

# Chapter 2

## Approaches to Estimating the Economic Cost of VAW: Literature Review



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The literature review focused on issues relevant to the current exercise: first, to find methodologies recommended for a group of states or countries, since a prime objective here is to develop a Commonwealth tool; second, to look for methods where the problem of under-reporting violence against women (VAW) in administrative data or sample surveys, resulting in underestimation of the economic cost, has been addressed; third, to assess some recent trends in VAW relevant to economic cost estimates; and fourth, to find studies that have attempted to consider the value for money offered by measures to prevent VAW.

### 2.1 Methodology and data

When a generalised framework is developed for a number of member states, researchers are constrained by factors as such as the availability of data; comparability of statistics across member states; and special features of the group. Under such a situation, the researcher may opt for a pragmatic rather than ambitious approach. In this case, a generalised framework such as this was a rare find in the literature. Yet an attempt was accomplished by Sylvia Walby and Philippa Olive under the aegis of the European Institute for Gender Equality (EIGE) in 2014, where they tried to identify and recommend appropriate methodologies to measure the cost of gender-based and intimate partner violence (IPV) for the European Union (EU)-28 member states. We believe the recommendations of this study are relevant for the current study, since it also aims to develop a generalised framework for the Commonwealth member states.<sup>1</sup> Hence the approaches and data requirements identified by EIGE study are elaborated below.

The EIGE study recommended an accounting-type approach based on three types of costs – ‘unit’ cost; ‘proportional’ cost; and ‘full’ cost. The study identified seven clusters of costs:

1. Lost income (lost economic output);
2. Health (emergency, general and mental health services);
3. Legal sector (criminal justice and civil justice systems);
4. Social welfare (housing and child protection);

5. Personal costs (moving home);
6. Specialised services (specialist and specialist government);
7. Physical and emotional impact (physical and emotional impact on victims).

The costing specifications recommended in the study may be generalised by the following equation:

$$\text{Economic Cost}_j = \text{Unit Cost}_j \times \text{Multiplier}_j \text{ (or Proportional Multiplier}_j\text{)}$$

Where,  $j=1\dots7$  – seven clusters; multiplier refers to data (e.g. number of IPV homicides or percentage of referrals to children’s social services because of abuse and/or neglect); and proportional multipliers<sup>2</sup> have been used to specify aspects where it is important to separate the total into costs related to VAW or otherwise.

The study also identified data requirements according to the seven clusters, above; these are summarised in Box 2.1.

The study adopted seven approaches to generate the required data for the costing studies:

1. expert judgement;
2. victim recall studies;
3. surveys;
4. administrative data;
5. population data sets;
6. studies of similar harms; and
7. specialised research projects.

An important development in costing methodology is to simulate or extrapolate an estimate based on administrative and survey data to arrive at a macro-level estimate using age cohort population data. This approach is appealing due to the high latency/under-reporting of offences – which is even more pronounced in developing countries or countries with weak administrative record keeping. Two recent attempts in this category include a study on Ukraine by the UN Population Fund and the UK Department for International Development (UNFPA and DFID 2017) and a study on Vietnam by Duvvury et al. (2012).

**UNFPA and DFID Ukraine study (2017):** in this study, the prevalence rates as reported in the official data were extrapolated onto the whole female population of Ukraine in the age cohort of 15–59 to simulate the number of survivors (or victims) of GBV and arrive at indicative numbers of recipients of services (such as medical services) that are provided but not reflected

**Box 2.1 Data requirements for the EU-28 country study**

**Area A:** The extent of gender-based and intimate partner violence against women:

*Types of data:*

*The number of victims (prevalence) in the last year*

*The number of incidents (frequency, type and severity, in the last year)*

**Area B:** The direct impact of intimate partner violence on the individual women concerned:

*Types of data:*

*The injuries to health*

*Increased family breakdown*

**Area C:** The extent of services utilised by women affected by violence:

*Types of data:*

*Victim support*

*Health services*

*Legal services*

**Area D:** Cost of services utilised

**Area E:** The impact of the violence on employment for the women affected:

*Types of data:*

*Number days of employment lost*

*GDP (or income) per employed person*

**Area F:** The value placed on avoiding the physical and emotional impact of intimate partner violence and/or the value placed on the reduced quality-adjusted life years (QALYs) or disability adjusted life years (DALYs)

**Source:** EIGE (2014).

in the official data (p.71). Costs of various services or clusters are applied to the simulated number of victims to assess the potential macro-level economic cost of VAW. In the Ukraine study, the costs calculated using the administrative data was referred to as the 'typical' case, while the costs based on the simulated numbers of victims was referred to as the 'full coverage' case. The cost specifications for these two cases are summarised below:

Typical case:  $Economic\ Cost_j = Unit\ Cost_j \times Victims_j$   
(based on administrative data)

Full coverage case:  $Economic\ Cost_j = Unit\ Cost_j \times Victims_j$   
(based on derived data)<sup>3</sup>

**Duvvury et al. Vietnam study (2012):** a similar approach was adopted in the Vietnam study to give macro-level estimates. A macro estimate was extrapolated based on the incidence rate (as determined in the study) and the prevalence data reported by the General Statistics Office. These two rates (i.e. the incidence rate and prevalence rate) were used to extrapolate onto the whole population for the age cohort 18–49 to determine number of potential victims of VAW seeking various services. The unit values of various services or cost clusters were applied onto the simulated number of victims to assess the potential macro-level economic cost of VAW in Vietnam (p.44).

## 2.2 Estimated economic cost of VAW

Economic cost estimates vary considerably depending on methodology, coverage of cost categories, numbers of survivors or incidents, cost of services etc. Some recent and striking cost estimates are reported here.

The EIGE (2014) study provided cost estimates for all 28 EU member states. The estimates are an extrapolation of UK cost estimates, applying country population multipliers (i.e. multipliers of the other 27 member states). The results reveal some important insights:

- i. The cost of GBV is dominated by gender-based VAW in contrast to gender-based violence against men. EU estimates reconfirm this trend. More than 87 per cent of the estimated total cost of GBV – which was 1.92 per cent of 2012 EU GDP – was accounted for by GBV against women. This also suggests that although there is evidence of violence against men, this still is a female-centric issue.
- ii. The costs of IPV or IPV against women (IPVAW) are the dominant source of cost – accounting for about 50 per cent of total GBV cost.

Two recent studies which tried to incorporate macro-level estimates on the basis of the under-reporting of VAW statistics, also produce some interesting and important outcomes:

- i. The UNFPA and DFID study on Ukraine estimated that the macro-level costs were 20 times higher than the costs based on administrative data (i.e. the typical case).
- ii. The Vietnam study also reported a hugely larger number of incidents as well as economic costs of VAW under the macro case (i.e. the full coverage case), compared to the case based on administrative data (i.e. the typical case).

**Table 2.1 Economic cost of IPV and GBV in EU-28 in 2012 (billion euros)**

	Member state	Cost of IPVAW	Cost of IPV	Cost of GBVAW	Cost of GBV
1	Austria	1.82	2.04	3.76	4.31
2	Belgium	2.40	2.69	4.97	5.69
3	Bulgaria	1.58	1.77	3.28	3.76
4	Croatia	0.92	1.04	1.91	2.19
5	Cyprus	0.19	0.21	0.39	0.44
6	Czech Republic	2.27	2.54	4.70	5.39
7	Denmark	1.21	1.35	2.50	2.86
8	Estonia	0.29	0.32	0.59	0.68
9	Finland	1.17	1.31	2.42	2.77
10	France	14.12	15.81	29.22	33.48
11	Germany	17.37	19.45	35.95	41.19
12	Greece	2.41	2.69	4.98	5.70
13	Hungary	2.15	2.40	4.45	5.09
14	Ireland	0.99	1.11	2.05	2.35
15	Italy	12.85	14.38	26.58	30.45
16	Latvia	0.44	0.50	0.92	1.05
17	Lithuania	0.65	0.73	1.34	1.54
18	Luxembourg	0.11	0.13	0.23	0.27
19	Malta	0.09	0.10	0.19	0.21
20	Netherlands	3.62	4.05	7.49	8.58
21	Poland	8.33	9.33	17.25	19.76
22	Portugal	2.28	2.55	4.72	5.41
23	Romania	4.35	4.87	8.99	10.30
24	Slovakia	1.17	1.31	2.42	2.77
25	Slovenia	0.44	0.50	0.92	1.05
26	Spain	10.13	11.34	20.95	24.01
27	Sweden	2.05	2.30	4.24	4.86
28	United Kingdom	13.73	15.37	28.42	32.56
Total EU 28		109.13	122.18	225.84	258.73
As % 2012 EU GDP		0.81	0.91	1.68	1.92
Female share (%)		89.3		87.3	

**Source:** Based on Table 6.1 of EIGE (2014)

**Note:** IPVW refers to intimate partner violence against women and GBVAW denotes gender-based violence against women.

**Table 2.2 Economic cost of VAW: comparison between typical case and full coverage (macro) case**

	Number of survivors		Cost	
	Typical case	Full coverage case	Typical case	Full coverage case
<i>Ukraine</i>			<i>In 000 \$</i>	<i>In 000 \$</i>
1. Lost income	710	16,694	97	3870
2. Cost of services	120,737	150,863	10,681	14,149
3. Personal cost		366,394		190,033
<b>Total</b>	<b>121,447</b>	<b>533,951</b>	<b>10,778</b>	<b>208,052</b>
<i>Vietnam</i>			<i>In 000 VND</i>	<i>In 000 VND</i>
1. Out of pocket expenditure	236	19,812,268	141,600	11,887,000,000
2. Lost income	148	19,812,268	79,214	21,225,000,000
3. Value of missed household work	3,168	19,812,268	27,076	10,052,000,000
<b>Total</b>	<b>3,552</b>	<b>19,812,268</b>	<b>247,890</b>	<b>43,164,000,000</b>

- iii. The main argument for the full coverage case (the macro-level estimates of the economic cost of VAW) is the prevalence of high invisibility of offences reported in the administrative data; this is especially the case in developing countries or where administrative data are weak.

A recent paper prepared by Fearon and Hoeffler (2014), under the aegis of the Copenhagen Consensus Center, reported the astonishing cost of domestic violence: 11.1 per cent of world GDP. Costs related to VAW and child were also reported to be high, at 5.3 per cent and 4.3 per cent of world GDP respectively (Figure 2.1). These high estimates highlight the importance of

**Figure 2.1 Estimated cost of domestic violence**

Source: Fearon and Hoeffler (2014).



establishing immediate corrective measures to reduce, prevent and eventually eliminate the incidence of VAW.

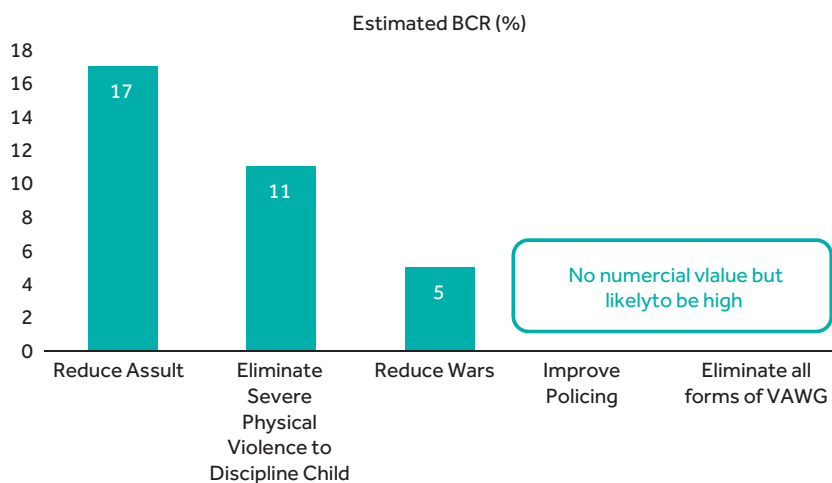
### 2.3 Estimated benefits of investment in preventing VAW

There is reluctance among policy-makers to invest in ‘soft’ sectors such as the social sectors, and projects on gender and children, compared to investment in ‘hard’ sectors (e.g. infrastructure and energy), because such investment is seen to enlarge the proximate productive capacity of an economy, leading to higher growth. However, recent global estimates of the economic cost of VAWG show that the loss to economy due to such violence is significant.

Considering the importance of investment in prevention of VAW, recent studies have been trying to quantify the benefit–cost ratio (or, in other words, the value for money) of investing in measures to eliminate (or prevent) VAW. Although the cost of interventions is relatively easy to determine, it is very difficult to assess the benefits of such interventions. The UNFPA and DFID study (2107), argued that ‘international studies demonstrate that each \$1 invested in GBV prevention saves the economy \$5 to \$20 in future service cost’. On the basis of these estimates, it urged Ukrainian authorities to discard the currently practised ‘left over’ principle for budgeting interventions to prevent VAW.

The study by the Copenhagen Consensus Center, on the other hand, provided detail on the benefit-cost ratios for interventions aiming at preventing violence, including VAW. Even though the report acknowledged that measuring the benefits of interventions to prevent domestic violence was

**Figure 2.2 Estimated benefit-cost ratio of interventions**



Source: Fearon and Hoeffler (2014).

difficult, it provided some benefit–cost ratios for certain interventions. The estimated benefit–cost ratios were high, suggesting good value for money in investing in programmes to prevent domestic violence (Figure 2.2).

## Notes

- 1 The current study aims to develop an implementable framework for Commonwealth member states, while encompassing the key characteristics of comprehensiveness, transferability and flexibility to adjust to new specifications and data.
- 2 More specifically, the proportional multiplier has been described as ‘if the cost data source also provides non-intimate partner violence services then the proportion of total budgets/ expenditures attributable to intimate partner violence should be estimated (Proportion of domestic violence that is IPV~75%; Proportion of all VAW that is IPV~40%)’, EIGE (2014), p.108.
- 3 Number of survivors are simulated (or derived) in the full coverage case using official population data of women usually aged between 18 and 64.

## References

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