



# **The Unintended Effects of Social Protections on Intra-Household Instability: Insights from Meta-Analysis and the UN Joint Programme in Ethiopia**

A Research Paper presented by:

***Mengistu Yismaw Alemu***

Ethiopia

in partial fulfilment of the requirements for obtaining the degree of  
MASTER OF ARTS IN DEVELOPMENT STUDIES

Major:

**Economics of Development  
(ECD)**

Members of the Examining Committee:

Binyam Afewerk Demena

Syed Mansoob Murshed

The Hague, The Netherlands  
September 2024

***Disclaimer:***

This document represents part of the author's study programme while at the International Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

***Inquiries:***

International Institute of Social Studies  
P.O. Box 29776  
2502 LT The Hague  
The Netherlands

t: +31 70 426 0460  
e: [info@iss.nl](mailto:info@iss.nl)  
w: [www.iss.nl](http://www.iss.nl)  
fb: <http://www.facebook.com/iss.nl>  
twitter: [@issnl](https://twitter.com/issnl)

***Location:***

Kortenaerkade 12  
2518 AX The Hague  
The Netherlands

## **Acknowledgement**

First and foremost, my gratitude goes to the Almighty and benevolent God and his mother, Saint Mary, who let me stay in life with proper health and enabled me to accomplish this study. Second, I express my deepest gratitude to my supervisor, Dr. Binyam Afework Demena. Dr., you were not only my supervisor but also a friend. It may be customary to thank a supervisor, but you are special. Since our first time contact till the last time (submission of the thesis), we have had a lot of meetings and email communications. You dedicated far more time and attention to my thesis than expected, especially related to the meta-analysis. Thank you for helping me stay organized and committed throughout the process. Your advice and support are beyond this thesis, and they are important to my future life. Professor Syed Mansoob Murshed, my second reader, I am very grateful for your critical observations and suggestions. I would have been lost if you didn't give me the direction related to the theoretical foundation of the study. I would also like to thank my discussants, Preksha Gupta and Rashad Mutawakil, for their constructive comments.

Now is the moment to extend my heartfelt thanks to my family. My father, Yismaw Alemu, I feel restless yet strong when I remember your advice from my childhood that “every occupation requires strength and effort. If you want to be successful in your occupation, you have to be strong.” I have been hearing it as if it happened yesterday and has shaped who I am today. My mother, Tsehay Enyew, I can't find the words to express your sacrifices for me. Finally, it is always impossible to mention all. Therefore, whoever has contributed to this study, one way or another, forgive me for not mentioning your name and accept my heartily admire.

## **Contents**

<b>Acknowledgement .....</b>	<b>iii</b>
<b>List of Tables .....</b>	<b>vi</b>
<b>List of Figures.....</b>	<b>vii</b>
<b>List of Acronyms .....</b>	<b>viii</b>
<b>Abstract.....</b>	<b>ix</b>
<b>Relevance to Development Studies .....</b>	<b>x</b>
<b>Chapter 1: Introduction .....</b>	<b>1</b>
<b>Chapter 2: Literature Review.....</b>	<b>6</b>
2.1. Concepts and Definitions .....	6
2.1.1. Social Protections .....	6
2.1.2. Intimate Partner Violence .....	7
2.2. Overview of the UN Joint Programme in Ethiopia .....	8
2.3. Overview of Intra-Household Models.....	8
2.3.1. Unitary Vs Collective Models .....	9
2.3.2. Cooperative Vs Non-Cooperative Models .....	9
2.4. Modelling the Impact of Social Protections on IPV: A Theoretical and Conceptual Framework .....	10
2.5. Attitudes, Intentions, and Actual Behaviour in IPV: A Conceptual Framework Based on the Theory of Planned Behaviour.....	14
<b>Chapter 3: Methodology.....</b>	<b>17</b>
3.1. Meta-Analysis .....	17
3.1.1. Protocols and construction of meta-dataset .....	17
3.1.2. Empirical Approach.....	19
3.2. The quasi-experimental examination of the UN joint programme .....	20
3.2.1. Data.....	20
3.2.2. Analytical Strategy .....	20
3.2.3. Empirical approach.....	24

<b>Chapter 4: Result and Discussion.....</b>	<b>26</b>
4.1. Results of Meta-analysis .....	26
4.1.1. Descriptive results .....	26
4.1.2. Econometrics analysis .....	28
4.2. Result and discussion of the UN joint programme in Ethiopia.....	33
4.2.1. Descriptive analysis.....	33
4.2.2. The impact of cash transfer and women empowerment .....	35
4.2.3. Applying the estimated women empowerment in the agricultural index (A_WEAI) .....	39
4.3. Robustness check .....	40
<b>Chapter 5: Conclusions and Policy Implications .....</b>	<b>42</b>
<b>References .....</b>	<b>44</b>
<b>Appendix:.....</b>	<b>44</b>

## List of Tables

Table 3.1 Composition of A-WEAI dimensions and indicators .....	22
Table 4.1 Overall reported estimates of UCT on IPV .....	29
Table 4.2 Publication bias and underlying genuine effect test .....	29
Table 4.3 Description and summary statistics of variables.....	30
Table 4.4 Why do estimates vary? Multivariate MRA results.....	32
Table 4.5 Baseline characteristics and balance.....	33
Table 4.6 Effect of CT and WE on attitude to PDV: Baseline model .....	37
Table 4.7 The effect CT and WE on PDV: Main model .....	39
Table 4.8 Effect of CT and WE on PDV: Applying A_WEAI.....	40
Table 4.9 The effect of CT and WE on attitude towards IPV: DID results .....	41

## List of Figures

Figure 1.1 Sign and significance of UCT impact on IPV (N=394) .....	2
Figure 2.1 Conceptual framework on the impact of CT on IPV under different theories and perspectives.....	11
Figure 2.2 Conceptual framework on how social protections affect attitude practical behaviour in IPV .....	14
Figure 3.1 PRISMA flow diagram for studies identification.....	18
Figure 4.1 Reported UCT impacts diverge over the period 2013 – 2024 (N=394).....	27
Figure 4.2 Funnel plots of estimated UCT effects on IPV (N=394).....	27
Figure 4.3 Average of outcome variables by access to CT and empowerment status.....	34

## List of Acronyms

A_WEAI	Abbreviated Women's Empowerment in Agriculture Index
CCT	Conditional Cash Transfer
CT	Cash Transfer
IPV	Intimate Partner Violence
MRA	Meta-Regression Analysis
PDV	Physical Domestic Violence
SDG	Sustainable Development Goal
UCT	Unconditional Cash Transfer
UNJP-RWEE	United Nations Joint Programme on Rural Women's Economic Empowerment
WE	Women Empowerment
WEAI	Women's Empowerment in Agriculture Index



## Abstract

Social protections, particularly social assistance programmes such as cash transfers (CTs) are considered the most important tools to reduce poverty and empower women. They are prominently linked in the Sustainable Development Goals (SDGs), particularly in SDG 1 and SDG 5, which aim to end poverty, and achieve gender equality and empower all women and girls. The role of those programmes in reducing poverty and enhancing women's empowerment has been recognized by many empirical examinations. However, their unintended effect on family instability, intimate partner violence (IPV) in particular, remains overlooked. Even the existing few empirical examinations on the impact of those programmes on IPV provide mixed and inconclusive results. By employing a meta-regression analysis (MRA) method, we reconcile the conflicting findings of the existing empirical studies. Using 394 reported estimates from 15 studies published until August 2024 on the impact of Unconditional cash transfer (UCT) on IPV, we estimated the genuine underlying effect of UCT on IPV and examined if there is publication bias. The multivariate MRA also shows that UCT helps to reduce IPV. Specifically, it shows that after controlling for publication bias and possible sources of heterogeneity, UCT was found to reduce IPV on average by 85.6%. However, we didn't find a significant publication bias in the issue.

In addition, most theories and empirical studies argue that the main mechanism through which CTs impact IPV is women's empowerment (WE). However, none of them examined the joint impact of CT and WE on IPV. Hence, besides reconciling the existing conflicting findings and examining the presence of publication bias, we find it necessary to examine the joint effect of CT and WE on IPV. To do so, we used the World Bank data on the Rural Women's Economic Empowerment (UNJP-RWEE) programme implemented to empower women in Ethiopia. In harmony with the meta-result, we found that UCT helps to reduce attitudes towards IPV, particularly physical domestic violence (PDV). However, women empowerment was found to increase attitudes towards PDV. Furthermore, UCT and women empowerment jointly increase attitudes towards hitting or beating a wife for neglecting children and for arguing with the husband by 38.9% and 45.7%, respectively. Overall, the result suggests that the increasing effect of IPV is primarily driven by women's empowerment. The results of this study provide valuable insights for policymakers and development agents working to enhance household welfare by enhancing women's empowerment should reconsider the possible trade-off between women's empowerment and intra-household violence. Hence, they should not only focus on empowering women but also enhancing the awareness of male spouses and the community related to the existing masculinity hegemony and gender roles.

**Keywords:** Cash Transfer, Domestic Violence, Intimate Partner Violence (IPV), Meta-Analysis, SDGs, Social Protections

## **Relevance to Development Studies**

The study brings various contemporary development issues such as social protection, household violence, women empowerment and others, which are the concerns and pillars of interdisciplinary programmes like development studies at the International Institute of Social Studies (ISS). The rich features and linkage of those issues in different SDGs also underscore the relevance of our study to development studies and any development issues in general. Besides providing a broader conceptual and empirical foundation of how social protections can impact intra-household violence across different contexts, our empirical examination in Ethiopia, where there are intricate cultural norms and gender roles, could address an essential gap in the development literature. Generally, by addressing different multidisciplinary and development issues that are highly featured and linked to most of the SDGs, our study contributed to the development studies and policies in general.

## Chapter 1: Introduction

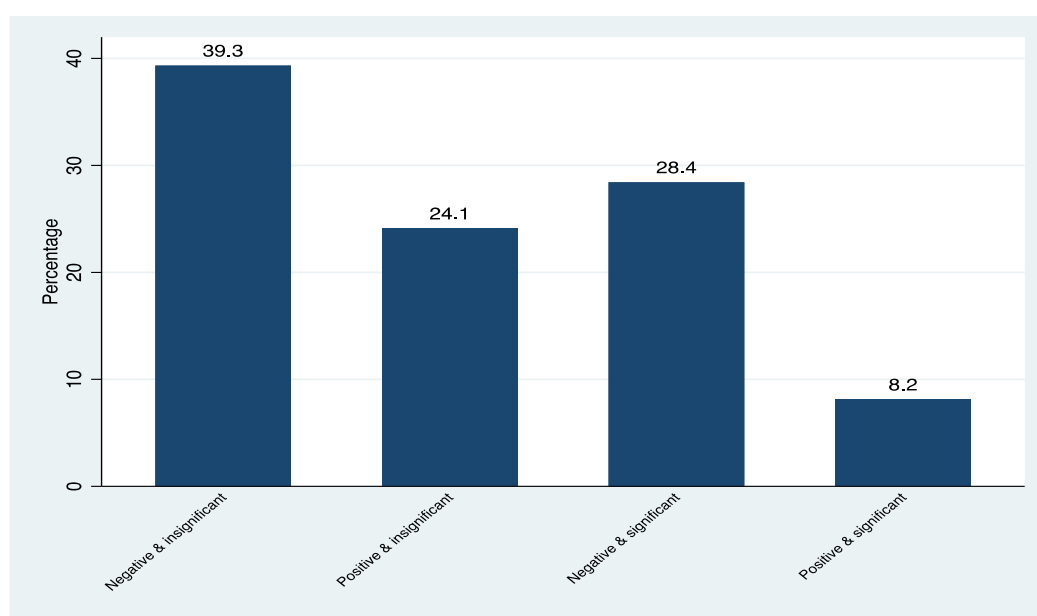
Social protections, particularly social assistance programmes such as cash transfers (CTs), are considered the most important tools in reducing poverty and empowering women (Gilligan, Devereux and Tenzing, 2022; Hirvonen, 2023). They are prominently linked to the Sustainable Development Goals (SDGs), mainly SDG 1 and SDG 5, which aim to end poverty, and achieve gender equality and empower all women and girls, respectively (Gentilini and Omamo, 2011; Hirvonen, 2023; Lekobane and Ton, 2024; Torm and Oehme, 2024; UN, 2024). They are also central to national strategies in low- and middle-income countries and for various international organizations and development agents. The role of those programmes in reducing poverty and empowering women has been recognized by many empirical examinations (Slater, 2011; Wu and Ramesh, 2014; Waqas and Awan, 2019; Alemu, 2024). However, their unintended effect on family instability, intimate partner violence (IPV) in particular, remains highly unnoticed.

Theories on the impact of those programmes on IPV predict an ambiguous effect. Among the main theoretical arguments, absolute resource (stress), expressive violence, and status inconsistency (backlash) theories predicted the IPV reduction effect of those programmes. According to absolute resource (stress) theory, protection programmes such as CTs can reduce the financial stress of the household, which might lessen financial strain related violence within the household (Fox *et al.*, 2002; Kayaoglu, 2022). On the other hand, instrumental violence and status inconsistency (backlash) theories predict the increasing effect of those programmes on IPV. Instrumental violence theory argues that the husbands might use violence as an instrument to extract the resources made available by the programme (Rodríguez-Menés and Safranoff, 2012; Baranov *et al.*, 2020). Status inconsistency (backlash) theory also argues that resources obtained from social protections may increase the income share and bargaining power of the women, which might make the men feel their traditional status threatened and encourage them to act violently to restore their traditional status (Yick, 2001; Baranov *et al.*, 2020). Thus, the net impact of such programmes remains unclear and requires an empirical investigation.

While there are a few empirical examinations on the impact of social protections on IPV, their findings are mixed and inconclusive. The inconclusiveness of the existing empirical evidence includes the sign, significance and magnitude of the effect of those programmes on IPV. Figure 1.1 illustrates the extent of variations (disagreements) among empirical studies regarding the

direction (sign) and significance of protection programs, such as unconditional cash transfer (UCT), in particular on IPV. The figure was based on 394 reported effects that we collected from 15 available primary studies that were published until August 2024. The figure shows that approximately two-fifths of the empirical reported coefficients on the impact of UCT on IPV have negative and insignificant effects. However, almost one-fourth of the reported estimate shows a contrasting effect, positive but insignificant. Most importantly, about 28% of the findings support the reducing effect of cash transfers on IPV. About 8% of the reported estimates also show the positive and significant effect of UCT on IPV. In general, the figure highlights the existing contradiction regarding the impact of social protections, UCT in particular on IPV.

Figure 1.1 Sign and significance of UCT impact on IPV (N=394)



Various concerns arise regarding the disagreements on the effect of social protections on IPV. The most important argument is that the effect of social protections on IPV depends on the conceptualization and modelling of IPV (Tankard and Iyengar, 2018; Baranov *et al.*, 2020). The variation in the mode of the transfers, as well as the availability and nature of other complimentary interventions as well as conditionalities, is also another reason behind the contradicting findings (Buller *et al.*, 2018; Ranganathan *et al.*, 2022). Others, like Kothari *et al.* (2023) and Rodrigues *et al.* (2023), also argued the possible heterogeneous effect of data resolution (both temporally and spatially), methods employed, and specific characteristics of the programme and the implementation area. Therefore, for effective policy intervention, the

impact of each social protection programme (interventions) should be examined separately, considering all those possible causes of heterogeneity.

Taking these gaps (issues) into account, the primary aim of this study is to conduct a meta-analysis to reconcile the conflicting findings. Meta-analysis is a useful statistical approach utilizing a similar hypothesis, research question, or empirical effect to investigate the mixed results routinely found in reported empirical studies (Demena and van Bergeijk, 2017; Floridi, Demena and Wagner, 2022; Afesorgbor, Fiankor and Demena, 2024; Demena, 2024a). The meta-analysis focused on UCT due to: (i) as mentioned above, social protection programmes are very diverse and should be investigated separately rather than lumping various interventions together. For example, the nature of conditional cash transfer (CCT) is somehow different from UCT, in which CCT imposes some behavioural conditions (such as school attendance and regular medical checks) (Ponce and Bedi, 2010). Since those behavioural restrictions have an effect on IPV by themselves, it is difficult to isolate whether the IPV effect is from the CT or behavioural restrictions, which needs separate and unique modelling and examination. (ii) since the second part of our examination, which aims to explore the main mechanism (channel) of the impact of CTs on IPV, is focused on UCT, focusing on UCT in the meta-analysis part will allow us to complement and validate the two results. In addition, besides reconciling the existing conflicting findings, the meta-analysis will offer a comprehensive guideline to the second empirical approach on how the effects of social protections on IPV should be accurately designed.

Though there have been a few empirical attempts at conducting meta-analysis on such programmes, for example, Baranov *et al.* (2020), focusing mainly on theoretical work rather than empirical research. Specifically, the paper deals with developing a comprehensive model by integrating various existing theories, particularly within the context of household bargaining. In addition, even their limited efforts in meta-analysis are concentrated solely on developing countries. In this paper, however, we use an enriched version of the dataset, including the most recently published papers with extensive data collection dealing with their data characteristics, estimation techniques and empirical specifications, as well as journal and study qualities to estimate the underlying genuine effect of UCT on IPV. Moreover, we extend the analysis to investigate factors contributing to the heterogeneous effect of UCT on IPV. To do so, our meta-analysis comprises all studies that examined the impact of UCT on IPV published until August 2024, providing a more comprehensive and advanced version of the previous meta-analysis.

Moreover, most of the theories and empirical studies argued that the main mechanism for the impact of social protections on IPV is through women's empowerment (for example, Buller *et al.*, 2018; Angelucci and Heath, 2020; Eggers and Steinert, 2022; Meyer *et al.*, 2024). However, none of them examines the joint effect of social protections, particularly CT and women's empowerment, on IPV. Hence, the second aim of this study is to evaluate the joint effect of CT and WE on IPV using the data from the United Nations Joint Programme on Rural Women's Economic Empowerment (UNJP-RWEE) programme in Ethiopia. UNJP-RWEE is the UN Joint Programme focusing on the economic empowerment of women by enhancing women's access to both financial and non-financial services (Mulema *et al.*, 2018). The aim of this study is to examine the impact of the UNJP-RWEE programme in Ethiopia, on physical domestic violence (PDV), particularly through WE. While the primary focus of UNJP-RWEE lies in promoting women's empowerment by facilitating greater access to credit through women-run rural savings and credit cooperatives (RUSACCOs), it is a microfinance plus programme that incorporates multiple interventions, such as agricultural livestock and technology transfers, business training, as well as a community gender awareness component. In addition, the dataset collected to evaluate the effectiveness of this programme contains additional information about the households, such as access to UCT and in-kind transfers. Hence, besides the opportunity to examine the effect of women empowerment on IPV, it allows us to examine the joint effect of UCT and WE as well as the impact of other complementary interventions on IPV, which are considered the main sources of heterogeneity behind the contradicting findings of the existing empirical examinations (Özler *et al.*, 2020). A study by Hillesland *et al.* (2022), evaluating the UNJP-RWEE, particularly access to microfinance through this social protection programme on WE, found that it contributed to women's empowerment. Departing from Hillesland *et al.* (2022), this study aims to investigate how women empowerment by the programme jointly with UCT contributes to PDV, which has not been explored so far.

In general, the study aims to answer the following specific research questions:

- i. *Do the reported empirical results of UCT on IPV suffer from publication bias, and if so, to what extent?*
- ii. *Do UCT generate an underlying genuine effect on IPV after accounting for publication and other biases?*
- iii. *What are the determinants behind the heterogeneity of the findings reported in the primary empirical studies?*

- iv. What is the unintended impact of the UNJP-RWEE on IPV, mainly through empowering women?*
- v. Is the combined impact of cash transfers and women's empowerment different from the sum of their individual effects?*

The research paper is organized as follows. Following the introduction chapter, chapter 2 deals with the review of related literature and theoretical frameworks. Chapter 3 discusses the materials and methods of the study; Chapter 4 presents the empirical findings and discussions; Chapter 5 provides conclusions and some policy implications.

## Chapter 2: Literature Review

This chapter provides a comprehensive review of the relevant literature to lay the foundation for understanding the impact of social protections on IPV. The chapter is structured as follows:

**Concepts and Definitions:** This section provides definitions of key concepts to the study, such as social protections and IPV. Moreover, it overviews the types and characteristics of different social protection programmes and IPV.

**Overview of the UN Joint Programme (UNJP-RWEE) in Ethiopia:** This section briefly describes the UN joint social protection programme in Ethiopia, which is examined in the study. The main objective and design of the programme, as well as their relevance to the study, are clearly presented in this section.

**Overview of Intra-Household Models:** This section briefly discusses basic theories and models used to understand intra-household dynamics and decision-making. It clearly presents the basic characteristics and differences between cooperative vs. non-cooperative and unitary vs. collective models.

After providing basic definitions of key concepts, we developed frameworks used throughout the study. More specifically, under the section “**Modelling the Impact of Social Protections on IPV: A Theoretical and Conceptual Framework**”, we developed a framework used to model the relationship between social protections and IPV. In addition, in the section “**Attitudes, Intentions, and Actual Behaviour in IPV: A Conceptual Framework Based on the Theory of Planned Behaviour**”, we developed a conceptual framework to show how attitudes, intentions, and actual behaviour to IPV are related and how they are influenced by social protection programmes.

### 2.1. Concepts and Definitions

#### 2.1.1. Social Protections

The ILO (2003) define social protection as a set of public measures that a society provides for its members to protect them against economic and social distress that various contingencies would cause (García and Gruat, 2003). Social protection programmes are very wide and diverse. However, they can be categorized into three main categories: (1) contributory social insurance programmes; (2) labour market programmes, and (3) social safety net (or social assistance) (Torm and Oehme, 2024).



Contributory social insurance programmes are a kind of social protection programme, funded through the contributions made by the beneficiaries (participants) (Palacios and Robalino, 2020). While, labour market programmes are initiatives aimed at promoting a more dynamic and resilient labour market. Specifically, they aim to improve employment opportunities, enhance workforce skills, and support income during job losses. These programmes include different types of interventions such as unemployment insurance, wage subsidies, and training (Holzmann and Jørgensen, 2001). The social safety net, or social assistance, comprises programmes designed to provide financial and in-kind support to individuals and families in need. Social assistance programmes are typically targeted at the poorest and most vulnerable households. They are considered more important for poverty reduction than other forms of social protection. Recently, attention has shifted toward social assistance programmes, particularly cash-based social protection programmes. Cash-based transfers may be conditional or unconditional; they mainly focus on very poor households, particularly women (Hirvonen, 2023).

### **2.1.2. Intimate Partner Violence**

Intimate Partner Violence (IPV) is any misbehaviour within an intimate relationship that causes physical, psychological (emotional), or sexual harm among the spouses in the relationship (Yount *et al.*, 2012; Yitbarek, Woldie and Abraham, 2019). Studies show that violence is a pervasive aspect of everyday life for families and has a significant adverse effect on the physical and mental health of the victims, yet there is little rigorous evidence as to how to reduce it (Addison and Murshed, 2006; Dillon *et al.*, 2013; Hidrobo and Fernald, 2013). IPV encompasses a broad spectrum of abusive behaviours. However, it can be generalized into three forms such as physical violence, psychological (emotional) abuse and sexual violence (Chandra-Mouli, 2012; Lagdon, Armour and Stringer, 2014).

Physical violence, sometimes called physical domestic violence (PDV), includes various acts such as hitting, kicking, slapping, punching and other form of physical violence. Sexual violence, on the other hand, involves non-voluntary (unwanted) sexual acts or attempts to have a sexual activity through force. Psychological (emotional) violence involves any behaviour that harms the emotional well-being of the spouse. Besides its adverse impact on the victims (spouses) directly, IPV and the home environment also have several adverse impacts on the health of children as well as the stability of the family (Mecheva *et al.*, 2023).

## **2.2. Overview of the UN Joint Programme in Ethiopia**

The UN Joint Programme Focused on Rural Women's Economic Empowerment (UNJP-RWEE) is a microfinance plus programme launched in Ethiopia in 2014 by the UN Women, the UN Food and Agriculture Organization (FAO), the World Food Programme (WFP), and the International Fund for Agriculture Development (IFAD). UNJP-RWEE was a five-year-long initiative to accelerate the economic empowerment of rural women in the regions of Oromia and Afar. The project provided women with greater access to credit through women-run rural savings and credit cooperatives (RUSACCOs), as well as numeracy, literacy, finance, and business-development training; agricultural livestock and technology transfers; agricultural training; and community-run educational conversations in healthy eating choices and nutrition (Campos and Kaaria, 2019).

The programme was implemented in eight kebeles<sup>1</sup> in which six were in the Oromia region, consisting Illuf Dirre and Nannoo Chemerri in the Yaya Gulele Woreda; Bura Adelle and Wabe Burkitu in the Dodola Woreda; and Abine Garmamme and Annenno Shisho in the Adami Tulu Woreda. The two beneficiary kebeles, such as Asboda and Boyina, were in the Afar region. Eight communities were also selected for comparison (control). Among them, six, Lemi, Dedfe, Haleko Gulenta Boke, Werji Washingula, Baressa, and Keta Berenda, were from the Oromia region. Whereas, Hanikesen and Aredo were from the Afar region. In addition, due to high non-response in control (comparison) communities in the Afar region, the community Gudmaydil Gayder was added as a comparison village during the midline field survey (Campos and Kaaria, 2016; Mane and Kaaria, 2019).

About 750 households were surveyed in the baseline survey, whereas about 702 women (spouses) were interviewed in the beneficiary communities. In the comparison communities, 678 women (spouses) were interviewed. The endline survey was conducted on 389 and 358 women in the beneficiary and comparison communities, respectively. Within the same households, 303 and 314 spouses were also surveyed in the beneficiary and control communities, respectively (Campos and Kaaria, 2016; Mane and Kaaria, 2019).

## **2.3. Overview of Intra-Household Models**

Intra-household models have received the most attention and considerable empirical support in the past decades. They are essential to understanding intra-household issues such as resource allocation and decision-making on various matters. More specifically, these models explain how

---

<sup>1</sup> Kebele is a collection of villages and the smallest administrative unit in Ethiopia (Alemu *et al.*, 2024).

household members make decisions to maximize their well-being (utility). There are several intra-household models, but they can be generalized into two main categories: unitary and collective models. Each model is based on different assumptions and provides a unique view of how household members are involved in the decision-making process (Fiala and He, 2017).

### **2.3.1. Unitary Vs Collective Models**

The unitary model, also known as the common preference model, considers players as a single decision-making unit (Donni and Molina, 2018). According to this model, all decision-makers (household members) are considered to act as a single unit and try to maximize a single utility function (common preference) (Browning, Chiappori and Lechene, 2006). This means that the given single utility function is expected to satisfy the utility of all members of the household. However, this model is criticized because it ignores possible differences in preference and interest as well as potential conflicts among household members (Donni and Ponthieux, 2011). This model has also been increasingly challenged by empirical evidence (Fortin and Lacroix, 1997; Backer, 2001; Spottswood, 2019).

The collective model, however, addresses the shortcomings of the unitary model by recognizing that the household consists of many individuals with different, possibly conflicting interests and preferences (Baland and Ziparo, 2018). As a result, according to this model, household decisions result from a bargaining process among household members based on their own preferences (utility function). Hence, the decision-making or resource allocation power could be different to each member, which can depend on the relative position of each member, such as educational level as well as other socio-cultural characteristics (Dietrich, 2008; Simuchimba, 2024). The collective model can be cooperative or non-cooperative (Vermeulen, 2002; Rapoport, Sofer and Solaz, 2011).

### **2.3.2. Cooperative Vs Non-Cooperative Models**

The cooperative model assumes that decision-makers (household members) behave cooperatively and negotiate in the decision-making process (Apps and Rees, 2007). The main assumption in cooperative decision-making models is that players (decision makers) can make and enforce binding agreements, which prevents them from acting purely based on their self-interest. These agreements lead to a Pareto-efficient outcome (resource allocation) in that no member can be made better off without making another member worse off. However, since the decision-making process could be a function of any kind of variable which reflects the household environment, the equilibrium outcome of the cooperative decision is not necessarily specified (Chiappori and Donni, 2009).

The non-cooperative model, however, assumes that household members act independently (based on their self-interest). Each player (household member) makes decisions to maximize their own utility considering the actions of others, regardless of the utility (satisfaction) level of others. Hence, a Pareto-efficient outcome is not guaranteed in this model. In addition, since individuals within the household are assumed to act independently and pursue their own interests regardless of the interests of other members, non-cooperative models consider possible conflicts among members of the household (Cacheux, 2005).

Generally, by considering the complexity of intra-household dynamics, the collective model (either cooperative or non-cooperative) can be considered more realistic than the unitary model (Matteazzi, Menon and Perali, 2017). In addition, IPV does not usually occur in a cooperative setting, as decision-makers act cooperatively and negotiate in the decision-making process. Hence, non-cooperative collective models are thought to be better to model IPV. However, either unitary, collective, cooperative or non-cooperative models can coexist in intrahousehold decision-making processes, which underscores the need to investigate the outcome of each intervention in the specific households separately (Fiala and He, 2017; Lecoutere and Van Campenhout, 2023).

## **2.4. Modelling the Impact of Social Protections on IPV: A Theoretical and Conceptual Framework**

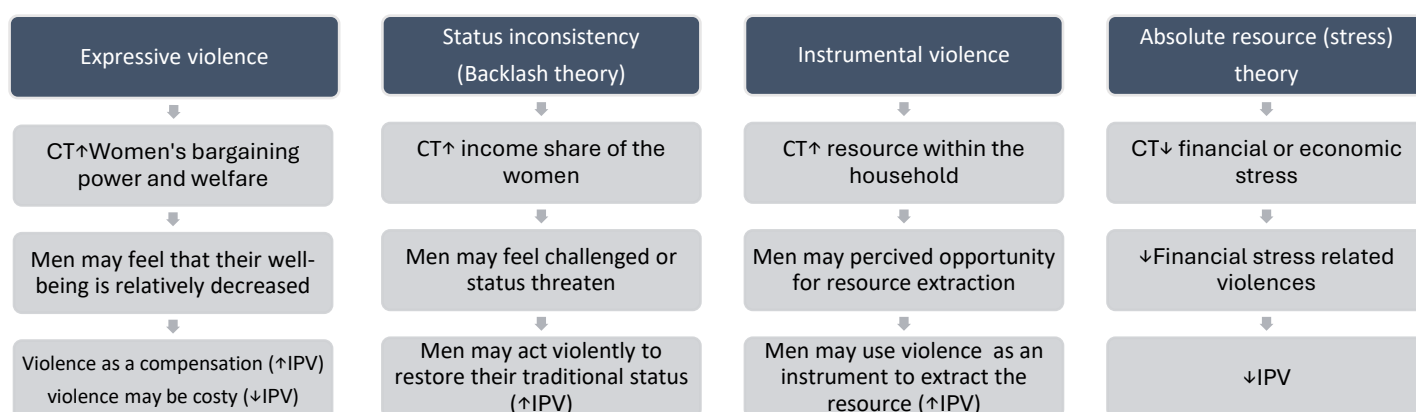
Besides the behaviour of the spouse and other factors, the predicting of the impact of social protections on IPV and family instability, in general, depends on how violence is conceptualized and modelled (Baranov *et al.*, 2020). Modelling IPV is mainly based on non-cooperative bargaining models because they acknowledge individual preferences, conflict of interest as well as strategic behaviours (Tauchen, Witte and Long, 1991; Franklin and Menaker, 2014; Dasgupta, 2019; Herrenkohl *et al.*, 2022). Besides the fact that violence encompasses many dimensions, it spans many disciplines, which makes no unified understanding across and within disciplines (Hidrobo and Fernald, 2013; Meyer *et al.*, 2024). Among the diverse theories and conceptualizations of social protection programmes and domestic violence, we summarized some and main of them in Figure 2.1.

Figure 2.1 illustrates how social protections, particularly CTs, affect IPV under different theories and perspectives. Though the conceptual framework is built based on the assumption that women receive the transfer, it is still valid even if the men receive the transfer. According to expressive violence theory, in Figure 2.1, CTs may have an increasing or decreasing effect on IPV, depending on the context. For instance, CTs may improve the income share and

bargaining power of women. This may lead the man to feel a decline in his relative income and well-being, making him use violence to compensate for his reduced income and well-being. Expressive violence also predicts an opposite direction (reducing) effect of such programmes on IPV. The reverse argument is that the programme may increase the income and bargaining power of the woman and may enable her to leave the unhappy marriage for violence to happen, which increases the opportunity cost of violence for the men, leading them to reduce their use of violence. Absolute resource (stress) theory also predicts the reducing effect of social protection programmes on IPV. According to the absolute resource (stress) theory, the protection programmes might reduce the financial stress of the household, which possibly reduces financial and economic stress-related sources of violence within the household (Buller *et al.*, 2018; Roy *et al.*, 2019).

On the other hand, the status inconsistency (backlash) theory argues that such programmes may increase the relative income of women. This may make the man feel that he is threatening his status and act violently to restore his default (traditional) status. In addition, according to instrumental violence theory, the men to use violence as an instrument to extract or control the resources made available by the programme (Murshed, 2009; Rodríguez-Menés and Safranoff, 2012; Murshid and Zippay, 2017; Baranov *et al.*, 2020).

Figure 2.1 Conceptual framework on the impact of CT on IPV under different theories and perspectives



Source: Modified based on Baranov *et al.* (2020)

Using the above and other diverse theories and perspectives about the link between different social protections and IPV, Baranov *et al.* (2020) developed a comprehensive model that captures the link between cash transfers and violence. Suppose the family is formed by male (m) and female (f) spouses. Using the household bargaining model, assume the spouses

maximise their utility (u) subject to a budget constraint and a function which determines its utility:

$$\max \mu \left( v, \frac{y_f}{y_m} \right) \mu^f (c^f, l^f, \theta, k, v) + \left[ 1 - \mu \left( v, \frac{y_f}{y_m} \right) \right] \mu^m \left[ v, c^m, l^m, s \left( \frac{y^m}{y^f + y^m}, v \right), \theta, k \right] \text{---- (2.1)}$$

This function is maximized subject to a budget constraint:

$$c^f + c^m + \emptyset = e^{\delta(v)} w^f L^f + n^f + w^m L^m + n^m \text{----- (2.2)}$$

Where,  $c^f$  and  $c^m$  are consumption of market goods by the male and female spouses, respectively.  $l^f$  and  $l^m$  are leisure time for the female and male spouses, respectively.  $\theta$  consumption of public goods produced by the female spouse (f) domestic (household) work time ( $d^f$ ) and market input  $\emptyset$ .  $k$  is marital capital.  $w^f$  and  $w^m$  are the female and male spouse wages.  $L^f$  and  $L^m$  are time allocated to the labour market by the woman and man.  $n^f$  and  $n^m$  are non-labour income of the female and male spouses, respectively. The  $\mu$  and  $(1 - \mu)$ , where  $\mu \in [0;1]$  shows individual weights or bargaining weights for the female and male spouses, respectively. The weights show how much of the women's and men's preferences are taken into consideration during the household resource allocation process. These weights are mainly determined by the options individuals have if they leave the relationship (marriage). As an example, if the ability of the woman to generate income outside the marriage is high, her bargaining power (threat point) is high, which leads to higher weight ( $\mu$ ) (McElroy and Horney, 1981; Stevenson and Wolfers, 2006; Zegenhagen, Ranganathan and Buller, 2019). The weight provided, along with their choice over how much they want to consume and enjoy (leisure), provides the solution to the household bargaining problem.

Suppose the total time available for the spouse is T. Then:

$$\text{Total time allocation for the woman: } T = d^f + l^f + L^f$$

$$\text{Total time allocation for the man: } T = l^m + L^m$$

In addition, if there is an intra-spouse cash transfer, its effect on their respective utility is determined by its net amount. Suppose the cash transfer by the woman and man is  $t^f$  and  $t^m$  respectively.

Hence, the income of the spouses can be rewritten as:

$$\text{Income of female spouse: } y^f = w^f l^f + n^f + (t^m - t^f)$$

$$\text{Income of male spouse: } y^m = w^m l^m + n^m + (t^f - t^m)$$

A CT for the woman would increase her non-labour income ( $n^f$ ). As we can see from Equation 2.1, CT can affect violence in several ways. For example, CT can affect IPV through relative incomes ( $\frac{y^f}{y^m}$ ) of the women, given the bargaining weight (power)  $\mu$ . A CT received by a woman increases not only her relative income but also her potential income if she leaves the marriage, as she would continue to receive the CT (Abildso *et al.*, 2018; Baranov *et al.*, 2020). This means that CT not only increases the actual and relative income of women but also increases their threat points. This makes the husband reduce violence because he knows that the woman now is more likely to leave the marriage if he makes violence.

However, unlike the neoclassical theory, where humans are considered utility maximiser agents and decisions are purely based on rational assumptions (economic outcomes of decisions), marriage decisions are also influenced by other factors. According to behavioural economics, humans do not always benefit maximisers and cost minimizers self-interested agents. Sometimes their decisions are influenced by other variables, such as different social values and norms (Gordon, 2011). Thus, even though the woman is not happy with the marriage and has better economic options outside the relationship, it doesn't mean that she would prefer (decide) to leave the marriage (Schoen *et al.*, 2002; Bethmann and Kvasnicka, 2011). Hence, if the women face a strong social stigma or lack of institutional support for divorce, a CT will not lead to decreased violence through the bargaining power channel.

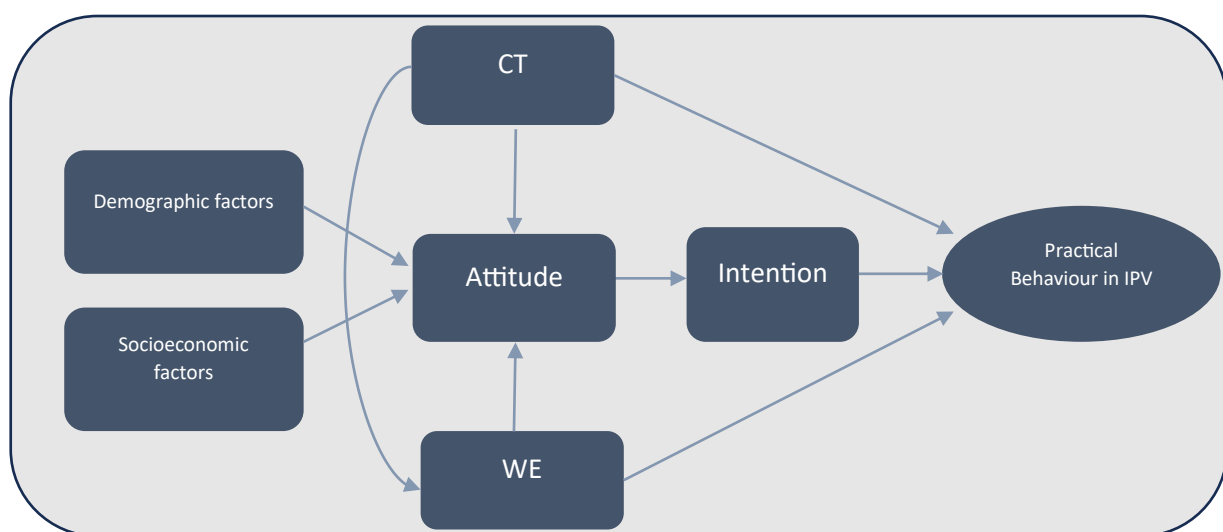
In addition, by optimizing the above two Equations (Eq. 2.1 and 2.2) using the Lagrange method we will find that:  $\frac{\partial \mu}{\partial c^f} > 0$ ,  $\frac{\partial \mu}{\partial c^m} > 0$ ,  $\frac{\partial \mu}{\partial l^f} > 0$  and  $\frac{\partial \mu}{\partial l^m} > 0$  and  $\frac{\partial \mu}{\partial \theta} > 0$  implies that the utility of the spouses increases with the consumption of the market as well as domestic goods and labour income. The direct effect of violence ( $v$ ), however, is heterogeneous among men and women spouses. Utility of the man is an increasing function of violence ( $\frac{\partial \mu^m}{\partial v} > 0$ ) but a decreasing function for the woman ( $\frac{\partial \mu^f}{\partial v} < 0$ ) (Frieze and Browne, 1989).

## 2.5. Attitudes, Intentions, and Actual Behaviour in IPV: A Conceptual Framework Based on the Theory of Planned Behaviour

Since the second part of our analysis is based on the data on attitude towards IPV, we found it necessary to make clear how attitude, intention and actual engagement in IPV are related or linked. The Theory of Planned Behaviour (TPB) offers a useful lens to understand the complex dynamics of how individuals form attitudes and intentions and translate them into practical behaviour (actions).

Attitude refers to the positive or negative evaluation of performing a behaviour (activity) (Ajzen, 2011; Michaelidou and Hassan, 2014; Abildso *et al.*, 2018). For our particular case, attitude refers to an individual's evaluation of IPV, whether they perceive it as acceptable or justified under certain circumstances. Intention refers to the readiness or willingness of an individual to engage in IPV. The attitude and intentions that individuals developed towards IPV, along with other external factors such as demographic and socioeconomic factors, translated to actual engagement with IPV. Hence, attitude shapes how individuals feel about the intention and practical engagement in it (Nunes, Pedneault and Hermann, 2022). We modified and adopted the standard TPB framework to show how attitude, intention and actual engagement in IPV are related or linked (see Figure 2.2). The framework also shows how social protections, cash transfer in particular and women empowerment, with other factors, affect attitude, intention, and actual behaviour (engagement on IPV).

Figure 2.2 Conceptual framework on how social protections affect attitude practical behaviour in IPV



Source: Own elaboration based on TPB



Consistent with the absolute resource (stress) theory, TPB argued that economic support, like providing cash, can reduce economic stress, which is often linked to IPV (Tankard and Iyengar, 2018; Meyer *et al.*, 2024). With reduced financial strain, the beneficiary may develop more positive attitudes toward his spouse and consider violence as unnecessary (Sara and Priyanka, 2023). In another way, access to CT may improve the financial independence and bargaining power of the woman, which makes her refuse the traditional gender roles and challenge her spouse (threatening the traditional autonomy of the men). This, in turn, may lead the husbands to develop a violent attitude to control their wife. In men-managed households, like Ethiopia, if women begin to challenge the existing cultural norms and gender roles, husbands may face pressure from their peers and society for their wives' unconventional behaviour. Gradually, husbands may develop a favourable attitude towards IPV. On the other hand, women's empowerment may help the spouse to find violence is morally wrong and socially unacceptable and to reconsider their attitudes toward using violence as a tool for control (Yigzaw *et al.*, 2010; Trott, Harman and Kaufman, 2017; Schuler and Nazneen, 2018).

In the second part of our empirical examination, attitudes towards PDV are measured using five specific indicators based on the available data: whether hitting or beating a wife is justified for (1) going out without informing her husband, (2) neglecting children, (3) arguing with her husband, (4) refusing sex and (5) burning the food. Given the prevailing social norms in Ethiopia, these activities capture the common justifications for PDV.

As illustrated in the conceptual framework developed in sections 2.4 and 2.5, documented in the literature and the practical experience in the study area, CT, particularly UCT, can impact the justification of violence across these activities in several ways. However, CT is unlikely to affect those outcomes equally, as the attitudes toward each situation reflect different aspects of gender norms and power dynamics. We hypothesized that the outcome, PDV indicator which has a direct link to the economic situation of the women and exposure to society, is expected to be more affected by CT. For instance, the CT is expected to impact the outcome of 'going out without informing her husband' more than other outcomes. This is because CT may directly increase the financial independence of the woman and reduce her reliance on her spouse, which enables her to make decisions, including her movement, freely. This may challenge the traditional norms, particularly in the patriarchal masculinity norms like Ethiopia, where women are considered subordinate and expected to seek permission from their spouses, especially for activities exposed to society, like going out. Though other outcomes like refusing sex or

arguing are also important issues to make violence, they are activities which can happen inside the house and not exposed to the society for which the husband may compromise and may not necessarily need to make violence. However, the outcome (activity) of 'going out without informing her husband' is more exposure to society, which might bring additional challenges from society (his friends and neighbours), which increases the husband's attitude to make violence to stop the activity of his wife.

## Chapter 3: Methodology

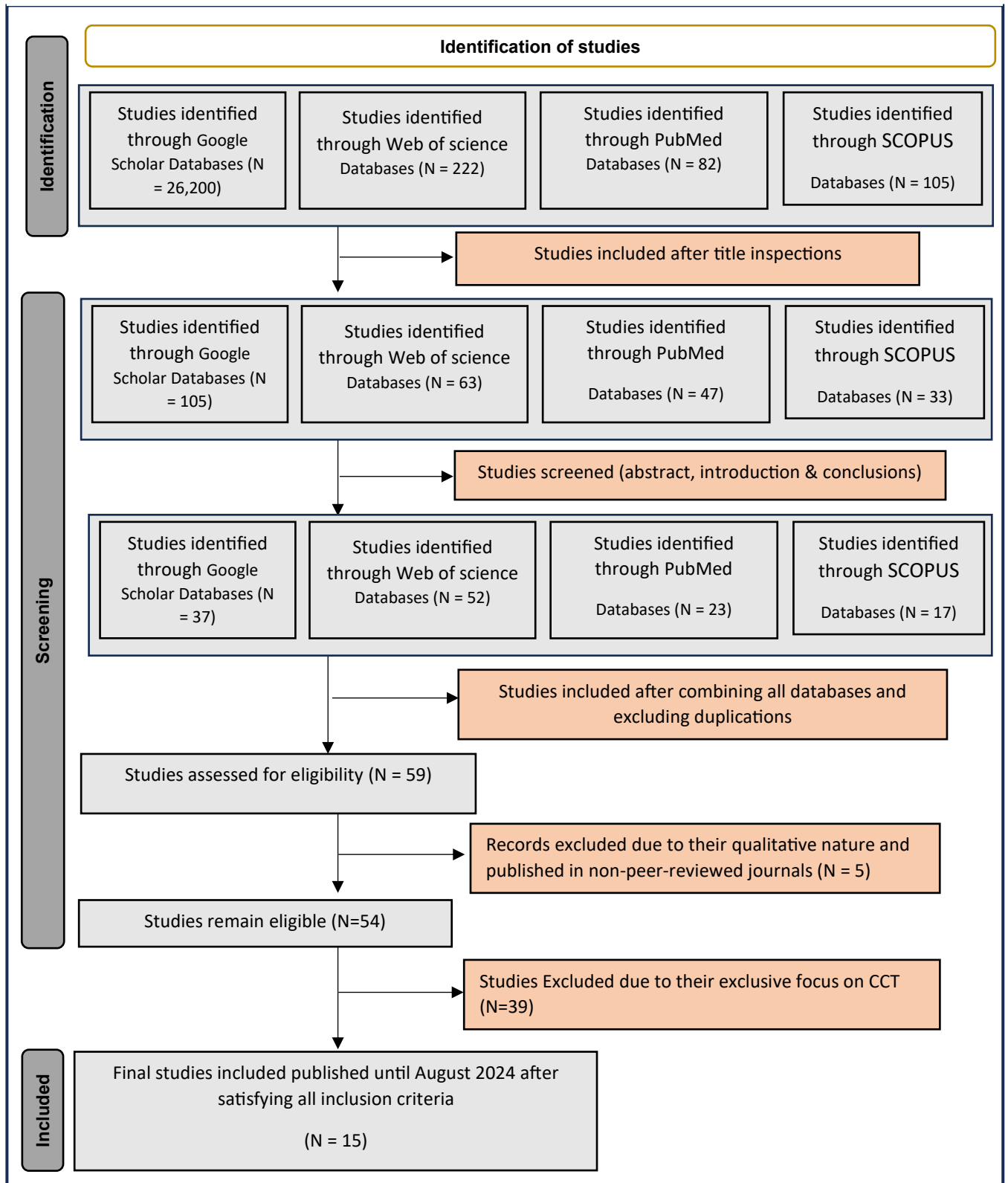
### 3.1. Meta-Analysis

#### 3.1.1. Protocols and construction of meta-dataset

Conducting a meta-analysis involves several steps and protocols. The most important and initial steps started with a systematic literature review, which involved identifying relevant empirical studies from various academic databases such as Google Scholar, Web of Science, PubMed, Scopus and others. In identifying the relevant studies, coding variables and data construction, we follow the Meta-Analysis in Economics Research Network (MAER-Net) prescriptions (Stanley *et al.*, 2013; Demena, 2017; Havránek *et al.*, 2020).

The search included all potentially relevant empirical studies published in peer-reviewed journals until August 2024. We conducted an advanced search in various databases using the broad keywords: ‘((Cash transfer) AND (violence))’ using PubMed, ‘(ALL= (Cash transfer)) AND ALL=(Violence)’ using Web of Science, ‘TITLE-ABS-KEY (cash transfer AND violence)’ using SCOPUS and ‘cash transfer + violence’ using Google Scholar. After carefully examining titles, abstracts and keywords in case of uncertainty, followed by an inspection of introductions and conclusions, our dataset ended up with 15 primary studies from 13 countries published between 2013 and 2024. Following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (see eg. Page *et al.*, 2021; Demena, Floridi and Wagner, 2022), the detailed procedure for searching and identifying the relevant studies is presented in Figure 3.1. Our inclusion criteria were studies published in peer-reviewed journals in the English language. In addition, studies have to be empirical micro-econometric studies that study the impact of UCT on IPV and report regression-based coefficients, sample size, t-statistics or standard errors. Using Microsoft Excel, we designed a data extraction template, and we conducted extensive coding of the study characteristics of the empirical studies, such as measures and effects, data type, estimation techniques, and study control variables, which were collected.

Figure 3.1 PRISMA flow diagram for studies identification



Source: adapted from Demena (2024a)

### 3.1.2. Empirical Approach

The empirical approach of the meta-analysis starts with testing for potential publication bias, followed by estimating the genuine underlying empirical effect and finally exploring factors that drive the existing mixed or heterogeneous results. To explore the presence of publication bias of UCT on IPV, we first utilized the most widely used technique, known as a funnel plot. A funnel plot is a scatterplot that displays effect sizes from individual studies on the horizontal axis against the standard errors on the vertical axis (Sterne and Egger, 2001; Terrin, Schmid and Lau, 2005; Demena, 2024a, 2024b). In the absence of publication bias, the IPV estimates will vary randomly (symmetrical) around the genuine effect, resembling an inverted funnel (triangle) shape. This is because imprecise estimates are mainly associated with small sample sizes and large standard errors are widely dispersed at the bottom of the funnel (Doucouliagos and Stanley, 2009; Demena and Afesorgbor, 2020; Afesorgbor and Demena, 2022). This method of detecting publication bias, however, is more subjective and depends on the visual ability of individuals, which may influence the overall conclusions of a meta-analysis (Hunter *et al.*, 2014; Demena and van Bergeijk, 2017; Floridi, Demena and Wagner, 2022). Hence, complementing with formal statistical techniques can offer a robust approach to bias detection. As a result, a formal and more powerful regression-based method of detecting the issue of publication bias has been proposed, such as a meta-regression model (MRM), which can provide a more robust estimate that also investigates the underlying genuine effect (Demena, 2015; Afesorgbor and Demena, 2022; Demena, Floridi and Wagner, 2022).

$$effect_{ij} = \beta + \delta se_{ij} + \mu_{ij} \text{-----} (3.1)$$

Where  $effect_{ij}$  the reported IPV effect of the  $i^{th}$  estimate in the  $j^{th}$  study.  $se_{ij}$  is the associated standard error. In the case of the absence of publication bias, the estimated coefficients should not be affected by the standard errors. If so, the coefficient  $\delta$ , which shows publication bias, will be zero. Similarly, the precision effect test (PET) captured by  $\beta$  shows the underlying effect after accounting for publication bias. In some cases, researchers may be inclined to select estimates in line with their prior beliefs or theoretical knowledge (Floridi, Demena and Wagner, 2022; Afesorgbor, Fiankor and Demena, 2024). If so, the error term in Equation (3.1) would not be expected to be independently and identically distributed. Hence, estimating Equation (3.1) using ordinary least squares (OLS) would produce an inefficient (biased) estimator. To solve this econometric problem, we estimated the weighted least square (WLS) version of the above equation. Dividing both sides of Equation (1) by the associated standard errors gives:

$$t_{stat_{ij}} = \delta + \beta(1/se_{ij}) + \varepsilon_{ij} \text{-----} (3.2)$$

Where  $t_{stat_{ij}}$  is the t-statistics ( $= effect_{ij}/se_{ij}$ ) of  $i$ th estimate in study  $j$ .  $1/se_{ij}$  the inverse of standard error and  $\varepsilon_{ij}$  is  $\mu_{ij}/se_{ij}$ .  $\delta$  in Equation 3.2 is used to test publication bias. That is if  $\delta \neq 0$  shows the existence of publication bias, and the sign also indicates the direction of the bias.  $\beta$  shows both the size and direction of the underlying genuine effects.

Furthermore, to investigate the heterogeneity in the reported estimates, we estimated the expanded version of Equation 3.2 (a multivariate MRM), which includes various potential sources of heterogeneity such as data characteristics, model specification, estimation techniques, publication and other characteristics. This extended version of Equation (3.2) becomes:

$$t_{stat_{ij}} = \delta + \beta(1/se_{ij}) + \partial_n X_{ij} + \varepsilon_{ij} \text{-----} (3.3)$$

Where  $X_{ij}$  captures various characteristics of empirical studies, potentially driving the sources of heterogeneity. Others are as defined in Equation 3.2.

## 3.2. The quasi-experimental examination of the UN joint programme

### 3.2.1. Data

Regarding the empirical examination using the programme in Ethiopia, the study utilized two-period panel data from the World Bank on the UNJP-RWEE programme in Ethiopia. The programme was launched in 2014 with the financial and technical support of UN agencies such as UN Women, FAO, WFP, and IFAD and implemented in collaboration with the federal, regional, and district-level partners in the regions. The baseline and end-line surveys for the programme were conducted in 2016 and 2019, respectively (Campos and Kaaria, 2016; Mane and Kaaria, 2019).

### 3.2.2. Analytical Strategy

As mentioned above, the main aim of the programme is to empower women by providing microcredit and various complementary training. The study by Hillesland *et al.* (2022), confirmed that the UNJP-RWEE programme was helping to empower women in all domains and indicators of empowerment except some indicators of instrumental agency, such as work balance. Hence, for our empirical approach, we followed two strategies. In our first strategy, we considered households, particularly women participating in this programme, as empowered and non-participants as non-empowered.

Even though the main aim of the programme (UNJP-RWEE) was to enhance women's empowerment and was empirically confirmed, considering that all women participating in the programme are empowered, it may raise a concern. For example, the programme, on average, may positively affect women's empowerment. However, it may have a heterogeneous effect on an individual level. To resolve this concern and validate the results of the first strategy, we developed a second strategy. In the second strategy, we computed an individual-level women empowerment index, specifically, the Abbreviated Women's Empowerment in Agriculture Index (A\_WEAI).

The Women Empowerment in Agriculture Index (WEAI), which was collaboratively developed by IFPRI, USAID, and OPHI in 2012, provides a comprehensive measure of empowerment that captures the overall and relative aspect of women empowerment in agriculture (Alkire *et al.*, 2013). WEAI consists of two weighted components: (i) the five domains of empowerment sub-index (5DE) with ten indicators and (ii) the Gender Parity Index (GPI), assigned weights of 0.90 and 0.10, respectively. The 5DE assesses women's empowerment across five domains, such as agricultural decision-making, resource access, income control, community leadership, and time allocation. The GPI also assesses gender parity by comparing the achievements of women relative to women within households (Malapit *et al.*, 2019; Quisumbing *et al.*, 2023). Through practical experience, the original WEAI was perceived as lengthy and created controversy in some indicators, such as autonomy in production and public speaking. To address these concerns, a more concise version, known as the Abbreviated WEAI (A-WEAI), was used (Alkire *et al.*, 2013; IFPRI, 2016; USAID, 2018)

The A-WEAI maintains similar domains to the original WEAI, but it comprises six indicators (Table 3.1) in contrast to the original WEAI, which has ten indicators (Kieran *et al.*, 2018). Like the original WEAI, the A-WEAI score is computed as the weighted sum of the household-level 5DE (constituting 90% of the total A-WEAI) and GPI (making up 10% of the total A-WEAI) (Malapit, 2017; Malapit *et al.*, 2019; Nacka, 2019) and given as:

$$A - WEAI = 0.9(5DE) + 0.1(GPI) \text{-----} (3.4)$$

Table 3.1 Composition of A-WEAI dimensions and indicators

Domain/dimensions	Indicator	Adequacy threshold	Weight
Production	Input in productive decisions	Inadequate if the respondent has no sole or joint decision-making about agricultural production.	1/5
Resources	Ownership of assets	Inadequate if the respondent has no sole or joint ownership of access to and control of assets, given that the household owns an asset.	2/15 <sup>2</sup>
	Access to and decisions on credit	Inadequate if the respondent has no access to and participation in decision-making concerning credit.	1/15
Income	Control over the use of income	Inadequate if the respondent has no sole or joint control over the use of income and expenditures	1/5
Leadership	Group membership	Inadequate if the respondent is not an active member in at least one economic or social group.	1/5
Time	Workload	Inadequate if the respondent works more than 10.5 hours a day (in the previous 24 Hours)	1/5

Source: Malapit (2017)

The 5DE is determined through a two-step process: establishing the disempowerment index ( $M_0$ ) and converting it into an empowerment index ( $1 - M_0$ ). The disempowerment index ( $M_0$ ) is calculated by multiplying the headcount of disempowered individuals ( $H$ ) by the average empowerment deficit ( $A$ ) ( $M_0 = H * A$ ). The headcount of disempowered individuals ( $H$ ) represents the proportion of individuals, encompassing both women and men, falling below the empowerment threshold. The average empowerment deficit ( $A$ ) measures the percentage of domains in which disempowered women fail to attain the empowerment threshold. The 5DE sub-index is equivalent to  $(1 - M_0)$ . Alternatively, 5DE can be expressed as:

$$5DE = H_e + H_n * A_a \text{ ----- (3.5)}$$

<sup>2</sup> In the original WEAI, the resource domain comprises three indicators: Purchase, sale, or transfer of assets; ownership of assets; and access to and decisions on Credit. Each indicator carries a weight of 1/15 (derived from 1/5 divided by 3). However, in the A-WEAI, the indicators purchase, sale, or transfer of assets, and ownership of assets are combined into a single indicator with a revised weight of 2/15 (1/15 + 1/15) (Malapit, 2017).



Where  $H_e$  is the percentage of women who are empowered;  $H_n$  is the percentage of women who are not empowered and  $A_a$  is the average absolute empowerment score among the disempowered. And  $H_e + H_n = 100\%$  and  $0 < A_a < 100\%$ .

Hence,

$$5DE = (1 - M_0) = 1 - A_p(A_n) = H_e + H_n(A_a) \text{ ----- (3.6)}$$

where  $H_n = (1 - A_a)$  and reflects the percentage of domains where disempowered women, on average, do not have adequate achievements.  $H_n$  is the proportion of individuals whose share of weighted inadequacies is more than the specified inadequacy threshold ( $k$ ) i.e.

$$H_n = \frac{q}{n} \text{ ----- (3.7)}$$

Where;  $q = \text{number of individuals who are disempowered}$   $n = \text{total population}$

The second component ( $A_n$ ) represented the average inadequacy score of disempowered individuals, which can be expressed as follows:

$$A_n = \frac{\sum_{i=1}^n c_i(k)}{q} \text{ ----- (3.8)}$$

Where;  $c_i(k) = \text{censored inadequacy score of individual } i$

The censored inadequacy score is individually calculated based on each person's performance across all indicators. This score is derived by summing the weighted inadequacies  $c_i$  and falls within a range of 0 to 1. As the inadequacies increase, the score rises and reaches its maximum at 1. Conversely, a lower score indicates fewer inadequacies across all indicators.

$$c_i = W_1I_1 + W_2I_2 + W_3I_3 + \dots W_nI_n \text{ ----- (3.9)}$$

Where  $w_i = \text{weight attached to indicator } i$  given that  $\sum_{n=1}^6 w_n = 1$

$I = 1$  if a person inadequate achievement in indicator and  $= 0$  otherwise.

In addition, the disempowered index is calculated using inadequacy count ( $c_i$ ) and disempowered cut-off ( $k$ ), formally:

$$c_i(k) = \begin{cases} c_i, & \text{if } c_i > k \\ 0, & \text{if } c_i \leq k \end{cases} \text{ ----- (3.10)}$$

The second component in A-WEAI is the Gender Parity Index (GPI), which can be calculated as follows:

$$GPI = 1 - H_w(R_p) \text{ ----- (3.11)}$$

Where;  $H_w$  is the percentage of women without parity in their households, and  $R_p$  is the average difference in empowerment between men and women within the same household.

The GPI sub-index consists of two relevant pieces of information: the proportion of parity-inadequate households ( $H_w$ ) and the average empowerment gap between the censored inadequacy scores of the women and men living in the households called lack of gender parity ( $R_p$ ). Where:

$$H_w = \frac{h}{m} \text{-----} (3.12)$$

$$R_p = \frac{1}{h} \sum_{i=0}^n \frac{c'_i(k)^m - c'_i(k)^w}{1 - c'_i(k)^m} \text{-----} (3.13)$$

$h$  = number of houses clasified as lacking gender parity;  $m$  = total of dual - adult household in the sample; and for Equation (3.13)  $c'_i(k)^m$  refers to censored inadequacy scores for men living in household  $I$ , and  $c'_i(k)^w$  refers to censored inadequacy scores for women living in the household  $i$

### 3.2.3. Empirical approach

For the quasi-experiment examination, though the survey consists of two-period data sets, baseline and end-line, and social unrest in the Oromia region, the baseline data was collected a bit late (December 2016 to January 2017) due to the conflict after some of the beneficiary households already received loans and training. As a result, the study employs the following panel model rather than the pure difference-in-difference (DiD) model.

$$Y_{ijt} = \beta(WE)_{ijt} + \delta_1 CT + \delta_2 (CT * WE) + \gamma X_{ijt} + \tau_t + \alpha_i + \varepsilon_{ijt} \text{-----} (3.14)$$

Where  $Y_{ijt}$  refers to outcome variables (IPV) for household  $i$  in village  $j$  at time  $t$ . Specifically, it measures the attitude of the husbands toward IPV in five indicators, such as if they justify hitting or beating the wife for going out without telling them, neglect the children, argue with them, refuse to have sex and burn the food.  $WE$  refer to women empowerment, measured in two techniques: (i) empowered if being beneficiaries for the UNJP\_RWEE, and non-empowered if not-beneficiary, and (ii) empowered if their A-WEAI  $\geq 0.50$ , non-empowered otherwise.  $\varepsilon_{ij}$  is the error term.  $X_{ijt}$  is a time-varying vector of control variables across households  $i$  and time  $t$ .  $\tau_t$  represents time-fixed effect,  $\alpha_i$  is a household fixed effect, and the  $\varepsilon_{ijt}$  is a time-variant individual error term.

However, cash transfers might affect not only IPV but also women's empowerment, as depicted in Figure 2.2. If so, the moderator effect of women empowerment may lead to biased estimates if we directly estimate Equation (3.14). Hence, to break this link (solve the problem of endogeneity), we employ an instrumental variable (IV) approach. Empowerment status, or the first stage equation, is treated as a function of the instrument ( $Z_i$ ), and other variables ( $X_i$ ). We considered the eligibility criteria of the empowerment intervention as the instrument ( $Z_i$ ). Hence, the instrumental variable ( $Z_i$ ) takes 1 for households eligible for the program and 0 otherwise. This first stage equation is written as:

$$WE_{ijt} = Z_{ijt} + X_{ijt} + \epsilon_{ijt} \text{-----} (3.15)$$

The instrumental variable ( $Z_i$ ) is conceptually expected to satisfy two conditions: (i) relevance and (ii) validity conditions. The relevance condition requires that the instrumental variable ( $Z_i$ ) must be correlated with the endogenous variable (WE), i.e.  $Cov(Z_i, WE_i|X_i) \neq 0$ . The validity condition requires that the instrumental variable ( $Z_i$ ) must not be correlated with the error term in the main regression model, i.e.  $Cov(Z_i, \mu_i|X_i) = 0$  (Hahn and Hausman, 2002; Newey and Powell, 2003; Yang *et al.*, 2014; Labrecque and Swanson, 2018). Since the instrument ( $Z_i$ ) is based on the eligibility criteria (program participation) to the WE program, it is likely to be correlated with WE, as confirmed by Hillesland *et al.* (2022) validates the relevance condition. The validity condition, however is valid by assumption that unobserved characteristics that affect IPV are not correlated with the instrument. If this assumption and condition holds, a consistent estimate of the impact of the programme on IPV can be obtained by estimating:

$$Y_{ijt} = \widehat{WE}_{ijt} + X_{ijt} + \mu_{ijt} \text{-----} (3.16)$$

Where  $\widehat{WE}_{ijt}$  the predicted value of  $WE_{ijt}$  in the first regression. Others are defined above.

## **Chapter 4: Result and Discussion**

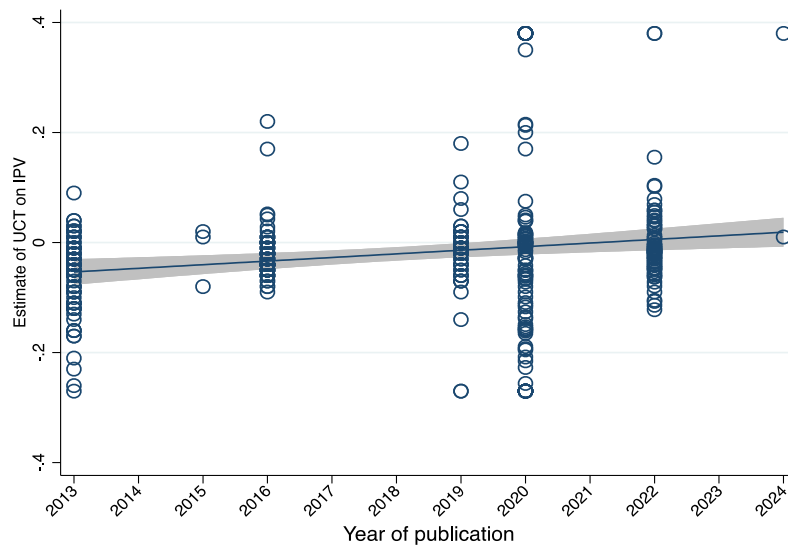
### **4.1. Results of Meta-analysis**

#### **4.1.1. Descriptive results**

In addition to contradictions in the sign and statistical significance of the estimated coefficients presented in Figure 1.1, Figure 4.1 also illustrates the extent of contradictions regarding the reported magnitude or size of the coefficients. The figure presents the positive trend on the 394 reported estimates on the effect of UCT on IPV, which was gathered from 15 primary studies globally published until August 2024 (for further details, please refer to the appendix Tables A1 and A2). The figure shows that, until around 2019/20, on average, the reported estimated coefficients were negative. After 2019/2020, however, the figure indicates that the reported estimates have a positive unintended effect of UCT on IPV. It indicates that the recently published studies are likely to report the unintended enhancing effect of these programmes, which fits with the ‘Economic Research Hypothesis’ proposed by Goldfarb (1995). This hypothesis suggests that sceptical research findings may follow and dominate the recent literature in contrast to seminal studies. In general, Figures 4.1 highlight the contradictions not only in terms of direction and statistical significance but also in terms of magnitude, which underscores the necessity of meta-analysis to reconcile those contradictions.

The publication of recent empirical studies with positive estimates, especially in social protection and IPV issues, can occur for various reasons. For example, researchers might select studies with results related to their prior theoretical expectations or with results they think publishable, such as positive and significant results. Funding agents for the primary empirical studies might also be another reason. Editors might also prefer to publish empirical studies with positive results because they are likely to attract more readers and citations (Doucouliagos and Stanley, 2009; Havranek and Irsova, 2012; Demena, 2015; Møen and Thorsen, 2017). In this context, the primary studies might overstate (bias) the true impact of UCT on IPV. Hence, computing the genuine effect of UCT on IPV using a simple arithmetic average of all available estimates in the presence of such bias is difficult, which necessitates the identification and adjustment of the effect of the publication selection bias.

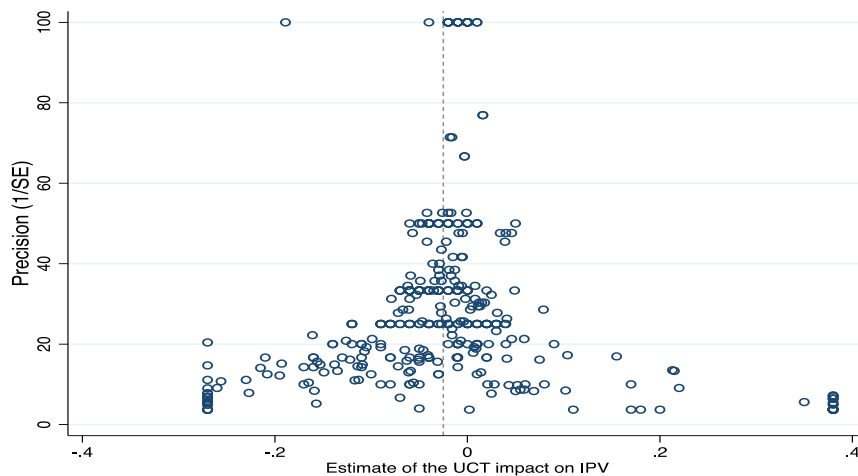
Figure 4.1 Reported UCT impacts diverge over the period 2013 – 2024 (N=394)



*Note:* The horizontal axis measures the year since the first primary study appeared in Google Scholar. The solid lines across the reported coefficients represent a linear trend in the estimates, while the surrounding grey-shaded areas indicate the corresponding 95% confidence interval.

To investigate the issue of publication selection bias, we start with a funnel plot (Figure 4.2). The plot appears symmetrical, suggesting the absence of any potential publication bias in the literature. As previously noted, publication bias can stem from either researchers or editors (journals). Given that our estimated results are derived exclusively from published peer-reviewed journals, the plot also indicates whether any publication bias is attributable to journal editors and reviewers. However, this visual method of publication bias detection is subjective and requires a more formal MRA.

Figure 4.2 Funnel plots of estimated UCT effects on IPV (N=394)



*Note:* The vertical dashed line represents the inverse variance weighted average effect of the full sample, as reported in Table 4.1.

#### 4.1.2. Econometrics analysis

Besides knowing the precise issue of the presence or absence of publication bias, the direction and magnitude of the bias are also important. In addition, researchers and policymakers are interested in the underlying magnitude and sign of the IPV effect of UCT (Tang and Liu, 2000; Sterne and Egger, 2001). All of these justify the necessity of using the formal statistical method of MRA, which can provide more precise information about the bias and help estimate a genuine empirical IPV effect corrected for this bias.

The result in Table 4.1 shows that, on average, UCT reduce IPV by 2%. The effect is also increased to 2.5% when we provide higher weight to more precise estimates. Using Eq. (3.2), we estimated the genuine effect of UCT on IPV after due allowance for publication bias (Table 4.2 in columns 1-3). In applied econometrics studies, multiple estimates are common in a single study due to various reasons, such as demand from the editors and reviews to ensure the robustness of the model in studies. Those multiple estimates from the same studies are unlikely to be statistically independent (Doucouliagos and Stanley, 2009; Stanley *et al.*, 2013; Demena, 2024a, 2024b). In addition, the presence of authors who publish or co-author in more than studies it is unlikely that reported estimates collected from these studies are statistically independent. Hence, it is important to employ a model which accounts for both within and between studies dependence, such as a hierarchical or mixed-effects multilevel (MEM) estimation (Doucouliagos and Laroche, 2009; Bom and Rachinger, 2019; Fernández-Castilla *et al.*, 2020; Demena, 2024a). Therefore, we start with two approaches that account for the within-study dependence, using the WLS(CDA) and fixed-effect (FE), and then we move to our preferred estimates (MEM).

In all estimation techniques, the constant term (FAT) was statistically insignificant, indicating no publication bias on the empirical relationship between UCT and IPV. In our preferred approach, the MEM result (Column 3 in Table 4.2), which we considered as the main (preferred) result, shows that the estimated slope of the coefficient (PET) is statistically significant, indicating a negative genuine empirical relationship between UCT and IPV. The MEM result shows that UCT reduces IPV by 1.3% on average after accounting for publication bias. The result also shows that the average effect of UCT on IPV is consistently lower than the simple average effect in all estimation techniques after considering publication bias.

Table 4.1 Overall reported estimates of UCT on IPV

Method	Effect size	S. E.	95% confidence interval	
Simple average effect <sup>a</sup>	-0.020	0.006	-0.033	-0.008
Weighted average effect <sup>b</sup>	-0.025	0.003	-0.031	-0.018

Notes: <sup>a</sup> the arithmetic mean of the formality impact, <sup>b</sup> uses inverse variance as weight

Table 4.2 Publication bias and underlying genuine effect test

Variables	(1)	(2)	(3)
	CDA	FE	MEM
Publication bias (FAT - constant)	-0.320 (0.460)	-0.387 (0.442)	-0.209 (0.288)
Genuine effect (PET - precision)	-0.014 (0.011)	-0.012 (0.015)	-0.013*** (0.004)
Observations	394	394	394
Studies	15	15	15

Notes: \*\*\* stands for a 1% level of significance.

Though the effect of publication bias using bivariate analysis was insignificant, all the above (bivariate) estimations consistently suggest the absence of publication bias. However, the average effect of UCT on IPV after accounting for the effect of publication bias reduced to 0.013 (Table 4.2.) from 0.02 (Table 4.1) of the simple average effect. This suggests that other factors also contribute to the heterogeneous effect of UCT on IPV, underscoring the necessity of multivariate MRA. As a result, we conducted a multivariate MRA, which accounts for various potential sources of heterogeneity and quality of the primary studies, such as the data characteristics, study design, nature of the intervention and other characteristics.

Drawing on the available meta-data and the discussion in the literature, we identified various potential sources of heterogeneity in the findings of the reported empirical studies. These potential factors, along with their means and standard deviations, are presented in Table 4.3. The mean and standard deviation of reported estimates in primary studies were -0.041 and 0.5, respectively. This suggests that the simple average value of reported estimates of UCT on IPV was -4.1%. The reported estimates from the primary studies were roughly based on 1,234 ( $e^{7.118}$ ) observations. The majority (91%) of the reported estimates were based on panel data, and less than 10% of the estimates were from cross-sectional data. Almost 80% of the primary studies were conducted within three years of the intervention. Only around 20% of the studies were conducted within less than a year of the intervention (contemporaneously).

Table 4.3 Description and summary statistics of variables

Moderator Variables	Description	Mean	Std. Dev.
<b>Outcome characteristics</b>			
Effect	Reported estimates of UCT on IPV	-0.041	0.500
Standard error	Standard error of the effect	0.072	0.109
<b>Data characteristics</b>			
No. Years	The logarithm of the number of years of data used	1.742	1.824
No. of Obs.	The logarithm of the number of observations	7.118	0.678
Panel	=1 if data is panel (cross-sectional data as reference category)	0.909	0.289
<b>Evaluation timing follow-up</b>			
Short-term	=1 if the evaluation period since the intervention is equal to one year, (0 1]	0.183	0.387
Medium-term	=1 if the evaluation period since the intervention is more than one year but less than or equal to 3 years, (1 3]	0.604	0.489
<b>Outcome characteristics</b>			
Physical	=1 if the response variable refers to the use of physical force against the women, such as hitting, punching, kicking, slapping	0.261	0.439
Emotional	=1 if the response variable refers to the use of actions or words that harm someone's mental and emotional well-being, such as verbal abuse, threats, intimidation, manipulation, humiliation, and controlling behaviour.	0.426	0.495
Sexual	=1 if the response variable refers to any non-consensual sexual act or behaviour such as rape, sexual assault, unwanted touching, and sexual harassment.	0.091	0.289
<b>Intervention</b>			
Monthly	=1 if the UCT provided a monthly basis	0.675	0.469
Bi-monthly	=1 if the UCT provided a bi-monthly basis	0.112	0.315
Quarterly	=1 if the UCT provided a quarterly basis	0.127	0.333
Women	=1 if the UCT exclusively targeted women	0.749	0.434
Complementary	=1 if there are any other complementary interventions other than UCT	0.426	0.495
Experimental (RCT)	=1 if the study design is experimental	0.878	0.328
<b>Treatment effect estimates</b>			
OLS	=1 if the estimation method is multivariate linear regression (IV, or other method not listed here as reference category)	0.853	0.355
<b>Specification characteristics</b>			
Age	Age of the household head	0.515	0.500
Household size	Size of the household	0.239	0.427
Gender	Gender of the household head	0.322	0.468
Education	The educational level of the household head	0.624	0.484
Asset	Asset level of the household	0.340	0.474
Marital status	Marital status of the household head	0.297	0.457
Fixed effect	=1 if specification controls for year-fixed effects	0.684	0.465
Interaction	=1 if the reported estimates come from interaction variables	0.706	0.456
<b>Publication characteristics</b>			
Publication age	Publication year or age of the study (base, 2013)	5.053	3.149
Citations	Logarithm of citations in Google Scholar per the age of the study, as of August 2024	2.975	0.739
Impact	The journal's impact factor from the ISI Web of Science as of August 2024	6.109	2.702

*Note: The statistics on outcome characteristics are presented before treating outliers, i.e., before the application of winsorization.*

In addition, nearly two-fifths of the estimated reports were on emotional violence. And approximately one-third of the estimates were on physical and sexual violence. Approximately two-thirds (67.5%) of the transfers were conducted on a monthly basis. Less than 10% of the transfers were made as a lump sum. Almost half of the studies provided the UCT with



complementary interventions such as literacy, business skills, empowerment, vocation training, nutrition, aspiration, behaviour change communication, and other training, e.g. (Ranganathan *et al.*, 2022; Roy *et al.*, 2022). Most (87.8%) of the reported estimates were based on experimentally designed studies. More than half of the studies controlled basic demographic characteristics of the household head, such as age, educational level and others. The oldest study was published in 2013, and the median study appeared in 2018 (five years after the first study in the issue). Results in Table 4.3 also show that 70.6 percent of the reported estimates come from interaction variables.

Table 4.4 presents the results of the multivariate MRA (estimated from Equation 3.3), including various possible sources of heterogeneity. To minimize the impact of outliers, we applied the Winsorization technique, preferring it over trimming to avoid losing any observations (Dixon and Yuen, 1974). In addition, following the MAER-Net reporting guidelines, we followed a general-to-specific (GETS) approach to reduce the problem of multicollinearity. GETS modelling involves estimation by including all potential explanatory variables and the next consecutive estimations conducted after removing the most insignificant variables until we arrive at a specific (reduced) model containing significant variables only (Stanley *et al.*, 2013; Clarke, 2014; Havránek *et al.*, 2020; Hendry, 2024).

While excluding particular (insignificant) variables can help reduce the risk of multicollinearity, the GETS technique has its cons. For instance, this technique decreases the degrees of freedom, potentially lowering the statistical power and reliability of the results (Krolzig and Hendry, 2001; Clarke, 2014; Demena, 2017; Mekasha and Tarp, 2021). Hence, maximum care should be taken to avoid missing the most important explanatory variables. Following the GETS procedure, we found that 65% of the explanatory variables remain statistically significant (Column 1 in Table 4.4, the specific model). The result in column 1 shows publication bias towards negative estimates. The result suggests that there might be a tendency for studies with smaller or less positive effects to be more likely published, which might underestimate the true effect size of UCT on IPV. Some literature classifies the economic importance of publication bias as severe if the bias is greater than or equal to 2, substantial if values are between 1 and 2, and modest or minimal if values are less than one (Thornton and Lee, 2000; Jackson, 2006). Considering these classifications, we found that our publication bias estimate (-0.277) is economically less important.

Table 4.4 Why do estimates vary? Multivariate MRA results

Moderator variables	(1) Specific	(2) CDA	(3) FE	(4) MEM
Bias coefficient (constant-FAT)	-0.277** (0.136)	-0.277 (0.333)	-0.443*** (0.103)	-0.008 (0.302)
Genuine effect (precision-PET)	-0.878*** (0.107)	-0.878*** (0.097)	-0.787** (0.317)	-0.856*** (0.159)
<b>Data characteristics</b>				
No. of Obs.	0.018** (0.009)	0.018*** (0.005)	0.012 (0.008)	0.013 (0.008)
Short-term	0.381*** (0.048)	0.381*** (0.065)	0.346 (0.200)	0.352*** (0.086)
Medium-term	0.151*** (0.025)	0.151*** (0.034)	0.169** (0.077)	0.162*** (0.043)
<b>Emotional</b>	-0.011** (0.004)	-0.011*** (0.003)	-0.005 (0.003)	-0.006 (0.004)
<b>Intervention</b>				
Monthly	-0.141*** (0.021)	-0.141*** (0.024)	-0.140 (0.085)	-0.144*** (0.036)
Bi-monthly	0.355*** (0.049)	0.355*** (0.058)	0.203 (0.190)	0.293*** (0.090)
Women	0.143*** (0.014)	0.143*** (0.010)	0.105* (0.050)	0.113*** (0.025)
Experimental	0.402*** (0.047)	0.402*** (0.051)	0.292 (0.166)	0.374*** (0.082)
Fixed effect	-0.187** (0.034)	-0.187*** (0.033)	-0.228** (0.082)	-0.217*** (0.054)
Interaction terms	-0.028*** (0.005)	-0.028** (0.010)	-0.026** (0.010)	-0.026*** (0.005)
<b>Publication characteristics</b>				
Publication age	0.0145*** (0.004)	0.015*** (0.002)	0.021** (0.007)	0.019*** (0.006)
Citations	0.029*** (0.008)	0.029*** (0.009)	0.067*** (0.018)	0.058*** (0.013)
Impact	0.022*** (0.004)	0.022*** (0.004)	0.017 (0.015)	0.018*** (0.007)
Observations	394	394	394	394
Studies	15	15	15	15

Notes: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . standard errors reported in parentheses are clustered at the study level. And all estimates use the inverse variance as weights. The estimation in Panel 1 is based on the GETS approach; Panel 2 is based on clustered data analysis (CDA), also known as WLS, estimated via the study level clustered robust standard errors; Panel 3 is fixed-effect (FE) estimation clustered at the study level; Panel 4 is based on MEM approach, estimated through the restricted maximum likelihood.

We also re-estimated the specific model in Column 1 employing different specifications, such as MEM, CDA, and FE, for comparison and robustness check. The MEM result in Table 4.4 (column 4), which accounts for both between and within studies effect, shows no significant publication bias. The genuine effect coefficient from the MEM estimation shows that UCT decreases IPV by 85.6% on average. This result is also consistent with different specifications, validating the robustness of our result. Various factors such as data characteristics, follow-up duration, type of intervention, study design, specifications, and publication characteristics were identified as significant moderators influencing the heterogeneous impact of UCT on IPV in the primary studies. More specifically, studies conducted on a longer data time span (short term and midterm) reported estimates, on average, 35.2% and 16.2% higher impact of UCT on IPV, respectively, than studies conducted contemporaneously (less than one year or on the same year). In addition, bi-monthly UCT payments (transfers), transfers exclusively targeted women, experimentally designed studies, more recent studies, and publication in higher impact

journals are associated with higher reported estimates of IPV. On the contrary, monthly transfer payments, estimations performed in controlling year-fixed effect and the estimation performed by interacting the transfer with other variables were found to reduce the reported estimates of the impact of UCT on IPV.

## 4.2. Result and discussion of the UN joint programme in Ethiopia

### 4.2.1. Descriptive analysis

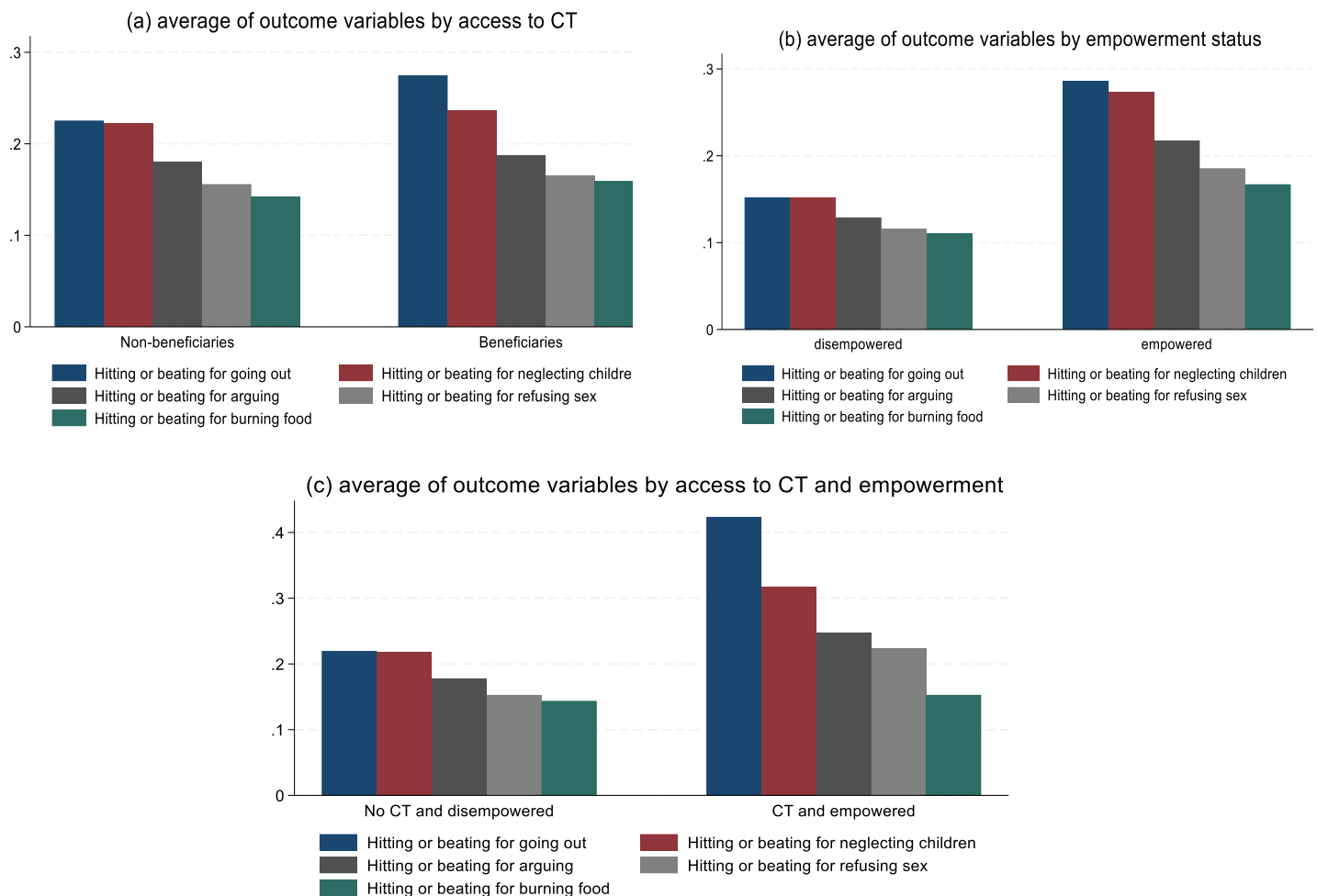
Ensuring whether the treated and control groups are comparable regarding their baseline characteristics is the crucial and foremost task before estimating the treatment effect. Table 4.5 presents summary statistics for the respondents based on access to cash and empowerment status in the baseline survey. The individual test shows that treated and non-treated respondents were comparable in the listed observable characteristics except for having children under five age and food insecurity characteristics, in which treated respondents were nearly 13% and 11% having more children under five and more food insecure than the non-treated, respectively.

Table 4.5 Baseline characteristics and balance

	Treated	Non-treated	Baseline difference (T-C)	P_Value
<b>Demographic characteristics</b>				
Working age [25-65]	0.8709	0.9252	-0.0543	0.1339
Children under five	0.0645	0.1909	-0.1264	0.0383
Education	0.6229	0.5192	0.1037	0.1537
Language	0.9167	0.9533	-0.0366	0.2799
Year in marriage	29.913	29.102	0.811	0.3792
Type of the household	0.5517	0.5451	0.0066	0.4719
<b>Socio-economic status</b>				
In-kind	0.3871	0.3272	0.0599	0.2441
Who-received the in-kind	0.6667	0.5733	0.0934	0.2625
Training	0.7097	0.7109	-0.0012	0.4943
Who receive training	0.4839	0.4245	0.0594	0.257
Food insecurity	0.6774	0.7828	-0.1054	0.0836
<b>Gender attitude</b>				
Respect	0.8696	0.905	-0.0354	0.2853
Trust	0.7826	0.842	-0.0594	0.251
Comfort during disagreement	1.0434	0.9783	0.0651	0.384
Joint orthogonality test: treatment versus control	chi2(10) = 4.95		Prob > chi2 =	0.8946

Generally, despite such minor differences in a few characteristics, such as having children under five and food insecurity, we can say that the difference in outcome variables after the intervention is attributed to the treatment (cash transfer and women empowerment) rather than to pre-existing differences between the groups (not confounded by other factors). In addition, the joint orthogonality test also shows that the given covariates jointly don't affect the likelihood of treatment.

Figure 4.3 Average of outcome variables by access to CT and empowerment status



Before directly estimating the impact of cash transfer and women empowerment on IPV, we visually inspect outcome variables by treatment variables. Figure 4.3 presents the average outcome of different measures of attitude towards PDV by access to cash transfer and women empowerment. Accordingly, Panels (a) and (b) show different indicators of attitude towards PDV based on access to cash and empowerment status, respectively. Panel (c) shows the attitude to PDV by the joint status of households: cash transfer and empowerment. Panel (a) shows that outcome variables (intention to PDV) are almost similar for both beneficiaries and non-beneficiaries except for the two attitude measures: the attitude towards hitting or beating a wife for going out without telling her husband and for neglecting children. Panel (b), however, shows that all types of attitudes to PDV are higher in households with empowered women than in households with non-empowered women. Panel (c) also indicates almost a similar feature as panel (b) in which households' access to cash transfers and empowerment seems to have a favourable attitude towards hitting or beating a wife.

#### **4.2.2. The impact of cash transfer and women empowerment**

Figure 4.4 above shows that attitude towards PDV is slightly higher among CT beneficiary households in some indicators. Also, attitude towards PDV was consistently higher among empowered households in all indicators. The simple expectation from this result is that CT and WE independently and jointly increase attitudes towards PDV. However, the joint (combined) effect of CT and WE is not simply the sum of their individual effects (Pace *et al.*, 2018; Shigute *et al.*, 2020), which might have different effects. Thus, visual inspection or the sum of their individual effects may lead us to the wrong conclusion. Hence, to better understand the actual effect of cash transfer and women's empowerment, we conducted more powerful estimates using regression analysis, including their combined effect.

The baseline model result, without confounding factors, presented in Table 4.6, shows the individual and joint effect of cash transfer and women's empowerment on different indicators of intention to PDV. The result shows that access to CT reduces the attitudes of husbands toward hitting or beating their wives for neglecting children. Specifically, husbands in CT beneficiary households demonstrate a nearly 12% reduction in attitudes that justify hitting or beating their wives for neglecting children. This result is in harmony with the result by Chzhen *et al.* (2021), who found that cash transfers increased gender-equitable attitudes.

Though it's not statistically significant, the negative sign of the coefficient of CT on other PDV attitude measures (indicators), except the attitude of justifying hitting a wife for going out without

their awareness, also confirms the role of cash transfer in reducing attitude towards justifying of hitting or beating the wife. This might happen due to several reasons. According to expressive violence theory, for example, cash transfers may improve the income and bargaining power of women, which makes violence cost for men. This is in harmony with the TPB, which states that the attitude of the person toward a behaviour is based on how they evaluate their outcome (consequence) (Abildso *et al.*, 2018). This means that since cash transfers can provide economic independence to the recipient, the perpetrator of violence may recognize that the consequence could be very costly (potentially leading to separation). In addition, access to cash may reduce financial stress and related causes of violence within the household.

The result in Table 4.6 also shows that cash-beneficiary households with empowered women (i.e., in the joint or combined effect) increase their attitude towards hitting or beating wives for neglecting children. The result shows that respondents in cash transfer and empowered women households have 4.5% higher attitudes towards hitting or beating a wife for neglecting children. Similar to the cash transfer, theories also documented a paradoxical effect of women's empowerment on intra-household violence. According to theories, women's empowerment can increase or decrease PDV, depending on situations or contexts. As an example, according to backlash and expressive violence theory, disruptions in traditional power dynamics and women empowerment (greater autonomy of women) may make men feel their authority or masculinity is being threatened and make them act violently to restore their traditional status. Eggers & Steinert (2022) and Schuler *et al.* (2018) also argued that empowered women may become more aware of their rights and challenge traditional roles, which causes the men to react with hostility. On the other hand, empowered women may develop a better way of treating their husbands and a peaceful way of conflict resolution, which improves the IPV attitude of the husband (Singh *et al.*, 2012; Schuler and Nazneen, 2018; Gautam and Jeong, 2019).

From the baseline regression (Table 4.6), we may conclude that cash transfer can reduce attitudes towards violence while women empowerment separately and jointly can increase violence. The effect of public interventions on household welfare, however, may vary depending on the contexts, such as demographic, socioeconomic, and institutional factors, as well as gender attitudes. Hence, a more comprehensive analysis that includes a possible moderator variable that can influence the direction and amplify or reduce the magnitude of the effect of the interest variables (intervention) on the outcome variables is necessary.

Table 4.6 Effect of CT and WE on attitude to PDV: Baseline model

Variables	(1)		(2)		(3)		(4)		(5)	
	Coefficients	Marginal effects	coefficients	Marginal effects	coefficients	Marginal effects	coefficients	Marginal effects	coefficients	Marginal effects
CT	0.061 (0.189)	0.018 (0.056)	-0.404** (0.190)	-0.118** (0.055)	-0.225 (0.191)	-0.058 (0.049)	-0.370 (0.229)	-0.081 (0.050)	-0.275 (0.237)	-0.056 (0.048)
WE	-0.136 (0.155)	-0.040 (0.045)	-0.103 (0.152)	-0.030 (0.044)	0.244 (0.155)	0.063 (0.040)	0.098 (0.174)	0.021 (0.038)	0.195 (0.181)	0.039 (0.036)
CT*WE	0.517 (0.472)	0.152 (0.139)	1.524*** (0.472)	0.045*** (0.134)	0.668 (0.492)	0.172 (0.126)	0.859 (0.571)	0.187 (0.124)	0.927 (0.612)	0.187 (0.123)
Constant	-0.764*** (0.061)		-0.764*** (0.060)		-0.980*** (0.072)		-1.109*** (0.081)		-1.221*** (0.094)	
Obs.	1243		1243		1243		1243		1243	

Notes: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Robust standard errors in parentheses clustered at household level. Column 1 is the result for attitude towards: hitting or beating a wife for going out without telling her husband; column 2 is for hitting or beating a wife for neglecting children; column 3 is for the hitting or beating a wife for arguing; column 4 is for hitting or beating a wife for refusing sex; column 5 is for hitting or beating a wife for burning food.

Table 4.7 presents a more compressive analysis, including possible moderator factors, which can provide more robust estimates. The direction of the individual and joint effect of CT and WE remain the same as in our baseline result. In addition, by including possible confounding factors, the individual and joint effects of the interventions become more significant, underscoring the importance of considering confounding factors (covariates). After accounting for possible covariates, CT was found to reduce attitude to hit and beat wives for neglecting children and going out by 19.7% and 37.4%, respectively. The direction and significance of cash transfer through women's empowerment and the independent effect of women's empowerment remain the same (positive).

The effect of CT was found to reduce attitudes towards PDV even after considering other possible explanatory (moderator) variables, particularly hitting or beating wives for going outside without the awareness of the husbands and burning food by nearly 4% and 3%, respectively. The individual effect of women empowerment remains positive by including more covariates. Husbands in empowered women households were found to have a higher attitude towards hitting or beating their wives for arguing with them and burning food by 15% and 11.6%, respectively, than husbands in households with non-empowered wives. The joint effect of cash transfer and women's empowerment remains positive. They jointly found an increase in the attitude of husbands to hit or beat their wives by 38.9% and 45.7% for neglecting children and arguing with them, respectively. So, in this regard, it is not the cash transfer that mainly drives the result in favour of PDV but the empowerment status of the women. This may be due to the reason that given the awareness of the husband remaining the same, working on women's empowerment may lead to disruption of the existing traditional gender norms and roles. It, in turn, may lead to confrontation and violence between spouses. In other words,

focusing solely on women's empowerment will not be enough to eliminate patriarchy or masculinity in husbands.

Demographic factors such as household type, children under five and economic factors such as having jobs outside the home and food insecurity have significant effects towards PDV. Having under-five age children increases the attitude of husbands to hit or beat their wives for going out without their awareness and arguing with them by 13.4% and 11.3%, respectively. The positive effect of having under-five-age children may have several explanations. On the one hand, having children under five may increase financial and economic stress, possibly increasing economic stress-related violence. On the other hand, given the common gender roles in Ethiopia in which women are expected to take care of children, having children under five means more responsibility for women, where the husband may expect the wife to be more home-bound and focused on caregiving for children, which make hitting or beating the wife justifiable. However, the negative effect of food insecurity on husbands' attitudes towards PDV is not expected. This might be because food-insecure households have fewer resources to control, which reduces the desire (attitude) of the husbands to control resources violently. In addition, others also argued that under a certain cultural context, extreme poverty may increase collaboration and solidarity. Extreme poverty and scarcity may also force the family to cooperate and share resources as a survival strategy (Kochuyt, 2004; Roca-Puig, Beltrán-Martín and García-Juan, 2021).

In the first part of the analysis (meta-analysis), we have discussed that complementary interventions are the main sources of heterogeneity among primary studies. Besides various demographic and socioeconomic factors and intra-household relationships, complementary interventions are expected to have a more pronounced moderator effect on the effect of main interventions. To account for the effect of complementary interventions, we controlled other interventions and treatments such as in-kind transfer and various trainings. The impact of in-kind transfers on intra-household violence is context-dependent. On one hand, if it helps to reduce the financial stress of the household, it could help to decrease violence. On the other hand, access to a resource, particularly by women, may reinforce existing gender dynamics and potentially increase the risk of violence. In addition, having in-kind transfer means having more resources to control, which may make the husband act violently to control it. In line with the second argument, in-kind transfer increased attitude towards PDV.

The reduced effect of access to training may be due to its effect on changing gender norms and attitudes, as most training interventions include gender equality and behaviour change communication (BCC) sessions (Roy *et al.*, 2019). In general, from our baseline as well as the main model, we can conclude that cash transfer helps to reduce attitudes towards PDV, which is in harmony with our meta-analysis. However, women empowerment jointly with cash transfers was



found to increase attitudes of husbands to hit or beat their wives, particularly for neglecting children and arguing with the husband.

Table 4.7 The effect CT and WE on PDV: Main model

Variables	(1)		(2)		(3)		(4)		(5)	
	Coefficients	Marginal effects	Coefficients	Marginal effects	Coefficients	Marginal effects	Coefficients	Marginal effects	Coefficients	Marginal effects
CT	-0.112 (0.358)	-0.032 (0.101)	-0.872* (0.482)	-0.197* (0.105)	-1.804** (0.879)	-0.374** (0.153)	-0.474 (0.490)	-0.088 (0.071)	-0.695 (0.447)	-0.123 (0.076)
WE	0.426 (0.289)	0.120 (0.075)	0.506 (0.344)	0.115 (0.075)	0.721* (0.370)	0.150* (0.069)	0.473 (0.434)	0.088 (0.057)	0.657* (0.397)	0.116* (0.061)
CT*WE	0.153 (0.620)	0.043 (0.175)	1.720** (0.759)	0.389** (0.162)	2.203* (1.224)	0.457* (0.228)	-0.160 (0.445)	-0.030 (0.081)	0.291 (0.580)	0.051 (0.104)
Household type	-0.0114 (0.009)	-0.003 (0.003)	-0.0212** (0.010)	-0.005** (0.002)	-0.0167* (0.010)	-0.004 (0.002)	0.000 (0.009)	0.001 (0.002)	-0.009 (0.009)	-0.002 (0.002)
Children under age five	0.475** (0.216)	0.134** (0.044)	0.201 (0.195)	0.046 (0.043)	0.547** (0.219)	0.113** (0.037)	0.490 (0.327)	0.091 (0.032)	0.259 (0.194)	0.046 (0.033)
Within working age [25-65]	-0.0545 (0.579)	-0.015 (0.163)	0.508 (0.719)	0.115 (0.161)	0.648 (0.856)	0.134 (0.174)	-0.749 (0.707)	-0.139 (0.110)	0.313 (0.712)	0.055 (0.126)
Food insecurity	-0.0453 (0.0355)	-0.013 (0.009)	-0.0763* (0.039)	-0.017* (0.008)	-0.114** (0.050)	-0.024** (0.008)	-0.110 (0.085)	-0.020 (0.008)	-0.040 (0.040)	-0.007 (0.007)
Access to training	-0.155 (0.237)	-0.044 (0.064)	-0.545* (0.293)	-0.121 (0.060)	-0.019 (0.295)	-0.004 (0.061)	-0.112 (0.324)	-0.021 (0.055)	-0.391 (0.297)	-0.069 (0.048)
Who received the training	0.465** (0.204)	0.131** (0.048)	0.263 (0.223)	0.059 (0.049)	0.155 (0.223)	0.032 (0.045)	0.177 (0.227)	0.033 (0.038)	0.061 (0.223)	0.011 (0.039)
In-kind	0.387** (0.187)	0.109** (0.042)	0.191 (0.197)	0.043 (0.043)	0.045 (0.187)	0.009 (0.039)	0.190 (0.247)	0.035 (0.035)	-0.026 (0.194)	-0.005 (0.034)
Respect	0.35 (0.313)	0.099 (0.088)	0.579* (0.331)	0.131 (0.075)	0.652 (0.401)	0.135 (0.080)	0.352 (0.484)	0.065 (0.080)	0.274 (0.402)	0.048 (0.072)
Trust	-0.107 (0.250)	-0.030 (0.069)	-0.249 (0.283)	-0.056 (0.063)	-0.040 (0.261)	-0.008 (0.054)	0.311 (0.316)	0.058 (0.051)	0.019 (0.299)	0.003 (0.053)
Disagreement comfort	-0.008 (0.086)	-0.002 (0.024)	-0.0254 (0.098)	-0.006 (0.022)	0.029 (0.089)	0.006 (0.018)	-0.069 (0.100)	-0.013 (0.016)	0.029 (0.091)	0.005 (0.016)
Jobs outside home	0.523* (0.309)	0.148* (0.090)	0.885** (0.371)	0.200 (0.081)	0.167 (0.425)	0.035 (0.089)	-0.176 (0.468)	-0.033 (0.080)	-0.313 (0.423)	-0.055 (0.073)
Constant	21.37 (16.56)		40.50** (20.11)		30.67 (19.43)		-1.43 (17.53)		15.26 (18.56)	
N	391	391	391	391	391	391	391	391	391	391

Notes: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Robust standard errors in parentheses clustered at the household level. Column 1 is the result of attitude towards hitting or beating a wife for going out without telling her husband; column 2 is for hitting or beating a wife for neglecting children; column 3 is for hitting or beating a wife for arguing; column 4 is for hitting or beating a wife for refusing sex; column 5 is for hitting or beating a wife for burning food.

#### 4.2.3. Applying the estimated women empowerment in the agricultural index (A\_WEAI)

So far, we followed the study by Hillesland *et al.* (2022), which documented that all respondents under UNJP-RWEE were empowered in all domains and indicators except some indicators of instrumental agency, such as work balance. Considering that all women under the programme are

empowered, however, may raise a concern. For example, the study provides only the average effect of the programme on women's empowerment, which may not have the same impact on each household (women). Hence, an empowerment measure that can provide each woman's empowerment status should be considered. To resolve this concern and validate our previous results, we re-estimated our main model (Table 4.7) using the abbreviated women empowerment in the agricultural index (A\_WEAI) (please refer to Appendix Table A3 for more information).

The regression result using A\_WEAI, presented in Table 4.8, is similar to our baseline model results. In addition, except that the effect of interventions becomes less significant in some indicators, the result is almost similar to our main results, which all validate our results. In sum, our result using the estimated A\_WEAI validates our previous generalization that cash transfer helps reduce attitudes towards PDV. The direction of the separate and joint effect of women's empowerment remains the same with our previous results.

Table 4.8 Effect of CT and WE on PDV: Applying A\_WEAI

VARIABLES	(1)		(2)		(3)		(4)		(5)	
	coefficients	Marginal effects	coefficients	Marginal effects	coefficients	Marginal effects	coefficients	Marginal effects	coefficients	Marginal effects
CT	-1.299 (1.388)	-0.382 (0.407)	-4.409*** (1.391)	0.288*** (0.089)	-1.980 (1.440)	-0.060 (0.369)	-2.628 (1.681)	-0.573 (0.365)	-2.711 (1.786)	-0.548 (0.359)
WE	-0.516 (0.588)	-0.152 (0.172)	-0.390 (0.577)	-0.114 (0.168)	0.925 (0.590)	0.238 (0.152)	0.371 (0.662)	0.081 (0.144)	0.740 (0.685)	0.145 (0.138)
CT*WE	1.963 (1.793)	0.577 (0.525)	5.782*** (1.791)	0.689*** (1.013)	2.533 (1.868)	0.652 (0.479)	3.259 (2.165)	0.711 (0.470)	3.516 (2.321)	0.710 (0.466)
Constant	-0.407 (0.439)		-0.493 (0.432)		-1.621*** (0.447)		-1.366*** (0.465)		-1.734*** (0.526)	
Observations	1243		1243		1243		1243		1243	

Notes: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Robust standard errors in parentheses clustered at the household level. Column 1 is the result of attitude towards hitting or beating a wife for going out without telling her husband; column 2 is for hitting or beating a wife for neglecting children; column 3 is for hitting or beating a wife for arguing; column 4 is for hitting or beating a wife for refusing sex; column 5 is for hitting or beating a wife for burning food.

### 4.3. Robustness check

Estimating a probit model with interaction terms may raise a concern, particularly related to the non-linear nature of the model, making the interpretation of interaction effects challenging and potentially leading to biased estimates due to multicollinearity or misspecification. To address these issues, we conducted a further analysis using the difference in difference (DID) model (Table 4.9). The DID model also resembles our previous results and confirms our previous generalization that cash transfer and women empowerment were separately found to reduce and increase the attitude to PDV, respectively. The positive impact of their joint effect was also validated.

Table 4.9 The effect of CT and WE on attitude towards IPV: DID results

	(1)	(2)	(3)	(4)	(5)
year	-	-	-	-	-
	0.049***	0.063***	0.053***	0.047***	0.036***
	(0.011)	(0.011)	(0.010)	(0.009)	(0.009)
CT	-0.0189	0.0235	-0.0044	-0.0466	0.0684
	(0.059)	(0.067)	(0.059)	(0.049)	(0.061)
WE	0.0686*	0.0657*	0.0212	0.038	0.0533*
	(0.036)	(0.038)	(0.033)	(0.032)	(0.031)
CT*WE	0.0748	-0.184*	-0.0087	0.16	-0.129
	(0.117)	(0.094)	(0.097)	(0.109)	(0.092)
CT*post	-0.021	-0.109	-0.0582	-0.0445	-0.156**
	(0.081)	(0.081)	(0.078)	(0.056)	(0.066)
WE*post	0.178***	0.136***	0.159***	0.0733*	0.0621
	(0.048)	(0.048)	(0.046)	(0.042)	(0.039)
CT*WE*post	0.0811	0.388***	-0.0042	-0.138	0.172
	(0.168)	(0.147)	(0.141)	(0.132)	(0.107)
_cons	99.58***	127.7***	107.9***	94.00***	73.29***
	(22.55)	(22.13)	(20.87)	(19.51)	(18.58)
N	1166	1166	1166	1166	1166

Notes: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Robust standard errors in parentheses clustered at the household level. Column 1 is the result of attitude towards hitting or beating a wife for going out without telling her husband; column 2 is for hitting or beating a wife for neglecting children; column 3 is for hitting or beating a wife for arguing; column 4 is for hitting or beating a wife for refusing sex; column 5 is for hitting or beating a wife for burning food. The same control variables from our main analysis (Table 4.7) are used.

#### 4.4. Limitations

This study is not without limitations. We identified three limitations that future researchers can consider. In the meta-analysis part, we only included peer-reviewed articles, assuming that the review process potentially advances the methodological quality of the reported estimates. However, this restricted approach may not cover the overall picture of the available research. As a result, we are not able to address, for instance, whether reported estimates are systematically different between peer-reviewed and unpublished or working papers. The other limitation of our meta-analysis is regarding the inclusion of only UCT. While CCT requires unique modelling and separate investigation due to its behavioural conditions, including CCT could potentially enhance the findings on this issue. The last limitation of the study we identified is related to the second part of the analysis (the quasi-experimental). As previously mentioned, very few beneficiaries received the treatment before the baseline survey. Although we developed an appropriate model to address this issue, in principle, it should not happen.

## Chapter 5: Conclusions and Policy Implications

The role of social protections, particularly CTs, has been attracting substantial policy and academic attention. They are pivotal and linked to various goals in the 2030 SDGs. Their role in enhancing various welfare outcomes of the household, including reducing extreme poverty, has been repeatedly demonstrated. However, their unintended effect on intra-household instability and intimate partner violence, in particular, is overlooked. Existing theories on the impact of social protections, CTs in particular on intra-household violence predict ambiguous effects. The existing ample empirical evidence also documented contradicting findings.

Recognizing these concerns, we conducted a meta-analysis on the effect of social assistance programmes, particularly UCT, on IPV to reconcile the conflicting findings. We have systematically reviewed peer-reviewed empirical studies published until August 2024, which provide 394 estimates from 15 studies. About two-fifths of the reported estimates find a negative and insignificant effect of UCT on IPV. However, almost one-fourth of the reported estimate shows a contrasting effect, positive but insignificant. Most importantly, about 28% of the findings support the beneficial effect of cash transfers on IPV. In sharp contrast, cash transfer enhanced IPV, though only in 8% of the reported estimates. The result from the multivariate MRA shows that UCT helps to reduce IPV. Specifically, it shows that after controlling for publication bias and possible sources of heterogeneity, UCT reduced IPV on average by 85.6%.

In addition to the contrasting existing empirical results, most of the theories and empirical studies recognized that the main mechanism for the impact of social protections on IPV is women's empowerment. However, none shows the joint effect of social protections, particularly CT and women's empowerment, on IPV. Hence, the second aim of this study is to evaluate the joint effect of CT and WE on IPV using the UNJP-RWEE programme in Ethiopia. In harmony with the meta-result, UCT was also found to reduce attitudes towards IPV, particularly PDV. This result supports the absolute resource (stress) theory, which argues that cash transfer reduces IPV by reducing financial or economic stress and related violence. It is also consistent with the side argument of expressive violence theory, which argues that enhancing the economic independence of the women increases the chance of separation if the husband makes a violent may force the husband to decrease violence. Women empowerment was independently and jointly with UCT found to increase the attitude towards hitting or beating a wife. The favourable impact of women empowerment on attitude towards IPV, PDV in particular, is consistent with the status inconsistency (backlash) theory argument that women empowerment may enhance the bargaining power of women, which enables them to challenge the traditional gender roles and masculinity hegemonic in which men are expected

to take the leading role in the household decision making. This may make the men feel their traditional status threatened, and they may act violently to restore their traditional status.

Overall, the result suggests that the increasing effect of IPV is primarily driven by women's empowerment. The result suggests that focusing solely on women's economic empowerment will not be enough to eliminate patriarchy or masculinity in husbands, which are the main causes of intrahousehold violence. Rather, working on women's empowerment, given the awareness of the husband remaining the same, may lead to disruption of the existing traditional gender norms and roles and increase confrontation and violence between spouses. Thus, policymakers and development agents working to enhance household welfare by enhancing women's empowerment should reconsider the possible trade-off between women's empowerment and intra-household violence. Hence, they should not only focus on empowering women but also develop and include packages to enhance the awareness of male spouses and the community related to existing masculinity hegemony and gender roles. By uniquely integrating two valuable methodologies - meta-analysis and the quasi-experimental examination, for instance, informing on how best to design the empirical strategy of the quasi-experimental approach from the heterogeneity analysis of the meta-analysis. In the same way, this approach of combining meta-analysis and the quasi-experimental examination also provides guidelines on how the empirical approach of future studies on the topic should be best designed. Furthermore, it can serve as an example for future researchers in various fields, for instance, in economics, public health and others, providing more reliable results which can be generalized across different socio-economic and cultural contexts by combining and utilizing those two methodologies which can complement each other.

## References

- Abildso, C.G. *et al.* (2018) 'Evaluation of an Intimate Partner Violence Training for Home Visitors Using the Theory of Planned Behavior', *Health Promotion Practice*, 19(2), pp. 194–202. Available at: <https://doi.org/10.1177/1524839917728050>.
- Addison, T. and Murshed, S.M. (eds) (2006) *The social contract and violent conflict*. Oxford: Currey.
- Afesorgbor, S.K. and Demena, B.A. (2022) 'Trade Openness and Environmental Emissions: Evidence from a Meta-Analysis', *Environmental and Resource Economics*, 81(2), pp. 287–321. Available at: <https://doi.org/10.1007/s10640-021-00627-0>.
- Afesorgbor, S.K., Fiankor, D.-D.D. and Demena, B.A. (2024) 'Do regional trade agreements affect agri-food trade? Evidence from a meta-analysis', *Applied Economic Perspectives and Policy*, 46(2), pp. 737–759. Available at: <https://doi.org/10.1002/aepp.13410>.
- Ajzen, I. (2011) 'The theory of planned behaviour: Reactions and reflections', *Psychology & Health*, 26(9), pp. 1113–1127. Available at: <https://doi.org/10.1080/08870446.2011.613995>.
- Alemu, M. *et al.* (2024) 'Productivity and efficiency heterogeneity among maize smallholder farmers in Ethiopia', *Cogent Food & Agriculture*, 10(1), p. 2300191. Available at: <https://doi.org/10.1080/23311932.2023.2300191>.
- Alemu, M. (2024) 'Social Protections and Child Work: Empirical Evidence from the Indonesian Unconditional Cash Transfer Program'. Available at: Submitted to Erasmus University of Rotterdam.
- Alkire, S. *et al.* (2013) 'The Women's Empowerment in Agriculture Index', *World Development*, 52, pp. 71–91. Available at: <https://doi.org/10.1016/j.worlddev.2013.06.007>.
- Angelucci, M. and Heath, R. (2020) 'Women Empowerment Programs and Intimate Partner Violence', *AEA Papers and Proceedings*, 110, pp. 610–614. Available at: <https://doi.org/10.1257/pandp.20201047>.
- Apps, P.F. and Rees, R. (2007) 'Cooperative Household Models', *SSRN Electronic Journal* [Preprint]. Available at: <https://doi.org/10.2139/ssrn.1032105>.
- Backer, L.C. (2001) 'The Extra-National State: American Confederate Federalism and the European Union', *Columbia Journal of European Law*, 7(2), pp. 173–240.
- Baland, J.-M. and Ziparo, R. (2018) 'Intra-Household Bargaining in Poor Countries', in S. Anderson, L. Beaman, and J.-P. Platteau (eds) *Towards Gender Equity in Development*. Oxford University Press, p. 0. Available at: <https://doi.org/10.1093/oso/9780198829591.003.0004>.
- Baranov, V. *et al.* (2020) 'Theoretical Underpinnings and Meta-analysis of the Effects of Cash Transfers on Intimate Partner Violence in Low- and Middle-Income Countries', *The Journal of Development Studies*, 57(1), pp. 1–25. Available at: <https://doi.org/10.1080/00220388.2020.1762859>.
- Bethmann, D. and Kvasnicka, M. (2011) 'The institution of marriage', *Journal of Population Economics*, 24(3), pp. 1005–1032. Available at: <https://doi.org/10.1007/s00148-010-0312-1>.
- Bom, P.R.D. and Rachinger, H. (2019) 'A kinked meta-regression model for publication bias correction', *Research Synthesis Methods*, 10(4), pp. 497–514. Available at: <https://doi.org/10.1002/jrsm.1352>.
- Browning, M., Chiappori, P.-A. and Lechene, V. (2006) 'Collective and Unitary Models: A Clarification', *Review of Economics of the Household*, 4(1), pp. 5–14. Available at: <https://doi.org/10.1007/s11150-005-6694-2>.
- Buller, A.M. *et al.* (2018) 'A Mixed-Method Review of Cash Transfers and Intimate Partner Violence in Low- and Middle-Income Countries', *The World Bank Research Observer*, 33(2), pp. 218–258. Available at: <https://doi.org/10.1093/wbro/lky002>.
- Cacheux, J.L. (2005) *Sharing and choosing within the household: A survey*. Working Paper EM11/05. EUROMOD Working Paper. Available at: <https://www.econstor.eu/handle/10419/68969> (Accessed: 10 July 2024).
- Campos, A.P. and Kaaria, S. (2016) *Ethiopia - Baseline Survey for the Impact Evaluation of the UN Joint Program Rural Women Economic Empowerment in Ethiopia, 2016*. Available at: <https://microdata.fao.org/index.php/catalog/2030> (Accessed: 3 June 2024).

- Campos, A.P. and Kaaria, S. (2019) *Ethiopia - End-line Survey for the Impact Evaluation of the UN Joint Program Rural Women Economic Empowerment in Ethiopia 2019*. Available at: <https://microdata.worldbank.org/index.php/catalog/5753/study-description> (Accessed: 14 May 2024).
- Chandra-Mouli, V. (2012) 'Interrupting Intimate Partner Violence in Developing Countries', *Journal of Adolescent Health*, 50(5), pp. 427–428. Available at: <https://doi.org/10.1016/j.jadohealth.2012.03.002>.
- Chiappori, P. and Donni, O. (2009) 'Non-unitary models of household behavior: a survey of the literature'.
- Chzhen, Y. *et al.* (2021) 'Impacts of a Cash Plus Intervention on Gender Attitudes Among Tanzanian Adolescents', *Journal of Adolescent Health*, 68(5), pp. 899–905. Available at: <https://doi.org/10.1016/j.jadohealth.2020.07.025>.
- Clarke, D. (2014) 'General-to-Specific Modeling in Stata', *The Stata Journal*, 14(4), pp. 895–908. Available at: <https://doi.org/10.1177/1536867X1401400412>.
- Dasgupta, S. (2019) 'Attitudes About Wife-Beating and Incidence of Domestic Violence in India: An Instrumental Variables Analysis', *Journal of Family and Economic Issues*, 40(4), pp. 647–657. Available at: <https://doi.org/10.1007/s10834-019-09630-6>.
- Demena, B.A. (2015) 'Publication bias in FDI spillovers in developing countries: a meta-regression analysis', *Applied Economics Letters*, 22(14), pp. 1170–1174. Available at: <https://doi.org/10.1080/13504851.2015.1013604>.
- Demena, B.A. (2017) 'Essays on intra-industry spillovers from FDI in developing countries: A firm-level analysis with a focus on Sub-Saharan Africa'. Available at: <https://repub.eur.nl/pub/100337/Thesis-Binyam.pdf> (Accessed: 3 June 2024).
- Demena, B.A. (2024a) 'Does export promotion enhance firm-level intensive margin of exports? Evidence from a meta-regression analysis', *Journal of Asian Business and Economic Studies*, ahead-of-print(ahead-of-print). Available at: <https://doi.org/10.1108/JABES-10-2023-0412>.
- Demena, B.A. (2024b) 'Publication bias in export promotion impact on export market entry: evidence from a meta-regression analysis', *Applied Economics Letters*, 0(0), pp. 1–6. Available at: <https://doi.org/10.1080/13504851.2024.2306185>.
- Demena, B.A. and Afesorgbor, S.K. (2020) 'The effect of FDI on environmental emissions: Evidence from a meta-analysis', *Energy Policy*, 138, p. 111192. Available at: <https://doi.org/10.1016/j.enpol.2019.111192>.
- Demena, B.A. and van Bergeijk, P.A.G. (2017) 'A Meta-Analysis of Fdi and Productivity Spillovers in Developing Countries', *Journal of Economic Surveys*, 31(2), pp. 546–571. Available at: <https://doi.org/10.1111/joes.12146>.
- Demena, B.A., Floridi, A. and Wagner, N. (2022) *The Short-Term Impact of COVID-19 on Labour Market Outcomes: Comparative Systematic Evidence* | SpringerLink. Available at: [https://link.springer.com/chapter/10.1007/978-3-030-82339-9\\_6](https://link.springer.com/chapter/10.1007/978-3-030-82339-9_6) (Accessed: 19 October 2024).
- Dietrich, J. (2008) 'Testing unitary and bargaining models of Chinese household food consumption', *Applied Financial Economics*, 18(5), pp. 397–410. Available at: <https://doi.org/10.1080/09603100500399134>.
- Dillon, G. *et al.* (2013) 'Mental and Physical Health and Intimate Partner Violence against Women: A Review of the Literature', *International Journal of Family Medicine*, 2013(1), p. 313909. Available at: <https://doi.org/10.1155/2013/313909>.
- Dixon, W.J. and Yuen, K.K. (1974) 'Trimming and winsorization: A review', *Statistische Hefte*, 15(2), pp. 157–170. Available at: <https://doi.org/10.1007/BF02922904>.
- Donni, O. and Molina, J.A. (2018) 'Household Collective Models: Three Decades of Theoretical Contributions and Empirical Evidence', *SSRN Electronic Journal* [Preprint]. Available at: <https://doi.org/10.2139/ssrn.3286175>.
- Donni, O. and Ponthieux, S. (2011) 'Economic Approaches to Household Behavior: From the Unitary Model to Collective Decisions', *Travail, genre et societes*, 26(2), pp. 67–83.

- Doucouliafos, H. and Laroche, P. (2009) 'Unions and Profits: A Meta-Regression Analysis', *Industrial Relations: A Journal of Economy and Society*, 48(1), pp. 146–184. Available at: <https://doi.org/10.1111/j.1468-232X.2008.00549.x>.
- Doucouliafos, H. and Stanley, T.D. (2009) 'Publication Selection Bias in Minimum-Wage Research? A Meta-Regression Analysis', *British Journal of Industrial Relations*, 47(2), pp. 406–428. Available at: <https://doi.org/10.1111/j.1467-8543.2009.00723.x>.
- Eggers, I. and Steinert, J.I. (2022) 'The Effect of Female Economic Empowerment Interventions on the Risk of Intimate Partner Violence: A Systematic Review and Meta-Analysis', *Trauma, Violence, & Abuse*, 23(3), pp. 810–826. Available at: <https://doi.org/10.1177/1524838020976088>.
- Fernández-Castilla, B. *et al.* (2020) 'The application of meta-analytic (multi-level) models with multiple random effects: A systematic review', *Behavior Research Methods*, 52(5), pp. 2031–2052. Available at: <https://doi.org/10.3758/s13428-020-01373-9>.
- Fiala, N. and He, X. (2017) 'Unitary or Noncooperative Intrahousehold Model? Evidence from Couples in Uganda', *The World Bank Economic Review*, 30(Supplement\_1), pp. S77–S85. Available at: <https://doi.org/10.1093/wber/lhw011>.
- Floridi, A., Demena, B.A. and Wagner, N. (2022) 'A game worth the candle? meta-analysis of the effects of formalization on firm performance', *Journal of Developmental Entrepreneurship*, 27(04), p. 2250026. Available at: <https://doi.org/10.1142/S1084946722500261>.
- Fortin, B. and Lacroix, G. (1997) 'A Test of the Unitary and Collective Models of Household Labour Supply', *The Economic Journal*, 107(443), pp. 933–955.
- Fox, G.L. *et al.* (2002) 'Economic Distress and Intimate Violence: Testing Family Stress and Resources Theories', *Journal of Marriage and Family*, 64(3), pp. 793–807. Available at: <https://doi.org/10.1111/j.1741-3737.2002.00793.x>.
- Franklin, C.A. and Menaker, T.A. (2014) 'Feminism, Status Inconsistency, and Women's Intimate Partner Victimization in Heterosexual Relationships', *Violence Against Women*, 20(7), pp. 825–845. Available at: <https://doi.org/10.1177/1077801214543385>.
- Frieze, I.H. and Browne, A. (1989) 'Violence in Marriage', *Crime and Justice*, 11, pp. 163–218. Available at: <https://doi.org/10.1086/449154>.
- García, A.B. and Gruat, J.V. (2003) 'A Life Cycle Continuum Investment For Social Justice, Poverty Reduction And Sustainable Development', *Social protection* [Preprint].
- Gautam, S. and Jeong, H.-S. (2019) *Intimate Partner Violence in Relation to Husband Characteristics and Women Empowerment: Evidence from Nepal - PMC*. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6427227/> (Accessed: 16 September 2024).
- Gentilini, U. and Omamo, S.W. (2011) 'Social protection 2.0: Exploring issues, evidence and debates in a globalizing world', *Food Policy*, 36(3), pp. 329–340. Available at: <https://doi.org/10.1016/j.foodpol.2011.03.007>.
- Gilligan, D.O., Devereux, S. and Tenzing, J. (2022) 'Social protection: Designing adaptive systems to build resilience to climate change'. Available at: <https://hdl.handle.net/10568/126898> (Accessed: 17 May 2024).
- Goldfarb, R.S. (1995) 'The economist-as-audience needs a methodology of plausible inference', *Journal of Economic Methodology*, 2(2), pp. 201–222. Available at: <https://doi.org/10.1080/13501789500000015>.
- Gordon, W. (2011) 'Behavioural Economics and Qualitative Research – A Marriage Made in Heaven?', *International Journal of Market Research*, 53(2), pp. 171–185. Available at: <https://doi.org/10.2501/IJMR-53-2-171-186>.
- Hahn, J. and Hausman, J. (2002) 'A New Specification Test for the Validity of Instrumental Variables', *Econometrica*, 70(1), pp. 163–189. Available at: <https://doi.org/10.1111/1468-0262.00272>.
- Havráněk, T. *et al.* (2020) 'Reporting Guidelines for Meta-Analysis in Economics', *Journal of Economic Surveys*, 34(3), pp. 469–475. Available at: <https://doi.org/10.1111/joes.12363>.



- Havranek, T. and Irsova, Z. (2012) 'Survey Article: Publication Bias in the Literature on Foreign Direct Investment Spillovers', *The Journal of Development Studies*, 48(10), pp. 1375–1396. Available at: <https://doi.org/10.1080/00220388.2012.685721>.
- Hendry, D.F. (2024) 'A Brief History of General-to-specific Modelling', *Oxford Bulletin of Economics and Statistics*, 86(1), pp. 1–20. Available at: <https://doi.org/10.1111/obes.12578>.
- Herrenkohl, T.I. et al. (2022) 'Child Maltreatment, Youth Violence, Intimate Partner Violence, and Elder Mistreatment: A Review and Theoretical Analysis of Research on Violence Across the Life Course', *Trauma, Violence, & Abuse*, 23(1), pp. 314–328. Available at: <https://doi.org/10.1177/1524838020939119>.
- Hidrobo, M. and Fernald, L. (2013) 'Cash transfers and domestic violence', *Journal of Health Economics*, 32(1), pp. 304–319. Available at: <https://doi.org/10.1016/j.jhealeco.2012.11.002>.
- Hillesland, M. et al. (2022) 'Does a joint United Nations microfinance “plus” program empower female farmers in rural Ethiopia? Evidence using the pro-WEAI', *World Development*, 156, p. 105909. Available at: <https://doi.org/10.1016/j.worlddev.2022.105909>.
- Hirvonen, K. (2023) 'Social protection: Adaptive safety nets for crisis recovery'. Available at: <https://cgspace.cgiar.org/items/c7f9c084-5a9e-4169-a850-7544da3672a1> (Accessed: 22 June 2024).
- Holzmann, R. and Jørgensen, S. (2001) 'Social Risk Management: A New Conceptual Framework for Social Protection, and Beyond', *International Tax and Public Finance*, 8(4), pp. 529–556. Available at: <https://doi.org/10.1023/A:1011247814590>.
- Hunter, J.P. et al. (2014) 'In meta-analyses of proportion studies, funnel plots were found to be an inaccurate method of assessing publication bias', *Journal of Clinical Epidemiology*, 67(8), pp. 897–903. Available at: <https://doi.org/10.1016/j.jclinepi.2014.03.003>.
- IFPRI, I.F.P.R. (2016) *Measuring women's empowerment in agriculture*. International Food Policy Research Institute. Available at: <https://www.jstor.org/stable/resrep46640> (Accessed: 22 January 2024).
- Jackson, D. (2006) 'The implications of publication bias for meta-analysis' other parameter', *Statistics in Medicine*, 25(17), pp. 2911–2921. Available at: <https://doi.org/10.1002/sim.2293>.
- Kayaoglu, A. (2022) 'Do Relative Status of Women and Marriage Characteristics Matter for the Intimate Partner Violence?', *Journal of Family Issues*, 43(8), pp. 2063–2086. Available at: <https://doi.org/10.1177/0192513X211030030>.
- Kieran, C. et al. (2018) 'A project under Gender, Agriculture, and Assets Program Phase Two (GAAP2): Developing Project-Level Indicators to Measure Women's Empowerment'.
- Kochuyt, T. (2004) 'Giving Away One's Poverty. on the Consumption of Scarce Resources within the Family', *The Sociological Review*, 52(2), pp. 139–161. Available at: <https://doi.org/10.1111/j.1467-954X.2004.00462.x>.
- Kothari, R., Husain, Z. and Dutta, M. (2023) 'Understanding the Geography of Victimization: A Spatial Analysis of Intimate Partner Violence in India', *Journal of Interpersonal Violence*, 38(5–6), pp. 4970–4997. Available at: <https://doi.org/10.1177/08862605221120898>.
- Krolzig, H.-M. and Hendry, D.F. (2001) 'Computer automation of general-to-specific model selection procedures', *Journal of Economic Dynamics and Control*, 25(6), pp. 831–866. Available at: [https://doi.org/10.1016/S0165-1889\(00\)00058-0](https://doi.org/10.1016/S0165-1889(00)00058-0).
- Labrecque, J. and Swanson, S.A. (2018) 'Understanding the Assumptions Underlying Instrumental Variable Analyses: a Brief Review of Falsification Strategies and Related Tools', *Current Epidemiology Reports*, 5(3), pp. 214–220. Available at: <https://doi.org/10.1007/s40471-018-0152-1>.
- Lagdon, S., Armour, C. and Stringer, M. (2014) 'Adult experience of mental health outcomes as a result of intimate partner violence victimisation: a systematic review', *European Journal of Psychotraumatology*, 5(1), p. 24794. Available at: <https://doi.org/10.3402/ejpt.v5.24794>.
- Lecoutere, E. and Van Campenhout, B. (2023) 'Joint Forces: The Impact of Intrahousehold Cooperation on Welfare in East African Agricultural Households', *Feminist Economics*, 29(1), pp. 266–297. Available at: <https://doi.org/10.1080/13545701.2022.2120206>.

- Lekobane, K.R. and Ton, G. (2024) 'Does social protection reach those left behind: empirical evidence from Botswana using multidimensional poverty approaches', *Journal of Development Effectiveness*, 0(0), pp. 1–15. Available at: <https://doi.org/10.1080/19439342.2024.2355635>.
- Malapit, H. (2017) 'The Abbreviated Women's Empowerment in Agriculture Index (A-WEAI)'.
- Malapit, H. *et al.* (2019) 'Development of the project-level Women's Empowerment in Agriculture Index (pro-WEAI)', *World Development*, 122, pp. 675–692. Available at: <https://doi.org/10.1016/j.worlddev.2019.06.018>.
- Mane, E. and Kaaria, S. (2019) *Ethiopia - End-line Survey for the Impact Evaluation of the UN Joint Program Rural Women Economic Empowerment in Ethiopia 2019*. Available at: <https://microdata.worldbank.org/index.php/catalog/5753> (Accessed: 3 June 2024).
- Matteazzi, E., Menon, M. and Perali, F. (2017) 'The Collective Farm-household Model: Policy and Welfare Simulations', *Applied Economic Perspectives and Policy*, 39(1), pp. 111–153. Available at: <https://doi.org/10.1093/aep/ppw004>.
- McElroy, M.B. and Horney, M.J. (1981) 'Nash-Bargained Household Decisions: Toward a Generalization of the Theory of Demand', *International Economic Review*, 22(2), pp. 333–349. Available at: <https://doi.org/10.2307/2526280>.
- Mecheva, M. de V. *et al.* (2023) 'Behavioural and environmental risk factors associated with primary schoolchildren's overweight and obesity in urban Indonesia', *Public Health Nutrition*, 26(8), pp. 1562–1575. Available at: <https://doi.org/10.1017/S1368980023000897>.
- Mekasha, T.J. and Tarp, F. (2021) 'Understanding poverty dynamics in Ethiopia: Implications for the likely impact of COVID-19', *Review of Development Economics*, 25(4), pp. 1838–1868. Available at: <https://doi.org/10.1111/rode.12841>.
- Meyer, S.R. *et al.* (2024) 'Explaining intimate partner violence through economic theories: A systematic review and narrative synthesis', *Aggression and Violent Behavior*, 77, p. 101929. Available at: <https://doi.org/10.1016/j.avb.2024.101929>.
- Michaelidou, N. and Hassan, L. (2014) 'New advances in attitude and behavioural decision-making models', *Journal of Marketing Management*, 30(5–6), pp. 519–528. Available at: <https://doi.org/10.1080/0267257X.2014.884368>.
- Møen, J. and Thorsen, H.S. (2017) 'Publication Bias in the Returns to R&D Literature', *Journal of the Knowledge Economy*, 8(3), pp. 987–1013. Available at: <https://doi.org/10.1007/s13132-015-0309-9>.
- Mulema, A.A. *et al.* (2018) 'Understanding rural women's empowerment: A qualitative case study of the UNJP-RWEE project, Ethiopia'. Available at: <https://cgspace.cgiar.org/items/ce95cf88-5042-4760-af50-8895e2177f9e> (Accessed: 2 October 2024).
- Murshed, M.S. (2009) 'Conflict as the absence of contract', *The Economics of Peace and Security Journal*, 4(1). Available at: <https://doi.org/10.15355/epsj.4.1.32>.
- Murshid, N.S. and Zippay, A. (2017) 'Microfinance Participation and Marital Violence in Bangladesh: A Qualitative Inquiry', *Violence Against Women*, 23(14), pp. 1752–1770. Available at: <https://doi.org/10.1177/1077801216665480>.
- Nacka, M. (2019) 'The Abbreviated Women's Empowerment in Agriculture Index: An Application in The Republic of North Macedonia', *Journal of Agricultural, Food and Environmental Sciences, JAFES*, 73(2), pp. 70–78.
- Newey, W.K. and Powell, J.L. (2003) 'Instrumental Variable Estimation of Nonparametric Models', *Econometrica*, 71(5), pp. 1565–1578. Available at: <https://doi.org/10.1111/1468-0262.00459>.
- Nunes, K.L., Pedneault, C.I. and Hermann, C.A. (2022) 'Do Attitudes Toward Violence Affect Violent Behavior?', *Journal of Aggression, Maltreatment & Trauma*, 31(7), pp. 835–850. Available at: <https://doi.org/10.1080/10926771.2021.2019158>.
- Özler, B. *et al.* (2020) 'Girl Empower - A gender transformative mentoring and cash transfer intervention to promote adolescent wellbeing: Impact findings from a cluster-randomized controlled trial in Liberia', *SSM - population health*, 10, p. 100527. Available at: <https://doi.org/10.1016/j.ssmph.2019.100527>.

- Pace, N. *et al.* (2018) 'One Plus One can be Greater than Two: Evaluating Synergies of Development Programmes in Malawi', *The Journal of Development Studies*, 54(11), pp. 2023–2060. Available at: <https://doi.org/10.1080/00220388.2017.1380794>.
- Page, M.J. *et al.* (2021) 'PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews', *BMJ*, p. n160. Available at: <https://doi.org/10.1136/bmj.n160>.
- Palacios, R.J. and Robalino, D.A. (2020) 'Integrating Social Insurance and Social Assistance Programs for the Future World of Labor', *SSRN Electronic Journal* [Preprint]. Available at: <https://doi.org/10.2139/ssrn.3602434>.
- Ponce, J. and Bedi, A.S. (2010) 'The impact of a cash transfer program on cognitive achievement: The Bono de Desarrollo Humano of Ecuador', *Economics of Education Review*, 29(1), pp. 116–125. Available at: <https://doi.org/10.1016/j.econedurev.2009.07.005>.
- Quisumbing, A. *et al.* (2023) 'Measuring Women's Empowerment in Agriculture: Innovations and evidence', *Global Food Security*, 38, p. 100707. Available at: <https://doi.org/10.1016/j.gfs.2023.100707>.
- Ranganathan, M. *et al.* (2022) 'Government of Ethiopia's public works and complementary programmes: A mixed-methods study on pathways to reduce intimate partner violence', *Social Science & Medicine*, 294, p. 114708. Available at: <https://doi.org/10.1016/j.socscimed.2022.114708>.
- Rapoport, B., Sofer, C. and Solaz, A. (2011) 'Household production in a collective model: some new results', *Journal of Population Economics*, 24(1), pp. 23–45. Available at: <https://doi.org/10.1007/s00148-010-0308-x>.
- Roca-Puig, V., Beltrán-Martín, I. and García-Juan, B. (2021) 'Incorporating poverty in society into strategic human resource management', *The International Journal of Human Resource Management*, 32(13), pp. 2759–2782. Available at: <https://doi.org/10.1080/09585192.2019.1640764>.
- Rodrigues, P. *et al.* (2023) 'Associations between small-area sociodemographic characteristics and intimate partner violence in Montréal, Québec', *Journal of Public Health Research*, 12(4), p. 22799036231208326. Available at: <https://doi.org/10.1177/22799036231208326>.
- Rodríguez-Menés, J. and Safranoff, A. (2012) 'Violence against women in intimate relations: A contrast of five theories', *European Journal of Criminology*, 9(6), pp. 584–602. Available at: <https://doi.org/10.1177/1477370812453410>.
- Roy, S. *et al.* (2019) *Can Transfers and Behavior Change Communication Reduce Intimate Partner Violence Four Years Post-program? Experimental Evidence from Bangladesh*. Intl Food Policy Res Inst.
- Roy, S. *et al.* (2022) 'Can transfers and complementary nutrition programming reduce intimate partner violence four years post-program? Experimental evidence from Bangladesh', *Journal of Human Resources* [Preprint]. Available at: <https://doi.org/10.3368/jhr.0720-11014R2>.
- Sara, R. and Priyanka, S. (2023) *Long-Term Effects of an Education Stipend Program on Domestic Violence: Evidence from Bangladesh | The World Bank Economic Review | Oxford Academic*. Available at: <https://academic-oup-com.eur.idm.oclc.org/wber/article-abstract/37/4/640/7192050?login=false> (Accessed: 15 September 2024).
- Schoen, R. *et al.* (2002) 'Women's Employment, Marital Happiness, and Divorce', *Social Forces*, 81(2), pp. 643–662. Available at: <https://doi.org/10.1353/sof.2003.0019>.
- Schuler, S.R. *et al.* (2018) 'Men's perspectives on women's empowerment and intimate partner violence in rural Bangladesh', *Culture, Health & Sexuality*, 20(1), pp. 113–127. Available at: <https://doi.org/10.1080/13691058.2017.1332391>.
- Schuler, S.R. and Nazneen, S. (2018) 'Does Intimate Partner Violence Decline as Women's Empowerment Becomes Normative? Perspectives of Bangladeshi Women', *World Development*, 101, pp. 284–292. Available at: <https://doi.org/10.1016/j.worlddev.2017.09.005>.
- Shigute, Z. *et al.* (2020) 'Linking Social Protection Schemes: The Joint Effects of a Public Works and a Health Insurance Programme in Ethiopia', *The Journal of Development Studies*, 56(2), pp. 431–448. Available at: <https://doi.org/10.1080/00220388.2018.1563682>.

- Simuchimba, C. (2024) 'Intra household resource allocation and women's empowerment: a collective model perspective', *International Journal of Economics Finance & Management Science*, 9(02), pp. 01–07. Available at: <https://doi.org/10.55640/ijefms-9148>.
- Singh, R.K. *et al.* (2012) 'An overview of sustainability assessment methodologies', *Ecological Indicators*, 15(1), pp. 281–299. Available at: <https://doi.org/10.1016/j.ecolind.2011.01.007>.
- Slater, R. (2011) 'Cash transfers, social protection and poverty reduction', *International Journal of Social Welfare*, 20(3), pp. 250–259. Available at: <https://doi.org/10.1111/j.1468-2397.2011.00801.x>.
- Spottswood, M. (2019) 'On the limitations of a unitary model of the proof process', *The International Journal of Evidence & Proof*, 23(1–2), pp. 75–81. Available at: <https://doi.org/10.1177/1365712718815341>.
- Stanley *et al.* (2013) 'Meta-Analysis of Economics Research Reporting Guidelines', *Journal of Economic Surveys*, 27(2), pp. 390–394. Available at: <https://doi.org/10.1111/joes.12008>.
- Sterne, J.A.C. and Egger, M. (2001) 'Funnel plots for detecting bias in meta-analysis: Guidelines on choice of axis', *Journal of Clinical Epidemiology*, 54(10), pp. 1046–1055. Available at: [https://doi.org/10.1016/S0895-4356\(01\)00377-8](https://doi.org/10.1016/S0895-4356(01)00377-8).
- Stevenson, B. and Wolfers, J. (2006) *Bargaining in the Shadow of the Law: Divorce Laws and Family Distress\** | *The Quarterly Journal of Economics* | *Oxford Academic*. Available at: <https://academic-oup-com.eur.idm.oclc.org/qje/article-abstract/121/1/267/1849020?login=false> (Accessed: 16 September 2024).
- Tang, J.-L. and Liu, J.L. (2000) 'Misleading funnel plot for detection of bias in meta-analysis', *Journal of Clinical Epidemiology*, 53(5), pp. 477–484. Available at: [https://doi.org/10.1016/S0895-4356\(99\)00204-8](https://doi.org/10.1016/S0895-4356(99)00204-8).
- Tankard, M.E. and Iyengar, R. (2018) 'Economic Policies and Intimate Partner Violence Prevention: Emerging Complexities in the Literature', *Journal of Interpersonal Violence*, 33(21), pp. 3367–3387. Available at: <https://doi.org/10.1177/0886260518798354>.
- Tauchen, H.V., Witte, A.D. and Long, S.K. (1991) 'Domestic Violence: A Nonrandom Affair', *International Economic Review*, 32(2), pp. 491–511. Available at: <https://doi.org/10.2307/2526888>.
- Terrin, N., Schmid, C.H. and Lau, J. (2005) 'In an empirical evaluation of the funnel plot, researchers could not visually identify publication bias', *Journal of Clinical Epidemiology*, 58(9), pp. 894–901. Available at: <https://doi.org/10.1016/j.jclinepi.2005.01.006>.
- Thornton, A. and Lee, P. (2000) 'Publication bias in meta-analysis: its causes and consequences', *Journal of Clinical Epidemiology*, 53(2), pp. 207–216. Available at: [https://doi.org/10.1016/S0895-4356\(99\)00161-4](https://doi.org/10.1016/S0895-4356(99)00161-4).
- Torm, N. and Oehme, M. (2024) 'Social protection and formalization in low- and middle-income countries: A scoping review of the literature', *World Development*, 181, p. 106662. Available at: <https://doi.org/10.1016/j.worlddev.2024.106662>.
- Trott, C.D., Harman, J.J. and Kaufman, M.R. (2017) 'Women's Attitudes Toward Intimate Partner Violence in Ethiopia: The Role of Social Norms in the Interview Context', *Violence Against Women*, 23(8), pp. 1016–1036. Available at: <https://doi.org/10.1177/1077801216654018>.
- UN (2024) *Progress towards the Sustainable Development Goals: Report of the Secretary-General*.
- USAID (2018) 'Women's Empowerment in Agriculture Study'. Available at: [https://pdf.usaid.gov/pdf\\_docs/PA00T8KB.pdf](https://pdf.usaid.gov/pdf_docs/PA00T8KB.pdf).
- Vermeulen, F. (2002) 'Collective Household Models: Principles and Main Results', *Journal of Economic Surveys*, 16(4), pp. 533–564. Available at: <https://doi.org/10.1111/1467-6419.00177>.
- Waqas, M. and Awan, M.S. (2019) 'Do Cash Transfers Effect Women Empowerment? Evidence from Benazir Income Support Program of Pakistan', *Women's Studies*, 48(7), pp. 777–792. Available at: <https://doi.org/10.1080/00497878.2019.1666007>.
- Wu, A.M. and Ramesh, M. (2014) 'Poverty Reduction in Urban China: The Impact of Cash Transfers', *Social Policy and Society*, 13(2), pp. 285–299. Available at: <https://doi.org/10.1017/S1474746413000626>.

- Yang, F. *et al.* (2014) 'Dissonant Conclusions When Testing the Validity of an Instrumental Variable', *The American Statistician*, 68(4), pp. 253–263. Available at: <https://doi.org/10.1080/00031305.2014.962764>.
- Yick, A.G. (2001) 'Feminist Theory and Status Inconsistency Theory: Application to Domestic Violence in Chinese Immigrant Families', *Violence Against Women*, 7(5), pp. 545–562. Available at: <https://doi.org/10.1177/10778010122182596>.
- Yigzaw, T. *et al.* (2010) 'Perceptions and attitude towards violence against women by their spouses: A qualitative study in Northwest Ethiopia.', *Ethiopian Journal of Health Development*, 24(1). Available at: <https://doi.org/10.4314/ejhd.v24i1.62943>.
- Yitbarek, K., Woldie, M. and Abraham, G. (2019) 'Time for action: Intimate partner violence troubles one third of Ethiopian women', *PLoS ONE*, 14(5), p. e0216962. Available at: <https://doi.org/10.1371/journal.pone.0216962>.
- Yount, K. *et al.* (2012) 'Indeterminate Responses to Attitudinal Questions About Intimate Partner Violence Against Women in Rural Bangladesh', *Population Research and Policy Review*, 31(6), pp. 797–830.
- Zegenhagen, S., Ranganathan, M. and Buller, A.M. (2019) 'Household decision-making and its association with intimate partner violence: Examining differences in men's and women's perceptions in Uganda', *SSM - Population Health*, 8, p. 100442. Available at: <https://doi.org/10.1016/j.ssmph.2019.100442>.

## Appendix:

Table A1: List of primary studies used in meta-analysis

No.	Articles
1	Briaux, J., Martin-Prevel, Y., Carles, S., Fortin, S., Kameli, Y., Adubra, L., Renk, A., Agboka, Y., Romedenne, M., Mukantambara, F. and Van Dyck, J., 2020. Evaluation of an unconditional cash transfer programme targeting children's first-1,000-days linear growth in rural Togo: A cluster-randomized controlled trial. <i>PLoS medicine</i> , 17(11), p.e1003388
2	Briaux, J., Martin-Prevel, Y., Carles, S., Fortin, S., Kameli, Y., Adubra, L., Renk, A., Agboka, Y., Romedenne, M., Mukantambara, F. and Van Dyck, J., 2020. Evaluation of an unconditional cash transfer programme targeting children's first-1,000-days linear growth in rural Togo: A cluster-randomized controlled trial. <i>PLoS medicine</i> , 17(11), p.e1003388
3	Copeland, W.E., Tong, G., Shanahan, L., Rothenberg, W.A., Lansford, J.E., Godwin, J.W., Rybińska, A., Odgers, C.L. and Dodge, K.A., 2024. Intergenerational Effects of a Family Cash Transfer on the Home Environment. <i>Journal of the American Academy of Child &amp; Adolescent Psychiatry</i> , 63(3), pp.336-344
4	Gibbs, A., Corboz, J., Chirwa, E., Mann, C., Karim, F., Shafiq, M., Mecagni, A., Maxwell-Jones, C., Noble, E. and Jewkes, R., 2020. The impacts of combined social and economic empowerment training on intimate partner violence, depression, gender norms and livelihoods among women: an individually randomised controlled trial and qualitative study in Afghanistan. <i>BMJ global health</i> , 5(3), p.e001946
5	Green, E.P., Blattman, C., Jamison, J. and Annan, J., 2015. Women's entrepreneurship and intimate partner violence: a cluster randomized trial of microenterprise assistance and partner participation in post-conflict Uganda (SSM-D-14-01580R1). <i>Social science &amp; medicine</i> , 133, pp.177-188.
6	Haushofer, J. and Shapiro, J., 2016. The short-term impact of unconditional cash transfers to the poor: experimental evidence from Kenya. <i>The Quarterly Journal of Economics</i> , 131(4), pp.1973-2042.
7	Heath, R., Hidrobo, M. and Roy, S., 2020. Cash transfers, polygamy, and intimate partner violence: Experimental evidence from Mali. <i>Journal of Development Economics</i> , 143, p.102410.
8	Hidrobo, M. and Fernald, L., 2013. Cash transfers and domestic violence. <i>Journal of health economics</i> , 32(1), pp.304-319
9	Hidrobo, M., Peterman, A. and Heise, L., 2016. The effect of cash, vouchers, and food transfers on intimate partner violence: evidence from a randomized experiment in Northern Ecuador. <i>American Economic Journal: Applied Economics</i> , 8(3), pp.284-303
10	Iqbal, T., Farooq, S. and Padda, I.U.H., 2021. Can empowerment be enhanced by putting cash in the hands of poor women? Learning from Pakistan's BISP Programme. <i>The European Journal of Development Research</i> , 33(3), pp.760-792
11	Özler, B., Hallman, K., Guimond, M.F., Kelvin, E.A., Rogers, M. and Karnley, E., 2020. Girl Empower—A gender transformative mentoring and cash transfer intervention to promote adolescent wellbeing: Impact findings from a cluster-randomized controlled trial in Liberia. <i>SSM-population health</i> , 10, p.100527
12	Peterman, A., Palermo, T.M., Handa, S., Seidenfeld, D. and Zambia Child Grant Programme Evaluation Team, 2018. List randomization for soliciting experience of intimate partner violence: application to the evaluation of Zambia's unconditional child grant programme. <i>Health economics</i> , 27(3), pp.622-628
13	Peterman, A., Valli, E. and Palermo, T., 2022. Government antipoverty programming and intimate partner violence in Ghana. <i>Economic Development and Cultural Change</i> , 70(2), pp.529-566
14	Ranganathan, M., Pichon, M., Hidrobo, M., Tambet, H., Sintayehu, W., Tadesse, S. and Buller, A.M., 2022. Government of Ethiopia's public works and complementary programmes: A mixed-methods study on pathways to reduce intimate partner violence. <i>Social Science &amp; Medicine</i> , 294, p.114708
15	Roy, S., Hidrobo, M., Hoddinott, J. and Ahmed, A., 2019. Transfers, behavior change communication, and intimate partner violence: Postprogramme evidence from rural Bangladesh. <i>Review of Economics and Statistics</i> , 101(5), pp.865-877

Table A2: Studies included in the meta-analysis:

Study (year)	Country	Data start	Data end	No of est.	Mean effect size	St. Dev.	Range
Briaux et al. (2020)	Togo	2014	2016	2	-5.750	3.041	-7.900 -3.600
Chakrabarti et al. (2020)	Zimbabwe	2013	2017	10	-0,246	0,468	-1,141 0,075
Copeland et al. (2024)	US	1993	2020	2	0,435	0,601	0,010 0,860
Gibbs et al. (2020)	Afghanistan	2018	2018	24	0,435	0,681	-1,230 1,060
Green et al. (2015)	Uganda	2009	2011	3	-0,017	0,055	-0,080 0,020
Haushofer & Shapiro (2016)	Kenya	2011	2013	4	0,108	0,106	-0,010 0,220
Heath et al. (2020)	Mali	2014	2016	42	-0,171	0,137	-0,522 0,014
Hidrobo & Fernald (2013)	Ecuador	2004	2006	74	-0,060	0,071	-0,270 0,090
Hidroboa et al. (2016)	Ecuador	2011	2011	75	-0,031	0,024	-0,090 0,010
Iqbal et al. (2020)	Pakistan	2019	2019	8	-0,021	0,039	-0,090 0,000
Ozler et al. (2020)	Liberia	2015	2017	26	0,016	0,065	-0,065 0,215
Peterman et al. (2017)	Zambia	2010	2015	4	0,036	0,014	0,021 0,052
Peterman et al. (2022)	Ghana	2015	2017	30	-0,015	0,071	-0,122 0,155
Ranganathan et al. (2022)	Ghana	2019	2019	40	0,035	0,196	-0,059 0,976
Roy et al. (2019)	Bangladesh	2012	2014	50	-0,028	0,099	-0,470 0,180

Table A3: Summary statistics of women's empowerment by A-WEAI indicators

Domains	Variable	Baseline		Endline		Cash beneficiaries		No-beneficiaries	
		Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Production	Input in productive decisions	0.979	0.062	0.997	0.022	0.998	0.022	0.988	0.048
Resources	Ownership of assets	0.867	0.007	0.872	0.027	0.867	0.05	0.87	0.022
	Access to and decisions on credit	0.934	0.008	0.934	0.003	0.934	0.07	0.934	0.006
Income	Control over the use of income	0.978	0.063	0.996	0.026	0.993	0.037	0.987	0.049
Leadership	Group membership	0.801	0.011	0.802	0.017	0.802	0.022	0.801	0.014
Time	Workload	0.995	0.031	0.994	0.034	0.991	0.043	0.995	0.031
N		332	332	393	393	85	85	640	640

## ISS Research Ethics Review Form

### for RP research carried out by MA students<sup>1</sup>

#### **Aim:**

This Form aims to help you identify research ethics issues which may come up in the design and delivery of your Research Paper (RP). It builds on the session on Research Ethics session in course 3105 and subsequent discussions with your peers and RP supervisor/reader. We hope the form encourages you to reflect on the ethics issues which may arise.

#### **The process:**

The Ethics Review process consists of answering questions in the following two checklists: B1-Low-sensitivity and B2-High-sensitivity. Depending on the answer to these questions you might need to fill section **C-Statement of Research Ethics** too.

The background document “ISS Research Ethics Guidelines for MA Students” provides advice and detailed information on how to complete this form.

Step 1 - Fill checklists B1 and B2

Step 2 - After answering checklists B1 and B2, the process proceeds as follows:

- **If you answer ‘yes’ to one or more low-sensitivity questions (checklist B1):** please discuss the issues raised with your supervisor and include an overview of the risks, and actions you can take to mitigate them, in the final design of your RP. You can refer to the ISS Research Ethics Guidelines for MA Students for help with this.
- **If you answer ‘yes’ to one or more high-sensitivity questions (checklist B2),** please complete section ‘C’ of the form below describing the risks you have identified and how you plan to mitigate against them. Discuss the material with your supervisor, in most cases the supervisor will provide approval for you to go ahead with your research and attach this form to the RP design when you upload it in canvas. If, after consultation with your supervisor, it is felt that additional reflection is needed, please submit this form (sections B1, B2, and C) to the Research Ethics Committee (REC) for review as follows:

When submitting your form to the REC, please send the following to [researchethics@iss.nl](mailto:researchethics@iss.nl):

- 1) the completed checklists B1 and B2 (or equivalent if dealing with an external ethics requirement)
- 2) the completed form C ‘Statement of Research Ethics’
- 3) a copy of the RP design
- 4) any accompanying documentation, for example, consent forms, Data Management Plans (DMP), ethics clearances from other institutions.

Your application will be reviewed by a reviewer who is not part of your supervisory team. The REC aims to respond to ethics approval requests within a period of 15 working days.

Step 3 - Integrating the Ethics Review process into the RP:

- This Ethics Review Form needs to be added as an annex in your final RP Design document to be uploaded in the Canvas page for course 3105.

---

<sup>1</sup> This checklist and statement is adapted from the Institute of Development Studies (IDS) Research Ethics Committee and informed by the checklists of two Ethics Review Boards at EUR (ESHCC and ERIM) and the [EU H2020 Guidance – How to complete your ethics self-assessment](#).



# ISS Research Ethics Review Form - MA Research

## Project details, Checklists, and Approval Status

### A) Project/Proposal details

1. Project/Proposal Title	Multidimensional Analysis of Social Protections on Households Resilience and Stability: Evidence from the UN Joint Program in Ethiopia
2. Name of MA student (applicant)	MENGISTU YISMAW ALEMU
3. Email address of MA student	681941ma@student.eur.nl
4. Name of Supervisor	Binyam Afework Demena (PhD)
5. Email address of Supervisor	demena@iss.nl
6. Country/countries where research will take place	<b>Ethiopia</b>
7. Short description of the proposed research and the context in which it is carried out:	
<p>The main objective of the study is to examine the unintended effects of social protections, Unconditional Cash Transfer (UCT) in particular, on intra-household instability in Ethiopia.</p> <p>In general, the study aims to answer the following specific research questions:</p> <ul style="list-style-type: none"> <li>i. Do the reported empirical results of UCT on IPV suffer from publication bias, and if so, to what extent?</li> <li>ii. Do UCT generate an underlying genuine effect on IPV after accounting for publication and other biases?</li> <li>iii. What are the determinants behind the heterogeneity of the findings reported in the primary empirical studies?</li> <li>iv. What is the unintended impact of the UNJP-RWEE on IPV, mainly through empowering women?</li> <li>v. Is the combined impact of cash transfers and women's empowerment different from the sum of their individual effects?</li> </ul>	

### B) Research checklist

*The following checklist acts as a guide to help you think through what areas of research ethics you may need to address. For explanations and guidance please refer to the background document 'ISS Research Ethics Guidelines for MA students'. Please complete both sections (B1 and B2)*

	Please tick the appropriate box	YES	NO
<b>B1: LOW-SENSITIVITY</b>			
1. Does the research involve the collection and or processing of (primary or secondary) personal data (including personal data in the public domain)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Does the research involve participants from whom voluntary informed consent needs to be sought?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Will financial or material incentives (other than reasonable expenses and compensation for time) be offered to participants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Will the research require the co-operation of a gatekeeper for access to the groups, communities or individuals to be recruited (e.g., administrator for a private Facebook group, manager of an institutions, government official)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Does the research include benefit-sharing measures for research which takes place with people who could be considered vulnerable? – please revise the background document (Guidelines) for more information.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**If you have ticked 'yes' to any of the above boxes (1-5), please discuss with your supervisor and include more information in your RP design describing the issue raised and how you propose to deal with it during your research.**

## ISS Research Ethics Review Form - MA Research

B2: HIGH SENSITIVITY	YES	NO
6. Does the research involve the collection or processing of <b>sensitive</b> (primary or secondary) personal data? (e.g. regarding racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, biometric data, data related to health or a person's sex life or sexual orientation)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Does the research involve participants for whom voluntary and informed consent may require special attention or who can be considered 'vulnerable'? (e.g., children (under 18), people with learning disabilities, undocumented migrants, patients, prisoners)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Will it be necessary for participants to take part in the research without their knowledge and consent (covert observation of people in non-public places)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Will the research be conducted in healthcare institutions, in healthcare settings, or will it involve the recruitment or study of patients or healthcare personnel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Could the research induce psychological stress or anxiety or cause harm or negative consequences for research participants, researchers, or persons and institutions connected to them?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Could the situation in one or several of the countries where research is carried out put the researcher, individuals taking part in the research, or individuals connected to the researcher, at risk? Presence of an infectious disease such as COVID-19 is considered a risk – please provide information as outlined in the background document (Guidelines).	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Does the research require ethical approval or research permission from a local institution or body?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**If you have ticked 'Yes' to one of the above (5-11), please complete section 'C' below describing how you propose to mitigate the risks you have identified. After discussion with your supervisor, please submit the form to the Research Ethics Committee. In addition, if you have ticked 'Yes' to a question on any kind of personal data, please also complete the privacy questionnaire.**

## ISS Research Ethics Review Form - MA Research

YOU ONLY NEED TO COMPLETE THIS SECTION IF YOU HAVE ANSWERED YES TO ONE OF THE QUESTIONS IN SECTION B2 ABOVE (Questions 5-11)

### C) Statement of Research Ethics

*Using the background document 'ISS Research Ethics Guidelines for MA students', please address how you are going to deal with the ethics concern identified, including prevention measure to avoid them from manifesting, mitigation strategies to reduce their impact, and preparedness and contingency planning if the risks manifest.*

*Please number each point to correspond with the relevant checklist question above. Expand this section as needed and add any additional documentation which might not be included in your RP design, such as consent forms.*

[TO BE COMPLETED BY MA STUDENT AND DISCUSSED WITH THE SUPERVISOR. IF THE SUPERVISOR FINDS IT NECESSARY TO SEEK FURTHER REVIEW, THE STUDENT MUST SUBMIT THE FORM TO THE RESEARCH ETHICS COMMITTEE]

### D) Approval from Research Ethics Committee

\*To be completed by the Research Ethics Committee only if

**Approved by Research Ethics Committee:** \_ \_ \_ \_ \_ **Date:** \_ \_ \_ \_ \_

**Additional comments for consideration from Research Ethics Committee:**

If the REC needs more information before approving, the REC secretary will be in touch with the MA student. If after requesting more information the REC still has concerns, the REC secretary will ask the supervisor to discuss these with the student. In the unlikely event that there is still no resolution, the REC will refer the application to the Institute Board.