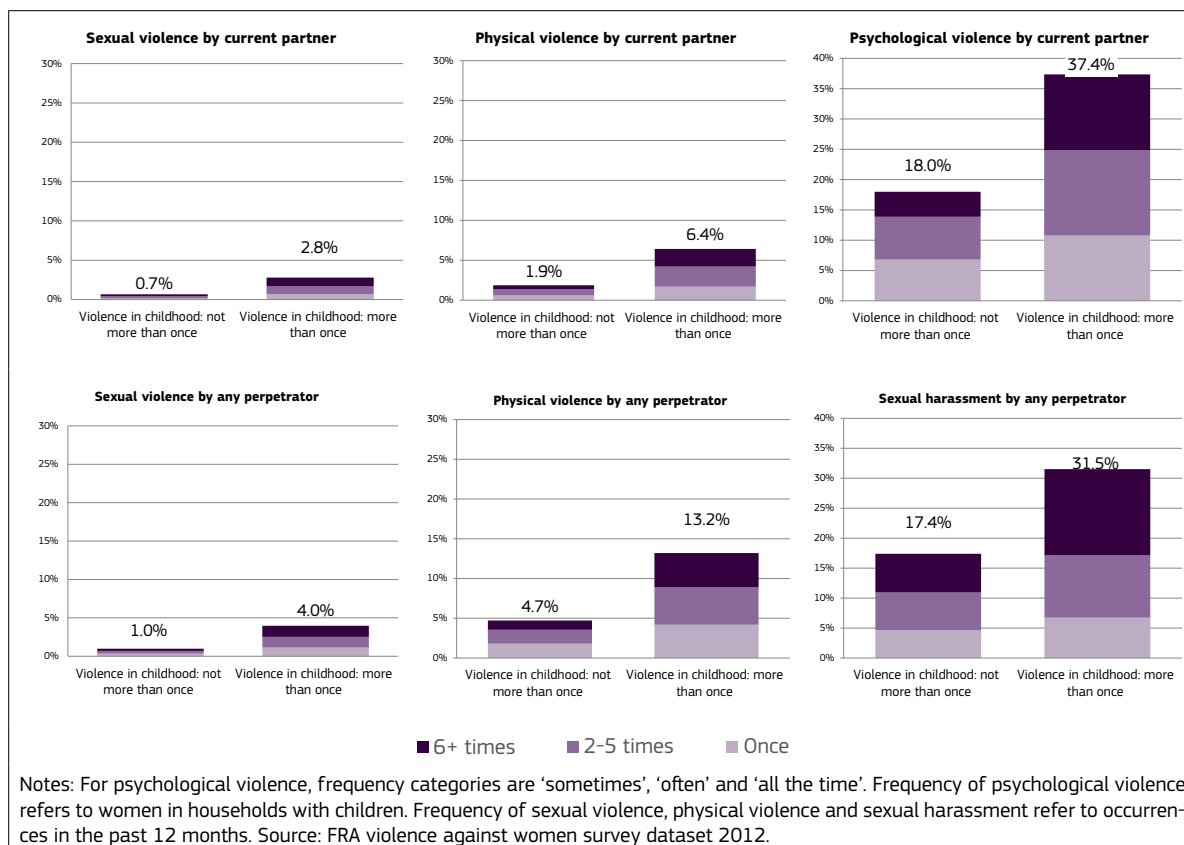
Alcohol abuse. According to the literature on VAW, **another good predictor of partner violence is whether or not he gets drunk regularly** (WHO 2016).[28] We define 'regularly' as at least once every two months and find that regular drunkenness on his part is associated with a fourfold increase in his partner's exposure to sexual and physical violence, and with a one and a half times increase for psychological violence (Figure 21), all statistically robust.

28 Harmful use of alcohol is listed by the World Health Organization among major risk factors for IPV, especially sexual violence (WHO 2016).

Figure 21 Estimated probabilities of violence by frequency class, type of violence and partner's drinking habits

Notes: For psychological violence, frequency categories are 'sometimes', 'often' and 'all the time'. Frequency of psychological violence refers to women in households with children. Frequency of sexual violence, physical violence and sexual harassment refer to occurrences in the past 12 months. Source: FRA violence against women survey dataset 2012.
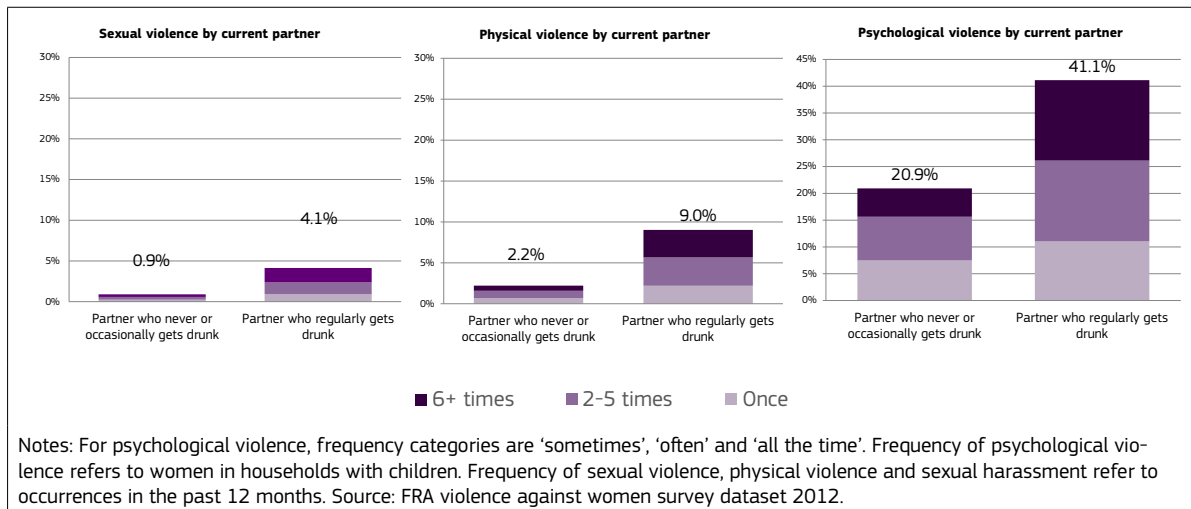
5.8 Leaving a violent relationship

To conclude our investigation of the FRA data set, we reverse perspectives and ask the following question(s): (i) do economic conditions of women in violent relations – financial independence in particular – influence the chances of leaving the relation? and (ii) what other factors are involved? In our definition **a woman had a violent relationship if sexual or physical abuse occurred at least once in any of the partnerships the woman entered since she was 15 years old** (Box 5 discusses our choice) and she left a violent relationship if her current partnership is not violent. **Separation rate** is the **share of women who left a violent relationship**, having been in at least one during their adult life.

Table 14 breaks down the average separation rate by the variables in the explanatory set used for estimation. By comparing separation rates for different variables we can gauge their possible influence. Rates are noticeable lower for non working women and low educated women, but also for women in households living well on present income as well as for female members of religious or ethnic minorities. Lower rates suggest that each of these factors makes separation more difficult or is associated with other factors making separation more difficult. Conversely, being a student and being aware that specialized services for victims of violence are available noticeably improves rates.

Table 14 Separation rates from a violent relationship by 'explanatory' variables

Violent relationships since age 15 years

		Did not leave	Left	All women with ex-perience of a violent relationship	Without experience of a violent relationship
All women in survey					
	freq.	1914	6285	8200	31419
	%	23	77	100	
age 18-24 years					
	%	14.6	85.5	100	
age 25-29 years					
	%	16.4	83.6	100	
age 30-34 years					
	%	19.0	81.0	100	
age 35-39 years					
	%	23.7	76.3	100	
age 40-49 years					
	%	26.5	73.5	100	
age 50-59 years					
	%	25.5	74.5	100	
age 60-74 years					
	%	26.4	73.6	100	
Primary and lower secondary education					
	%	27.1	72.9	100	
Upper and post-secondary education					
	%	20.5	79.5	100	
Tertiary education					
	%	21.9	78.1	100	
Belonging to ethnic or religious minority					
	%	27.2	72.8	100	
Aware of at least one service for VAW					
	%	21.4	78.6	100	
Working					
	%	21.2	78.8	100	
Short-term unemployed					
	%	23.9	76.1	100	
Student					
	%	16.4	83.6	100	
Not working					
	%	27.5	72.5	100	
Living comfortably on present income					
	%	25.6	74.4	100	
Coping on present income					
	%	22.9	77.1	100	
Finding it difficult or very difficult on present income					
	%	22.5	77.5	100	

Several of these findings on separation rates resonate with the literature we re-viewed in Part 1 (end of section 2.2.2), for example the finding that rates are lower if the woman does not work and has poor education, but also if she belongs to a well-off household. However, separation rates computed from raw data can be confounding. For example, students may find it less difficult to leave not because of student status but because they tend to have much fewer children and the latter deter women from quitting relations, even violent ones. As before, we need to resort to econometric estimation in order to know whether it is student status, absence of children, or both that make a difference.

In the previous sections we estimated probabilities of experiencing a given type of violence in relation to the explanatory variables. In this section, we estimate prob-abilities of leaving a violent relationship in connection with explanatory variables. A different econometric procedure is appropriate here, the so called probit model with correction for sample selection (Box 5). The results of the estimation can, however, be illustrated in much the same way as we have up to now.

Box 5. Estimation issues: definitions, samples and variables

One preliminary issue to address is how a 'violent relation' should be understood and therefore measured. The literature offers mixed suggestions: some contributions only classify as violent those partnerships that are marred by severe forms of violence. Others use looser criteria, and we are closer to the latter. According to our definition, a relation is violent if sexual or physical abuse occurred at least once in any of the partnerships the woman entered since she was 15 years old. However, in order to allow sufficient time for the woman to get organised and leave a violent partner, we disregarded instances of relations where the abuse first occurred in the six months preceding the interview.

The size of the sample we eventually used therefore consists of the entire FRA sample of women who have been partnered at least once, barring those who were abused sexually or physically in the six months preceding the interview (Table 15). Out of the 39,618 women in the sample, 8200 experienced a violent relationship since 15 years of age (just above 20%). More than two thirds (77%) left the relationship.[29] However violent relations tend to break up more frequently than non violent partnerships, and the more intensely violent the relation is, the higher the separation rate (i.e. the per-centage of women who leave out of the total number of women in violent relation-ships). For example, if we had chosen to classify relations where physical or sexual abuse occurred more than once as 'violent', the separation rate would have gone up to 79% for violent relations with at least two episodes, and to 83% for those with at least six episodes of physical or sexual abuse.

Our explanatory variables for this estimation coincide with the ones we used for previ-ous estimates, except for partner characteristics. They include indicators of economic condition of the woman as well as her age. In line with the literature, we assumed that (her) economic condition influenced probability and frequency of experiencing violence but also the probability of leaving a violent relation. In contrast, we did not use infor-mation on the characteristics of the partner (including comparative earnings) for the simple reason that the likelihood of separating was estimated for <u>any</u> violent partner-

29 Seventy-seven percent separation rates may sound high in comparison with figures around 50% in the earlier American literature (see the commentary for Zlotnic, 2006, in section 2.2.2, Part 1). How-ever, Bowlus and Seitz (2006) report a much higher rate (73%: 1120f) and clarify that much depends on the characteristics of the sample.

ship that the woman entered since she was 15 years old, and the survey provides no information about former partners. Nor does it provide information about the characteristics of the woman at the time of separation; in this case, however, we simply assumed continuity of characteristics, i.e. that current characteristics are a good proxy for past characteristics. This is a very strong assumption and demands equally strong caution in interpreting the results. In particular, age effects might be interpreted as 'cohort effects', having children may be interpreted as 'propensity to have children' and so on. In some cases, however, interpretation is problematic as we point out in the text.

As noted, probabilities of leaving a violent relationship were estimated using the sample of women who found themselves in a violent relationship at some time in their life. The problem is that this group of women is not drawn randomly from the relevant population, indeed it may be a 'special' group of women. Hence a simple probit regression may yield biased estimates. To avoid this possibility, the Heckman correction procedure can be used: a 'selection variable' is identified, in our case 'living in a big city'. See, for example, Christopher Baum (2006), 'An Introduction to modern econometrics using Stata', Stata Press: chapter 10 for an easy to read illustration of this model and its estimation.

The set of explanatory variables is also the same as previously, on the understanding that what influences the probability to leave a violent relationship inevitably influences the probability that violence occurs. In this case, however, the characteristics of the partner are omitted because they are not known for previous partners. We also only know the characteristics of the woman at the time of the interview, not at the time she left the violent relationship. This demands special prudence in interpreting the results (Box 5).

Below are the main findings in point form. **The estimated probability of leaving a violent relation is significantly higher for a woman who:**

- **currently belongs to a household in critical economic conditions or just coping on present income** (+11 pp. with respect to household living comfortably)

- **is aware that specialized services are available for victims of violence** (+9 pp. with respect to being unaware)

- **attained a medium level of education** (+4 pp. with respect to being low educated).

Conversely, **probability of leaving is significantly lower for a woman who:**

- **currently lives in a household with children** (+11 pp. compared to having no child)

- **experienced physical violence at least twice in childhood** (+8 pp. with respect to not having been abused)

- **has not worked in the past twelve months** (+5 pp. with respect to having a job).

Figure 22 charts the corresponding probabilities. What we cannot find in the figures and need to ask is whether the numbers are backed by a consistent story and whether this story supports the expectation that financial independence helps women separate from violent partners.

Figure 22 Estimated conditional probabilities of leaving a violent relationship by selected characteristics of respondent

Self-reported economic status

Live comfortably on present income	70.1%
Cope on present income	76.1%
Find it difficult or very difficult on present income	81.4%

Awareness of specialised services

Not aware of any service for VAW	69.1%
Aware of at least one service for VAW	78.1%

Level of education

primary and lower secondary	74.1%
upper and post-secondary	78.2%
tertiary	77.1%

Having children

Not having any child	85.0%
Having children	73.8%

Labour force status

Working	78.8%
Short-term unemployed	74.2%
Student	74.2%
Not working	73.6%

Physical violence in childhood

Never	78.4%
Once	73.6%
More than once	70.0%

Sexual violence in childhood

Never	76.2%
Once	79.6%
More than once	76.4%

Psychological violence in childhood

Never	78.4%
Once	73.6%
More than once	70.0%

Source: FRA violence against women survey dataset 2012.

73

We believe that the answer is a very qualified yes. First, the reasons for being positive, then the need for qualification. Let us restate the result about labour force status: the estimated probability of leaving a violent relation is 78.8% for a woman who is currently in employment (Figure 22). All other things being equal, a woman who does not work has a probability of 73.6%. If moreover, the woman is aware that shelters or other services are available, this further increases her chances of quitting by several percentage points. It is tempting to conclude that a combination of employment and services is an important aid for female victims of IPV who wish to separate from abusive partners.

However, this must be reconciled with the apparently opposite finding that the probability of leaving is higher for women from households in critical conditions and lower in well-off households. One way to resolve the apparent contradiction is to recall from the literature on VAW that women who leave a violent relation often end up in poverty. Since we are estimating the probabilities that women left relationships at any point of their adult life, at least some of the women in our sample may have fallen into poverty after separation. If so, our estimates would reflect a powerful two way causation process between experience of violence and poverty.

But if we need to resort to two-way causation in order to make sense of our results, we are no longer able to infer with some degree of confidence that having a job, for example, helps a woman leave: she may, in fact, have taken a job after she left and because she left. In other words we are faced with a catch 22 dilemma of being able to make sense of our results only if we admit that they are rather preliminary and that they could change radically if we were able to properly allow for two-way causation.[30]

While we cannot resolve this methodological weakness, it is reassuring to note that in a different respect, our findings resonate with what other studies report (Gelles 1976): **when the woman has been abused in childhood, her likelihood of leaving is significantly curbed.** This reinforces evidence in support of the claim that addressing violence in childhood should feature among the policy priorities for containing VAW.

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30 Unfortunately, this option is unfeasible with FRA data. The main reason is that estimating inherently dynamic events (like entering a partnership, leaving it, entering a second one and so on), where two-way causation takes place over time, requires suitable data. In particular, retrospective information is needed on the characteristics of both partners over time and on the timing of the relevant transitions. No such information is available in the FRA survey and no degree of econometric sophistication can counter this kind of knowledge gap. We therefore chose to stick to a relatively simple methodology.

6. Violence against women in times of crisis

To conclude the empirical investigation, we now turn our attention from economic conditions at individual and household level (the micro level) to macroeconomic conditions, specifically conditions in a downturn. The FRA survey was conducted in the middle of the so called Great Recession, but it is a cross section, a one-shot picture across European Member States. Any possible effect of the crisis cannot therefore be singled out from the survey because we lack terms of comparison and must rely on other sources. In this short chapter, these sources are the literature and newly released judiciary data by Eurostat. The objective is minimal, however, a short incursion into these sources is warranted, more to motivate further enquiry than to offer a comprehensive review of either source.

6.1 Evidence from the literature

In the previous sections we learnt that, depending on type of abuse, occurrence is related to economic shocks, sudden unemployment in particular, marginal labour status, difficult household economic conditions, and (awareness of) availability of specialised services, all of which may worsen in a recession. However, a recession may acquire relevance for violence not only indirectly because the micro-level processes that lead to abuse happen to become more frequent, but also because a downturn fuels some of these processes independently. This is the idea of economists of the Beckerian tradition who maintain that recessions lower the opportunity costs of crime, hence of perpetrating violence, because unemployed or poor people, for example, have less to lose if they get caught after perpetrating violence.[31]

The empirical literature is still rather scant, especially in Europe, and it focuses primarily on the effect of the crisis via male unemployment or via cuts in services. Sanz-Barbero et al. (2015) estimated multinomial regressions using data from the 2011 Spanish macrosurvey of gender-based violence. They concluded that women's risk of IPV may have increased recently in Spain as a result of rising unemployment at regional level as well as income inequalities.

European comparative research on this point includes a regional report published in 2014 by the Euromediterranean Human Rights Network and a comparative study conducted by the United Nations Interregional Crime and Research Institute (UNICRI 2014). The latter covers four Member States (Italy, France, Spain and Greece) and is worthy of closer attention. The French experts contributing to this report underlined the role played by unemployment in domestic violence: *"If no social group is exempt from domestic violence, underemployment and poverty are shown by*

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31 See Cramer (2011) for a discussion.

several surveys to be driving forces… Spouse's unemployment is also a risk factor for exposure to violence: when the two partners are in employment, 2% of women report having experienced domestic violence, compared to 4.6% for unemployed women whose partner is also unemployed… Thus among the 400 000 women reporting having experienced physical violence from their partners, the victimization rate is four times higher among women in households where the average income per consumption unit is the lowest" (UNICRI 2014: 52). The Greek experts came to a similar conclusion: *"Economic difficulties, changing gender roles in the household, and frustrated men who are unable live up to the traditional breadwinner ideal, all lead to increased household tensions, and in turn to greater incidence of domestic violence".* Moreover, *"as women are more likely to suffer from poverty, some groups of women—particularly poor immigrant women—are also more vulnerable to other forms of gender-based violence, such as trafficking"* and *"the fact the state funds and social services are being reduced or entirely cut, helps neither the circumstances under which gender violence may arise, nor victims who are seeking social and financial support"* (UNICRI 2014: 106, 108). Italian experts stressed the same factors: *"Italy's prolonged recession is likely to aggravate the problem of domestic violence by making it more difficult for women to find the money they need to leave an abusive situation"* and *"for potentially abusive men, the loss of a job can remove "social anchors that restrain violent behaviour"* (UNICRI 2014: 167).

Concerning budget cuts, specialized research about the repercussions on VAW services was conducted in the USA as soon as the crisis began. An example is offered by the Center for Domestic Peace in California, USA, which reports an increase in requests for assistance during the last recession. Nationally, 80% of domestic abuse shelters noted an increase in women seeking respite from abuse and 73% of the shelters attribute this rise to financial issues (Center For Domestic Peace 2011). Renzetti begins her article on economic stress and domestic violence by observing the link between the recession that started in December 2007, the unemployment rate and the elevated number of incoming calls to domestic violence agencies (Renzetti 2009: 1). An online survey commissioned by Mary Kay in 2011 on 672 domestic violence shelters in the US investigated the influence of economic developments on shelters since 2008. Eighty percent of shelters recorded an increase in women seeking assistance. More than half the shelters reported that abuse was more violent than before the economic crisis started (September 2008).

 A number of academic studies in Ireland also focused on violence in times of crisis (Harney 2011). The Luxembourg Institute of Health (Luxembourg Institute of Health 2015) touched upon the effect of the crisis in its 2015 study on domestic violence. Polish authorities also investigated the issue, focusing on the relation between the reduction in employment, more frequent conflicts in households and domestic violence (Bieleseszk 2010). Svarna (2014) links the economic recession which started in Greece in 2009 to the increasing number of women using help lines and shelter services. An increase in police intervention in cases of domestic violence has also been recorded.

For Spain, the UNICRI report claims that financial cuts aimed at fiscal consolidation had a severe impact on the annual budget for gender based violence, which had been reduced every year since 2010: in 2014, it amounted to €21.85 million (0.005% of Spain's national budget), 1.5% less than in 2013, and 33.8% lower than in the budget of 2010. Briones-Vozmediano et al. (2014) add qualitative evidence on services for migrant women victims of violence. Based on 43 interviews administered to key informants, they concluded that "*these policy changes prompted by the crisis hinder effective coverage of services for women victims of IPV in general, and more specifically, for immigrant women in this situation*" (Briones-Vozmediano et. al. 2014:8).

6.2 Evidence from Eurostat

Eurostat released data on prisoners and offenders in the criminal justice system in EU-28 Member States over the period 2008-2014. The data provides prevalence rates and absolute numbers for three major offences, **intentional homicide including by own partner, rape and sexual assault**. Prevalence is computed per 100,000 of population of the same sex group.[32]

Since comparison of levels across countries may be distorted by differences in national recording systems, we followed Eurostat's advice to focus on comparisons across time within each country and found that **change over the years of the crisis (2008-2014) varied across category of offence and country**. By way of illustration, we only report two charts: intentional homicides and sexual violence. Both compare prevalence rates (per 100,000 of female population) at the beginning and end of the chosen period.

Intentional homicide. In the vast majority of the twenty-three countries for which records are available, fewer female victims of intentional homicides were reported in 2013-14 than at the beginning of the crisis (in proportion to the female population). Also, in countries where the converse occurred (Austria, Greece, Hungary, Ireland, Northern Ireland, Norway and Serbia), the reported increase was generally modest, except in Austria and Norway.

Figure 23 Female victims of intentional homicide per 100,000 of female population: average rates in 2008-2009 and 2013-2014
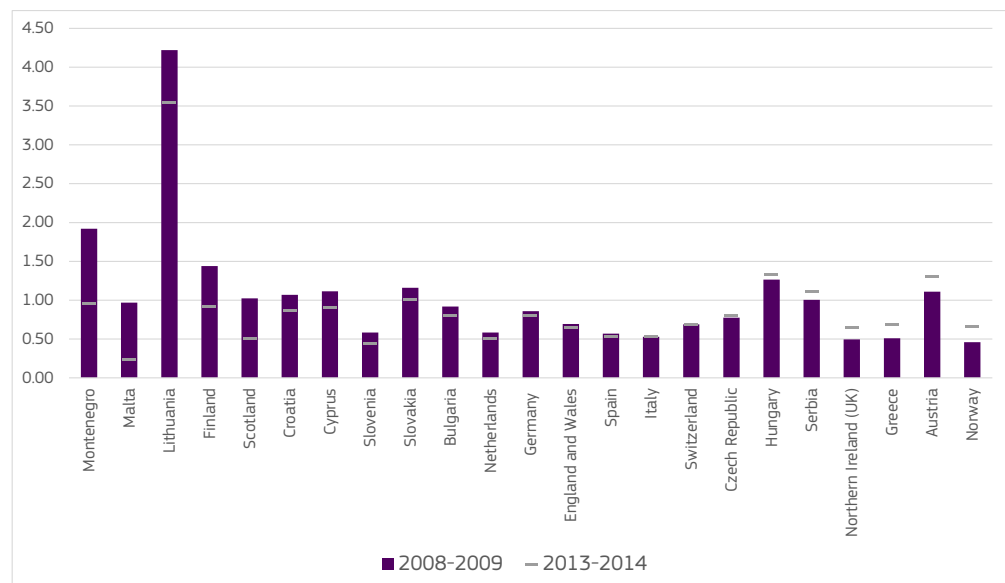
Source: Eurostat, database on Crime and criminal justice, accessed on 27 January 2017.

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32 Eurostat collects data on police-recorded offences. In this section we examine female victims of rape, sexual violence and intentional homicide for European countries with records over the period 2008-2014. Sexual assault refers to unwanted sexual acts, attempts to obtain a sexual act, or contact or communication with unwanted sexual attention not amounting to rape. Rape is defined as sexual intercourse without valid consent. Sexual violence covers both rape and sexual assault. (http://ec.europa.eu/eurostat/statistics-explained/index.php/Crime_and_criminal_justice_statistics)**.**

Sexual Violence. The picture for **victims of rape** is less reassuring. Victims are disproportionately women in all the Member States that collect judicial statistics on rape, and the gender gap is striking with, for example 17 victims for every male victim in Ireland, and up to 19 female victims in Norway. In this case, too, **countries recording a higher prevalence at the end of the crisis period were a minority:** Austria, Czech Republic, Croatia, England and Wales, Ireland, Luxemburg, Northern Ireland (UK) and Norway. However, the minority is larger than for intentional homi-cides, and increases at the end of the crisis period tend to be larger.

Finally, **countries recording a higher prevalence at the end of the crisis period were a majority in the case of sexual assault.**   Women are far more likely than men to be victims of sexual assault, again with a striking gender gap in most coun-tries and regions keeping records. England and Wales, for example, reported more than six female victims for every male victim in 2014. Austria, the Czech Republic, Denmark, England and Wales, Ireland, Lithuania, Luxembourg, Malta, Northern Ire-land (UK), Norway and Spain all recorded more female victims of sexual assault in 2013-2014 than at the onset of the crisis (in proportion to the female population), and the increase was very large in at least three cases (England and Wales, Ireland and Luxembourg).

Figure 24 Female victims of rape and sexual assault per 100,000 of female population: average rates in 2008-2009 and 2013-2014

A.   Rape
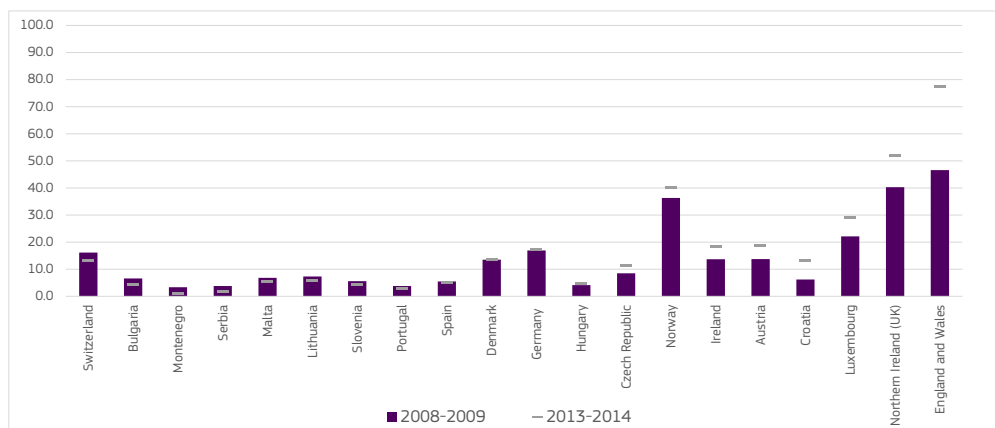
B.   Sexual assault
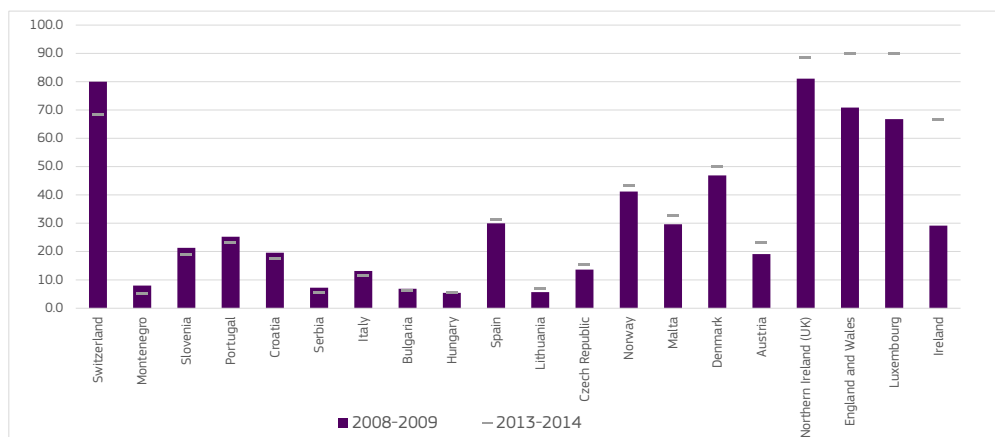
Source: Eurostat, database on Crime and criminal justice, accessed on 27 January 2017.

Overall, judicial data from Eurostat is not inconsistent with expectations that the crisis may have heightened violence against women, but differences in trends across countries and type of violence are the dominant note. Caution is especially warranted in gauging these trends because we do not know exactly what lies behind the judicial figures. Gender experts from the ENEGE network were specifically asked to uncover possible connections between patterns and trends emerging from judicial data on one hand, and changes in economic conditions for women and men ensuing from the crisis on the other. Their comments highlighted difficulties rather than offering new insights. In their view, the difficulty of tracing (statistically relevant) links is partly due to the fact that the topic investigated is relatively new. Under-reporting is frequently mentioned as an additional difficulty, since it is well known that judicial figures on violence against women underestimate actual prevalence. Last but perhaps not least, any confounding effect of under-reporting may be further compounded by differences in judicial data collection over time and across countries.

To sum up this selective and very brief overview of available evidence for Europe, **the European picture reveals mixed trends over the crisis, with judicial records on rape and sexual assault indicating a surge in violence in at least a large minority of European countries, while records on intentional homicides point in the opposite direction.** Country-level evidence from existing literature on the repercussions of rising unemployment and cuts in specialized services offers somewhat clearer evidence that the crisis might have worsened exposure for women, although even this evidence is not conclusive.

7. Concluding summary

7.1 Questions and answers

In the first part of this report we reviewed theoretical and empirical literature on violence against women from the perspective of women's economic independence. As in the rest of the report, we focused attention on the influence that independence may exercise on VAW, not the other way round. Either direction of causation is relevant for policy, but research has often prioritized the other way round, e.g. investigation of the economic costs of violence for the woman or for society.

The review was not aimed at compiling an exhaustive or even representative 'state-of-research' report for Europe, although we made a special effort to identify literature from European countries (alongside other industrialized countries, primarily Canada and the USA). Rather, the main objective of the review was to (i) identify questions on economic independence and violence that are still debated in the literature and potentially relevant for policies, (ii) select theoretical perspectives to guide investigation on these issues.

This proved less straightforward than it sounds. Studies on VAW form a vast, magmatic field with contributions spanning the entire domain of social sciences – from criminology, psychology and epidemiology to anthropology, sociology, social policy, statistics and economics. Each discipline has brought to the literature its own language, priorities, methods of enquiry and scientific standards, which has enriched the debated.

However, the downside of interdisciplinarity has also emerged from our review, especially with regard to empirical investigation. Fragmentation is a problem. There is no shared notion of 'economic independence' for women in the literature, nor of economic empowerment. Hence different contributions select this or that indicator, following disciplinary 'must', data convenience or researcher's inclination. Likewise for violence: theoretical perspectives tend not to distinguish between types of violence, while empirical investigations do or must, because their data is selective; so, results that may apply to a given type of violence tend to be generalized across the spectrum. Lack of shared standards is an additional problem. In measuring violence, for example, frequency of occurrence may make a difference, but some contributions account for it, others do not. Methodologies differ, sometimes radically, with answers to similar questions being drawn from simple prevalence statistics in some cases and sophisticated econometric procedures in other cases.

All this and yet other examples of fragmentation and lack of share standards mean that it is often difficult to compare results and reconstruct an overall picture. Unsurprisingly, inconsistency of results is often lamented in the literature, although we chose not to emphasize this aspect in our review as we concentrated on detecting key empirical issues and regularities. However, we did highlight some instances of inconsistent results. The role of male unemployment is a case in point: in the non economic literature male unemployment has been often, albeit not systemati-

cally, associated with higher prevalence on violence; in the economic literature this has been confounded by a recent, authoritative contribution, both empirically and theoretically (section 2.3). The question is how far such inconsistencies are real – which would signal a weak, erratic relation between certain aspects of economic independence and violence – and how much they are due, instead, to lack of shared standards and fragmentation.

Arguably, the investigation that was carried out in the second part of the report avoids these pitfalls, at least in part. It is the first EU-wide attempt to address the possible influence of economic independence and VAW. It exploits the individual records from FRA survey, the largest dedicated survey on VAW available for Europe. It covers <u>all</u> types of violence against women except violence ending in murder, stalking and violence against children. Moreover, the same or comparable methodology is adopted to investigate the different types of violence. All this helps avoiding fragmentation of analysis, not only because of extensive coverage, but also because interdependency among types of violence becomes visible when analysis is carried out along nearly the entire spectrum. Lack of homogeneity in research criteria and research standards should also be contained when comparable methodologies are applied.

To summarize the findings from the investigation we go back to the questions that inspired analysis (section 3.2) and organise the discussion in a question-answer format.

Question. What is the relationship, if any, between her financial (in)dependence and her exposure to any form of violence?; and does this relation differ for groups that are more at risk such as young women or migrants?

Answer. This is 'the' core question for this report, actually a composite question warranting a multi-faceted answer. The bottom-line reply to the first part of the question is that **financial independence directly influences probability of abuse via labour force status and earnings, but such influence is generally contained and, more importantly, has different signs and strength depending on the type violence. The strongest influence** that her financial independence exercises **goes via household economic conditions.** Insofar as the woman gains financial independence by taking up a job and her earnings significantly help avoid or lessen household poverty, independence fences off the accentuated surge of violence that we consistently found associated with households in critical economic conditions.

Specifically, **we found that having a job as opposed to being homemaker in retirement or long term unemployment does not significantly protect women from physical or sexual abuse from partners, nor does it expose them**. We also found that childless women, not other women, are less at risk of psychological abuse if they work. **In contrast, having a job heightens the risk of sexual harassment from non partners.** The order of magnitude involved is large for psychological abuse of working, childless women, and more contained for sexual harassment. For example, having a job is associated with a 4 pp. points increase in the probability of being harassed (by partners and non partners) compared to not working (about 20% more). Here is an example of the importance of introducing **a distinction between 'private spaces' and 'public spaces'** which is well known to anthropologists: as women acquire more independence and agency they may gain protection within private spaces while losing it within public spaces. Or the converse may happen,

81

depending on type of violence and dimension of independence[33].

Two additional important dimensions interacting with economic independence in our findings are **affiliation to religious or ethnic minorities** and age. Our results for minority women reveal a consistent rise in the probability of being abused by partners, but the rise is statistically relevant only for psychological abuse. **Economic abuse drives the rise in psychological violence in this case**, i.e. the attempt to limit access to financial resources, especially employment, or to limit participation in the management of financial resources: from going shopping to taking financial decisions. The order of magnitude we estimated is very large: exposure to economic violence practically doubles for a woman affiliated to religious or ethnic minorities. **Affiliation to ethnic minority also intensifies the risk of sexual harassment (by all perpetrators).**

Age is important but, again, selectively. For young women (18-29) we consistently estimated higher prevalence across types of abuse in comparison with older women, independently of economic conditions (labour force status, earnings and household economic status). However, differences are noteworthy and robust (statistically significant) only for physical abuse and for sexual harassment (by all perpetrators).

Perhaps the strongest evidence from our findings for economic conditions is that financial independence affects VAW indirectly via households conditions in general, and poverty in particular, confirming what emerges from a large body of literature. **Compared to households where the respondent's perception is to live comfortably on present income, those in dire economic conditions witness a surge in the probability of the woman experiencing physical violence, psychological violence, and sexual harassment** (at least once). Households perceived to just 'cope' on present income stand in the middle and generally witness an intermediate rise in the said probability, with some exceptions. The order or magnitude involved is medium to large. For example the estimated probability of experiencing sexual harassment is one and a quarter times higher for women in households finding it difficult to cope in comparison to well-off households (from 25.2 to 19.3 pp.); also physical violence is one and a half times more likely to occur at least once in the former type of households compared to the latter (9 against 6.3 pp.). The pattern is the same for sexual abuse, although statistical significance is weak.

 A few results we obtained are difficult to account for or reconcile with other findings. An example is the role of economic independence among students: we found that students and trainees are significantly less exposed to sexual violence than working women. Should we understand that what is at stake here is not financial independence as such but some 'exposure factor' such as living less frequently with partners, or cohort factors such as a more equalitarian sexual culture among younger cohorts[34]? More focused research is clearly needed to adequately address such queries.

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33 Criminologists' idea that time of exposure matters may seem to provide a clearer explanation: women are less exposed to IPV when they work because they spend less time at home and are more exposed to sexual harassment because they spend more time at work. However, the idea that IPV decreases because of less time spent at home has been challenged by Aizer (2010) who finds that IPV takes place during non working hours. It is also challenged by our findings that working does not significantly associate with lower physical or sexual violence.

34 Age is controlled for in these estimations, but age effects need not coincide with cohort effects, and we did not identify which cohorts may best capture cultural change.

Question. Can a link be traced between economic conditions of the perpetrator, in particular with regard to unemployment and poverty, and the likelihood of abuse against women, including sexual harassment?

Answer. Contrary to expectations, in our results labour status of the male partner is not consistently a significant discriminant for abusive behaviour on his part. Education has a stronger role. While education is not merely an indicator of economic conditions, in the case of men it tends to closely correlate with his earnings[35].

Our evidence specifically indicates that it is especially important to distinguish between types of violence in this instance. We found a small difference in the probability that sexual and physical abuse occurs when the male partner is in employment as opposed to being out of the labour force. The difference is larger in case of unemployment, but none of these differences are robust enough to warrant further thought. In contrast, being out of as opposed to being in the labour force significantly associates with higher likelihood of abusive psychological behaviour, although the increase is rather small.

The pattern that emerges from our estimates about partner's characteristics is neater and stronger for education, as we found that **the likelihood for a low educated partner to be more abusive nearly doubles in comparison to a better educated male partner when it comes to physical or sexual behaviour.** In contrast, the difference is statistically negligible when it comes to psychological violence.

If we combine the evidence about (not) having a job with that on education, and if we take education to proxy level of earnings, our findings turn out to be much more nuanced, but nevertheless broadly consistent with the literature supporting resource theory. Nuanced because unemployment is not the only things that matters and because it is crucial to distinguish between psychological abuse and physical or sexual abuse. Consistent because the direction of causation is the same, even if statistical significance is not always there, i.e. unemployment and low/education go hand in hand with higher abuse.

The final piece of evidence on partner's conditions concerns poverty. As noted, information about poverty is recorded for the household of the female respondent in the FRA survey. When the two partners live together, if she is poor, the partner is poor. Hence what we found for poverty of her household (previous answer) holds for the partner.

Question. Are sudden changes in economic conditions, including labour force status, of the perpetrator or the victim more conducive to violence, e.g. the perpetrator or the victim losing his/her job?

Answer. **We gathered qualified support for the hypothesis that having experienced some economic shock over the 12 months preceding the interview increases the risk of intimate partner violence.** Our evidence concerns the female respondent, i.e. the potential 'victim' rather than the perpetrator since we do not know the length of the unemployment spell for her partner[36] It concerns, in particu-

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35 For example, it is standard practice among economists to use the former as a 'proxy' of the latter.

36 As mentioned earlier, the FRA survey records unemployment status for the partner without enquiring if and when unemployment was caused by loss of job. In contrast it asks the respondent whether she lost her job in the last 12 months. Being unemployed is clearly different from having recently lost one's job, e.g. a student is unemployed when s/he first enters the labour market; a returnee is unem-

lar, those women we categorise as 'short-term unemployed': they are likely to have recently experienced a sudden deterioration of economic conditions, either because they lost their job less than 12 months from the time of the interview, or because household income has fallen enough for them to seek and accept occasional employment.

The order of magnitude of the increase in IPV that these women experience compared with working women varies but it never attains full statistical significance. For example the estimated probability of physical violence is 4.5% compared with 3% for women with a job; and the corresponding figures for economic violence are 6.1% compared with 4.8%. Lack of statistical significance could be enough to dismiss all these differences. The reason why we prefer to view them as bringing qualified support to the hypothesis under examination is twofold. First, there is strong consistency of pattern, since the risk of violence for women who lost their job rises systematically across types of intimate partner abuse with respect to women who have a job. The second reason is that poor significance is often exaggerated by small numbers, and the number of women likely to have experienced an economic shock (the 'short-term unemployed) is small compared to those in or out of employment.

Question. How do relative economic conditions of the partners affect the likelihood of intimate partner violence?

Answer. Using the FRA data we constructed two different indicators of relative economic conditions, respectively comparative level of earnings and comparative level of education (respondent earns/ is better educated, partners are on a par, respondent earns more/is better educated). Exploiting both indicators we obtained results that are broadly consistent. **Depending on type of violence and indicator we found some evidence of higher risk of violence both when she outperforms and underperforms the partner** (a U shaped relationship); **but evidence is slightly stronger for women who are outperformers**, tilting support towards relative and gendered resource theory.

In detail, **physical abuse turned out to be weakly sensitive to comparative earnings or comparative education.** In contrast, when her earnings rose in comparison with the partner's, **sexual abuse was found to increase in parallel until doubling for those who out-earn their partners** (in comparison to those who under-earn him). Risks of psychological abuse also appear to rise in a linear fashion when her education increases vis a vis that of the partner. However, **when comparative earnings are used,** the finding for women is that earning less than partner is definitely more 'risky' than earning more.

 In all these cases, women in non traditional partnerships, where the male breadwinner role is questioned, face greater abuse than women in equalitarian or traditional couples. But only in the case of sexual abuse did we find a large order magnitude: double the risk of abuse for women earning more than partner (compared to women earning less).

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ployed when s/he returns to the labour market.

Question. To what extent does financial independence increase the likelihood that a woman leaves an abusive relationship?

Answer. Our estimates indicate that **women (currently) in paid employment have a high rate of separation** from violent relations over their adult life (estimated at 78.8%)**, the difference with women who do not work being non negligible (5.5 pp) and statistically significant**. Taken in isolation, this result is plausible, in line with the findings of some empirical studies, and supportive of the idea that financial autonomy contributes to fighting the plight of violence.

However, these results might hide an issue of reverse causation which cannot be ignored and which is well illustrated by another finding we obtained, namely **that women from poor households have the highest separation rate (estimated at 81.4%)**. The seeming contradiction between the two results may be explained away by recalling from the literature that women who leave violent relations often end up in poverty. In this reasoning, however, the order of causation is reversed: the decision to leave (sometime in the past) would 'explain' poverty in current times, not the other way round. This is a strong reminder that our estimates bring out associations between variables which cannot be taken as straight, one-way causal links; at least not without further investigation.

Apart from employment status and household conditions, the likelihood of separation also increases by a significant (and statistically robust) amount if the woman is aware of specialized services available to victims of abuse (see below). Conversely, it decreases if she experienced violence in childhood and has any children. In all these cases variations are robust and range between 8 and 11 pp.

Question. To what extent availability of supporting services/provisions for VAW victims increases the likelihood that the latter leave an abusive relationship independently of own financial self-reliance?

Answer. Our estimates indicate that the separation rate for a woman who is aware of the availability of supporting services for victims of VAW is 9 pp higher than for a woman who is unaware (whose separation rate is 69.1%). The difference is large and significant, but, again, we must exercise caution in interpreting our evidence because we do not know when the woman left the relation or when she gained awareness. If, for example she had gained awareness after leaving the relation, we could hardly draw the implication that services actually assist women in separating from violent partners.

Question. Did the recent crisis have repercussions on the prevalence and type of VAW?

Answer. We cannot offer smoking-gun evidence, but there is some evidence in this report in support of the assumption that VAW rose during the crisis.

The findings in chapter 5 do suggest that violence is likely to intensify during a recession. Her if not his unemployment tends to associate with more abuse in a fairly consistent fashion, and so does deterioration of household economic condition. While association with unemployment is not always robust, that with poverty is generally strong and large. Moreover, during the latest crisis earnings losses for men were larger than for women in several European countries (Bettio et al. 2013). In those household where she out-earned the partner as a result, this may have triggered abusive behaviour on his part, if our findings about comparative earnings

hold true. However, we could not test those expectations using the FRA survey database: the latter was conducted in the middle of the so-called Great Recession, but it is a cross section, a one-shot picture across European Member States.

National and comparative evidence from existing literature on the repercussions of rising unemployment and cuts in specialized services bear out some of the above expectations. However, the country coverage and scope of the investigations are such that they ought be taken as preliminary rather than conclusive evidence.

Judicial data recently released by Eurostat on intentional homicide (including by partner), rape and sexual assault cover the entire period of the crisis (2008-2014). While providing some answers about trends in prevalence of 'very serious' violence, the data actually return a mixed picture opposing a decrease in the prevalence of intentional homicides for the majority of reporting countries to a surge in the prevalence of sexual assault and rape for at least a large minority of reporting countries. ENEGE national experts were asked to comment on this data and were encouraged to look 'behind' in search of links with economic condition. In response, most experts underscored the limitations of the data – under-reporting, non homogeneity in data collection over time and across countries – which further justifies caution.

7.2 Notes on policy

How does the entire body of results in this report add to existing knowledge, and how do they provide evidence that may be relevant to policy? With a massive body of literature on violence, especially empirical, claiming that one or more of the results we obtained is 'truly' new would be neither accurate nor plausible. The more so because in our investigation we went 'wide' rather than 'deep' exploring issues of economic relevance across the types of violence in order to best exploit the advantages of the FRA data set (accurate coverage of all types) and avoid the disadvantages (limited information on the economic conditions of the partners and their households).

Nevertheless our findings bring novelty in some important respects. Firstly, they indicate that what holds for a given type of violence need not hold for a different type. Hence some of the 'inconsistencies' in the literature may be artefacts due to fragmentation of analysis. Secondly, the results show that, using the same (or similar) methodology for all types of violence, including choice of explanatory variables, facilitates comparison of orders of magnitude for the various effects. For example, although our focus was economic independence, we could ascertain that having suffered violence in childhood is a better predictor of the woman's risk of violence than most economic indicators, and this holds across types of violence.

We must, however, recall the limitations of the estimation exercise conducted for this report. Economic independence or economic conditions are not central dimensions in the FRA survey, so the set of information we could rely on is limited. Moreover, given the methodology we used (probit or ordered probit estimation of cross sectional data), the 'effects' we found and discussed, e.g. the increase in psychological violence for women who earn more than their partner, should be interpreted as measures of association rather than causal influence. Finally, we hardly used information about violence over the life course because we lacked retrospective information about economic conditions. This further limited our ability to detect causal chains.

For sound and fine grained evidence, analysis of FRA data must go further. It should nevertheless be apparent that such exercises as we have conducted can be informative for policy even if they are exploratory.

On a very general level, the results call for unrelenting vigilance since they indicate that VAW changes guise rather than simply decreasing or increasing in response to women's progressive integration in the labour market. In particular, sexual harassment at work and other forms of harassment may be spreading due to the long recession, persistent unemployment and widespread job insecurity among women.[37] Yet only a minority of member states has taken any action.

On a more operational level, our findings help to better identify possible targets: women belonging to religious or ethnic minorities are targets for economic rather than physical or even sexual violence, working women and students are targets for sexual harassment, women in poor households are targets for physical and sexual abuse by their partners, as well as sexual harassment. They also advocate a multi-setting policy approach and call for policy innovations. The case of sexual harassment makes it clear that Member States' attempts to grapple with the problem span different policy settings – from the workplace to the educational setting and cyberspace - and some of these attempts are bound to be innovative as they cover new ground. However, the need for a multi-setting and innovative policy approach is shared by other forms of violence, those we know better that have long attracted policy attention. Without attempting to be comprehensive or operational, the following examples illustrate the relevance of our findings for this type of policy approach.

Labour market policy. One clear finding from our estimations is that employment status of the woman matters via poverty reduction. While this is yet another reason to advocate measures in support of women's employment, the labour policy tool kit to reduce VAW should also encompass well-targeted provisions. Take the finding that an economic shock can trigger violence, such as when she suddenly loses her loss and becomes unemployed. One idea could be to resort to unemployment or job centres for preventative action, i.e. by asking staff of these centres to 'play sentry' with regard to their female clients. Similarly, professional associations could be asked to help fight the kind of violence (sexual, psychological) that sometimes occurs among non traditional couples when she earns as much or more than her partner. Such associations could, for example, be asked to organise awareness-raising initiatives among their members to forewarn them about this risk.

Educational policy. Another lesson from our findings is that irrespective of working status or earnings, well educated women are generally better able to fence off violence from their partners, while he is more prone to physical or sexual violence if his level of education is low. Although we cannot take this evidence to imply that all men ought to be given tertiary education, it can be used to support the claim that educational leverage can be effective. Equally strong advocacy in favour of educational provisions comes from two additional results, namely the importance of abuse in childhood and the higher prevalence of economic violence among ethnic and religious minorities. In both cases, early targeted educational schemes are likely to prove more effective than more years of education.

Social policy. Two pieces of evidence from our investigation directly impinge on social policy: the fact that alcohol abuse associates with a fourfold increase in sexual and physical violence from the male partner, and evidence that being aware of specialized services for victims of violence associates with a non negligible increase in

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37 ISTAT (2012: 7-10) for sexual blackmail at work.

the woman's chances of quitting abusive relationships. Although we already warned that the latter finding cannot be taken as proof of a causal link, both results offer prima facie support for investing in specialized services for victims of violence. However, the review of the empirical literature that we conducted in the first part of this report offered convincing evidence that specialized centres hosting female victims of violence may paradoxically engender poverty or make it last longer. This is in fact a clear case in which a combination of policies rather than a single policy approach is needed for success, e.g. individualised policy packages where the victim is offered shelter but also comprehensive care and effective assistance in her job search by employment centres.

References

Abramovaite, Juste, Siddhartha Bandyopadhyay and Louise Dixon (2015): The Dynamics of Intergenerational Family Abuse: A Focus on Child Maltreatment and Violence and Abuse in Intimate Relationships. Journal of Interdisciplinary Economics, Vol. 27, No. 2, pp. 160–174.

Adams, Adrienne E., Cris Sullivan, Deborah M. Bybee, and Megan R. Greeson (2008): Development of the Scale of Economic Abuse. Violence against women, Vol. 14, No. 5, pp. 563-588.

Aizer, Anna (2010): The Gender Wage Gap and Domestic Violence. American Economic Review, Vol. 100, No. 4, pp. 1847-1859.

Anderberg, Dan, Helmut Rainer, Jonathan Wadsworth, and Tanya Wilson (2013): Unemployment and Domestic Violence: Theory and Evidence. CESIFO WORKING PAPER NO. 4315 CATEGORY 4: LABOUR MARKETS JUNE 2013. http://ftp.iza.org/dp7515.pdf (06/11/2015).

Anderson, Deborah K. and Daniel G. Saunders (2003): Leaving an abusive partner: An empirical review of predictors, the process of leaving, and psychological well-being. Trauma, Violence, & Abuse, Vol. 4, No. 2, pp. 163–191.

Atkinson, Maxine, P., Theodore N. Greenstein, and Molly Monahan Lang (2005): For Women, Breadwinning Can Be Dangerous: Gendered Resource Theory and Wife Abuse. Journal of Marriage and Family, Vol. 67, No. 5, pp. 1137-1148.

Baum, Cristopher (2006): An Introduction to Modern Econometrics Using Stata, Stata Press: College Station, Texas, USA.

Benavides-Espinoza, Claudia and George B. Cunningham (2010): Observer's reporting of sexual harassment: The influence of harassment type, organizational culture, and political orientation. Public Organization Review, Vol. 10, No. 4, pp. 323–337.

Benson, Michael and Greer L. Fox (2002): Economic Distress, Community Context and Intimate Violence: An Application and Extension of Social Disorganization Theory, Final Report. https://www.ncjrs.gov/pdffiles1/nij/grants/193434.pdf (12/11/2015).

Benson, Michael L., Greer L. Fox L., Alfred DeMaris and Judy Van Wyk (2002): Economic Distress and Intimate Violence: Testing Family Stress and Resources Theories, Journal of Marriage and Family, Vol. 64 , No. 3, pp. 793–807.

Berdahl, Jennifer L. and Celia Moore (2006): Workplace harassment: double jeopardy for minority women. Journal of Applied Psychology, Vol. 91, pp. 426–436.

Bergman, Mindy E. and Jaime B. Henning (2008): Sex and ethnicity as moderators in the sexual harassment phenomenon: a revision and test of Fitzgerald et al. (1994). Journal of Occupational Health Psychology. Vol. 13, pp. 152–167.

Bettio, Francesca, Marcella Corsi, Carlo D'Ippoliti, Antigone Lyberaki, Manuela Samek Lodovici and Alina Verashchagina (2013): The Impact of the Economic Crisis on the Situation of Women and Men and on Gender Equality Policies, Luxembourg: Publications Office of the European Union.

Bieleseszk, Katarzyna (2010): Impact of economic crisis on the situation of Polish women. In Studia Juridica et Politica Jaurinensis Available at: http://dfk-online.sze.hu/images/sjpj/2014/bielesz.pdf.

Blood, Robert and Donald Wolfe (1960): Husbands and Wives: The Dynamics of Married Living. New York: Macmillan.

Bowlus, Audra J. and Shannon Seitz (2006): Domestic Violence, Employment, and Divorce. International Economic Review, Vol. 47, No. 4, pp. 1113–1149.

Brandau, Heidrun and Karin Ronge (1997): Gewalt gegen Frauen im häuslichen Bereich. Alte Ziele – Neue Wege [Domestic Violence Against Women. Old Goals – New Ways]. www.big-berlin.info/sites/default/files/medien/big_broschuere1.pdf *(02/11/2015).*

Briones-Vozmediano, Erica, Andres A. Agudelo-Suarez, Isabel Goicolea and Carmen Vives-Cases (2014): Economic crisis, immigrant women and changing availability of intimate partner violence services: a qualitative study of professionals' perceptions in Spain. International Journal for Equity in Health, Vol. 13: 79.

Brush, Lisa D. (2003): Effects of Work on Hitting and Hurting. Violence against women, Vol. 9, No. 10, pp. 1213-1230.

Brzank, Petra (2012): Wege aus der Partnergewalt [Ways to Leave Partner Violence Behind]. Springer VS.

Buchanan, Nicole and Louise Fitzgerald (2008): Effects of racial and sexual harassment on work and the psychological wellbeing of African American women. Journal of Occupational Health Psychology, Vol. 13, pp. 137–151.

Bundesarbeitsgemeinschaft Wohnungslosenhilfe e.V. (ed.) (2013): Wohnungslosigkeit [Homelessness]. https://www.bpb.de/system/files/dokument_pdf/07%20Wohnungslosigkeit.pdf (04/11/2015).

Bundesministerium für Familien und Jugend (ed.) (2015): Ökonomische Gewalt [Economic Violence]. http://www.gewaltinfo.at/fachwissen/formen/oekonomische_gewalt.php (04/11/2015).

Burazeri, Genc, Enver Roshi, Rachel Jewkes, Susanne Jordan, Vesna Bjegovic and Ulrich Laaser (2015): Factors associated with spousal physical violence in Albania: cross sectional study. BMJ, Vol. 331, pp. 197–201.

Center for Domestic Peace (ed.) (2011): Economics and Domestic Violence. http://www.centerfordomesticpeace.org/sites/default/files/2011%20PeaceWatch.pdf (12/11/2015).

Chamberlain Lindsey Joyce, Martha Crowley, Daniel Tope and Randy Hodson (2008): Sexual Harassment in Organizational Context. Work and Occupations, Vol. 35, pp. 262–95.

Cramer, Christopher (2011): Unemployment and Participation in Violence. World Development Report background Paper, the World Bank: Washington DC.

Dugan, Laura, Daniel Nagin and Richard Rosenfeld (1999): Explaining the Decline in Intimate Partner Homicide: The Effects of Changing Domesticity, Women's Status, and Domestic Violence Resources. Homicide Studies, Vol. 3, No. 3, pp. 187–214.

Euromediterranean Human Rights Network (2014): Violence against women in the context of political transformation and economic crisis in the Euro-Mediterranean region. Available at: http://euromedrights.org/wp-content/uploads/2014/03/VAW-report_final_en.pdf

EC – European Commission (1998): Sexual harassment in the workplace in the European Union, Directorate-General for Employment, Industrial Relations and Social Affairs.

Eurofound (2012): Fifth European Working Conditions Survey, Publications Office: Luxembourg.

Eurofound (2015): Violence and harassment in European workplaces: Extent, impacts and policies. Dublin. http://www.eurofound.europa.eu/observatories/eurwork/comparative-information/violence-and-harassment-in-european-workplaces-extent-impacts-and-policies (13/05/2016).

Farrington, Keith (1986): The Application of Stress Theory to the Study of Family Violence: Principles, Problems, and Prospects. Journal of Family Violence, Vol. 1, No. 2, 1986, pp. 131–147.

Fink, Janet S., Donna L. Pastore and Harold A. Riemer (2003): Managing employee diversity: perceived practices and organizational outcomes in NCAA Division III athletic departments. Sport Management Review, Vol. 6, pp. 147–168.

Farmer, Amy and Jill Tiefenthaler (1997): An Economic Analysis of Domestic Violence. Review of Social Economy Vol. LV, No. 3, pp. 337-358.

Fougeyrollas-Schwebel, Dominique (2005): Violence against women in France: The context, findings and impact of the Enveff survey. http://www.un.org/womenwatch/daw/egm/vaw-stat-2005/docs/expert-papers/fougeyrollas.pdf (05/11/2015).

Fox, Greer Litton, Michael L. Benson, Alfred A. DeMaris and Judy Van Wyk (2002): Economic Distress and Intimate Violence: Testing Family Stress and Resources Theories. Journal of Marriage and Family, Vol. 64, No. 3, pp. 793–807.

FRA – European Union Agency for Fundamental Rights (2014a): Violence against women: an EU-wide survey. Main results, Vienna: FRA.

FRA – European Union Agency for Fundamental Rights (2014b): Violence against women: an EU-wide survey. Survey methodology, sample and fieldwork, Vienna: FRA.

Frauen helfen Frauen in Not e.V. (ed.) (2015): Rad der Gewalt [Violence Wheel]. http://www.gewaltgegenfrauen.de/med/rad-der-gewalt.pdf (04/11/2015).

Gelles, Richard J. (1976): Abused wives: Why do they stay? Journal of Marriage and the Family, Vol. 38, No. 4, pp. 659–667.

Goode, William J. (1971): Force and violence in the family. Journal of Marriage and the Family, Vol. 33, No. 4, pp. 624–636.

Greene, William H. (2013) : Econometric Analysis, Prentice Hall.

Gutek, Barbara A. and Aaron Groff Cohen (1987): Sex ratios, sex role spillover, and sex at work: A comparison of men's and women's experiences. Human Relations, Vol. 40, No. 2, pp. 97-115.

Hagemann-White, Carol (2004): Gegen Gewalt an Frauen und Kindern handeln. Forschungsperspektiven im europäischen Maßstab, in: Almer, Daniela (ed.), Jahre Frauenhausbewegung in Europa, Milena-Verlag: Vienna, 32–44.

Hagemann-White, Carol and Barbara Kavemann (2004): Gemeinsam gegen häusliche Gewalt. Kooperation, Intervention, Begleitforschung. Forschungsergebnisse der wissenschaftlichen Begleitung der Interventionsprojekte gegen häusliche Gewalt (WiBIG). Im Auftrag des Bundesministeriums für Familie, Senioren, Frauen und Jugend [Together Against Domestic Violence. Cooperation, Intervention, Accompanying Research. Research Results of the Academic Support of Intervention Projects Against Domestic Violence (WiBIG). Commissioned by the German Federal Ministry for Family Affairs, Senior Citizens, Women and Youth]. http://www.bmfsfj.de/RedaktionBMFSFJ/Abteilung4/Pdf-Anlagen/langfassung-studie-wibig,property%3Dpdf,bereich%3Dbmfsfj,sprache%3Dde,rwb%3Dtrue.pdf (26/11/2015).

Harney C. (2011), The Impact of the Recession on Domestic Violence Against Women and Support Services in Ireland: an Exploratory Study", in Critical Social Thinking: Policy and Practice, Vol. 3, 2011.

Heiskanen, Markku and Minna Piispa, (1998): Faith, Hope, Battering, A Survey Of Men's Violence against Women in Finland. http://www.unece.org/fileadmin/DAM/stats/gender/VAW2/surveys/Finland/FIN_VAW_Publication.pdf (05/11/2015).

Hofstede, Geert (2001): Culture's Consequences: Comparing Values, Behavior, Institutions, and Organizations Across Nations. Thousand Oaks, CA: Sage.

International Alliance of Women (ed.) (2013): The effects of the economic crisis on gender-based violence. http://womenalliance.org/old/pdf/CSW57-Statement.pdf (12/11/2015).

Iotnick, Caron, Dawn M. Johnson and Robert Kohn (2006): Intimate partner violence and long-term psychosocial functioning in a national sample of American women. Journal of Interpersonal Violence. Vol. 21, No. 2, pp. 262–275.

ISTAT (2010): Le molestie sessuali 2008–2009, Istituto Nazionale di Statistica: Roma. http://www.istat.it/it/archivio/5173 (12/05/2016).

Jaspard, Maryse (2001): Violence against women: the first French national survey. Population & Sociétés, No. 364. https://www.ined.fr/fichier/s_rubrique/18735/publi_pdf2_pop_and_soc_english_364.en.pdf (05/11/2015).

Kalmus, Debra S. and Murray A. Straus(1982): Wife's marital dependency and wife abuse. Journal of Marriage and Family, Vol. 44, No. 2, pp. 277–286.

Kaukinen, Catherine (2004): Status Compatibility, Physical Violence, and Emotional Abuse in Intimate Relationships. Journal of Marriage and Family, Vol. 66, No. 2, pp. 452–471.

Lloyd, Susan and Nina Taluc (1999): The effects of male violence on female employment. Violence against women, Vol. 5, No. 4, pp. 370–392.

Lundberg, Shelly and Robert Pollak (1993): Separate Spheres Bargaining and the Marriage Market. Journal of Political Economy, Vol. 101, No. 6, pp. 988–1010.

Luthar, Vipan and Harsh Luthar (2007): A Theoretical Framework Explaining Cross-Cultural Sexual Harassment: Integrating Hofstede and Schwartz. Journal of Labor Research, Vol. 28, No. 1, p. 169.

Luxembourg Institute of Health (2015), La violence domestique au Grand-Duché de Luxembourg: étude des causes pour une prévention ciblée. Available at: http://www.mega.public.lu/fr/espace-presse/dossiers-presse/2015/etude-violence-domestique/Etude-Violence-domestique---Version-integrale-23_2_2015.pdf

Maass, Anne, Mara Cadinu, Gaia Guarnieri and Annalisa Grasselli (2003) Sexual Harassment Under Social Identity Threat: The Computer Harassment Paradigm. Journal of Personality and Social Psychology, Vol. 85, No. 5, 853–870.

MacKinnon, Catherine (1979): Sexual Harassment of Working Women: A Case of Sex Discrimination. New Haven, CT: Yale University Press.

Macmillan, Ross and Rosemary Gartner (1999): When She Brings Home the Bacon: Labor-Force Participation and the Risk of Spousal Violence against Women. Journal of Marriage and family, Vol. 61, No. 4, pp. 947–958.

Mary Kay (ed.) (2011): "Mary Kay Truth About Abuse" Survey. National Findings from Third Survey of Domestic Violence Shelters in the United States. http://www.ncdsv.org/images/marykay_truthaboutabusesurvey_2011.pdf (12/11/2015).

Mavrikiou, Petroula M., Martha Apostolidou and Stavros K. Parlalis (2014): Risk factors for the prevalence of domestic violence against women in Cyprus. The Social Science Journal Vol. 51, No. 2, pp. 295–301.

McCloskey, Laura Ann (1996): Socioeconomic and coercive power within the family. Gender & Society, Vol. 10, No. 4, pp. 449–463.

McDonald Paula and Sandra Backstrom (2008): Fighting Back: Workplace Sexual Harassment and the Case of North Country. Australian Bulletin of Labour, Vol. 34, No 1, pp. 47–63.

McDonald, Paula (2012): Workplace Sexual Harassment 30 Years on: A Review of the Literature. International Journal of Management Reviews, Vol. 14, No. 1, pp. 1–17.

McElroy, Marjorie B. and Mary Jean Horney (1981): Nash-Bargained Household Decisions: Toward a Generalization of the Theory of Demand. International Economic Review, Vol. 22, No. 2, pp. 333–49.

Montero, Isabel, Isabel Ruiz-Pérez, Vicenta Escribà-Agüir, Carmen Vives-Cases, Juncal Plazaola-Castaño Marta Talavera, David Martín-Baena and Rosana Peiró (2012): Strategic responses to intimate partner violence against women in Spain: a national study in primary care, Journal of Epidemiology & Community Health, Vol. 66, pp. 352–358.

National Institute of Justice (2002): Annual Report 2002, U.S. Department of Justice, Office of Justice Programs. https://www.ncjrs.gov/pdffiles1/nij/200338.pdf (12/05/2016).

National Institute of Justice (ed.) (2004): When Violence Hits Home: How Economics and Neighborhood Play a Role. U.S. Department of Justice, Office of Justice Programs. https://www.ncjrs.gov/pdffiles1/nij/205004.pdf (12/11/2015).

Numhauser-Henning, Ann and Sylvaine Laulom (2012): Harassment related to Sex and Sexual Harassment Law in 33 European Countries, Discrimination versus Dignity, European Commission Directorate-General for Justice.

Opferhilfe beider Basel (ed.) (2015): Ökonomische Gewalt [Economic Violence]. http://www.opferhilfe-beiderbasel.ch/oekonomische_gewalt.aspx (04/11/2015).

Renzetti, Claire M. (2009): Economic Stress and Domestic Violence. http://uknowledge.uky.edu/cgi/viewcontent.cgi?article=1000&context=crvaw_reports (12/11/2015).

Rennison, Callie Marie, Walter S. DeKeseredy and Molly Dragiewicz (2013): Intimate Relationship Status Variations in Violence Against Women: Urban, Suburban, and Rural Differences. Violence Against Women, Vol. 19, No 11, pp. 1312–1330.

Riger, Stephanie and Maryann Krieglstein (2000): The impact of welfare reform on men's violence against women. American Journal of Community Psychology, Vol. 28, No.1, pp.631–647.

Riger, Stephanie and Susan Staggs (2004): The Impact of Intimate Partner Violence on Women's Labor Force Participation. https://www.ncjrs.gov/pdffiles1/nij/grants/207143.pdf (12/11/2015).

Rodriguez-Menes, Jorge and Ana Safranoff (2012): Violence against women in intimate relations: A contrast of five theories. European Journal of Criminology, Vol. 9, No. 6, pp. 584–602.

Romito, Patrizia and Daniela Gerin (2002): Asking patients about violence: a survey of 510 women attending social and health services in Trieste, Italy. Social Science & Medicine, Vol. 54, No. 12, pp. 1813–1824.

Rubenstein, Michael (1987): The dignity of women at work. A report of the problem

of sexual harassment in the Member States of the European Community.

Russell, Diana E. H (1975): The politics of rape: The victim's perspective. New York: Stein and Day.

Sanz-Barbero, Belén, Carmen Vives-Cases, Laura Otero-García1, Carles Muntarner, Jordi Torrubiano-Domínguez and Patricia O'Campo (2015): Intimate partner violence among women in Spain: the impact of regional-level male unemployment and income inequality. The European Journal of Public Health, Vol. 5, No.6, pp. 1105–1111.

Sanders, Cynthia K. (2007): Domestic Violence, Economic Abuse, and Implications of a Program for Building Economic Resources for Low-Income Women Findings from Interviews with Participants in a Women's Economic Action Program, Center for Social Development George Warren Brown School of Social Work Washington University: St. Louis. http://csd.wustl.edu/Publications/Documents/RP07-12.pdf (12/05/2016).

Sanders, Cynthia K. (2015): Economic Abuse in the Lives of Women Abused by an Intimate Partner: A Qualitative Study. Violence Against Women, Vol. 21, No. 1, pp. 3–29.

Schröttle, Monika and Ursula Müller (2004): Lebenssituation, Sicherheit und Gesundheit von Frauen in Deutschland. Eine repräsentative Untersuchung zu Gewalt gegen Frauen in Deutschland. Im Auftrag des Bundesministeriums für Familie, Senioren, Frauen und Jugend [Life Situation, Security and Health of Women in Germany. A Representative Survey on Violence Against Women in Germany. Commissioned by the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth]. http://www.bmfsfj.de/RedaktionBMFSFJ/Abteilung4/Pdf-Anlagen/lang-fassung-studie-frauen-teil-eins,property=pdf,bereich=bmfsfj,sprache=de,rwb=true.pdf (23/11/2015).

Schröttle, Monika and Nicole Ansorge (2008): Gewalt gegen Frauen in Paarbeziehungen. Eine sekundäranalytische Auswertung zur Differenzierung von Schweregraden, Mustern, Risikofaktoren und Unterstützung nach erlebter Gewalt. Im Auftrag des Bundesministeriums für Familie, Senioren, Frauen und Jugend [Violence Against Women in Partner Relationships. A Secondary Analytical Evaluation to Differentiate Degrees of Severity, Patterns, Risk Factors and Support after Experiencing Violence. Commissioned by the German Federal Ministry for Family Affairs, Senior Citizens, Women and Youth]. http://www.bmfsfj.de/RedaktionBMFSFJ/Broschuerenstelle/Pdf-Anlagen/gewalt-paarbeziehung-langfassung,property=pdf,bereich=bmfsfj,sprache=de,rwb=true.pdf (23/11/2015).

Schwartz, Shalom (1999): A Theory of Cultural Values and Some Implications for Work. Applied Psychology: An International Review, Vol. 48, pp. 23–47.

Statistisches Bundesamt (ed.) (2012): Frauen und Männer auf dem Arbeitsmarkt. Deutschland und Europa [Women and Men at the Job Market. Germany and Europe]. https://www.destatis.de/DE/Publikationen/Thematisch/Arbeitsmarkt/Erwerbstaetige/BroeschuereFrauenMaennerArbeitsmarkt0010018129004.pdf?__blob=publicationFile (25/11/2015).

Straus, Murray A. (1979): Measuring intrafamily conflict and violence: The conflict tactics (CT) scales. Journal of Marriage and Family, Vo. 41, No. 1, pp. 75–88.

Svarna, Foteini (2014): Financial Crisis and Domestic Violence – The Case of Greece. In: The Women's International Perspective. http://thewip.net/2014/05/29/financial-crisis-and-domestic-violence-the-case-of-greece (12/11/2015).

Tangri, Sandra S. and Stephanie M. Hayes (1997): Theories of Sexual Harassment. In William O'Donohue, ed. Sexual Harassment: Theory, Research, and Treatment. Boston, MA: Allyn and Bacon, 1997.

Tangri, Sandra S., Martha R. Burt and Leonor Johnson (1982): Sexual harassment at work: three explanatory models. Journal of Social Issues, Vol. 38, pp. 33–54.

Thomas, Alison. (1997): Men behaving badly? A psychosocial exploration of the cultural context of sexual harassment. In Thomas, A. and Kitzinger, C. (eds), Sexual Harassment: Contemporary Feminist Perspectives. Buckingham: Open University Press.

Timmerman, Greetje and Cristien Bajema (1999): Incidence and methodology in sexual harassment research in northwest Europe. Women's Studies International Forum, Vol. 22, No. 6, pp. 673–681.

Timmerman, Greetje and Cristien Bajema (2000): The impact of organizational culture on perceptions and experiences of sexual harassment. Journal of Vocational Behavior, Vol. 57, No. 2, p. 188–205.

Towers, Jude (2015): Making the Links between Economic Inequality and Intimate Partner Violence. http://eprints.lancs.ac.uk/73772/1/Towers_J_Safe_Article_Feb_2015.pdf (06/11/2015).

Uggen, Christopher and Amy Blackstone (2004): Sexual Harassment as a Gendered Expression of Power, American Sociological Review. Vol. 69, pp. 64–92.

UNICRI (2014): The impacts of the crisis on Gender Equality and Women's Wellbeing. Available at: www.unicri.it/news/files/VAW_draft_last_lowq.pdf (12/05/2016).

United Nations (1993), General Assembly, Declaration on the Elimination of Violence against Women, A/RES/48/104, 20 December 1993.

United Nations (1995), Report of the Fourth World Conference on Women, A/CONF.177/20/Rev.1, 4–15 September 1995.

United Nations (2013), Guidelines for Producing Statistics on Violence against Women: Statistical Surveys, New York.

United Nations Entity for Gender Equality and the Empowerment of Women (ed.) (2012): Virtual Knowledge Centre to End Violence Against Women and Girls. Causes, protective and risk factors. http://www.endvawnow.org/en/articles/300-causes-protective-and-risk-factors-.html (16/11/2015).

WHO – World Health Organization (2016): Violence against women, Fact sheet No. 239, updated January 2016, http://www.who.int/mediacentre/factsheets/fs239/en/ (13/05/2015).

WHO – World Health Organization (2013): Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence, Geneva, http://www.who.int/reproductivehealth/publications/violence/9789241564625/en/ (13/05/2015).

APPENDIX A: Aggregation and weighting of FRA data

In the FRA survey frequencies are recorded in the following categories for physical and sexual violence and for sexual harassment:

- never
- once
- 2-5 times
- 6 or more times

Psychological violence is recorded in the following categories:

- never
- sometimes
- often
- all the time

Every type of violence physical, sexual, psychological and sexual harassment features a list of 'items', with frequencies being separately recorded for each item. Since our units of analysis in this report are types of violence, not single items, we devised an algorithm to aggregate frequencies across items.

First, categories were converted into numbers as follows:

Never = 0;

Once = 1;

2-5 times = 3.5;

 6 or more times = 6.

For psychological violence, we used the following conversion:

Never = 0;

Sometimes = 1;

Often = 3.5;

All the time = 6.

These numerical frequencies were then aggregated, i.e. added, by type of violence. The resulting sum was then converted back into the original categories, i.e. never, once, etc.

'Refused', 'Not applicable' and 'Don't know' answers were also assigned a zero value.

This was necessary in order not to lose information. If, for example a respondent's answered 'do not know' to only one question-item and if we set 'do not know' to missing, this would have make it impossible to numerically aggregate frequencies across the remaining items. All the respondent's answers would have been lost as a result.

All the frequencies were weighted using the variable WTEUOVER for conversion of sample figures into EU population figures.

APPENDIX B: 'Explanatory' variables

Table B1 The set of 'explanatory' variables. Absolute and percentage frequency in the sample of women with current partner*

			Frequency	Percentage
Women's characteristics – subsample of women with current partner	Age group	18-24 years	2760	9.1
		25-29 years	2690	8.9
		30-34 years	3228	10.6
		35-39 years	3384	11.1
		40-49 years	6918	22.8
		50-59 years	5804	19.1
		60-74 years	5593	18.4
	Education	primary and lower secondary	10974	36.2
		upper and post-secondary	13004	42.9
		tertiary	6349	20.9
	Experience in childhood	no physical violence in childhood	22464	73.8
		physical violence once in childhood	1750	5.8
		physical violence more than once in childhood	6208	20.4
		no sexual violence in childhood	26871	88.3
		sexual violence once in childhood	1932	6.4
		sexual violence more than once in childhood	1619	5.3
		no psychological violence in childhood	27447	90.2
		psychological violence once in childhood	795	2.6
		psychological violence more than once in childhood	2181	7.2
	Awareness	not aware of any service for VAW	5528	18.2
		aware of at least one service for VAW	24894	81.8
	Minority	not member of ethnic or religious minority	28866	94.9
		member of ethnic or religious minority	1556	5.1
	Labour force status	currently working	16642	54.9
		short-term unemployed	1724	5.7
		student or trainee	1631	5.4
		not working	10293	34.0

Household characteristics	Household composition	no children in household	15514	52.1
		1 child in household	6156	20.7
		2+ children in household	8133	27.3
	Place of residence	living in big city or suburb of big city	21352	70.2
		not living in big city	9070	29.8
	Self-reported economic status	living comfortably on present income	8337	27.8
		coping on present income	13969	46.6
		finding it difficult or very difficult on present income	7644	25.5
Current partner characteristics	Labour force status	neither working nor retired	8774	28.8
		retired, employed or self-employed	21648	71.2
	Education	primary and lower	11821	39.4
		upper and post-secondary	12195	40.7
		tertiary	5956	19.9
	Relative earnings	partner earns less than respondent	3461	12.1
		both earn roughly the same amount	5864	20.6
		partner earns more than respondent	19179	67.3
	Alcohol abuse	partner does not get drunk regularly	25627	85.8
		partner gets drunk regularly	4232	14.2

* As previously (see Table 2), country variables are not reported in this table although they are included as covariates in all estimations.

Table B2 The set of 'explanatory' variables. Absolute and percentage frequency in the sample of women with current partner and children*

			Frequency	Percentage
Women's characteristics – subsample of women with current partner and children	Age group	18-24 years	532	2.3
		25-29 years	1219	5.2
		30-34 years	2364	10.0
		35-39 years	2878	12.2
		40-49 years	6265	26.5
		50-59 years	5298	22.4
		60-74 years	5122	21.6
	Education	primary and lower secondary	9305	39.4
		upper and post-secondary	9810	41.5
		tertiary	4529	19.2
	Experience in childhood	no physical violence in childhood	17168	72.4
		physical violence once in childhood	1423	6.0
		physical violence more than once in childhood	5123	21.6
		no sexual violence in childhood	20816	87.8
		sexual violence once in childhood	1520	6.4
		sexual violence more than once in childhood	1378	5.8
		no psychological violence in childhood	21403	90.3
		psychological violence once in child-hood	630	2.7
		psychological violence more than once in childhood	1682	7.1
	Awareness	not aware of any service for VAW	4309	18.2
		aware of at least one service for VAW	19405	81.8
	Minority	not member of ethnic or religious minority	22353	94.3
		member of ethnic or religious minority	1361	5.7
	Labour force status	currently working	12700	53.8
		short-term unemployed	1355	5.7
		student or trainee	173	0.7
		not working	9366	39.7
Household characteristics	Household composition	no children in household	10156	43.4
		1 child in household	5617	24.0
		2+ children in household	7607	32.5
	Place of residence	living in big city or suburb of big city	17058	71.9
		not living in big city	6656	28.1
	Self-reported economic status	living comfortably on present income	8337	27.8
		coping on present income	13969	46.6
		finding it difficult or very difficult on present income	7644	25.5

Current partner's characteristics	Labour force status	neither working nor retired	6953	29.3
		retired, employed or self-employed	16761	70.7
	Education	primary and lower	10141	43.3
		upper and post-secondary	8798	37.6
		tertiary	4482	19.1
	Relative earnings	partner earns less than respondent	2648	11.6
		both earn roughly the same amount	4457	19.6
		partner earns more than respondent	15645	68.8
	Alcohol abuse	partner does not get drunk regularly	20409	87.4
		partner gets drunk regularly	2941	12.6

*As previously (see Table 2), country variables are not reported in this table although they are included as covariates in all estimations. Source: FRA violence against women survey dataset 2012.

Table B3 The set of 'explanatory' variables. Country of residence. Absolute and percentage frequency of women in the sample

Country code	Weighted Freq.	Weighted %	Unweighted Freq.
AT	703	1.67	1505
BE	871	2.07	1537
BG	661	1.57	1507
CY	69	0.17	1505
CZ	903	2.15	1620
DE	6889	16.4	1534
DK	443	1.05	1514
EE	119	0.28	1500
EL	941	2.24	1500
ES	3821	9.1	1520
FI	433	1.03	1520
FR	5145	12.25	1505
HR	375	0.89	1505
HU	874	2.08	1512
IE	355	0.85	1569
IT	5042	12.01	1531
LT	294	0.7	1552
LU	41	0.1	908
LV	203	0.48	1513
MT	34	0.08	1501
NL	1342	3.19	1510
PL	3296	7.85	1513
PT	901	2.14	1515
RO	1857	4.42	1579
SE	739	1.76	1504
SI	172	0.41	1501
SK	471	1.12	1512
UK	5007	11.92	1510
EU	42002	100	42002

Source: FRA violence against women survey dataset 2012.

APPENDIX C: Additional tables on prevalence of violence

Table C1 Frequency of physical violence by respondent labour force status

A. Violence by current partner since age of 15

Frequency	0	1	2—5	6+	Total	
	%	%	%	%		
A: Currently working	93.7	2.4	2.7	1.9	16642	100
B: Other labour force status	91.8	2.7	2.8	2.8	13780	100
t-test: A-B	***		**	**		
C: All	92.8	2.5	2.3	2.3	30422	100

B. Violence by non partners since age of 15

Frequency	0	1	2—5	6+	Total	
	%	%	%	%		%
A: Currently working	97.3	0.8	0.9	0.9	16642	100
B: Other labour force status	96.4	1.1	1.6	1	13780	100
t-test: A-B	**		***			
C: All	96.9	0.9	1.2	1	30422	100

Source: FRA violence against women survey dataset 2012.

Table C2 Frequency of physical violence by earning position compared to partner

Violence by current partner in past 12 months. All partnered women

Frequency	0	1	2—5	6+	Total	
	%	%	%	%		
A: Respondent earns less than partner	97.1	0.9	1.2	0.7	19179	100
B: Both earn roughly the same amount	96.6	1.1	0.9	1.5	5864	100
C: Respondent earns more than partner	96.5	0.5	1.5	1.5	3461	100
t-test: A-B				*		
t-test: B-C		**				

Source: FRA violence against women survey dataset 2012.

Table C3 Frequency of sexual violence by respondent labour force status

Violence by any perpetrator in past 12 months

Frequency	0	1	2—5	6+	Total	
	%	%	%	%	N.	%
A: Currently working	98.3	0.6	0.7	0.5	20351	100
B: Other labour force status	98.0	0.6	0.7	0.7	21651	100
t-test: A-B						
C: All	98.2	0.6	0.7	0.6	42002	100

Source: FRA violence against women survey dataset 2012.

Table C4 Frequency of psychological violence by respondent labour force status

Violence by current partner

	Women in households without children					
Frequency	Never	Some-times	Often	All the time	Total	
	%	%	%	%	N.	%
A: Currently working	80.0	8.3	8.9	2.9	3942	100
B: Other labour force status	71.6	12.2	10.6	5.6	2766	100
t-test: A-B	***	**		***		
C: All	76.5	9.9	9.6	4	6708	100

Source: FRA violence against women survey dataset 2012.

Table C5 Frequency of psychological violence by earning position compared to partner

Violence by current partner

	Women without children					
Frequency	Never	Some-times	Often	All the time	Total	
	%	%	%	%	N.	%
A: Respondent earns less than partner	74.7	11.3	9.8	4.2	3534	100
B: Both earn roughly the same amount	81.3	7.6	8.8	2.4	1406	100
C: Respondent earns more than partner	78.8	8.8	7.4	5	813	100
t-test: A-B	***	**		**		
t-test: B-C						

Source: FRA violence against women survey dataset 2012.

Table C6 Frequency of psychological violence by self-reported economic status

Violence by current partner

	Women without children					
Frequency	Never	Sometimes	Often	All the time	Total	
	%	%	%	%	N.	%
A: Living comfortably on present income	75.9	12.3	7.6	4.2	2045	100
B: Coping on present income	79.9	9.1	8.8	2.2	3042	100
C: Finding it difficult on present income	70.4	8.6	12.9	8.1	1385	100
t-test: A-B						
t-test: B-C	***		**	***		

Source: FRA violence against women survey dataset 2012.

Figure C1 Estimated probabilities of physical violence by frequency class and earning position compared to partner

Violence by current partner in past 12 months. All partnered women
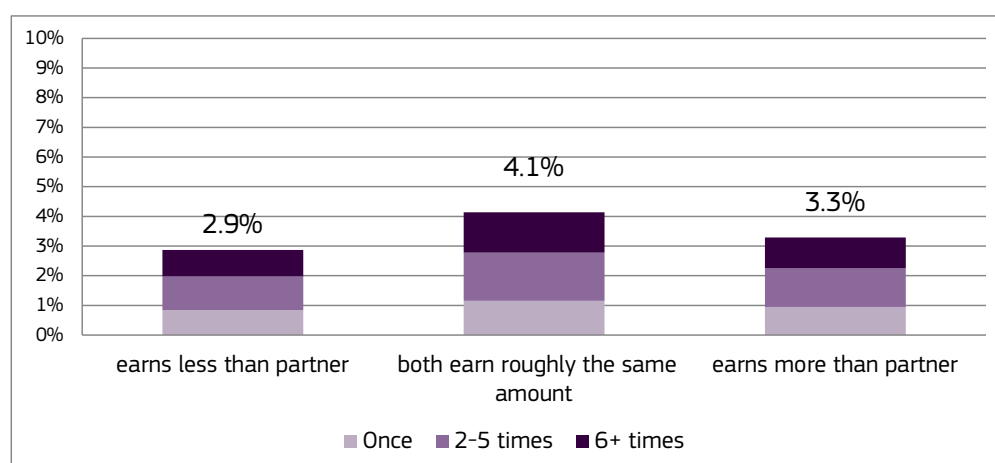
Source: FRA violence against women survey dataset 2012.

Figure C2 Estimated probabilities of psychological violence by frequency class and respondent labour force status

Violence by current partner. Women in households without children
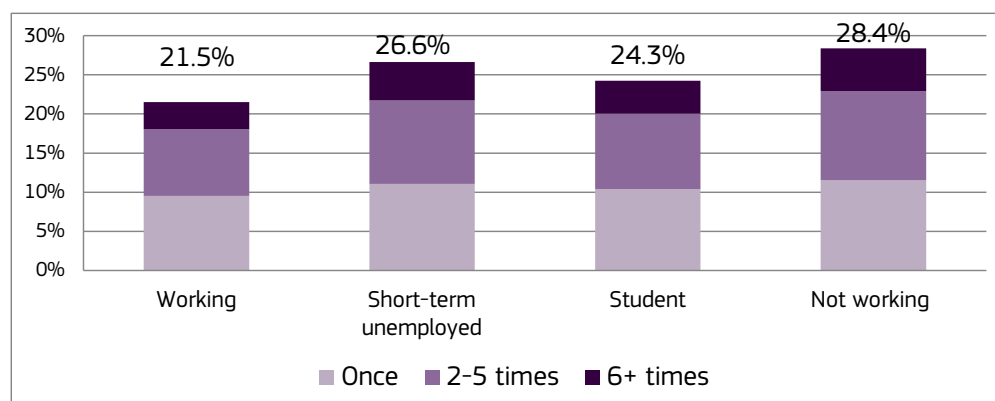
Source: FRA violence against women survey dataset 2012.

Figure C3 Estimated probabilities of psychological violence by frequency class and earning position compared to partner

Violence by current partner. Women in households without children
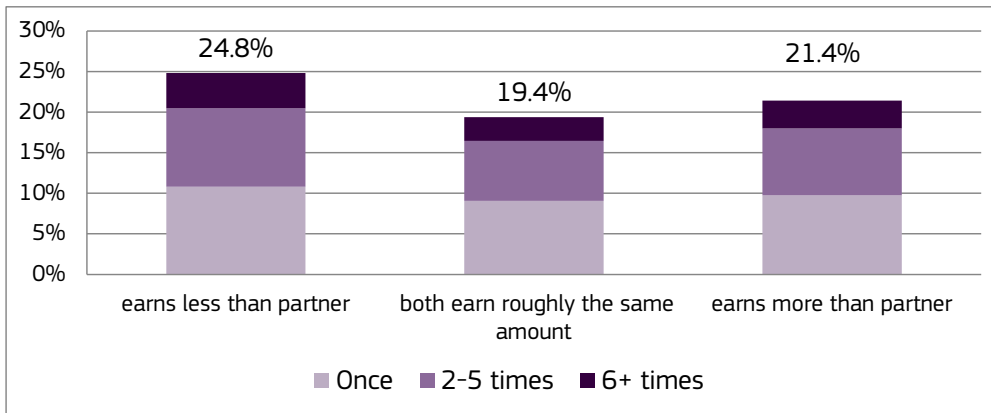
Source: FRA violence against women survey dataset 2012.

Figure C4 Estimated probabilities of psychological violence by frequency class and self-reported economic status

Violence by current partner. Women in households without children
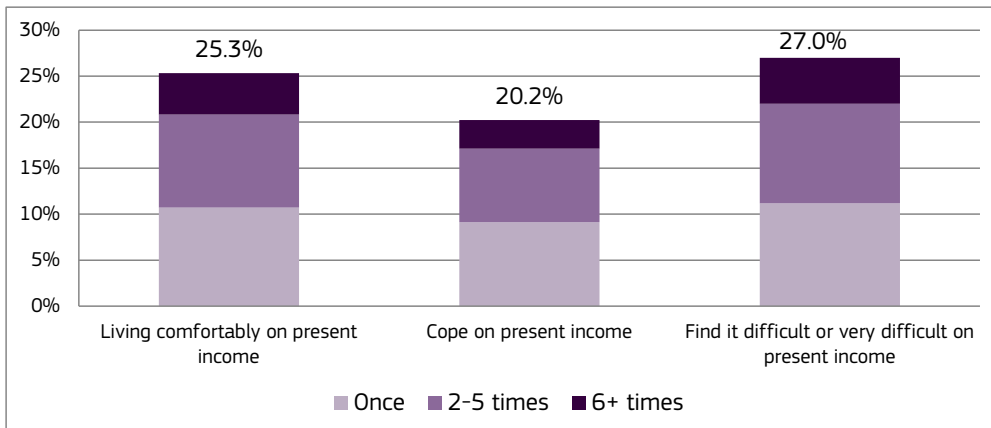
Source: FRA violence against women survey dataset 2012.

APPENDIX D: Detailed results – estimated effects of labour force status, relative earnings and family economic status

How to read tables

Consider for example Table D1 and the frequency class 'once. For a woman in the 'short-term unemployed' category, the probability of having suffered physical violence just once is 0.4 percentage points higher than for a woman still working at the time of interview. Since the estimated probability that the latter frequently suffered physical violence is 0.8%, recent experience of unemployment is associated with fifty percent increase in the probability of violence. But this increase in probability is only weakly statistically significant.

The comparison is carried out for women with the same characteristics except labour force status (see Table 2 for list of characteristics – independent variables – included in the estimation).

Table D1 Estimated difference in the probability of physical violence by respondent labour force status

Violence by current partner in past 12 months[§]

Frequency: Never	*Predicted probability for working women = 97.0%*		Stat. Sign.
	Difference in probability (pp) if woman:		
	short-term unemployed	-1.69	*
	student or trainee	-1.43	
	not working	0.05	
Frequency: Once	*Predicted probability for working women = 0.8%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	0.40	*
	student or trainee	0.34	
	not working	-0.01	

Frequency: 2-5 times	*Predicted probability for working women = 1.2%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	0.65	*
	student or trainee	0.55	
	not working	-0.02	
Frequency: 6+ times	*Predicted probability for working women = 0.9%*		
	Difference in probability (pp.) if woman:		
	short-term unemployed	0.64	*
	student or trainee	0.53	
	not working	-0.02	

[§] 'Short-term unemployed' women are women who worked in the past 12 months, but not at the time of the interview. Source: FRA violence against women survey dataset 2012.

Table D2 Estimated difference in the probability of physical violence by respondent labour force status

Violence by non partners in past 12 months[§]

Frequency: Never	*Predicted probability for working women = 94.5%*		Stat. Sign.
	Difference in probability (pp) if woman:		
	short-term unemployed	-0.46	
	student or trainee	-1.89	
	not working	1.49	***
Frequency: Once	*Predicted probability for working women = 2.0%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	0.14	
	student or trainee	0.57	
	not working	-0.49	**
Frequency: 2-5 times	*Predicted probability for working women = 2.2%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	0.19	
	student or trainee	0.76	
	not working	-0.61	**
Frequency: 6+ times	*Predicted probability for working women = 1.2%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	0.13	
	student or trainee	0.55	
	not working	-0.40	**

[§] Short-term unemployed women are women who worked in the past 12 months, but not at the time of the interview. Source: FRA violence against women survey dataset 2012.

Table D3 Estimated difference in the probability of physical violence by earning position relative to partner Violence by current partner in past 12 months

A. Working women

Frequency: Never	*Predicted probability when both earn roughly the same amount = 96.4%*		Stat. Sign.
	Difference in probability (pp) if woman:		
	earns more than partner	0.20	
	earns less than partner	1.22	*
Frequency: Once	*Predicted probability when both earn roughly the same amount = 1.1%*		
	Difference in probability (pp) if woman:		
	earns more than partner	-0.06	
	earns less than partner	-0.34	*
Frequency: 2–5 times	*Predicted probability when both earn roughly the same amount = 1.3%*		
	Difference in probability (pp) if woman:		
	earns more than partner	-0.07	
	earns less than partner	-0.44	*
Frequency: 6+ times	*Predicted probability when both earn roughly the same amount = 1.2%*		
	Difference in probability (pp) if woman:		
	earns more than partner	-0.08	
	earns less than partner	-0.44	*

B. All women.

Frequency: Never	*Predicted probability when both earn roughly the same amount = 95.9%*		Stat. Sign.
	Difference in probability (pp) if woman:		
	earns more than partner	0.85	
	earns less than partner	1.27	*
Frequency: Once	*Predicted probability when both earn roughly the same amount = 1.2%*		
	Difference in probability (pp) if woman:		
	earns more than partner	-0.21	
	earns less than partner	-0.32	*
Frequency: 2–5 times	*Predicted probability when both earn roughly the same amount = 1.4%*		
	Difference in probability (pp) if woman:		
	earns more than partner	-0.32	
	earns less than partner	-0.48	*
Frequency: 6+ times	*Predicted probability when both earn roughly the same amount = 1.4%*		
	Difference in probability (pp) if woman:		
	earns more than partner	-0.32	
	earns less than partner	-0.47	*

Source: FRA violence against women survey dataset 2012.

Table D4 Estimated difference in the probability of physical violence by self-reported economic status

Violence by any perpetrator in past 12 months

Frequency: Never	*Predicted probability for woman reporting household (HH) comfortable on present income = 93.7%*		
	Difference in probability (pp) for woman reporting:		Stat. Signif.
	HH copes on present income	0.15	
	HH finds it difficult or very difficult to cope on present income	-2.70	***
Frequency: Once	*Predicted probability for woman reporting HH comfortable on present income = 2.3%*		
	Difference in probability (pp) for woman reporting:		
	HH copes on present income	-0.05	
	HH finds it difficult or very difficult to cope on present income	0.77	***
Frequency: 2–5 times	*Predicted probability for woman reporting HH comfortable on present income = 2.3%*		
	Difference in probability (pp) for woman reporting:		
	HH copes on present income	-0.05	
	HH finds it difficult or very difficult to cope on present income	0.94	***
Frequency: 6+ times	*Predicted probability for woman reporting HH comfortable on present income = 1.8%*		
	Difference in probability (pp) for woman reporting :		
	HH copes on present income	-0.05	
	HH finds it difficult or very difficult to cope on present income	0.99	***

Source: FRA violence against women survey dataset 2012.

Table D5 Estimated difference in the probability of sexual violence by respondent labour force status[§]

Violence by any perpetrator in past 12 months

Frequency: Never	*Predicted probability for women working currently = 98.1%*		Stat. signif.
	Difference in probability (pp) if woman:		
	short-term unemployed	-0.08	
	student or trainee	1.05	***
	not working	0.02	
Frequency: Once	*Predicted probability for working women = 0.6%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	0.02	
	student or trainee	-0.30	***
	not working	-0.01	
Frequency: 2-5 times	*Predicted probability for working women = 0.7%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	0.03	
	student or trainee	-0.37	***
	not working	-0.01	
Frequency: 6+ times	*Predicted probability for working women = 0.6%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	0.03	
	student or trainee	-0.38	***
	not working	-0.01	

[§] Short-term unemployed women are women who worked in the past 12 months, but not at the time of the interview. Source: FRA violence against women survey dataset 2012.

Table D6 Estimated difference in the probability of sexual violence by respondent labour force status[§]

Violence by current partner in past 12 months

Frequency: Never	*Predicted probability for working women = 98.5%*		Stat. signif.
	Difference in probability (pp) if woman:		
	short-term unemployed	0.29	
	student or trainee	1.04	***
	not working	0.42	
Frequency: Once	*Predicted probability for working women = 0.4%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	-0.07	
	student or trainee	-0.25	***
	not working	-0.10	

Frequency: 2–5 times	*Predicted probability for working women = 0.5%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	-0.10	
	student or trainee	-0.38	***
	not working	-0.15	
Frequency: 6+ times	*Predicted probability for working women = 0.5%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	-0.12	
	student or trainee	-0.41	***
	not working	-0.17	

§ Short-term unemployed women are women who worked in the past 12 months, but not at the time of the interview. Source: FRA violence against women survey dataset 2012.

Table D7 Estimated difference in the probability of sexual violence by earning position relative to partner.

Violence by current partner in past 12 months. All women with current partner

Frequency: Never	*Predicted probability when both earn roughly the same amount = 98.2%*		Stat. Signif.
	Difference in probability (pp) if woman:		
	earns more than partner	-0.13	
	earns less than partner	0.81	**
Frequency: Once	*Predicted probability when both earn roughly the same amount = 0.5%*		
	Difference in probability (pp) if woman:		
	earns more than partner	0.03	
	earns less than partner	-0.20	*
Frequency: 2–5 times	*Predicted probability when both earn roughly the same amount = 0.7%*		
	Difference in probability (pp) if woman:		
	earns more than partner	0.05	
	earns less than partner	-0.29	**
Frequency: 6+ times	*Predicted probability when both earn roughly the same amount = 0.7%*		
	Difference in probability (pp) if woman:		
	earns more than partner	0.06	
	earns less than partner	-0.32	**

Source: FRA violence against women survey dataset 2012.

Table D8 Estimated difference in the probability of sexual violence by self-reported economic status.

Violence by any perpetrator in past 12 months

Frequency: Never	*Predicted probability for woman reporting household (HH) comfortable on present income = 98.4%*		
	Difference in probability (pp) for woman reporting:		S t a t . Sign.
	HH copes on present income	-0.01	
	HH finds it difficult or very difficult to cope on present income	-0.49	
Frequency: Once	*Predicted probability for woman reporting HH comfortable on present income = 0.5%*		
	Difference in probability (pp) for woman reporting:		
	HH copes on present income	0.00	
	HH finds it difficult or very difficult to cope on present income	0.13	
Frequency: 2-5 times	*Predicted probability for woman reporting HH comfortable on present income = 0.6%*		
	Difference in probability (pp) for woman reporting:		
	HH copes on present income	0.00	
	HH finds it difficult or very difficult to cope on present income	0.17	
Frequency: 6+ times	*Predicted probability for woman reporting HH comfortable on present income = 0.5%*		
	Difference in probability (pp) for woman reporting :		
	HH copes on present income	0.00	
	HH finds it difficult or very difficult to cope on present income	0.19	

Source: FRA violence against women survey dataset 2012.

Table D9 Estimated difference in the probability of psychological violence by respondent labour force status.[§]

A. Violence by current partner. Women with children

Frequency: Never	*Predicted probability for working women = 76.7%*		Stat. Sign.
	Difference in probability (pp) if woman:		
	short-term unemployed	-2.25	
	student or trainee	-3.27	
	not working	0.09	
Frequency: Sometimes	*Predicted probability for working women = 7.9%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	0.50	
	student or trainee	0.71	
	not working	-0.02	

Frequency: Often	*Predicted probability for working women = 9.0%*	
	Difference in probability (pp) if woman:	
	short-term unemployed	0.82
	student or trainee	1.18
	not working	-0.03
Frequency: All of the time	*Predicted probability for working women = 6.5%*	
	Difference in probability (pp) if woman:	
	short-term unemployed	0.94
	student or trainee	1.38
	not working	-0.03

B. Violence by current partner. Women without children

Frequency: Never	*Predicted probability for working women = 78.5%*		Stat. Sign.
	Difference in probability (pp) if woman:		
	short-term unemployed	-5.13	
	student or trainee	-2.73	
	not working	-6.86	**
Frequency: Sometimes	*Predicted probability for working women = 9.5%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	1.53	
	student or trainee	0.84	
	not working	2.00	**
Frequency: Often	*Predicted probability for working women = 8.5%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	2.16	
	student or trainee	1.15	
	not working	2.88	**
Frequency: All of the time	*Predicted probability for working women = 3.5%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	1.44	
	student or trainee	0.74	
	not working	1.98	*

[§] Short-term unemployed women are women who worked in the past 12 months, but not at the time of the interview. Source: FRA violence against women survey dataset 2012.

Table D10 Estimated difference in the probability of psychological violence by earning position relative to partner

A. Violence by current partner. All women with children

Frequency: Never	*Predicted probability when both earn roughly the same amount=79.7%*		Stat. Sign.
	Difference in probability (pp) if woman		
	earns more than the partner	-2.82	
	earns less than the partner	-3.65	***
Frequency: Sometimes	*Predicted probability when both earn roughly the same amount=7.1%*		
	Difference in probability (pp) if woman		
	earns more than the partner	0.68	
	earns less than the partner	0.87	***
Frequency: Often	*Predicted probability when both earn roughly the same amount=7.9%*		
	Difference in probability (pp) if woman		
	earns more than the partner	1.05	
	earns less than the partner	1.36	***
Frequency: All of the time	*Predicted probability when both earn roughly the same amount=5.3%*		
	Difference in probability (pp) if woman		
	earns more than the partner	1.09	
	earns less than the partner	1.43	***

B. Violence by current partner. All women without children

Frequency: Never	*Predicted probability when both earn roughly the same amount = 80.6%*		Stat. Sign.
	Difference in probability (pp) if woman		
	earns more than the partner	-2.04	
	earns less than the partner	-5.45	**
Frequency: Sometimes	*Predicted probability when both earn roughly the same amount = 9.1%*		
	Difference in probability (pp) if woman		
	earns more than the partner	0.69	
	earns less than the partner	1.77	*
Frequency: Often	*Predicted probability when both earn roughly the same amount = 7.4%*		
	Difference in probability (pp) if woman		
	earns more than the partner	0.84	
	earns less than the partner	2.24	**
Frequency: All of the time	*Predicted probability when both earn roughly the same amount = 2.9%*		
	Difference in probability (pp) if woman		
	earns more than the partner	0.51	
	earns less than the partner	1.44	**

Source: FRA violence against women survey dataset 2012.

Table D11 Estimated difference in the probability of psychological violence by self-reported economic status

A. Violence by current partner. Women with children

Frequency: Never	*Predicted probability for woman reporting household (HH) copes on present income= 77.7%*		
	Difference in probability (pp) for woman reporting:		Stat. Sign.
	HH lives comfortably on present income	2.89	***
	HH finds it difficult or very difficult to cope on present income	-6.67	***
Frequency: Sometimes	*Predicted probability for woman reporting HH comfortable on present income = 7.7%*		
	Difference in probability (pp) for woman reporting:		
	HH lives comfortably on present income	-0.72	***
	HH finds it difficult or very difficult to cope on present income	1.43	***
Frequency: Often	*Predicted probability for woman reporting HH copes on present income = 8.6%*		
	Difference in probability (pp) for woman reporting:		
	HH lives comfortably on present income	-1.09	***
	HH finds it difficult or very difficult to cope on present income	2.41	***
Frequency: All of the time	*Predicted probability for woman reporting HH copes on present income = 6.0%*		
	Difference in probability (pp) for woman reporting :		
	HH lives comfortably on present income	-1.08	***
	HH finds it difficult or very difficult to cope on present income	2.82	***

B. Violence by current partner. Women without children

Frequency: Never	*Predicted probability for woman reporting HH copes on present income= 79.8%*		
	Difference in probability (pp) for woman reporting:		Stat. Sign.
	HH lives comfortably on present income	-5.09	**
	HH finds it difficult or very difficult to cope on present income	-6.76	***
Frequency: Sometimes	*Predicted probability for woman reporting HH comfortable on present income = 9.1%*		
	Difference in probability (pp) for woman reporting:		
	HH lives comfortably on present income	1.58	**
	HH finds it difficult or very difficult to cope on present income	2.05	***
Frequency: Often	*Predicted probability for woman reporting HH copes on present income = 8.0%*		
	Difference in probability (pp) for woman reporting:		
	HH lives comfortably on present income	2.15	***
	HH finds it difficult or very difficult to cope on present income	2.85	***

Frequency: All of the time	*Predicted probability for woman reporting HH copes on present income = 3.1%*		
	Difference in probability (pp) for woman reporting :		
	HH lives comfortably on present income	1.36	***
	HH finds it difficult or very difficult to cope on present income	1.86	***

Source: FRA violence against women survey dataset 2012.

Table D12 Estimated difference in the probability of economic violence by respondent labour force status, self-reported economic status, and earnings compared to the partner[§]

Violence by current partner

All women	*Predicted probability for working women = 4.8%*		Stat. Sign.
	Difference in probability (pp) if woman:		
	short-term unemployed	1.21	
	student or in training	-2.30	***
	not working	1.19	**
All women	*Predicted probability for woman reporting household (HH) comfortable on present income = 4.2%*		
	Difference in probability (pp) for woman reporting:		
	HH copes on present income	0.35	
	HH finds it difficult or very difficult to cope on present income	2.87	***
All women	*Predicted probability when both earn roughly the same amount = 4%*		
	Difference in probability (pp) if woman:		
	earns more than the partner	0.43	
	earns less than the partner	1.93	***
Only working women	*Predicted probability when both earn roughly the same amount = 3.3%*		
	Difference in probability (pp) if woman:		
	earns more than the partner	0.84	
	earns less than the partner	1.42	**

Source: FRA violence against women survey dataset 2012.

Table D13 Estimated difference in the probability of sexual harassment by respondent labour force status.

Sexual harassment by any perpetrator in past 12 months

Frequency: Never	*Predicted probability for working women = 78%*		Stat.Signif.
	Difference in probability (pp) if woman:		
	short-term unemployed	-2.77	*
	student or in training	-3.78	*
	not working	4.31	***

Frequency: Once	Predicted probability for working women =5.4%		
	Difference in probability (pp) if woman:		
	short-term unemployed	0.43	*
	student or in training	0.57	**
	not working	-0.75	***
Frequency: 2-5 times	*Predicted probability for working women = 7.7%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	0.82	*
	student or in training	1.10	*
	not working	-1.34	***
Frequency: 6+ times	*Predicted probability for working women =8.9%*		
	Difference in probability (pp) if woman:		
	short-term unemployed	1.53	*
	student or in training	2.11	*
	not working	-2.22	***

§ Short-term unemployed women are women who worked in the past 12 months, but not at the time of the interview. Source: FRA violence against women survey dataset 2012.

Table D14 Estimated difference in the probability of sexual harassment by self-reported economic status.

Sexual harassment by any perpetrator in past 12 months

Frequency: Never	*Predicted probability for woman reporting household (HH) comfortable on present income = 80.7%*		
	Difference in probability (pp) for woman reporting:		Stat. Sign.
	HH copes on present income	-0.96	
	HH finds it difficult or very difficult to cope on present income	-5.78	***
Frequency: Once	*Predicted probability for woman reporting HH comfortable on present income = 4.9%*		
	Difference in probability (pp) for woman reporting:		
	HH copes on present income	0.16	
	HH finds it difficult or very difficult to cope on present income	0.90	***
Frequency: 2-5 times	*Predicted probability for woman reporting HH comfortable on present income = 6.9%*		
	Difference in probability (pp) for woman reporting:		
	HH copes on present income	0.29	
	HH finds it difficult or very difficult to cope on present income	1.71	***
Frequency: 6+ times	*Predicted probability for woman reporting HH comfortable on present income = 7.6%*		
	Difference in probability (pp) for woman reporting :		
	HH copes on present income	0.50	
	HH finds it difficult or very difficult to cope on present income	3.18	***

Source: FRA violence against women survey dataset 2012.

APPENDIX E: Detailed results – estimated effects of explanatory variables

Table E1 Base (reference) categories

Women's characteristics	Age	Age 30+ years
	Education	Low education
	Experience in childhood	Violence in childhood: not more than once
	Awareness	Not aware of any service for VAW
	Minority	Not belonging to ethnic or religious minority
HH characteristics	Place of residence	Not living in big city
	HH composition	No children in HH
Current partner's characteristics	Employment status	Partner has a job
	Education	Partner with low education
	Comparative education level	Woman's education not higher than partner's
	Drinking habits	Partner who never or only occasionally gets drunk

Table E2 Estimated difference in the probability of physical violence with respect to the corresponding base category §

Violence by current partner in past 12 months

Frequency: Never	Difference in probability (pp) for woman aged 18-29 years	-0.52	
	Difference in probability (pp) for woman with upper secondary or tertiary education	1.01	*
	Difference in probability (pp) for woman who experienced violence in childhood more than once	-4.55	***
	Difference in probability (pp) for woman in HH with at least one child	-2.12	***
	Difference in probability (pp) for woman aware of at least one service for VAW	0.74	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	-0.83	
	Difference in probability (pp) for woman living in big city	-1.94	***
	Difference in probability (pp) for woman with unemployed partner	-0.60	
	Difference in probability (pp) for woman with partner not in labour force	0.31	
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	1.79	***
	Difference in probability (pp) for woman with level of education higher than her partner	-0.53	
	Difference in probability (pp) for woman with partner who regularly gets drunk	-6.82	***

Frequency: Once	Difference in probability (pp) for woman aged 18-29 years	0.13	
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.25	*
	Difference in probability (pp) for woman who experienced violence in childhood more than once	1.10	***
	Difference in probability (pp) for woman in HH with at least one child	0.52	***
	Difference in probability (pp) for woman aware of at least one service for VAW	-0.18	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.20	
	Difference in probability (pp) for woman living in big city	0.46	***
	Difference in probability (pp) for woman with unemployed partner	0.14	
	Difference in probability (pp) for woman with partner not in labour force	-0.08	
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	-0.44	***
	Difference in probability (pp) for woman with level of education higher than her partner	0.13	
	Difference in probability (pp) for woman with partner who regularly gets drunk	1.52	***
Frequency: 2-5 times	Difference in probability (pp) for woman aged 18-29 years	0.20	
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.39	*
	Difference in probability (pp) for woman who experienced violence in childhood more than once	1.75	***
	Difference in probability (pp) for woman in HH with at least one child	0.82	***
	Difference in probability (pp) for woman aware of at least one service for VAW	-0.28	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.31	
	Difference in probability (pp) for woman living in big city	0.74	***
	Difference in probability (pp) for woman with unemployed partner	0.23	
	Difference in probability (pp) for woman with partner not in labour force	-0.12	
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	-0.69	***
	Difference in probability (pp) for woman with level of education higher than her partner	0.20	
	Difference in probability (pp) for woman with partner who regularly gets drunk	2.54	***

Frequency: 6+ times	Difference in probability (pp) for woman aged 18-29 years	0.20	
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.37	*
	Difference in probability (pp) for woman who experienced violence in childhood more than once	1.70	***
	Difference in probability (pp) for woman in HH with at least one child	0.78	***
	Difference in probability (pp) for woman aware of at least one service for VAW	-0.28	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.31	
	Difference in probability (pp) for woman living in big city	0.74	***
	Difference in probability (pp) for woman with unemployed partner	0.23	
	Difference in probability (pp) for woman with partner not in labour force	-0.11	
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	-0.66	***
	Difference in probability (pp) for woman with level of education higher than her partner	0.20	
	Difference in probability (pp) for woman with partner who regularly gets drunk	2.75	***

§ Difference in probability stands for the change in the estimated probability of violence in response to a discrete change from the corresponding base category ('marginal effects'). In the case of age, for example, the base category is the 30+ age group and a woman aged 19-29 years has 0.52 pp less chance of having never experienced physical violence than a woman with the same (average) characteristics but aged 30+. Base categories are listed in Table E1. Source: FRA violence against women survey dataset 2012.

Table E3 Estimated difference in the probability of sexual violence with respect to the corresponding base category§

Violence by current partner in past 12 months

Frequency: Never	Difference in probability (pp) for woman aged 18-29 years	0.50	
	Difference in probability (pp) for woman with upper secondary or tertiary education	0.46	
	Difference in probability (pp) for woman who experienced violence in childhood more than once	-2.12	***
	Difference in probability (pp) for woman in HH with at least one child	-1.35	***
	Difference in probability (pp) for woman aware of at least one service for VAW	0.27	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	-0.88	
	Difference in probability (pp) for woman living in big city	-0.93	***
	Difference in probability (pp) for woman with unemployed partner	-0.13	
	Difference in probability (pp) for woman with partner not in labour force	-0.08	
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	0.69	*
	Difference in probability (pp) for woman with level of education higher than her partner	-0.21	
	Difference in probability (pp) for woman with partner who regularly gets drunk	-3.25	***

Frequency: Once	Difference in probability (pp) for woman aged 18–29	−0.12	
	Difference in probability (pp) for woman with upper secondary or tertiary education	−0.10	
	Difference in probability (pp) for woman who experienced violence in childhood more than once	0.48	***
	Difference in probability (pp) for woman in HH with at least one child	0.31	***
	Difference in probability (pp) for woman aware of at least one service for VAW	−0.06	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.19	
	Difference in probability (pp) for woman living in big city	0.21	**
	Difference in probability (pp) for woman with unemployed partner	0.03	
	Difference in probability (pp) for woman with partner not in labour force	0.02	
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	−0.16	
	Difference in probability (pp) for woman with level of education higher than her partner	0.05	
	Difference in probability (pp) for woman with partner who regularly gets drunk	0.67	***
Frequency: 2–5 times	Difference in probability (pp) for woman aged 18–29	−0.18	
	Difference in probability (pp) for woman with upper secondary or tertiary education	−0.16	
	Difference in probability (pp) for woman who experienced violence in childhood more than once	0.76	***
	Difference in probability (pp) for woman in HH with at least one child	0.49	***
	Difference in probability (pp) for woman aware of at least one service for VAW	−0.10	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.31	
	Difference in probability (pp) for woman living in big city	0.33	***
	Difference in probability (pp) for woman with unemployed partner	0.05	
	Difference in probability (pp) for woman with partner not in labour force	0.03	
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	−0.25	*
	Difference in probability (pp) for woman with level of education higher than her partner	0.08	
	Difference in probability (pp) for woman with partner who regularly gets drunk	1.11	***

Frequency: 6+ times	Difference in probability (pp) for woman aged 18-29	-0.21	
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.19	
	Difference in probability (pp) for woman who experienced violence in childhood more than once	0.89	***
	Difference in probability (pp) for woman in HH with at least one child	0.55	***
	Difference in probability (pp) for woman aware of at least one service for VAW	-0.12	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.38	
	Difference in probability (pp) for woman living in big city	0.39	***
	Difference in probability (pp) for woman with unemployed partner	0.05	
	Difference in probability (pp) for woman with partner not in labour force	0.03	
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	-0.29	
	Difference in probability (pp) for woman with level of education higher than her partner	0.09	
	Difference in probability (pp) for woman with partner who regularly gets drunk	1.46	***

§ Difference in probability stands for the change in the estimated probability of violence in response to a discrete change from the corresponding base category ('marginal effects'). In the case of age, for example the base category is the 30+ age group and a woman aged 19-29 has 0.50 pp more chances of having never experienced sexual violence than a woman with the same (average) characteristics but aged 30+. Base categories are listed in Table E1. Source: FRA violence against women survey dataset 2012.

Table E4 Estimated difference in the probability of psychological violence with respect to the corresponding base category[§]

Violence by current partner. Women with children

Frequency: Never	Difference in probability (pp) for woman aged 18-29	-2.91	
	Difference in probability (pp) for woman with upper secondary or tertiary education	0.51	
	Difference in probability (pp) for woman who experienced violence in childhood more than once	-19.36	***
	Difference in probability (pp) for woman in HH with at least one child	-4.06	***
	Difference in probability (pp) for woman aware of at least one service for VAW	-0.44	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	-8.93	***
	Difference in probability (pp) for woman living in big city	-4.39	***
	Difference in probability (pp) for woman with unemployed partner	-1.40	
	Difference in probability (pp) for woman with partner not in labour force	-3.09	***
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	0.91	
	Difference in probability (pp) for woman with level of education higher than her partner	-3.81	***
	Difference in probability (pp) for woman with partner who regularly gets drunk	-20.20	***
Frequency: Sometimes	Difference in probability (pp) for woman aged 18-29	0.62	
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.11	
	Difference in probability (pp) for woman who experienced violence in childhood more than once	3.96	***
	Difference in probability (pp) for woman in HH with at least one child	0.92	***
	Difference in probability (pp) for woman aware of at least one service for VAW	0.10	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	1.77	***
	Difference in probability (pp) for woman living in big city	0.96	***
	Difference in probability (pp) for woman with unemployed partner	0.32	
	Difference in probability (pp) for woman with partner not in labour force	0.68	**
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	-0.20	
	Difference in probability (pp) for woman with level of education higher than her partner	0.83	***
	Difference in probability (pp) for woman with partner who regularly gets drunk	3.55	***

Frequency: Often	Difference in probability (pp) for woman aged 18-29	1.05	
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.18	
	Difference in probability (pp) for woman who experienced violence in childhood more than once	6.99	***
	Difference in probability (pp) for woman in HH with at least one child	1.48	***
	Difference in probability (pp) for woman aware of at least one service for VAW	0.16	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	3.14	***
	Difference in probability (pp) for woman living in big city	1.59	***
	Difference in probability (pp) for woman with unemployed partner	0.51	
	Difference in probability (pp) for woman with partner not in labour force	1.12	**
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	-0.33	
	Difference in probability (pp) for woman with level of education higher than her partner	1.38	***
	Difference in probability (pp) for woman with partner who regularly gets drunk	6.91	***
Frequency: All of the time	Difference in probability (pp) for woman aged 18-29	1.24	
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.21	
	Difference in probability (pp) for woman who experienced violence in childhood more than once	8.41	***
	Difference in probability (pp) for woman in HH with at least one child	1.65	***
	Difference in probability (pp) for woman aware of at least one service for VAW	0.18	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	4.02	***
	Difference in probability (pp) for woman living in big city	1.84	***
	Difference in probability (pp) for woman with unemployed partner	0.58	
	Difference in probability (pp) for woman with partner not in labour force	1.29	**
	Difference in probability (pp) for woman with partner with upper secondary or tertiary education	-0.37	
	Difference in probability (pp) for woman with level of education higher than her partner	1.61	***
	Difference in probability (pp) for woman with partner who regularly gets drunk	9.73	***

§ Difference in probability stands for the change in the estimated probability of violence in response to a discrete change from the corresponding base category ('marginal effects'). In the case of age, for example the base category is the 30+ age group and a woman aged 19-29 has 2.9 pp less chances of having never experienced psychological violence than a woman with the same (average) characteristics but aged 30+. Base categories are listed in Table E1. Source: FRA violence against women survey dataset 2012.

Table E5 Estimated difference in the probability of physical violence with respect to the corresponding base category[§]

Violence by partner and non partners in past 12 months

Frequency: Never	Difference in probability (pp) for woman aged 18-29	-8.86 ***
	Difference in probability (pp) for woman with upper secondary or tertiary education	0.81
	Difference in probability (pp) for woman who experienced violence in childhood more than once	-8.50 ***
	Difference in probability (pp) for woman in HH with at least one child	-3.34 ***
	Difference in probability (pp) for woman aware of at least one service for VAW	0.77
	Difference in probability (pp) for woman belonging to ethnic or religious minority	-1.98 *
	Difference in probability (pp) for woman living in big city	-2.58 ***
Frequency: Once	Difference in probability (pp) for woman aged 18-29	2.28 ***
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.23
	Difference in probability (pp) for woman who experienced violence in childhood more than once	2.37 ***
	Difference in probability (pp) for woman in HH with at least one child	0.96 ***
	Difference in probability (pp) for woman aware of at least one service for VAW	-0.22
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.55 *
	Difference in probability (pp) for woman living in big city	0.73 ***
Frequency: 2-5 times	Difference in probability (pp) for woman aged 18-29	2.99 ***
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.28
	Difference in probability (pp) for woman who experienced violence in childhood more than once	2.97 ***
	Difference in probability (pp) for woman in HH with at least one child	1.17 ***
	Difference in probability (pp) for woman aware of at least one service for VAW	-0.27
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.69 *
	Difference in probability (pp) for woman living in big city	0.90 ***
Frequency: 6+ times	Difference in probability (pp) for woman aged 18-29	3.58 ***
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.30
	Difference in probability (pp) for woman who experienced violence in childhood more than once	3.16 ***
	Difference in probability (pp) for woman in HH with at least one child	1.21 ***
	Difference in probability (pp) for woman aware of at least one service for VAW	-0.28
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.74 *
	Difference in probability (pp) for woman living in big city	0.95 ***

§ Difference in probability stands for the change in the estimated probability of violence in response to a discrete change from the corresponding base category ('marginal effects'). In the case of age, for example the base category is the 30+ age group and a woman aged 19-29 has 8.86 pp less chances of having never experienced physical violence than a woman with the same (average) characteristics but aged 30+. Base categories are listed in Table E1. Source: FRA violence against women survey dataset 2012.

Table E6 Estimated difference in the probability of sexual violence with respect to the corresponding base category[§]

Violence by partners and non partners in past 12 months

Frequency: Never	Difference in probability (pp) for woman aged 18-29	-1.13	
	Difference in probability (pp) for woman with upper secondary or tertiary education	1.03	***
	Difference in probability (pp) for woman who experienced violence in childhood more than once	-2.99	***
	Difference in probability (pp) for woman in HH with at least one child	-1.56	***
	Difference in probability (pp) for woman aware of at least one service for VAW	0.45	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	-0.94	
	Difference in probability (pp) for woman living in big city	-1.00	***
Frequency: Once	Difference in probability (pp) for woman aged 18-29	0.29	
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.28	***
	Difference in probability (pp) for woman who experienced violence in childhood more than once	0.80	***
	Difference in probability (pp) for woman in HH with at least one child	0.42	***
	Difference in probability (pp) for woman aware of at least one service for VAW	-0.12	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.24	*
	Difference in probability (pp) for woman living in big city	0.27	***
Frequency: 2-5 times	Difference in probability (pp) for woman aged 18-29	0.38	
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.36	***
	Difference in probability (pp) for woman who experienced violence in childhood more than once	1.03	***
	Difference in probability (pp) for woman in HH with at least one child	0.54	***
	Difference in probability (pp) for woman aware of at least one service for VAW	-0.16	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.32	
	Difference in probability (pp) for woman living in big city	0.34	***
Frequency: 6+ times	Difference in probability (pp) for woman aged 18-29	0.45	
	Difference in probability (pp) for woman with upper secondary or tertiary education	-0.40	***
	Difference in probability (pp) for woman who experienced violence in childhood more than once	1.16	***
	Difference in probability (pp) for woman in HH with at least one child	0.60	***
	Difference in probability (pp) for woman aware of at least one service for VAW	-0.18	
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.37	
	Difference in probability (pp) for woman living in big city	0.39	***

§ Difference in probability stands for the change in the estimated probability of violence in response to a discrete change from the corresponding base category ('marginal effects'). In the case of age, for example the base category is the 30+ age group and a woman aged 19-29 has 1.13 pp less chances of having never experienced sexual violence than a woman with the same (average) characteristics but aged 30+. Base categories are listed in Table E1. Source: FRA violence against women survey dataset 2012.

Table E7 Estimated difference in the probability of sexual harassment with respect to the corresponding base category[§]

Harassment by partners and non partners in 12 past months

|			
Frequency: Never	Difference in probability (pp) for woman aged 18-29	-19.5	***
	Difference in probability (pp) for woman with upper secondary or tertiary education	-5.3	***
	Difference in probability (pp) for woman who experienced violence in childhood more than once	-14.1	***
	Difference in probability (pp) for woman in HH with at least one child	-1.8	****
	Difference in probability (pp) for woman aware of at least one service for VAW	-3.9	***
	Difference in probability (pp) for woman belonging to ethnic or religious minority	-5.5	***
	Difference in probability (pp) for woman living in big city	-4.1	***
Frequency: Once	Difference in probability (pp) for woman aged 18-29	2.4	***
	Difference in probability (pp) for woman with upper secondary or tertiary education	0.9	***
	Difference in probability (pp) for woman who experienced violence in childhood more than once	2.1	***
	Difference in probability (pp) for woman in HH with at least one child	0.3	***
	Difference in probability (pp) for woman aware of at least one service for VAW	0.7	***
	Difference in probability (pp) for woman belonging to ethnic or religious minority	0.8	***
	Difference in probability (pp) for woman living in big city	0.6	***
Frequency: 2-5 times	Difference in probability (pp) for woman aged 18-29	5.2	***
	Difference in probability (pp) for woman with upper secondary or tertiary education	1.6	***
	Difference in probability (pp) for woman who experienced violence in childhood more than once	4.1	***
	Difference in probability (pp) for woman in HH with at least one child	0.6	***
	Difference in probability (pp) for woman aware of at least one service for VAW	1.2	***
	Difference in probability (pp) for woman belonging to ethnic or religious minority	1.6	***
	Difference in probability (pp) for woman living in big city	1.2	***

Frequency: 6+ times	Difference in probability (pp) for woman aged 18-29	11.9	***
	Difference in probability (pp) for woman with upper secondary or tertiary education	2.8	***
	Difference in probability (pp) for woman who experienced violence in childhood more than once	7.9	***
	Difference in probability (pp) for woman in HH with at least one child	1.0	***
	Difference in probability (pp) for woman aware of at least one service for VAW	2.1	***
	Difference in probability (pp) for woman belonging to ethnic or religious minority	3.1	***
	Difference in probability (pp) for woman living in big city	2.2	***

§ Difference in probability stands for the change in the estimated probability of violence in response to a discrete change from the corresponding base category ('marginal effects'). In the case of age, for example the base category is the 30+ age group and a woman aged 19-29 has 19.5 pp less chances of having never experienced sexual harassment than a woman with the same (average) characteristics but aged 30+. Source: FRA violence against women survey dataset 2012.

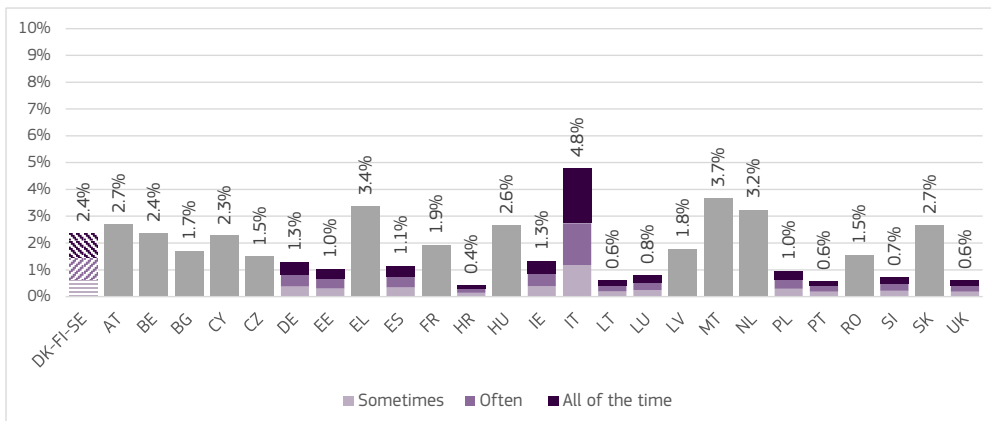# APPENDIX F: Detailed results – estimated country effects

Fig F1 Estimated probabilities of physical violence by country of residence

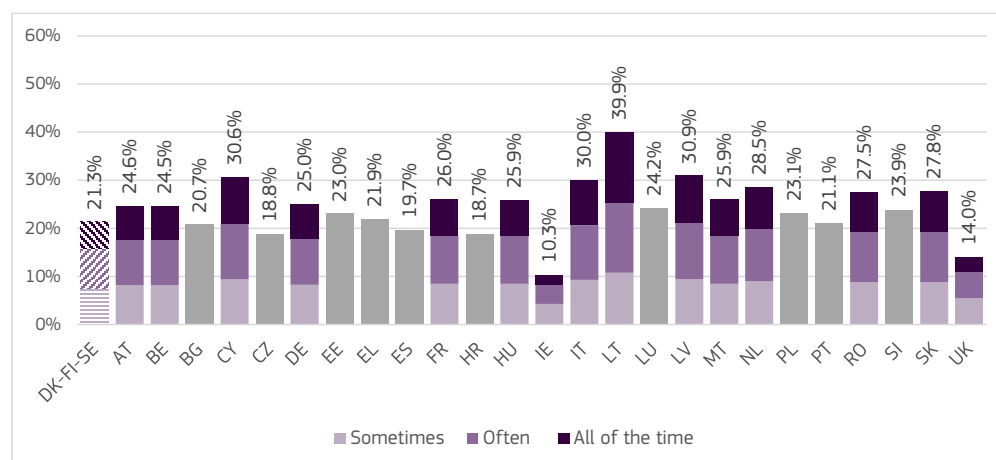Violence by current partner in past 12 months
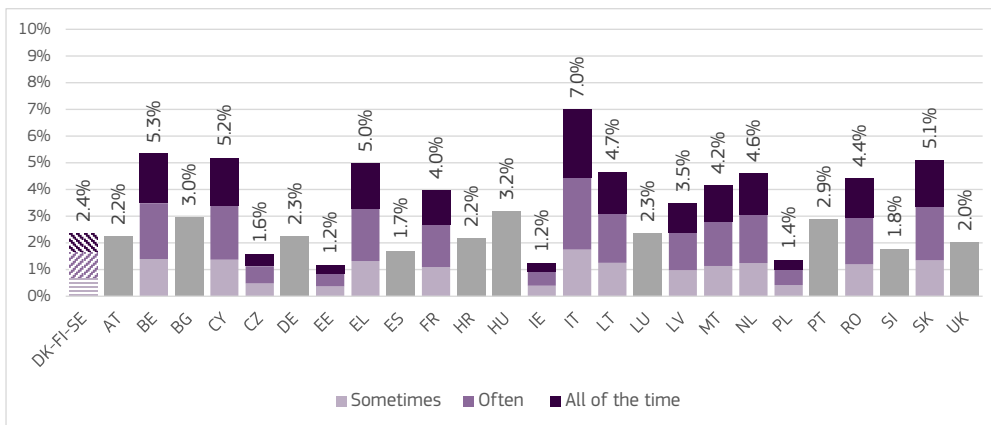
Fig F2 Estimated probabilities of sexual violence by country of residence

Violence by any perpetrator in past 12 months

Fig F3 Estimated probabilities of psychological violence by country of residence

Violence by current partner in past 12 months, women with children

Figures F1, F2, and F3 show estimated probabilities of different forms of violence by country of residence. These probabilities were computed from the 'country effects' we obtained in the respective estimations. We chose to compare individual countries with the Denmark–Finland–Sweden group of countries, which acts as reference category, appears as the first bar in each figure, and is labelled DK–FI–SE. The rationale for choosing this reference category is that Denmark, Finland and Sweden ranked highest in terms of women's overall life satisfaction in 2013 (Eurostat, data retrieved in August 2016) and scored highest among Member States in terms of EIGE Gender Equality Index 2013. The questions the figures address can be understood as follows: is prevalence of, say, physical violence by current partner in Belgium in the last 12 months any different from that estimated for DK–FI–SE? If the difference is statistically significant then the bar for the country is colored in shades of purple, otherwise it is colored grey. In the case of Belgium, the estimated difference in probability with respect to DK–FI–SE is large (2.9 pp. i.e. 5.3-2.4 pp.) and statistically significant.

Why this difference? What does it capture? Country effects compare countries, all other things being equal, i.e. Belgium is compared with DK–FI–SE after 'removing' differences between the two in women's labour force status, age, education and other characteristics, partner's labour force status and characteristics, etc.; in short, after removing all differences measured by our explanatory variables. The latter variables, however, do not include differences due to, say, overall crime level and cultural, legal or institutional factors. Note that cultural and legal differences may also influence the degree to which women of a given country are willing to disclose experiences of violence (for a discussion on this point see FRA 2014a: 22–26; 31–33). Country effects can therefore be thought of as summarizing the impact of idionsyncratic factors on violence at country level.

The results we obtain are rather different from those yielded by comparison of prevalence rates across countries discussed in the FRA report (FRA, 2014a). The difference arises not only because, unlike raw data, econometric estimates compare countries 'all other things being equal'. It is also due to the fact that the FRA survey compares countries on the basis of lifetime prevalence of violence, whereas we only consider prevalence in the last 12 months. Specifically, we obtain smaller variation between countries (especially for sexual violence) and no clear ranking of

countries in terms of, say, gender equality or strength of labour market integration for women. However, our estimates highlight some regularities. Italy and Ireland are the only countries with significantly higher and significantly lower estimated probabilities of abuse, respectively, than the DK-FI-SE group across all types of violence. In the range defined by these extremes, there are four subgroups of countries where women are more exposed than in DK-FI-SE to at least two forms of violence out of the three we investigated. These are the Baltic States, island countries in southern Europe (Cyprus and Malta), a subgroup of continental countries (Belgium, France and the Netherlands) and a subgroup of Eastern countries (Slovakia and Romania).

APPENDIX G: Detailed results – leaving a violent relationship

Table G1 Estimated difference in the probability of leaving a violent relationship by labour force status, self-reported economic status, experience of violence in childhood and other respondent characteristics[§]

Average probability of leaving conditional on having entered a violent relation at some point since age 15 years =76.4%		
Predicted probability for working women =78.8%		Stat. Sign.
Difference in probability (pp) if woman:		
short-term unemployed	-4.60	
student or trainee	-4.55	
not working	-5.20	***
Predicted probability for woman reporting household (HH) comfortable on present income=70.2%		
Difference in probability (pp) for woman reporting:		
HH copes on present income	5.98	**
HH finds it difficult or very difficult to cope on present income	11.23	***
Predicted probability for woman without children=85.0%		
Difference in probability (pp) if woman has any children	-11.21	***
Predicted probability for woman with primary or lower secondary education=74.1%		
Difference in probability (pp) if woman's highest education level is		
secondary	4.14	**
tertiary	3.01	
Predicted probability for woman not aware of any service for VAW=69.1%		
Difference in probability (pp) if woman is aware of at least one service for VAW	9.01	***
Predicted probability for woman not belonging to ethnic or religious minority=76.5%		
Difference in probability (pp) if woman belongs to ethnic or religious minority	-1.85	
Predicted probability for woman reporting no experience of sexual violence in childhood=76.2%		
Difference in probability (pp) if woman reports having experienced sexual violence in childhood		
once	3.41	
more than once	0.22	

Predicted probability for woman reporting no experience of psychological violence in childhood=76.2%	
Difference in probability (pp) if woman reports having experienced psychological violence in childhood	
once	2.26
more than once	2.45
Predicted probability for woman reporting no experience of physical violence in childhood=78.5%	
Difference in probability (pp) if woman reports having experienced physical violence in childhood	
once	-4.77
more than once	-8.46 ***
Predicted probability for woman in the age group 18-24 = 79.7%	
Difference in probability (pp) if woman is in the age group	
25-29 years	-0.79
30-34 years	-1.26
35-39 years	-3.72
40-49 years	-7.29 *
50-59 years	-3.90
60-74 years	-2.11

§ The reported changes in probabilities are the 'marginal effects' yielded by estimation of the corresponding probit model with sample selection. The selection variable is a dummy for living in a big city. The estimated probability of leaving is only evaluated if the first incident with the partner took place more than 6 months prior to the interview and is conditional on selection (having entered a violent relationship). Source: FRA violence against women survey dataset 2012.