

The impact of economic resource transfers to women versus men

A systematic review



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January 2012

The EPPI-Centre reference number for this report is 2001.

This report should be cited as: Yoong J, Rabinovich L, Diepeveen S (2012) The impact of economic resource transfers to women versus men: a systematic review. Technical report. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London
ISBN: 978-1-907345-22-7

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List of abbreviations

CCT	Conditional cash transfer
DfID	Department for International Development (UK)
MENA	Middle East and North Africa
MSSM	Maryland Scale of Scientific Methods
RCT	Randomised controlled trial
RPS	<i>Red de Protección Social</i> (Social Safety Net - Nicaragua)

Abstract

This systematic review examined the question: “what is the evidence of the impact on family well-being of giving economic resources to women relative to the impact of giving them to men?” This review is of interest to policy-makers and funders in developed and developing countries, given the recent growth in the number of poverty alleviation transfer programs that implicitly or explicitly designate women as transfer recipients.

Results

- **The gender of the transfer recipient affects the outcomes of some programmes -**
- **Targeting transfers to women can improve children’s well-being -** in particular in the form of investments of children’s health and education.
- **Increasing female control of transfers does not guarantee positive outcomes.**
- **Findings for micro-credit remain highly controversial and inconclusive.**
- **Outcomes may be dependent on the type of programme offered.**

Implications for research and policy: The review highlights a number of focus areas for future research. Focusing on gender effects for unconditional transfer programmes may be valuable, although some evidence already exists for old age pensions. In the case of micro-credit programmes, much controversy remains to be resolved. Important under-studied regions of the developing world include sub-Saharan Africa, the Asia Pacific (outside South Asia), and the MENA region. Overall, a substantive body of research that carefully considers issues of selection and attribution is still a crucial missing part of developing gender-mainstreaming in transfer programmes; given the sustained popularity and importance of such as a poverty alleviation tool across the developing world, a fundamental need exists to further develop the evidence base on which these programmes are based.■

Methodology: We conducted the search through eight electronic databases, ten organizational websites and Google Scholar, as well as bibliographic back-searching and input from reviewers, covering peer-reviewed published studies as well as grey literature and Ph.D. dissertations. In total, we located 5,774 potentially relevant studies. Most were excluded, as they did not match the systematic review topic. The final count of included studies was 15, some of which reviewed multiple programmes. Statistical meta-analysis was considered but not possible due to the diversity of interventions among a small number of papers as well as the diversity of the outcome measurements. We thus conducted a narrative synthesis.

Executive summary

In recent decades, the number and scope of poverty alleviation transfer programmes that explicitly or implicitly designate women as transfer recipients have grown. This systematic review examined the question:

What is the evidence of the impact on family well-being of giving economic resources to women relative to the impact of giving them to men?

This question focuses attention on unearned transfers of economic resources (cash or in-kind) in the context of formally organised public, private and non-governmental social assistance programmes (including micro-credit programmes) in developing countries with the goal of combating poverty.

Our search was conducted via eight electronic databases, ten organisational websites and Google Scholar, as well as bibliographic back-searching and input from reviewers, covering peer-reviewed published studies as well as grey literature and PhD dissertations. The screening process considered type of transfer, whether outcomes of transfers to women versus men were assessed, methodological approach and outcome measures. In total, we located 5,774 potentially relevant studies. Most were excluded as they did not match the systematic review topic. Remarkably, while a significant proportion of the references focused on different types of unearned transfers, most did not rigorously compare outcomes of a transfer programme made to women versus men. The final count of included studies was 15, some of which reviewed multiple programmes. Four studies covered unconditional cash transfer programmes (including old-age pensions), three covered conditional cash transfer programmes, two covered grants made to household enterprises and six covered micro-credit programmes. Statistical meta-analysis was considered, but not possible due to the diversity of interventions among a small number of papers as well as the diversity of the outcome measurements. We thus conducted a narrative synthesis.

Differences in outcomes from transfers to women versus men are found in all but two of the studies included in this review. Targeting cash transfers towards women through conditional cash transfer programs and pensions appears to improve child nutrition and health; however, it is not yet clear that such interventions consistently lead to any other systematic pattern of economic choices, let alone whether they ultimately lead to benefits for the household as a whole more than if the transfer were targeted to men. In general, in spite of much evidence against a unitary household model, few studies provide direct and robust empirical insights into the causal pathways that generate these differences, although we find much to suggest that differences in preferences, incentives and bargaining power matter to household outcomes.

The review highlights a number of focus areas for the future. Focusing on the gender effects of unconditional transfer programmes may be valuable, although some evidence already exists for old-age pensions. In the case of micro-credit programmes, much controversy remains to be resolved. Important under-studied regions of the developing world include sub-Saharan Africa, the Asia Pacific region (outside South Asia) and the Middle East and North Africa region. Overall, a substantial body of research that carefully considers issues of selection and attribution is still a crucial missing part of developing gender mainstreaming in transfer programmes; given the sustained popularity and importance of such a poverty alleviation tool across the developing world, a fundamental need exists to further develop the evidence base on which these programmes are based.

1. Background

The number and scope of poverty alleviation transfer programmes that explicitly or implicitly designate women as recipients has grown in recent decades. Targeting women specifically as transfer recipients aims to improve household well-being and to support broader social developmental objectives, such as improving children's health and educational outcomes. Much empirical and theoretical literature supports this programme design, suggesting that women are likely to use resources in ways that improve family well-being, especially that of children (e.g. Thomas, 1990; Haddad, Hoddinott and Alderman, 1997; Rawlings and Rubio, 2005; Handa and Davis, 2006).

Despite the seminal contributions of such studies, many may not be adequately addressing the comparative efficacy of having women, rather than men, receive transfers. Programmes and evaluations are rarely designed to test whether targeting women specifically results in better outcomes. Indeed, many features that are meant to maximise programme success are based on this assumption, but ultimately confound the ability to test the assumption itself in a scientifically rigorous way. As a result, although the overall impact of a programme that delivers transfers to women may be known, it is often difficult or even impossible to benchmark the results against a truly relevant and valid counterfactual.

The overall goal of this review is to examine the question:

What is the evidence of the impact on family well-being of giving economic resources to women relative to the impact of giving them to men?

We note four important points in the interpretation of our research question:

- **We regard the research question in its most direct interpretation.** That is, our attention here is focused on whether transfers have different effects on outcomes when given to recipients who differ by gender, but have otherwise similar individual characteristics. This study is not concerned with outcomes arising because of disparities related to other factors (e.g. because the men and women enrolled in programme were self-selected, or were recruited from different socioeconomic backgrounds, or had different educational attainments).
- **We consider only unearned transfers, cash or in-kind.** We are interested in transfers of economic resources only in the context of formally organised public, private and non-governmental social assistance programmes in developing countries with the goal of combating poverty.
- **We understand 'well-being' in a broad sense.** Although multiple ways of measuring well-being continue to be debated in the literature, for the purpose of this review, we use a definition that covers a range of objective and subjective indicators related to material, human and social development.¹

¹ In theory, 'well-being' is a complex, multidimensional concept that resists objective and exclusive definition. In this review, we adopt a broad definition that includes material standards of living as well as human capital and social relationships. The last two are in themselves components of well-being, and also contribute to the household's ability to support future standards of living. A rich and diverse theoretical literature suggests that well-being should go beyond objective indicators of individual qualities to include subjective experience (see Diener, 1984). Appendix 2.4 presents a taxonomy of well-being indicators.

- **We understand ‘the family’ in a way that highlights underlying economic relationships.** Given the economic focus of our review question, we refer to ‘the family’ as a potentially multi-generational household with shared resources used for production, investment and consumption activities that include the rearing of children. We do not consider wider kinship networks or social affiliations that may fall under the broader sociological definitions of family membership.

This systematic review incorporates rigorous criteria for the inclusion of evidence for two reasons: (1) the large number and type of potentially relevant studies (experimental, quasi-experimental and qualitative), and (2) the fundamental importance of maintaining a distinction between correlation and causation in the light of the research question. The aim is to scope out and review only research that appropriately identifies the extent to which gender can be found to moderate the relationship between economic resource transfers and family well-being, and the causal pathways involved.

The report is structured as follows: in the next section, we describe an underlying conceptual framework that links household transfers to a range of outcomes that fall under the purview of household well-being, and discuss the scope of the research question and definitions outlined above in greater detail. We next lay out the methodology used in the systematic review process, and report on the results of our search. We then synthesise the findings from the included studies. We conclude with a discussion that relates our findings to the initial conceptual framework, reflects on potentially useful insights from studies that were excluded, and highlights the limitations of the body of evidence as well as the report. Finally, we suggest next steps for research.

Economic resource transfers

This review is concerned with formal transfer programmes with an anti-poverty mandate. The discussion needed to be narrowed to better focus on those topics relevant most to policy makers and practitioners. The types of programmes that were considered within the scope of the review fall into two broad categories.

- **Programmes that provide economic resources for domestic consumption/investment:** In the most prevalent type of economic resource transfer programme, households receive benefits as income supplements in the form of unconditional cash or in-kind transfers and subsidies. Such transfers are unconditional in that the households simply receive benefits by virtue of qualifying (for instance, via a means test, age or employment criterion). Schemes of this type include food transfers and food subsidies for low-income households, traditional unemployment benefits and non-contributory public pensions. The South African Old Age Pension Programme is such a programme. A relatively new, more direct results-based approach is one that delivers resources to households conditionally, based on desired behaviours or outcomes. In order to ensure that households realise long-term benefits, conditional cash or in-kind transfers and subsidies (popularly abbreviated as CCT) programmes tend to focus on behaviours/outcomes that reflect investments in human or physical capital (for instance, obtaining regular health checks or having children remain in school, or purchase of housing). Pioneering programmes of this type include PROGRESA/Oportunidades (Mexico) and Bolsa Familia (Colombia). In the light of the broad definition of economic resource transfers provided above, we also consider public works as falling under the purview of conditional transfer programmes. While somewhat further from the classic view of

social assistance, public works may be considered a type of CCT in which recipients who are otherwise excluded from the labour market are provided with unpaid or low-paid employment (often related to public works or other socially beneficial activities), and in return for their participation receive transfer payments (the value of which may or may not reflect market wages). These programmes may also pay benefits in-cash or in-kind. An example of this is the public works programmes in Ethiopia, which include both a Food-for-Work programme and a wage-based Productive Safety Nets Programme.

- **Programmes that provide economic resources to households for market activity:** A second broad class of transfer programmes are livelihood-oriented. In such programmes, resources are transferred to households with the aim of expanding their productive capacity. These transfers can take the form of unconditional cash or in-kind grants and subsidies to households and/or micro-enterprises, again in cash or in kind (for instance, direct financial cash grants or subsidies for land leases, or alternatively, programmes such as the voucher/coupon-based Inputs for Assets Program in Malawi, supply them with poultry, livestock, seeds or other farm inputs). Programmes can be structured to also include conditionality, such that use of benefits is restricted in certain ways (for instance, livestock may be given to households on condition that they undertake training and participate in other activities). A number of programmes targeting those with very low income, such as the BRAC Ultra-Poor programme in Bangladesh, have adopted this approach. Finally, from the perspective of this review, a broad interpretation of resource transfer programmes may also be said to include micro-finance, particularly micro-credit, following the model initially pioneered by the Grameen Bank (Bangladesh). Micro-credit provides a loan to households rather than a transfer per se; however, given their prevalence in low-income countries, and often gendered aspect (provision is to women), we have chosen to include them in this review. The model considered here provides financial capital to households who do not otherwise qualify for formal credit in the form of uncollateralised loans (the terms of which may or may not reflect market interest rates).

Certain transfer programmes may reflect a special purpose, although the fundamental structure of such programmes falls into one of the categories above. For example, the external circumstances in which the programmes are deployed often reflect a particular contingency and/or may be temporary in nature. These include transfers as part of natural disaster relief in a community, where emergency transfer or food aid programmes may be quickly put into place to support short-term consumption, followed by asset-transfer programmes to support rebuilding. While our review did not exclude programmes that are launched in such special circumstances, results from the evaluation of such programmes would need to be appropriately considered as a separate category in the light of their applicability in more routine settings.

Conceptual framework

In recent years, evaluators have been concerned with the ‘causal pathways’ of interventions, that is, attention has been focused on the mechanisms through which particular activities lead to certain outcomes (Gaarder, 2010). Examinations of causal pathways are as important to systematic reviews as to such empirical evaluations; as the authors of one paper put it: ‘Going beyond questions of effectiveness and looking at how and why interventions work enhances the relevance and utility of systematic reviews for practitioners and policy-makers’

(King *et al.*, 2010). In order to examine the causal pathways leading from economic resource transfers to men versus women, to outcomes for individuals and households, we propose an abstract, simplified representation of household decision-making. The goal is to put such causal pathways in context, and to formalise the central argument that is often made - given women's preferences over household production and consumption, transferring economic resources directly and specifically to women can have differential impacts on family well-being than if the transfer was made to men (or to an unspecified household member).

As described, we view the family through the lens of the economic life of a single household with shared resources, and use the terms 'household' and 'family' interchangeably throughout the discussion.

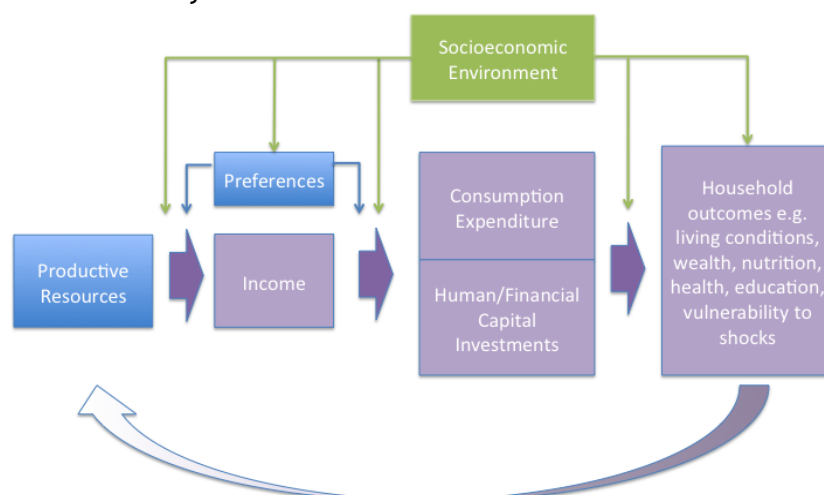
The basic unitary household model

Development policy discussions held prior to the 1990s typically treated households as unitary, or behaving as a single entity (Alderman *et al.*, 1995). Figure 1.1 shows a simplified model of a household based on this assumption, which was expressed both intrinsically and explicitly. A household uses its available productive resources (assets, labour and entrepreneurship) as productive inputs to generate income, whether in cash or in kind. Note that domestic work, such as childcare or home production of food, also represents a contribution to the household.

The household then allocates income derived from production to different categories of expenditure: consumption, savings and investment in financial assets, investments in human capital (such as child education and schooling), and other goods. This expenditure in turn affects final outcomes, such as overall standard of living, wealth, nutritional and health status, and educational attainment, which ultimately feed back into the future productive capacity of the household. The ability to save and invest in financial and human capital provides households with a future flow of income, and allows them to accumulate a monetary buffer for emergencies. This buffer represents the family's ability to withstand economic shocks.

There are two other important factors that enter this simple model: household preferences and the socioeconomic environment. With reference to preferences, households are presumed to have fundamental likes and dislikes about the way that they choose to use their productive resources, as well as the way in which they choose to allocate their income. Households with the same resources may thus realise different outcomes, because they make different choices.

Figure 1.1: Unitary household model

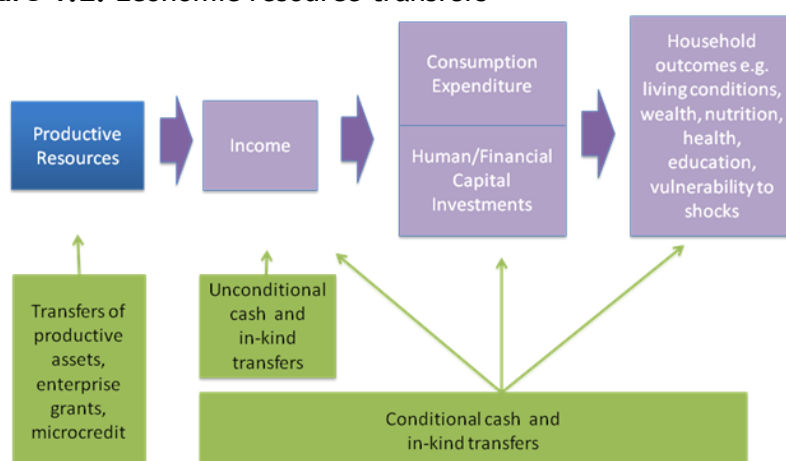


The external socioeconomic environment (represented in green) also affects the relationship between inputs and outcomes. First, background constraints may affect the ability of households to transform resources into income, income into expenditures, or expenditures into outcomes. Households may experience different production constraints, or different returns to factors of production. For example, underdeveloped markets can result in very different local wage levels. Alternatively, households may be restricted in their ability to spend. In some instances, households with no access to financial services may wish to save in bank accounts, but have no ability to do so. Finally, households may experience very different returns for the same expenditures; for example, households with access to only poor quality health clinics or schools may spend large amounts on health and education, but ultimately still realise very poor health and educational outcomes. The socioeconomic environment may also form part of household preferences, through cultural and social norms. Finally, some household outcomes are a direct function of the socioeconomic environment, for example peace and security.

A range of measures of well-being is embedded in the model not only as final outcomes, but as intermediate outcomes along the entire causal chain (highlighted in purple in Figure 1.1). The emphasis on family has an important additional implication: that we need to consider the absolute and relative outcomes of individuals within the household in the context of their familial roles (i.e. fathers, mothers, daughters, sons, grandparents, etc.).

Various types of transfers can be represented at different stages of the household decision-making process (Figure 1.2). These transfers may be thought of as an extension of the external socioeconomic environment. First, households can receive transfers in the form of productive inputs, such as in-kind transfers of productive assets (e.g. livestock programmes), or financial capital (e.g. micro-loans or grants to household enterprises). While these transfers increase a household's own productive capacity and may lead to greater sustained income over time, returns on investment can be uncertain. More direct income transfers may be given to the household, conditionally or unconditionally. Unconditional cash transfers or transfers of goods that can be resold lead to increases in household income, but households retain discretion over its use. Finally, to ensure that particular expenditures are made or specific outcomes realised, conditionality may be imposed on these transfers. Unconditional transfers have a direct effect only on a household's income. Conditional transfers, however, may also have direct effects on consumption/expenditure and investment decisions, and on household outcomes such as nutrition, health, education and so forth, depending on the nature of the conditionality e.g. requiring children to attend school.

Figure 1.2: Economic resource transfers



Contextualising the family: from a unitary to a collective model of the household

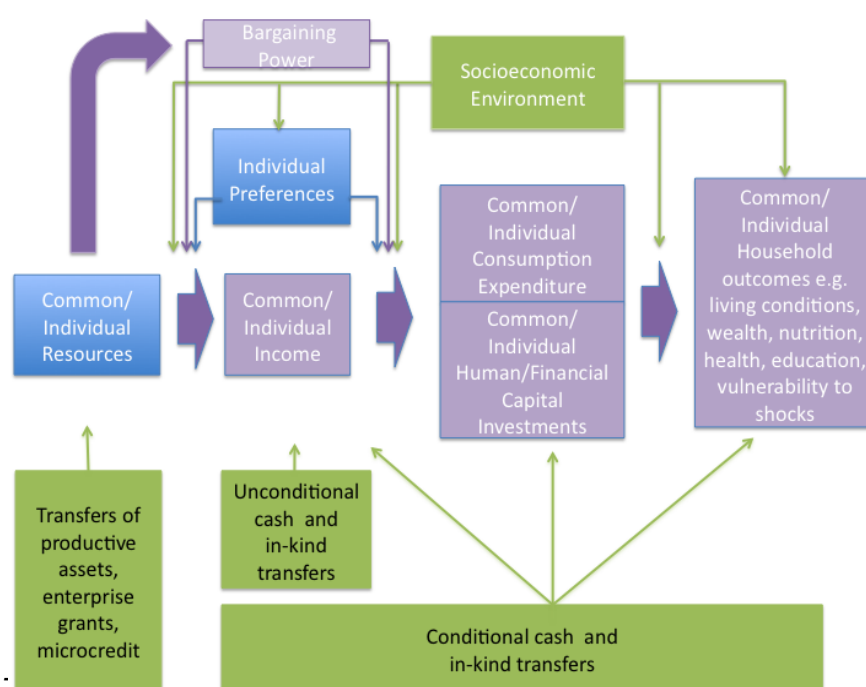
The unitary model is a useful way to envision the various economic processes that a household participates in. We noted previously that the emphasis on the family suggests the need to consider outcomes for individuals within the household as well as the collective. However, it is important - particularly for analysing the impact of gender - to recognise that households are collective rather than unitary entities when considering the more fundamental aspects of decision-making (for example Browning *et al.*, 1994; Browning and Chiappori, 1998).

If we take seriously the basic household where households make decisions as a unit, we are eventually required to assume that all household members have identical preferences, or that households allowed a single decision maker to dictate. A less restrictive but still highly stylised approach is to assume that households behave cooperatively, allocating resources to maximise their total productivity and welfare. However, a significant body of research shows that households do not tend to act as unitary or even Pareto-efficient entities (e.g. Thomas, 1990; Chiappori, 1992; Strauss and Thomas, 1995), and that preferences over household production and consumption decisions are broadly gender-specific (e.g. Rawlings and Rubio, 2005; Handa and Davis, 2006; Fiszbein *et al.*, 2009).

To understand the potential impact of gender differences in transfer allocation, we expand our model to make explicit the fact that the household is a collective rather than a single entity, and that intra-household bargaining takes place and decisions may or may not be fully cooperative (Figure 1.3). On the production side, resources may be owned and contributed on an individual basis. On the consumption side, expenditures may be allocated to joint consumption of public goods, or directed at consumption or investment specific to individual household members.

An important additional component of this model is bargaining power, which may be affected, among other factors, by individual household members' shares of resources or income. Decisions about earned income may then be taken with varying degrees of cooperation: household members may have different preferences, and decisions about individual/collective resources, income and expenditures may be made taking these preferences into account as well as bargaining power.

Figure 1.3: Collective model with transfers



An intuitive way to think about this in the economics literature is to consider decision-making outcomes as driven by weighted preferences, with the weights driven by bargaining power.

In this fuller model, when transfers are allocated to women rather than men in a household, several factors determine whether or not differences in outcomes related to well-being will actually be realised:

1. **Differences in tastes/preferences and incentives:** For a variety of reasons, women may be systematically different from men in their preferences for types of expenditure or the welfare of particular family members. For example, if women are more likely to be primary caregivers, they may be more likely to have knowledge and preferences about the types of expenditure that may increase child well-being. Women may be more likely to be the target of child health education programmes, and may thus be best positioned to make decisions about spending related to child health. In the second case, there is increasing evidence that women and men may have different preferences. Much discussion has centered on whether women tend to have more altruistic preferences (see for instance Phipps and Burton, 1998; Dooley et al., 2005; and Lundberg and Pollak, 1996), or whether men and women may tend to favour household members of the same sex (Quisumbing, 1994).
2. **Differences in bargaining power over allocations:** Assuming that intra-household bargaining is not fully cooperative, giving transfers to women rather than men will have differential effects if (a) the transfer increases women's relative bargaining power and (b) women have different tastes/preferences over the allocation of expenditure. It should be noted that achieving increased gender parity itself may be interpreted as an indicator of increased family well-being. We note, however, that in some settings, other factors such as social norms or a lack of legal rights for women may counteract this effect. One example of this is in instances when transfers to young girls are simply turned over as a matter of course to their fathers and husbands.
3. **Differences in income-generating ability:** Transfers of productive inputs may generate more or less income in the hands of men rather than women, based on their ability to use these inputs. The benefit of putting assets in the hands of women may be higher. If, for instance, women and men have similar economic opportunities, but women are far more capital-constrained, giving capital to women may result in a much higher marginal return to capital. On the other hand, the environment may be the opposite: women may face many other constraints (such as social restrictions on occupational type, or a relative lack of training) that result in lower returns to the transfer.² Many external background factors may also make the pass-through of transfer programmes more or less effective for women. Women may be more vulnerable than men to external pressure from official sources, for example, and thus transfers may have less impact in their hands if leakage increases due to error, fraud and corruption.

Having set out the conceptual framework through which our review question is interpreted, we now turn to the execution, results and analysis of the systematic review. In the next section, we describe in detail the methodology used to conduct our search. Key aspects of the methodology, including the search terms and the

² Note however that a model where the household is fully Pareto-efficient and there are no restrictions on reallocation, these differences may be eroded by redistribution within the household.

inclusion/exclusion criteria, reflect the definitions and conceptual framework outlined above.

2. Methods used in the review

Search

Initial pilot testing

The research team piloted the search strategy to ensure that the search terms yielded sufficient and relevant results ('hits'), and that the inclusion criteria could be applied to titles and abstracts consistently. During this step, the team conducted three searches using two initial sets of search terms and two different databases. Two researchers independently assessed the resulting title lists yielded by each search. The search terms provided a manageable number of hits, and preliminary inclusion/exclusion criteria were applied. Uncertainties were discussed by all three researchers until consensus was reached on a final protocol. On the basis of this assessment, the search terms were slightly modified, with a small number of keywords added and a three-tier rather than two-tier system for search terms used. In addition, the pilot test indicated that studies relevant to our review were typically published from the mid-1990s when evaluations of transfer programmes became more widespread. In response, the cut-off date for the search was set to 1990.

Search terms

The final range of keywords used to conduct a three-tier search is described in Table 2.1.

Table 2.1: Relevant search terms according to tier

Tier 1 terms	Tier 2 terms	Tier 3 terms
<ul style="list-style-type: none"> • transfer • micro-credit • cash transfer • workfare • in-kind • unearned income • pension • livestock AND transfer • food AND transfer 	<ul style="list-style-type: none"> • women/woman • men/man • family • household • female/male • mother/father • wife/husband 	<ul style="list-style-type: none"> • impact • outcome • effect • benefit • well-being/well-being • evidence • evaluation

We used combinations of the search terms in each tier in formats applicable to each database and website. Truncation was used as appropriate (e.g. asset* AND transfer*). Individual search terms were used in combination with each term from the other two levels, to ensure retrieval of the breadth of potentially relevant studies. Thesauri and indexes were consulted in those databases that have these features (for example, EconLit). Relevant subject headings were included as appropriate, along with keywords from titles and abstracts. There were no limits by language in the searches, with the exception of the database WorldCat. This

database limited the search to English language titles, so a separate search for Spanish language titles was run.

Sources

Based on the pilot test, we conducted searches for materials dating back to 1990. With the assistance of a reference librarian, reports were identified through searches in two phases. The sources for searches in the first phase are listed in Table 2.2. See Appendix 3.1 for details regarding the database searches.

Table 2.2: Sources for first phase searches

Subscription and non-subscription databases ³	Key websites (institutions and organisations)	Other
<ul style="list-style-type: none"> • Web of Science • EconLit • Academic Search Elite • BLDS at IDS • IDEAS search engine • Worldcat • ArticleFirst • Contemporary Women's Issues • PubMed⁴ • JStor • Dissertation Abstracts • Science Direct⁵ 	<ul style="list-style-type: none"> • Inter-American Development Bank • DfID • Institute of Development Studies • Asian Development Bank • African Development Bank • Centre for Global Development • World Bank • 3ie • Campbell Collaboration 	<ul style="list-style-type: none"> • Google Scholar⁶

³ These databases included the following journals, among others: *American Economic Review*, *Journal of Human Resources*, *Journal of Development Economics*, *World Development*, *World Bank Economic Review*, *Development Policy Review*, *Journal of Development Studies*, *Journal of International Development*.

⁴ A search on PubMed retrieved an unmanageable number of hits (4700+). Thus we reviewed the first 200, checking for the relevance of the sources retrieved. After selecting 26 hits for review of abstract, as the titles did not provide sufficient information to ascertain relevance, we found no relevant papers. A search for Spanish titles was also conducted but no relevant hits were identified. Based on this, we chose to exclude PubMed from the search.

⁵ The initial Science Direct search retrieved more than 9,300 hits. As such we restricted the search parameters to studies published between 2005 and 2010. This alone resulted in 703 hits. Of the 703 hits, five studies were identified as potentially relevant to the review question, one of which was a duplicate of studies retrieved from the other databases. Due to the unmanageable number of hits, we chose to restrict the Science Direct search to the years 2005 to 2010.

⁶ The Google Scholar search was conducted using Google Advanced Scholar Search. Whilst the RAND team believe that it is extremely useful to use this search engine, it is important to search so that the number of hits is manageable. We searched articles in the following subject areas available through this search engine: 'Business, administration, finance and economics' and 'Social sciences, arts and humanities'. We reviewed the first 1,000 hits when sorted by relevance.

In the second phase we added to these results by ‘snowballing’ (hand-searching bibliographies of relevant papers that met the relevance inclusion criteria as described below) to identify additional articles. Attempts to locate additional published and unpublished studies were done by making direct contact with authors and experts in the field.

Screening

In order to screen studies relevant to our systematic review question, we assessed the relevance and quality of the studies retrieved according to three main criteria, adapted from Gough (2007):

- **Topic relevance** (i.e. does the focus of the study under review contribute to answering the systematic review’s research question)
- **Methodological relevance** (i.e. is the method used in the study appropriate to address the systematic review’s research question)
- **Methodological quality** (i.e. is the research methodology selected and used in the study applied appropriately).

Titles and abstracts were included or excluded according to topic and methodological relevance criteria. Criteria on methodological quality were then applied to full text that met both topic and methodological relevance. We next developed a two-level system of classification for the studies to evaluate the ‘weight of evidence’ of each study. Studies that fulfilled all three criteria outlined above were assigned to Level 1, and studies that were topically and methodologically relevant but did not meet methodological quality criteria were assigned to Level 2. Studies that only fulfilled one criterion were not included in the review. Only Level 1 studies were included in the final set of papers judged to provide the most robust evidence to address the systematic review question. Level 2 studies were used to contribute relevant insights (possibly qualitative), but were not included in the main analysis.

Inclusion and exclusion criteria

This section describes the inclusion and exclusion criteria applied for the selection of papers for review.

Topic relevance

The criteria for topic relevance reflect the conceptual framework discussed earlier:

- Studies should focus on the impact of unearned economic resource transfer programmes as described in Section 1. We excluded studies of other types of private transfers or public interventions such as dowries, inheritance, tax incentives, humanitarian/emergency assistance other than those taking the form of economic resource transfer programmes, and earned income from employment, as the focus of our review was on transfer interventions specifically developed for poverty alleviation.⁷
- Studies should be set in the context of low- and middle-income countries, or in low-income communities in developed country settings if findings from these settings were relevant to the design and implementation of programmes in developing nations.

⁷ Mexico’s PROCAMPO programme, on which one of the included studies (Davis *et al.*, 2002) focuses, is not explicitly an anti-poverty programme but rather an intervention aimed to respond to the adjustment poverty that was expected to emerge as a result of the North American Free Trade Agreement (NAFTA).

- Studies should focus on the broad definition of well-being as described in Appendix 2.4, but should also focus on impacts on the household/family, or specific members of the family (such as daughters, sons, children of both sexes, mothers, grandmothers etc.), in the areas of health, education, age of marriage, fertility or income/poverty, or of impacts associated with family well-being more broadly. This included impacts such as women's empowerment and decision making in the household and/or community. We excluded studies that evaluated impacts but did not adopt a household perspective, such as those studies that examine macro-economic impacts.
- Studies should examine the differential impact of transferring unearned economic assets to women versus men to be included in our review. Studies examining the impact of these transfers in general, and those focusing only on the impacts of transfers to men or women (without the comparative element) were excluded. However, studies in which programmes delivered transfers only to women but which made explicit analytical attempts to isolate the impact of gender targeting were not excluded a priori and subjected to further quality review.

Methodological relevance

Rather than identify a set of methodologies, the study team determined that the basic criteria for methodological relevance should be based on the analytical approach to the research question:

- Given the nature of the question, studies had to conduct evaluation of a specific programme or programmes, rather than assessment of generic transfers obtained from a class of programmes.
- Analysis had to employ an approach that aimed at identifying causal effects and their relative size.

As is common in research on development interventions, impact evaluation covers several different quantitative methodological approaches, including different types of quasi-experimental designs (propensity score matching, pipeline approaches if the intervention is phased, etc.), regression-based approaches, and much less often, randomised controlled trials (RCTs).

In terms of our research question, we note that this criterion a priori rules out qualitative research from methodological relevance. Although such studies by definition do not produce statistically valid estimates of causal effects, qualitative research is valuable in that it 'aims to provide an in-depth understanding of people's experiences, perspectives and histories in the context of their personal circumstances or settings' (Spencer *et al.*, 2003: p.3). It often draws on unstructured methods that are sensitive to the social context, rich in detail, complex, and use an inductive analytic process. Theory and the researcher's perspective are the basis for making generalisations about causality (Noyes *et al.*, 2008) that may or may not be soundly supported by the quality of the research. However, qualitative research may be judged as methodologically relevant to developing an understanding of the conceptual framework. Thus we consider such studies eligible for inclusion as Level 2 studies.

Methodological quality for quantitative studies

We developed the criteria for the methodological quality and rigour of quantitative studies by adapting and applying the Maryland Scale of Scientific Methods (MSSM) (Sherman and Gottfredson, 1998). The MSSM provides a rating system for comparing and assessing methodological rigour and effect size for primary evidence analysis. It considers sample size, use of control variables, variable measurement and control for effects of attrition, and can be applied across a variety of types of

quantitative studies. A rating was assigned to each study through an assessment of the description of its methodological approach. Scores were assigned on six variables: (1) presence of control comparison group(s), (2) use of control variables to account for initial group differences, (3) variable measurement, (4) controls for effects of attrition from the study, (5) use of statistical significance tests, and (6) overall evaluation methodology. In addition, information was recorded on sample size and duration of study. If, for a particular study in any category, the methodological approach was unclear or unstated (e.g. no mention of attrition was made), up to a maximum of two efforts were made to contact the authors for clarification. If the methodological approach could not be clarified further, the lowest rating for that category was assigned. Only studies that scored 18 and above by both reviewers were judged as having met the criteria for quality. When scoring decisions did not match, a third researcher reviewed the paper. The detailed protocol is reproduced in Appendix 2.2.

Methodological quality for qualitative studies

To the best of our knowledge, there is no agreement on the most effective form of quality assessment for qualitative studies. Indeed, some feel that 'at present, opinion on the value of formal quality assessment is divided and there is insufficient evidence to inform a judgement on the rigour or added value of various approaches' (Noyes *et al.*, 2008, 20.3.2.2). For this review, we thus avoid using scores to assess qualitative studies, but instead use a narrative assessment, considering the relevance and rigour of the findings, study design, data collection, analysis, reporting and research conduct. The framework is based on the 18 questions for appraising qualitative studies in Spencer *et al.* (2003), adapted to include elements from the 10 questions for appraising qualitative studies used in the Critical Appraisal Skills Programme (2006). These questions consider the rigour of the qualitative methods and their application to the study, the credibility of findings and their relevance to the systematic review question. These aspects are assessed in relation to of the research design, sampling, data collection, reflexivity and recognition of researcher biases, ethical issues, data analysis, findings and the value of the research. Although no explicit numerical scoring is applied, the framework is used to evaluate the quality of reporting of study methodology, and whether the study then meets reasonable overall standards. The detailed protocol is reproduced in Appendix 2.3.

Applying inclusion and exclusion criteria to determine Level 1 and Level 2 studies

All titles, abstracts, and full papers were saved in an electronic database. To apply the inclusion criteria, titles were first randomly allocated to one of the three researchers and screened independently. Titles which appeared to fulfil our inclusion criteria for topic and methodological relevance, and those which did not provide enough information to ascertain suitability, were earmarked for extraction of abstracts. The inclusion criteria for relevance were again applied to abstracts. These, as well as abstracts which did not provide enough information to ascertain suitability for inclusion, were selected for retrieval of full texts. Finally, selected full texts were read by two researchers independently, and screened for topic and methodological relevance. Those that fit the relevance inclusion criteria were eligible for methodological quality assessment; those that did not were excluded. The full text of the remaining studies that met the topic relevance criteria were independently read and scored by two researchers, selected based on their methodological expertise. Studies that met all criteria were identified as Level 1 studies and included. Studies that met both relevance criteria but not quality criteria were separately identified as Level 2 studies and earmarked for revisiting during the discussion. At all points where disagreements emerged about individual

studies, a third researcher was consulted. The table recording excluded studies is reproduced as Appendix 3.3.

Characterisation of included studies

In reviewing the full text of Level 1 studies, each reviewer independently captured key data from each of the papers using a data extraction form designed by the research team and entered in an Excel spreadsheet. Descriptive information included:

- Full bibliographical reference
- Publication type (peer reviewed journal article, institution working paper)
- Country or region of intervention studied
- Type of transfer examined (micro-credit, conditional cash transfer, etc.)
- Other intervention characteristics (funded and/or run by NGO, government, private entity; pilot, small scale intervention, large scale intervention; etc.)
- Client characteristics
- Study design, time period and sample size
- Outcome(s) under investigation
- Findings (quantitative and qualitative).

The data entered by the two reviewers for each paper was compared with the aim of checking for reporting differences. When these were identified, a third researcher reviewed the study to resolve any discrepancy. No discrepancies remained after this process was applied. The final table of data may be found in Appendix 4.1.

Synthesis of evidence

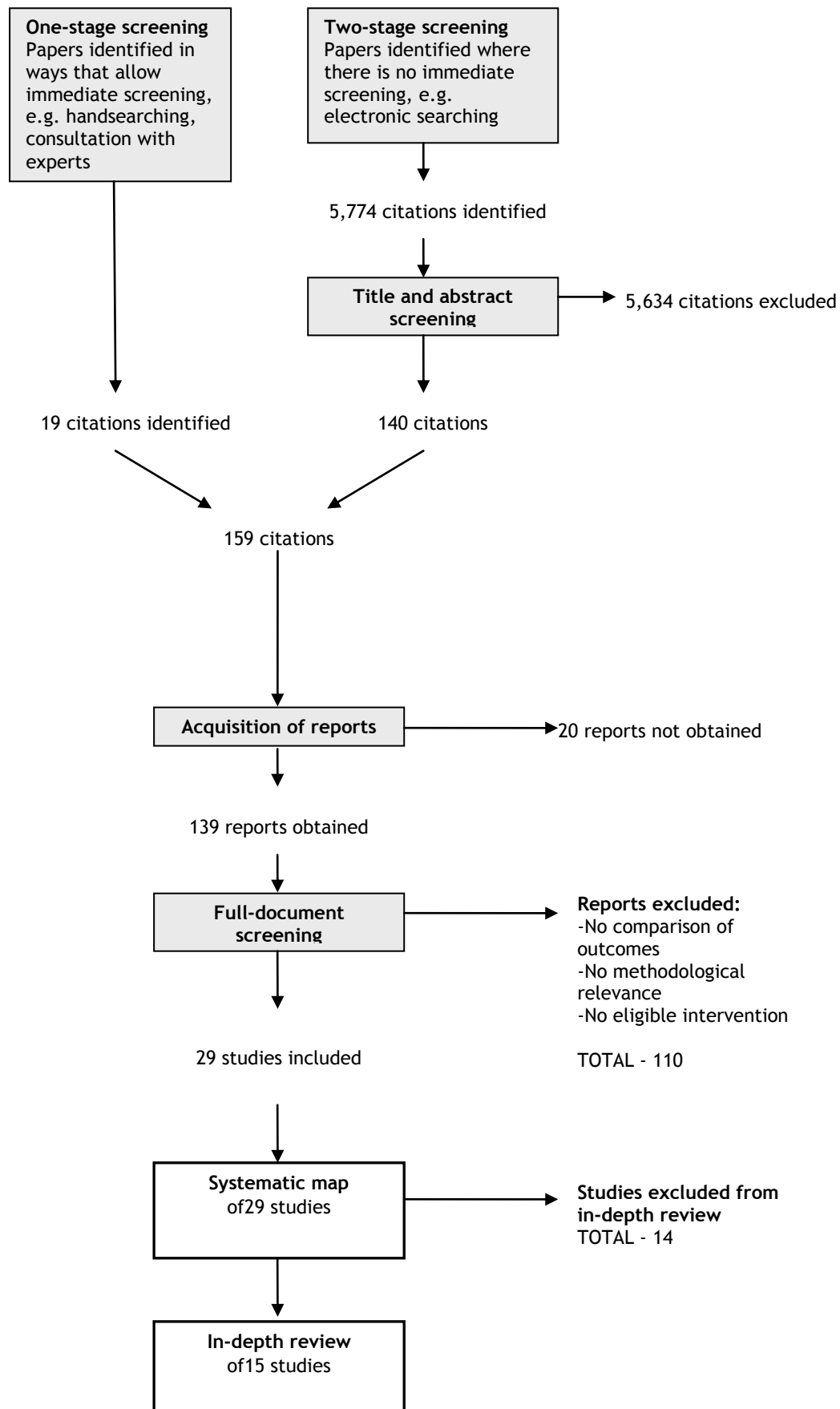
Based on the final count of papers, we determined the most appropriate method of synthesising the resulting evidence base. A statistical meta-analysis was considered, but not possible due to the diversity of interventions among a small number of papers as well as the diversity of the outcome measurements. We thus conducted a narrative synthesis of findings guided by the conceptual framework. The narrative synthesis presents the results reported in each included paper, and discusses findings by type of intervention examined.

The narrative synthesis addresses the evidence from Level 1 studies on whether, and under what circumstances, unearned transfers to women lead to different outcomes for the family than when transfers are made to men (and for what types of outcomes). Insights from Level 2 studies are also considered but as part of a supporting discussion.

3. Identifying and describing studies: results

Our initial searches in the databases and websites listed in the previous section produced 5774 potentially relevant hits. Duplicates were deleted within but not across databases. After a review of titles, the majority were discarded as they did not match the review topic, and 504 were selected for review of abstracts. For a small number of relevant titles, abstracts were not available so the full text was retrieved instead. We excluded most of the abstracts as they did not match the systematic review topic. While a significant proportion of the references focused on different types of unearned transfers, most did not compare outcomes of a transfer made to women versus men. Most other hits were irrelevant to the review.

Figure 3.1: Filtering of papers from searching to map to synthesis



A total of 140 abstracts were selected for more in-depth review of full text and application of the methodological quality score based on the criteria for topic and methodological relevance. Of these, 20 full texts could not be located.⁸ Hand-searching of the reference lists of all selected papers yielded an additional 15 studies for review and expert reviewers located a further 4 studies for inclusion. Of these 139 full texts, 110 were excluded on the basis of topic or methodological relevance. Of the remaining 29 papers, 14 were excluded as they did not meet the MSSM score criteria. This left us with a total of 15 included studies examining 5 types of transfers (conditional cash transfers, unconditional cash transfers (including child benefits and old-age pensions) and cash and kind grants to micro-enterprises and micro-credit.

Characteristics of included studies

This section summarizes the main features of the studies included in this review (detailed descriptions are available in Appendix E).

Programme types and settings

The studies that met our inclusion criteria represent programmes in four of the broad categories of transfers defined in our framework, and are set in six countries, as described in Table 3.1.

⁸These studies are listed in Appendix 3.2.

Table 3.1: Characteristics of studies: transfer categories and countries

	Africa	Latin America			South Asia			
	South Africa	Nicaragua	Mexico	Bolivia	Pakistan	Bangladesh	Sri Lanka	Count
Unconditional cash transfers	Duflo(2000) and (2003) ⁹ Bertrand <i>et al.</i> (2003)		Juarez (2010)	Yanez-Pagans (2008)				4
Conditional cash transfers		Gitter and Barham (2008)	Davis <i>et al.</i> (2002) Rubalcava <i>et al.</i> (2009)					3
Grants to household enterprises			Davis <i>et al.</i> (2002)				de Mel <i>et al.</i> (2009)	2
Micro-credit to household enterprises					Montgomery and Weiss (2011)	Pitt and Khandker (1998) Pitt <i>et al.</i> (1999) Pitt <i>et al.</i> (2003) Pitt <i>et al.</i> (2006) Roodman and Morduch (2009)		6
Count	2	1	4	1	1	5	1	15*

*The total is more than 15 because Davis *et al.* (2002) is listed twice.

⁹Duflo published an earlier paper in the American Economic Review on this same study in 2000. The 2000 paper is cited by the 2003 publication as a nonparametric version of the same analysis. As such, for this review we only cite the results as published in the 2003 paper.

Three out of the four studies covering unconditional cash transfer programmes to families analysed old-age pension programmes. Two of these focus on a major expansion of the old-age pension in South Africa (Duflo, 2003 and Bertrand *et al.*, 2003) and a third one examined the old-age pension programme in Bolivia (Yanez-Pagans, 2008). The first is a universal, non-contributory programme targeting all women aged 60 and over and all men aged 65 and over, subject to a means test. The second is characterised in the study as ‘an unconditional cash transfer program which entitled all Bolivians aged 65 and older to receive a flat, non-contributory, and unconditional cash transfer independently of their income level (i.e. the only eligibility criteria rule is age)’ (Yanez-Pagans, 2008: p.4). One study by Juarez (2010) examined a pension transfer to individuals aged 70 and over in metropolitan areas of Mexico City, through the *Pensión Alimentaria para Adultos Mayores* (nutrition transfer for senior adults). In this program, commencing in 2001, approximately 70USD was allocated monthly per individual, with no limit on the transfer amount per household.

Three studies cover conditional cash transfer programmes and are all based in Latin America: two evaluations of programmes in Mexico focused on the well-known conditional cash transfer programme, PROGRESA (now known as *Oportunidades*) (Davis *et al.*, 2002; Rubalcava *et al.*, 2009) and the third study, Gitter and Barham (2008), focused on Nicaragua’s *Red de Protección Social* (Social Safety Net).

Turning to programmes focused on household enterprise activity, one study examines the effect of transfers to farmers in Mexico through a programme called PROCAMPO (Davis *et al.* 2002), and another to micro-entrepreneurs in Sri Lanka (de Mel *et al.*, 2009). The six remaining studies focus on micro-credit from three different programmes, all but one in Bangladesh: Grameen Bank (Pitt and Khandker, 1998; Pitt *et al.*, 1999; Pitt *et al.*, 2003), BRAC (Pitt and Khandker, 1998; Pitt *et al.*, 1999; Pitt *et al.*, 2003; Pitt *et al.*, 2006) and Bangladesh Rural Development Bank or BRDB (Pitt and Khandker, 1998; Pitt *et al.*, 1999; Pitt *et al.*, 2003; Roodman and Morduch 2009). The sixth study focused on micro-credit borrowers through Khushhali Bank in Pakistan (Montgomery and Weiss, 2011). Only one of the studies examined more than one type of intervention (Davis *et al.*, 2002, which studied both PROGRESA conditional transfers and PROCAMPO unconditional transfers).

The programmes varied not only by type of transfer examined but also in other important ways, such as funding source, coverage and target population. The micro-credit programmes all provide small loans to the poor, most often in rural areas. While most target women especially, only about one third of clients of the Khushhali Bank in Pakistan were women. However, while government bodies (e.g. the Bangladesh Rural Development Bank) provide some transfers, others are led by non-governmental organisations (e.g. Grameen Bank and BRAC). In contrast, the two conditional cash transfer programmes, Mexico’s PROGRESA and Nicaragua’s *Red de Protección Social* (Social Safety Net), are government programmes that target primarily rural women as the transfer recipient. The primary recipients of Mexico’s PROCAMPO, a government programme providing unconditional cash transfer to farmers, are male landowners. De Mel *et al.* (2009) examine the outcomes of capital shocks (cash or inputs/equipment) provided to male and female micro-enterprise owners as part of a field experiment. The target population were low-capital micro-enterprise owners with no paid employees, and outside the agriculture, transportation, fishing and professional services.

Study designs

Only quantitative studies qualified for inclusion as Level 1 studies. Among these, all used either a randomised controlled trial (RCT) or applied well-documented quasi-experimental methods to observational survey data to generate a valid control group.

One of the included studies (de Mel *et al.*, 2009) aimed at providing capital shocks to micro-enterprises and measuring the return to this shock. Selected firms were randomly given a grant. While the allocation of treatment was not stratified by gender, the large sample size enabled women in the treatment group to be comparable in terms of pre-treatment characteristics to non-treatment women. The same was true for men. The de Mel *et al.* (2009) study was the only study included in this review that used only data from an RCT.

Three other studies used a randomised design but with the addition of other econometric techniques. Rubalcava *et al.* (2009) used data collected originally to examine the impact of PROGRESA. While baseline data are from a census from 1997, data are also used from a 1998 survey of selected communities randomly allocated to treatment and control groups to receive PROGRESA transfers. Communities were selected for the PROGRESA evaluation sample through propensity score matching based on their level of infrastructure and economic status. This limited selection and programme placement biases. The empirical strategy in Gitter and Barham (2008) is also based on a randomised evaluation using a difference-in-difference approach to analyse the impact of the similar *Red de Protección Social* cash transfer, implemented in 21 randomly selected communities, with another 21 communities selected as control group. The difference-in-difference approach is used to correct for imbalance in the treatment and control communities. Finally, the paper by Davis *et al.* (2002) adopts a hybrid approach as it also evaluates PROGRESA, which is randomised, but uses econometric techniques to enable comparison to PROCAMPO clients, a programme that does not have a randomisation component.

Juarez (2010) and Montgomery and Weiss (2011) also adopt a differences-in-differences approach but in each case exploit a quasi-experiment rather than an explicitly randomised design. In the case of Juarez (2010), the identification strategy is a triple-differences design. This exploits the fact that, within the same large metropolitan area in Mexico City, the old-age pension was rolled out to elderly households at different time periods: Distrito Federal neighbourhoods received pensions before State of Mexico neighbourhoods, and within Distrito Federal, enrolment was first extended only to poor households in 2001, then to all age-eligible households in 2003. Montgomery and Weiss (2011) examine the case in which a micro-credit provider's loan disbursement to different communities in Pakistan was staggered over time with no systematic rationale. The identification of effects due to credit access was allowed by comparing members with loans with members who had not yet received loans (due to the programme rollout being staggered), and with non-members.

A programme's well-defined eligibility requirements can offer the opportunity to implement a discontinuity-based design in cross-sectional data. Yanez-Pagans (2008) takes advantage of a sharp discontinuity created by the programme assignment mechanism to investigate the heterogeneity of the allocation patterns within indigenous, non-indigenous and multi-ethnic households that include one elder and one school-aged child (6-13 years old). Similarly, Duflo (2003) investigates the effects of men's and women's pensions on child nutrition by exploiting the discontinuity at age 60 for women and age 65 for men. In this study, Duflo compares anthropometric indicators (weight for height and height for age) of

children in households with no member eligible for the pension, those in households with an eligible man, and those in households with an eligible woman. Her preferred estimates are obtained using the presence of eligible men and women as instruments for actual pension receipts, with other appropriate controls in the specification. Further analysis by this researcher (2003) uses a difference-in-difference methodology by examining height for age of younger and older children in eligible and non-eligible households, as height for age reflects past and current nutrition.

Bertrand *et al.* (2003) also exploit eligibility criteria to study the South African pension system. This team adopts a slightly different approach. They focus only on three-generation households in order to reduce heterogeneity in the sample, a measure that ensures that the age of the elderly person is the only source of variation. The team then uses programme eligibility as an instrument for receiving actual transfers.

Other studies that use eligibility criteria include Pitt and Khandker (1998), Pitt *et al.* (1999) and Pitt *et al.* (2003). Each of these uses a quasi-experimental discontinuity-based design with village-level fixed effects that are based on the criteria that households with more than half an acre of land are not eligible for micro-credit, and that villages are defined by men's- and women's-only groups. Finally, Pitt *et al.* (2003) use panel data methods while Pitt *et al.* (2006) extend the cross-sectional methodology of Pitt and Khandker (1998) using instrumental variables with household fixed-effects.

In a unique replication study, Roodman and Morduch (2009) revisit the findings of Pitt and Khandker (1998) and Pitt *et al.* (2006) with the same panel data. The study employs difference-in-difference methodology, but also runs specification tests that argue that Pitt *et al.*'s (2006) methods may not adequately resolve the causality problem in their particular setting. The methodology is similarly rigorous in its approach but results in a contradictory and negative finding.

4. Findings: differences in outcomes of transfers to women versus men

There are important differences in programme design between the various types of transfer programmes examined in the included studies. Here, we summarise our findings on the review question for each type of programme. In the final chapter, we present a synthesis of the evidence on outcome differences for all types of transfers made to women versus men. The table in Appendix 4.1 summarises the results for each included study.

Unconditional cash transfers

Studies on South Africa's old-age pension programme offer a number of important finds. Gender effects appear to prevail significantly in this programme; that is, overall, women's pensions have great effects on outcomes both for children and prime-age adults. Interestingly, these effects appear to depend on the gender of the transfer beneficiary as well as the gender of household members. Duflo (2003) finds that women's pensions increase the nutritional status of girl children significantly, but not that of boys, while men's pensions have little or no effect on the nutritional status of either male or female children. Bertrand *et al.* (2003) find that men's pensions have no effect on the labour supply of prime-aged male and female household members, but women's pensions have a negative effect. They also find that women's pensions tend to reduce labour supply for prime-aged men more so than for prime-aged women. As a result, overall well-being may or may not improve as the net effect of the pension appears to be a decline in net household income (1Rand in pension corresponds in a decline of 1.05Rand in non-pension household income).

Juarez (2010) finds similar results with regard to labour supply for the demogrant¹⁰ in Mexico City. In general, the grant does not appear to affect pensioners. Instead, it seems to have a greater effect on those living with an eligible pension recipient which is differentiated by gender: the study shows that the labour force participation and work hours of 18-59 year old men and women increase if the eligible pensioner is a male but decrease, if the eligible pensioner is female, suggesting a transfer of economic resources to younger members of the household.

In Bolivia, Yanez-Pagans(2008) finds that women's eligibility for a pension results in overall increases in expenditures on children's schooling by 56-91%. This is remarkable, relative to men's eligibility for the pension (which has no significant effect). The effect is especially strong for non-indigenous women. However, in contrast to Duflo's findings for South Africa (2003), these effects mostly benefit boys, and there is no effect on enrolment. Conversely, nutritional impacts, as measured by child weight for height, are significant only for girls.

We found no studies that examined differential effects for unconditional cash transfers to men versus women on household investment or female empowerment. Differential impacts on male versus female household members due to transfers to women could have varying impacts on women's position and relative power in household relationships and decision making. However, such impacts are only speculative without further analysis.

Conditional cash transfers

The studies examining PROGRESA focus on indicators such as type of expenditure (including health, school, clothing, food), boys' and girls' school enrolment, and

¹⁰ A grant based on purely demographic principles such as age and sex.

investments in business, agriculture and small livestock. They consistently find a relative difference in expenditure, investment and school enrolment for transfers to women versus men. Rubalcava *et al.* (2009) find positive impacts of the transfer on improved nutrition for the household overall, as measured by protein per calorie of intake. Davis *et al.* (2002) and Rubalcava *et al.* (2009) both find that transfers in the hands of women favour child goods - specifically children's clothing. Rubalcava *et al.* (2009) also find a positive impact possibly, but not as strongly, on education expenditures and school enrolment. We found no other reported impacts for other types of child goods.

Both Davis *et al.* (2002) and Rubalcava *et al.* (2009) also suggest that PROGRESA income that is given to women is more likely to increase certain types of investment. Davis *et al.* (2002) finds an increase in business investment, while Rubalcava *et al.* (2009) find a shifting of resources to investment in small livestock. They also note that household decisions are based on benefits at the time they are paid to women and not on future PROGRESA income. Finally, it is worth noting that Davis *et al.* (2002) find a mix of gender and programme effects, where male PROGRESA recipients behave differently from female PROGRESA and male PROCAMPO recipients.

The third study in this category examines the *Red de Protección Social*, a conditional cash transfer programme directed to women in Nicaragua (Gitter and Barham, 2008). The study estimates the impact of the programme's transfers on school enrolment and household expenditures. It shows that the programme has a positive impact on school enrolment and food and milk per capita expenditures, and that this effect does not decrease when the woman of the household is less powerful (measured in relative years of schooling completed). This finding suggests that the transfers to women are not being captured by men with pre-transfer power advantage.

In a discussion of CCT programmes that are also targeted at women (as both programmes under discussion are), it is necessary to understand whether or not estimated programme impacts are due to conditionality or due to the impact of the gender targeting. For instance, in PROGRESA, a researcher who observed only an increased take-up of clinical services and no other information, might plausibly argue that increased clinic attendance is a condition of receiving the grant, an income effect applying to the household as a whole, or the result of increased income in the hands of women with a greater preference for child health care. It may also not be possible to distinguish whether conditionality itself affects women differently from men. As a result, in the studies we reviewed, the evidence has to be interpreted with care.

However, in the studies reviewed here, there is little direct evidence that conditionality is playing a significant confounding role in the effects of the cash transfer. In Rubalcava *et al.* (2009), the authors show that their estimates of PROGRESA's impact on child goods are present only in households with mother and father, but not in single-headed households, while the conditions hold in both cases.¹¹ In Gitter and Barham (2008), the authors explicitly attempt to understand the impact of gender targeting by looking for heterogeneous impacts associated with an ex ante measure of female empowerment within the household. Gitter and Barham (2008) find that the non-income effects of the Nicaraguan CCT are extremely important for school enrolment, which may not be surprising given the conditionality of the programme. In addition, the authors find that that non-

¹¹ In a paper that was not included, Attanasio and Lechene (2002) find that their results are robust to treating schooling as endogenous by controlling for it in their demand estimation and by using lagged schooling as an instrumental variable, thus accounting for the conditionality.

income impacts are also found on both food and milk per capita expenditures, neither of which are attached to programme conditions (although Gitter and Barham also point out that nutrition education may also play a role). In fact, similar results are found in non-conditional programmes for most of the literature included in this review, but the evidence for conditionality on outcomes is yet to be determined conclusively.¹²

Grants to micro-enterprises

De Mel *et al.* (2009) examine micro-enterprise cash and in-kind grants to individuals in Sri Lanka provided to male and female entrepreneurs in the context of a field experiment. Because of fungibility effects, the experiment did not specify that the cash had to be used for the business; the cash grant was made explicitly unconditional. The study found that male entrepreneurs obtained a permanent increase in income, resulting in purchase of durables and financial assets for their households, but women did not. Men invested more of all grants, while women did not invest small grants and invested from large grants but earned no return. They found no evidence that women invested grants in schooling or health/household durable goods. While this study did not examine differential effects on empowerment as an outcome, the study suggests that women who are more empowered (a composite measure of reported involvement in household purchasing, reported ability to make input and purchase decisions without spousal input, and agreement that spousal input increases profits) are able to more efficiently invest their grants.

Micro-credit

In early work based on their study of micro-lending in rural Bangladesh, Pitt and Khandker (1998) suggest that gender effects are strong: credit to women increases total expenditures, women's assets, girls' and boys' schooling and labour supply for women, and that men's credit has significantly fewer effects, increasing boys' schooling only. Similarly Pitt *et al.* (2003) find that female credit has large, positive and significant effects on height-for-age for girls and boys, and on arm circumference for girls, relative to credit to men. It should be noted that both studies also suggest that the effects are heterogeneous across programmes. For example, the researchers find a strong, statistically significant effect of female Grameen Bank credit on girls' schooling and a relatively smaller effect on borrowing from other credit programmes. Similar heterogeneity across programmes emerges in Pitt *et al.* (1999) when looking at outcomes on fertility and contraception use.

In contrast to the other two studies, Pitt *et al.* (1999) find impacts on contraception use for transfers to both men and women to be small or insignificant. Women's credit also has a positive but not necessarily significant impact on fertility, while men's credit reduces fertility relative to non-participants.

Pitt *et al.* (2006) constructed indexes of women's empowerment in multiple domains (purchasing power, finances, transaction management, mobility networks, activism, fertility and parenting, household attitudes and husband's behaviours), and find that women's credit has a strong effect on most of these measures of empowerment, while men's credit does not.

In Pakistan, Montgomery and Weiss (2011) find somewhat mixed results: female borrowers 'do not report any major improvement in their sense of empowerment after taking out a loan', whereas wives of male members reported being more empowered in some areas (such as decisions about fertility and household finances) (Montgomery and Weiss, 2011: p.106). The authors report that this lack of impact

¹² We thank two of our reviewers for noting this.

on empowerment for female borrowers may be due to these women's higher sense of empowerment at baseline. Given the heterogeneity in study outcomes, we conclude that the evidence on the relative impact of loans to men versus women in Bangladesh is inconclusive.

It should be noted that recent studies of micro-credit that did not meet our criteria for study inclusion highlight significant controversy over whether micro-credit has any causal impact at all on poverty and related outcomes, let alone effects by gender (for an example and overview of this larger question, see results and discussion in Banerjee *et al.*, 2009). Specifically, with respect to the early Pitt and Khandker studies, a series of replication studies has emerged to debate the validity of their initial findings. In their replication study, Roodman and Morduch (2009) question both the sign and the strength of the econometric identification strategy for the results found by Pitt, Khandker and their co-authors. In responses dated March and April 2011, Pitt (2011a and b) demonstrates first that the Roodman and Morduch (2009) results contain a significant error, that when corrected leads to sign concordance with the Pitt and Khandker findings. However, at this date, while the sign of the effects have been found to be consistent, the controversy about whether the Pitt and Khandker econometric strategy truly leads to causal inference remains unresolved. Troubling though it may be, it is clear that the data for this particular study location are particularly problematic and that evidence for micro-finance in general, is not yet conclusive.

Notable results from excluded studies

A significant body of research resulting from the search terms, bibliographies and suggestions by reviewers and others was reviewed but not included, and was revisited ex-post to see if any implications for the research question could still be drawn.

First, much general literature on intra-household resource allocation was reviewed that presented evidence to suggest that altering the balance of resources controlled by women is positively correlated with family well-being in multiple ways. Income in the hands of women has been shown to be positively related to the living standards of their children and the household as a whole (see Haddad *et al.*, 1997, for a survey of the early literature, and Doepke and Tertilt, 2011, for a review of more current literature). Thomas (1994) shows that non-labour income of the mother in Brazil has a significantly larger impact on the height of girls than boys. Looking at other types of transfers within households, such as inheritance, gifts and remittances, we also find some evidence that the direction and impact of transfers can vary by the gender of the sender. For instance, women have been found to be more likely to send remittances between generations (for example to children) while men are more likely to send them within a generation (Pfau and Giang, 2008). Women have also been found to be more likely to send remittances to their origin households, which could also impact family well-being (Curran and Saguy, 2001; Osaki, 2003).

Such gender effects can depend on interaction with other characteristics, such as education and land ownership. In a study of the rural Philippines, for instance, Quisumbing (1995) finds that only better educated fathers favour daughters in allocating resources, while mothers with more land favour sons. However, as is the case with this example, much of this literature was judged to be highly sensitive to context and, more importantly, not topically relevant to the question of transfer programmes specifically. The finding that income in the hands of women is associated with different choices from income in the hands of men is suggestive but potentially misleading in the case of causal attribution, as families with more

income in the hands of women are likely to be different from families where the situation is reversed, often in ways that are not observable by researchers. Also, these findings may have low external validity for the context of a transfer programme. In some cases, researchers exploit natural experiments or other sources of variation in resources that allowed causal interpretation; for example in Cote d'Ivoire, where crops are gender-specific and differentially affected by weather patterns, Duflo and Udry (2004) find that rainfall shocks that increase women's income increase expenditure on food. However, as Duflo (2005) notes, the presence of a programmatic context itself as well as the infusion of additional resources into the household can have its own effects: if a transfer programme is well run and highly trusted to effect a permanent change in income, outcomes may change markedly, but if a programme is seen as purely temporary, households may anticipate the end of the programme and not alter their behaviour.

Second, a relatively large body of studies document the successes and failures of programmes that deliver transfers to women, but do not necessarily include analysis of whether programmes succeed or fail *because* they deliver transfers to women. Many of the papers that were gathered as part of our search process provided quantitative and qualitative evidence on the overall health, economic and educational impact of individual programmes, including several in a comprehensive review format. Certain specific and seminal studies fell into this category: for instance, Lundberg *et al.* (1997)¹³ conducted a before/after study of a major policy change in child benefits (the Child Allowance Law) in the UK and find a highly significant increase in spending on women's and children's clothing relative to men's after the benefit was changed from a tax deduction on salary to a cash benefit to women, suggesting that transfers to women are more likely to be shared relatively more with household members. Similarly, a host of rigorous impact evaluations of PROGRESA demonstrate strong effects on child well-being and other outcomes, but as the programme primarily targeted women, few studies specifically addressed the effect of gender targeting directly through empirical methods (two exceptions that attempt to do so are included in the review). Two important studies that were noted in this review but excluded are Attanasio and Lechene (2002) and Attanasio and Lechene (2010). As Doepke and Tertilt (2011) note, the approach of Attanasio and Lechene (2002) of essentially comparing households with different post-transfer women's income shares while controlling for post-transfer total income does not rule out the possibility of important unobserved differences across households with different pre-transfer income differences. However, their results consistently show that an increase in the women's share of income under PROGRESA had a steadily positive effect on children's clothing and a negative impact on alcohol consumption, although effects on food consumption are somewhat less robust to specifications. In follow-up work, Attanasio and Lechene (2010) use an indirect but novel approach to argue that transfers to women indeed had a positive causal impact on food consumption in PROGRESA. They document that total consumption increased but that food budget shares did not decrease and rule out a number of alternative explanations such as changes in preferences, and the labelling of money, such that the authors finally, by elimination, suggest that the control over resources by women is the only remaining possibility.

¹³Lundberg *et al.* (1997) was excluded first on topic relevance as the sample population was outside of the review's defined population of interest - it included both non-poor and poor families in a developed country (the UK). Secondly, Lundberg *et al.* (1997) themselves note that their findings are not attributable to the sex of the transfer recipient, and demonstrate correlation with a policy change rather than causation.

Also included in this category are a number of excellent reviews (non-systematic) of the impact of transfer programmes (for example, Das *et al.*, 2005; Westover, 2008; Banerjee *et al.*, 2009; Fiszbein *et al.*, 2009). A systematic review exists of conditional cash transfers for improving uptake of health interventions in low- and middle-income countries (Lagarde *et al.*, 2007), and one on the impact of micro-credit, funded by 3ie, is currently in progress. A useful systematic review on conditional cash transfers and performance-based incentives for health is Gaarder *et al.* (2010).

Two other studies that cover other types of transfer programmes in subpopulation groups and consider differential impacts of transfers to men and women are Almeida and Galasso (2008) and Ssewamala *et al.* (2010). Almeida and Galasso (2008) examine asset transfers to promote self-employment among welfare participants in Argentina, while Ssewamala *et al.* (2010) analyse the effect of an economic empowerment intervention in rural Uganda targeted at adolescents that included a financial transfer. However, in both cases, the intervention involved a number of components in addition to a resource transfer, i.e. an intensive mentorship or tutoring programme. We excluded these studies as the contribution of this additional component might or might not be arguably more likely to impact on behavioural outcomes than the resource transfer.

A number of Level 2 studies that considered impacts of transfers to men and to women but did not qualify on methodological grounds also emerged as particularly insightful. Kabeer (2001) presents a qualitative analysis that suggests that loans to women affect women's empowerment, as measured in terms of women's perceptions of their position within the household and household relations. The study notes the complexity of measuring empowerment, as judgements in evaluations differ as to what changes constitute evidence of empowerment, particularly in societies where public mobility and social norms may be actively chosen by women to signal social standing.

Holvoet (2005) compared the gender effects of two subsidised credit programmes in southern India, the Integrated Rural Development Programme (IRDP) and the Tamil Nadu Women's Development Programme (TNWDP) and finds that the decision-making influence of women only increases when transfers are made to women, and only for decisions about loans. Swaminathan *et al.* (2009) also examine credit transfers to men and women across four formal credit programmes, in addition to informal credit transfers (for example, through networks of friends, family and acquaintances), and suggest that recipient gender matters for employment-related outcomes as well as status and self-esteem. In Uganda, Hoffmann (2008) finds that when allocated a mosquito net, women are not more likely than men to use nets for their children, but tend to cover a larger fraction of household members. Men are more likely than women to use the net for themselves (although women also do so). Hazarika and Guha-Khasnobis (2008), studying all micro-credit transfers in rural Malawi in 1995, find that young girls', though not boys', long-term nutrition and the access to micro-credit of adult female household members are positively correlated. Fletschner (2008) analyses all credit to men versus women in rural Paraguay in 1999, using an observational cross-

sectional study and finds that household efficiency falls by an additional 11percent.¹⁴

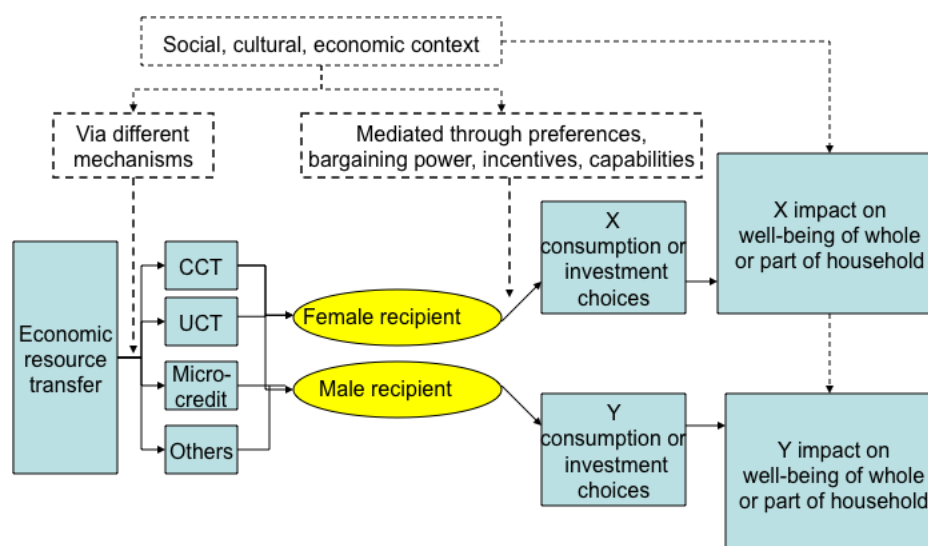
¹⁴¹⁴Kabeer's study (2001) was excluded due to lack of information about the methodology and data analysis. Holvoet (2005) and Hoffman (2008) were excluded due to concerns about the quality of comparison groups and control variables. Swaminathan *et al.* (2009) shows some unresolved inconsistencies in the sample characteristics and survey responses, for example, the number actually reporting access to credit is considerably lower than the proportion reported in the sampling design and an instrumental variables strategy is proposed but the specification is not validated. Hazarika and Guha-Khasnobis (2008) and Fletschner (2008) do not address a specific programme, and it is not possible to analyse the role of selection in these studies; or to understand the potential impact of a specific incremental intervention.

5. Implications and conclusion

Key findings

For the reader's benefit, we revisit and recast the broader overall conceptual framework outlined in the previous section to focus on the potential impacts and causal pathways we searched for in our reading of the available literature.

Figure 4.1: Conceptual framework



Differences in outcomes from transfers to women versus men are found in all but two of the studies included in this review (although the results from a cluster of studies in the former group conducted by Pitt and Khandker and colleagues are put into question by the findings of a study in the latter group - Roodman and Morduch, 2009 - as noted above). Included studies cut across the three broad dimensions of objective well-being indicators discussed in this study - material and physical, human capital, and social relations. However, none of the studies looking at transfers to men versus women considered subjective indicators of well-being. This gap is probably linked to the scarcity of qualitative studies on the subject of transfers to men versus women, as well as challenges in identifying and measuring subjective feelings towards one's situation. The table in Appendix 4.3 categorises studies into the different dimensions of well-being, and identifies some of the subjective indicators unanalysed in existing literature.

Here, we summarise the key findings from our review.

- **Targeting transfers to women can improve children's well-being.** From the studies that rigorously examine conditional cash transfer programmes, we found that outcomes for objective indicators of well-being were improved, especially in the form of investments in children's health and education. It should be noted that variability across specific programmes and contexts prevents further generalisation. In these studies, there is little direct evidence that conditionality is playing a significant confounding role with the effects of the cash transfer. In fact, the evidence for conditionality on outcomes is yet to be found conclusive given that effects of gender differences in allocation of transfers are found in the general literature on

intra-household resource allocation as well as in the studies reviewed here that focus on unconditional cash transfers.

- **The gender of the transfer recipient affects the outcomes of some programmes.** Except for the findings for micro-credit, the balance of the evidence indicates that the gender of the transfer recipient affects the outcomes of particular types of programmes, although not always in the clear direction of overall household well-being. In the context of CCT programmes, targeting cash transfers towards women appears to improve child nutrition and health; however, it is not yet clear that such interventions consistently lead to any other systematic pattern of economic choices. Because there is little direct evidence of conditionality having a confounding effect, these results can be safely attributed to the gender of the recipient. In the case of unconditional cash transfers (most notably pension programmes), it is possible that the net effect of a transfer to a woman leads to negative outcomes for the household (Juarez, 2010; Bertrand et al., 2003).
- **Increasing female control of transfers does not guarantee positive outcomes.** The evaluations of unconditional cash transfer programmes also find differences in outcomes of transferring assets to women versus men, but these outcomes are not unambiguously positive nor do they tend to consistently benefit one gender versus another. Duflo (2003) found positive impacts on girls' but not boys' nutritional status, Bertrand *et al.* (2003) found reductions in the labour supply of prime-age men (which reduce their income from employment), Juarez (2010) also found reductions in the labour supply of both prime-age men and women, and Yanez-Pagans (2008) found increased school expenditures that benefit boys more than girls. It is worth remembering, though, that unlike most CCTs, unconditional cash transfers such as old-age pensions are typically not designed to have impact on overall household well-being, and the studies included in this review do not assess programme impacts against their primary objectives.¹⁵

In the case of grants to household enterprises, de Mel *et al.* (2009) find that giving transfers to men resulted in the accumulation of durables and assets, while transfers to women did not, due to women's lack of investments and low capital returns. Finally, findings for micro-credit from the studies included in this review, in contrast to those of the other types of transfer programmes examined, remain highly controversial and inconclusive. These studies, which focused primarily on micro-credit in Bangladesh, arrive at contradictory conclusions, while the single study that examined micro-credit elsewhere (in Pakistan) found mixed results across measures of empowerment (Montgomery and Weiss, 2010). As noted above, recent studies of micro-credit that did not meet our criteria for study inclusion highlight significant controversy over whether micro-credit has any causal impact at all on poverty and related outcomes, let alone effects by gender (for a review see, for example, Banerjee *et al.*, 2009).

- **Outcomes may be dependent on the type of programme offered.** In spite of the limited number of studies included in this review, the results seem to indicate that the type of transfer may play an important role in the outcomes for the household. It cannot be assumed that *any* transfer to a woman will lead to better outcomes for family well-being than the same transfer to a man. The studies on conditional cash transfers do suggest that

¹⁵ We thank our reviewers for noting this.

transfers to women lead to greater improvements in family well-being than transfers to men, a finding supported by the more general literature on intra-household resources allocation discussed earlier in this paper. However, the impacts by gender of recipient of other transfers like pensions, as well as grants and micro-credit, which are types of interventions that focus on income generation, are more ambiguous.

Causal pathways: why do we see the results that do exist?

Many of the studies reviewed here, as well as others that did not meet our inclusion criteria, briefly discuss hypotheses on the causal pathways between economic resource transfer intervention and outcomes. In general, we find that the studies suggest that the unitary household model does not hold. The balance of research indicates that differences in preferences, incentives and bargaining power (as outlined earlier in this paper) do in fact matter, even when women and men have the same capabilities.

Multiple authors in the review suggest that differences between women and men have a causal effect on outcomes regarding household well-being, particularly in the case of unconditional and conditional transfers focused on consumption, where income generation is not an issue. Bertrand *et al.* (2003) suggest that differences in altruism could explain the difference between impacts on other household members seen when female pensioners receive benefits. In her study of the effects of pensions to male and female recipients on the anthropometric status of children in South Africa, Duflo (2003) suggests attributing some of these effects to differences in longevity between men and women, writing that: 'Grandmothers are likely to have a stronger incentive than grandfathers to invest in children because they will benefit from them for a longer time', as they are eligible to receive the pensions earlier than men (age 60 for women versus age 65 for men) and because they live longer (p.21). Finally, in their paper, Rubalcava *et al.* (2009) suggest that gender effects in PROGRESA are related to female time preferences that are, specifically, more future-oriented. 'PROGRESA benefits increase the power of women, who are better able to assert their preferences' for investments with a longer-term horizon such as investments in children and small livestock (p.535). The authors substantiate this using less direct but related evidence (data from the Mexican Family Life Survey), which demonstrates that women are on average more patient than men.

Secondly, bargaining power can mediate outcomes, and is important as an outcome itself. For instance, Rubalcava *et al.* (2009) cite qualitative research by Adato *et al.* (2000) showing that PROGRESA income is perceived as being under the control of women, giving them greater ability to invest according to their own preferences and priorities. However, putting resources in the hands of women may not increase their bargaining power a priori: in the case of grants to household enterprises, de Mel *et al.* (2003) find that small transfers to women in this context may be appropriated by men in the household and diverted to other purposes. In this vein, Bertrand *et al.* (2003) suggest that the lack of bargaining power by female pensioners in South Africa is what leads to a male-female recipient differential in labour supply response by prime-age men: '[w]hen the pensioner is a man, the ability of prime-age men to capture resources is diminished' (p. 48).

Finally, little evidence suggests that differences are generated because of differential opportunities for women to maximise the benefit from transfer programmes. De Mel *et al.* (2003) show in fact that gender gap in enterprise performance is *not* attributable to different abilities and that the gender gap in

fact is larger in female-dominated industries, but few other studies explicitly or implicitly consider this possibility.

Limitations of the review

To restrict the scope of the review, we chose to focus on specific types of transfers. Other less-common transfers to households that could have a significant impact that were not explicitly included were for instance emergency transfers and food aid, although the breadth of the search terms (including the word 'transfer' alone) makes it unlikely that important studies in this category were missed. However, we acknowledge that the variety of conditions under which these additional transfers are made could also have important additional interactions with gender in their impact on the family. We also acknowledge the role of other types of resource flows such as inter-household gift exchange and remittances in this context; an important question is whether or not transfer programmes of the type examined in this review simply crowd out or substitute for informal resource flows. In most of the evidence base we discuss, net impacts are estimated for the household, suggesting that at least for our focus on anti-poverty programmes, overall impacts implicitly take these into account (although a deeper understanding of the interaction between formal and informal flows is an area ripe for study).

Biases in the review

The findings from the review are limited by several potential methodological biases, which we have recognized and sought to mitigate throughout the research process.

The review is restricted by the scope of the studies included in the search. Our search strategy excluded studies published before 1990, and may have excluded findings published in other languages (although some searches were undertaken for Spanish-language material). In the snowballing search of full texts, the reviewers scanned for relevant studies in other languages or published earlier. However, in the end, all the relevant studies that we found were published after 1990 and all were in English.

The review findings were also limited as we did not include papers for which we could not verify the quality of the evidence. Methodological quality was judged primarily from the information provided in the papers, articles or books. If authors did not comprehensively report their methodology and findings, their study would not necessarily pass the quality appraisal criteria, even if the original work was of high quality. As mentioned earlier, where studies were considered marginally qualifying, two attempts were made to contact authors by email with clarifying questions, but further contact was not attempted. Also, papers that were completed by students as part of a Masters or Bachelors-level degree were also excluded, as we could not confidently verify the methodological rigour of such studies.

A final point worth noting regarding bias is the potential of 'evaluation bias' in the evidence on our review question specifically, and on development programmes in general. 'Evaluation bias' may arise if programmes evaluated and reported upon are those that are of a certain size, have more funding, and/or are organised and implemented in particular ways. We have not identified robust evidence to suggest that this type of bias is in place. However, it is possible that these factors mean that the bulk of, for example, CCT or micro-credit programmes that are robustly evaluated (especially if the evaluation is an RCT) are not representative of all the CCT or micro-credit programmes that exist. As is the case with reporting bias,

‘evaluation bias’ raises important questions about the ability to generalise from specific programme evaluation findings. In this case, as Duflo (2005) suggests, larger and more established programmes are likely to have more significant impacts than smaller programmes that are perceived as temporary, and so ‘evaluation bias’ is likely to be in the direction of overstating impact.

Implications for policy research

Transfer programmes remain a popular and important poverty alleviation tool across the developing world, and it is essential to develop a larger evidence base on which these programmes are founded. The limited nature of our conclusions is set against a contrastingly large amount of literature retrieved through our searches. Our search terms yielded an initial list of 5764 studies, but very few of these provided admissible findings for the review. It is possible, however, to use what results were gleaned to identify several practical and systematic limitations contributing to the scarcity of evidence to guide future directions in research.

First, gender remains an important consideration in development policy and programming, and as such, evidence on the role of women in improving household wellbeing is a critical area in need of further research. Many critical concerns are specific to women (for example, maternal health), and poverty and low development outcomes affect women in profound ways. Much of the literature we reviewed implies that gender-specific impacts can be programme- and context-specific. Individual practitioners would do well to investigate the circumstances of their particular programmes in detail prior to making design choices, rather than making assumptions in favour of either gender.

It is important to note that many programmes in fact enrol only female recipients. This programme design is especially challenging for the research community, as it ultimately allows for no natural comparison group of male recipients. Many evaluations are then elicited without explicit consideration of the counterfactual.

Even when programmes have both male and female recipients, it is often unclear whether differences between the two groups are due to gender effects per se, or indirectly due to selection biases. In the first instance, gender directly mediates the relationship between transfers and outcomes for recipient households, all else being equal; in the second instance, outcomes may differ simply because typical female recipients and their household circumstances are significantly different from typical male recipients.

The identification of true gender effects is also made problematical by programmes that are comprehensive in scope and bundle financial assistance with training and other forms of social support. This design makes it difficult to cleanly attribute effects to the transfer component alone.

In many instances, evaluations that focus on reporting overall effects are often sufficient for operational purposes, and do not go into the depth needed to separately identify income or wealth effects due to the release of household budget constraints, effects due to program terms and conditions, and effects that arise from payments being made specifically to women. Selection is often inadequately accounted for even when acknowledged to be present. Researchers and consumers of research would benefit from an increased emphasis on careful construction of appropriate comparison groups and the inclusion of appropriate control variables.

For the most part, the studies that are included tend to be restricted in the scope of measures of well-being. There is a significant mismatch in the results: while qualitative and other studies (not included in our final list of studies) cover

subjective measures of well-being in some detail, quantitative studies tend to ignore this important dimension. In addition, the type of households considered in the analysis is limited. The studies included in this review which focus on pension transfers suggest that extended family household structures can be important to understanding household well-being.

Few studies examined heterogeneous types of household composition, with the exception of Rubalcava *et al.* (2009) who consider single male- and female-parent households as part of their identification strategy. While the review did not specifically focus on this aspect, no evidence arose comparing how transfers directed at older or younger generations in the household might differ in development outcome. As such, single-parent households or households with adults of only one sex are not specifically considered in the evidence.

In some cases, the reliability of the evidence is questioned by the appearance of contradictory findings. This was true particularly among those studies that drew on the same datasets. For instance, Roodman and Murdoch conduct a replicability study on work by Pitt *et al.* (1999) and by Pitt and Khandker (1998), using a dataset from a multipurpose quasi-experimental household survey conducted in rural Bangladesh in 1991-1992. Their attempt to replicate the findings draws into question the results from both earlier studies. These contradictions within the few existing studies comparing family outcomes by male versus female transfer recipients suggests the need for further studies and a wider evidence base before drawing conclusions about the nature of the relationship between gender, transfers and family well-being.

Finally, at a broader level, due to the scant number of relevant studies on each type of transfer, findings are not necessarily comparable, and evidence is context- and programme- specific. For instance, although more than one study addresses old-age pensions, comparison of results is not straightforward. The South African pension reform is means tested and de facto highly concentrated among a single, disadvantage ethnic group, while the Bolivian system is not means tested. Without a wider body of data and evidence, drawing comparisons in gender effects across programmes and country contexts is difficult. It is to be noted that none of the papers compared interventions in more than one country.

Along with informational gaps such as those named above, the studies *en masse* also offer a number of ways by which policy makers and the research community may address limitations in the evidence base. The studies offer answers that are both specific to our review question and more generally to programme evaluation.

- **Small pilot projects may offer valuable insights.** Answering the question of the differential impact of transferring assets to women versus men will involve substantially more evaluation of programmes where gender effects are explicitly estimated. The intentional design of programmes with such evaluation will also need to be kept in mind. It may be difficult to structure large, ongoing programmes to test the hypothesis that transfers to women lead to better household outcomes than transfers to men. However, the design and implementation of smaller pilot projects that use randomisation or other robust methods for identifying gender-based effects is to be supported.
- **Evaluation and design should be integrated from the inception of economic resource transfer interventions.** Several studies included in this review are suggestive of effects, as they tend to be based on econometric analysis rather than randomised experiments. As the authors of one of the studies reviewed in this paper states: '[i]f one goal of CCT programmes is to

strengthen and broaden the quality of information regarding the efficacy of targeting transfers to women, more detailed questions on how households allocate their resources or possibly experiments that provide targeted and non-targeted transfers should be used in future program designs' (Gitter and Barham, 2008, p.288).¹⁶ This is applicable not only to the subject of the paper, CCT programmes, but to other transfer programmes also. While the use of resources in this way may seem counterproductive or even duplicative, this study highlights the importance of further study, as the impact of targeting women versus men recipients is an open question that may well have suffered from having been taken for granted.

- **The quality of evidence may benefit from attention to causal inference.** There is a paucity of studies that explore the causal pathways leading from transfers to differential outcomes depending on the gender of the recipient. Given the popularity of such interventions, and the limited evidence base on the question of causality, it is important to emphasise greater attention to causal inference in empirical research, which could involve more systematic qualitative research to help interpret quantitative findings.
- **Researchers should consider revisiting the analysis of existing or completed programmes with fresh approaches.** This includes searching for natural experiments that allow for creative identification of gender effects even when programme design does not explicitly allow for it. The open controversy over micro-credit demonstrates that there is ample room for debate, even when competing empirical approaches are both relatively sound in their own right. The assumption that evaluation for any programme is 'complete' may reward critical re-investigation. Attanasio and Lechene (2010) suggest that it is possible to address this question by modelling the effect of different distribution factors in current programmes allocating transfers to women to test hypotheses.
- **Researchers and policymakers would clearly benefit from a more fully realised common framework for understanding mechanisms and outcomes.** Bearing in mind the difficulty of making comparisons across studies and although the conceptual framework sketched in this paper is for illustrative purposes only, a common framework would help reduce the burden of evaluation for individual programmes and harmonise the results of research. A collective effort to clarify key outcomes and indicators would go far in ensuring that new studies at the very least are able to build upon a foundation of common understanding, particularly when the context of individual studies varies significantly.
- **Further studies are needed in key areas cited in this review.** We found that research in area studies is concentrated primarily upon Latin America and South Asia, rather than other important regions of the developing world such as sub-Saharan Africa, the rest of the Asia Pacific and MENA region. These regions are in need of focused consideration. From a programmatic perspective, our review suggests that building an evidence base on gender effects in public works and unconditional transfer programmes apart from pensions may be valuable. Also, although the evidence base exists in the case of micro-credit programmes, mixed results among studies suggest that

¹⁶ Recent CCT pilot programmes set to have been completed in 2010 might allow for such an analysis. For example, the World Bank Spanish Impact Evaluation Fund has funded impact evaluations involving a random allocation of cash transfers to women and men in Morocco and Burkina Faso. Also a CCT in Yemen included two treatment groups: one with the father and the other with the mother as the transfer recipient.

further development is important. Finally, even in the case of a (relatively) consensual view, as in the case of conditional and unconditional cash transfers, work may be done to more clearly articulate the effects of transfers versus conditionality, particularly given the variation across programme types. Of particular relevance to this systematic review, the evidence remains limited on the extent to which the impacts of unearned transfer programmes have come from the release of families' budget constraints via the transfer, changes in behaviour due to conditions attached to the transfer (where conditions are attached), or changes in the use of the household resources due to payment to women.

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Appendices

Appendix 1.1: Advisory Group membership

Thanks are due to Lina Payne (DFID) and Arthur van Diesen (DFID) for their role in providing advice on the usefulness and scope of the review, throughout the review process.

Authorship

This systematic review was conducted by Joanne Yoong, Lila Rabinovich and Stephanie Diepeveen.

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Acknowledgements

Users were requested to comment on the accessibility and usefulness of this review. They include staff at the DfID, the World Health Organization, Centro de Investigación y Docencia Económicas, University College, London and the Institute for Fiscal Studies. Their feedback was invaluable in shaping the study. We would like to thank, in particular, Lina Payne, Arthur van Diesen, Rebecca Calder, Dr Susan Parker, Dr Sarah Barber, Dr Valérie Lechene and Professor Orazio Attanasio.

Thanks are also due to Nicola Crissell at the DfID and Kelly Dickson at the EPPI-Centre for their patience, guidance and assistance as we prepared the review. Finally, we are grateful to Jack Clift for research support provided.

All errors remain our own.

Appendix 2.1: Journals handsearched

World Bank Africa Region Working Paper Series

Appendix 2.2: Quantitative quality appraisal tool

Scoring Protocol for Methodological Rigour (completed for each analytical module or programme in the paper (some papers may evaluate more than one programme or group, or analyse more than one unit (e.g. households and villages))).

<p>1. Sample size</p> <p>Location [not scored]</p> <p>Time period</p>	<p>individuals_____</p> <p>households_____</p> <p>blocks, cities, states, or other geographical units_____</p> <p>communities/villages_____</p> <p>other relevant unit (specify)_____</p> <p>Country_____</p> <p>Rural/Urban _____</p> <p>Inception date_____</p> <p>Total study length _____</p> <p>Length of time from end of treatment to last follow-up (in months)_____</p>
<p>2. Presence of control comparison group(s)</p>	<p>1=No comparison group present</p> <p>2=Separate comparison group present, but non-randomly constituted and limited (e.g., only demographic variables) or no information on pre-treatment equivalence of groups</p> <p>3=Separate comparison group present but non-randomly constituted; extensive information provided on pre-treatment equivalence of groups; obvious group differences on important variables</p> <p>4=Separate comparison group present; extensive information provided on pre-treatment equivalence of groups; only minor group differences evident</p> <p>5= Random assignment to comparison and treatment groups; differences between groups are not greater than expected by chance; units for random assignment match units for analysis</p> <p>Note: Sometimes random assignment takes place at a different level from the analysis. For example, microfinance groups are randomly assigned to conditions, but members are the unit of analysis. These cases should not be treated as random assignments.</p>

3. Use of control variables to account for initial group differences	<p>1=No use of control variables to adjust for initial group differences</p> <p>3=Control variables used, but many possible relevant differences uncontrolled</p> <p>5=Most relevant initial differences (e.g., differences on a pre-treatment measure of the dependent variable or variables highly associated with the dependent variable) between groups controlled statistically OR random assignment to groups resulted in no initial differences.</p>
4. Variable measurement	<p>1=No systematic reproducible approach to variable measurement is employed</p> <p>2=No indication of how study variables were constructed or obtained</p> <p>3=Some attention to constructing or obtaining high quality measures, but reliability not demonstrated</p> <p>4=Variables developed or selected with some consideration of use in prior studies and reliability of measurement; reliability reported; not all measures demonstrated to be reliable</p> <p>5= Careful selection of relevant variables considering their prior use and reliability demonstrated for all or most of the measures</p>
5. Control for effects of attrition from study	<p>1=Attrition from treatment or control group is greater than 50% and no attempt is made to determine the effects of attrition on the outcome measures.</p> <p>2=No accounting given of cases that dropped out of study or attrition from treatment or control group is moderate and no attempt is made to determine the effects of attrition on the outcome measures.</p> <p>3=Differences between study participants (both treatment and comparison) who were present at the pre-test and absent at the post-test are identified and discussed.</p> <p>4=Differences between study participants (both treatment and comparison) who were present at the pre-test and absent at the post-test are identified and discussed; possible differential attrition between treatment and comparison</p>

	<p>groups is discussed.</p> <p>5=Careful statistical controls for the effects of attrition are employed, or attrition is shown to be minimal; threat of differential attrition for treatment and comparison groups is addressed adequately.</p> <p>Note: Attrition is loss from the initial sample or population identified as the treatment group or the comparison group. Sometimes attrition occurs even before a pre-test is administered.</p>
6. Use of statistical significance tests	<p>0=No statistical tests or effect sizes</p> <p>1=Statistical tests used or effect sizes computed</p>
7. Overall evaluation methodology	<p>1=No reliance or confidence should be placed on the results of this evaluation because of the number and type of serious shortcomings(s) in the methodology employed</p> <p>3=Methodology rigorous in some respects, weak in others</p> <p>5=Methodology rigorous in almost all respects</p> <p>Note: Key elements in your rating of overall methodology should be:</p> <p><i>Control of extraneous variables:</i> Have the influences of independent variables extraneous to the purposed of the study been minimised (usually through random assignment to conditions, matching treatment and comparison groups carefully, or statistically controlling for extraneous variables)?</p> <p><i>Minimisation of error variance:</i> Are the measures relatively free of error?</p> <p><i>Sufficiency of power to detect meaningful differences [if not explicit, consider whether sample size seems reasonable]</i></p>

Appendix 2.3: Qualitative quality appraisal framework

Qualitative research ‘aims to provide an in-depth understanding of people’s experiences, perspectives and histories in the context of their personal circumstances or settings’. It draws on unstructured methods that are sensitive to the social context, rich in detail, complex, inductive analytic process (Spencer *et al.*, 2003: p.3). Theory and the researcher’s perspective are the basis for making generalisations (Noyes *et al.*, 2008).

However, there is no agreement on the most effective form of quality assessment for qualitative studies: ‘At present, opinion on the value of formal quality assessment is divided and there is insufficient evidence to inform a judgement on the rigour or added value of various approaches’ (Noyes *et al.*, 2008:20.3.2.2).

For this review, we thus avoid using scores to assess qualitative studies, but instead use a narrative assessment, considering the relevance and rigour of the findings, study design, data collection, analysis, reporting and research conduct. The following framework is based on the 18 questions for appraising qualitative studies in Spencer (2003), adapted to include elements from the 10 questions for appraising qualitative studies in the Critical Appraisal Skills Programme (2006).

Criteria	Quality indicators (possible features for consideration)
Topic relevance	<ul style="list-style-type: none"> • Compares men versus women • Discusses one form of transfer • Analyses household-level outcomes of the transfer, or the outcomes for particular household members
Credibility of findings	<ul style="list-style-type: none"> • Findings/conclusions are supported by data and study evidence, and resonate with other knowledge and experience • Findings/conclusions have a coherent logic • There is evidence of validation/triangulation of findings to support or refine findings • Quotations are numbered or otherwise identified to demonstrate that they are not from one/two people
Breadth and depth of study findings (scope for wider inferences)	<ul style="list-style-type: none"> • Study aims and design are set in the context of existing knowledge/understanding (e.g. literature review to summarise knowledge to date) • Findings are presented/conceptualised in a way that offers new insights/alternative ways of thinking • Presents the potential for wider inferences from the study: <ul style="list-style-type: none"> ○ Describes how findings are relevant to the wider population from which the sample is drawn ○ Describes the contexts in which the study was conducted to allow applicability to other settings to be assessed ○ Discusses the limitations on drawing wider inferences

Criteria	Quality indicators (possible features for consideration)
Extent to which the evaluation addresses original aims and purposes	<ul style="list-style-type: none"> • Clear statement of study aims and objectives, and of reasons for any changes in objectives • Findings are clearly linked to the purposes of the study • Discusses limitations of study in meeting aims (e.g. gaps in coverage, restricted access to setting or participants, unresolved areas of questioning, time constraints, etc.)
Defensibility of design	<ul style="list-style-type: none"> • Discusses how overall research strategy was designed to meet the aims of the study • Discusses the rationale for study design; including convincing arguments for different features of research design (e.g. multiple methods, time frames, reasons for components of research, etc.) • Use of different features of design/data sources is evident in the findings presented • Discusses limitations of research design and their implications for the study evidence • Describes any changes made to the design, their justification, and implications for the study
Defensibility of sample design and coverage Specifically consider the gender of participants included/excluded from the study, and factors affected the participation and coverage of men versus women.	<ul style="list-style-type: none"> • Target sample is appropriate to accessing the type of knowledge sought • Discusses how sample/selections allowed the required comparisons to be made • Sample profile is detailed <ul style="list-style-type: none"> ○ Describes location/areas and how/why chosen ○ Describes population of interest and sample's relationship to it ○ Discusses missing coverage and implications for evidence ○ Documents reasons for non-participation/exclusion among the sample • Evidence of maximising inclusion (e.g. language matching, translation, specialised recruitment) <ul style="list-style-type: none"> ○ Discusses access and methods of approach and how these might have affected participation and coverage ○ Discusses why some people may have chosen not to participate
Quality of data collection	<ul style="list-style-type: none"> • Data collection tools were piloted • Data collection was comprehensive, flexible and sensitive enough to provide a complete and/or rich description <ul style="list-style-type: none"> ○ E.g. time with participants, more than one method of data collection, follow-up?

Criteria	Quality indicators (possible features for consideration)
	<ul style="list-style-type: none"> ○ Discusses how fieldwork methods or settings may have influenced data collected ○ Discusses the saturation of data • Clear discussion of data collection tools/approach <ul style="list-style-type: none"> ○ Who conducted data collection ○ Procedures and documents used for collection and recording; conventions for field notes ○ Checks on origins, status and authorship ○ Audio or video recording of interviews, discussions and/or conversations (or justification for why not) • Steps taken to ensure participants were able and willing to contribute • Discussion of strengths and weaknesses of data sources and methods
Quality of the approach and formulation of the analysis	<ul style="list-style-type: none"> • Data analysis methods were systematic: <ul style="list-style-type: none"> ○ Describes the form of the original data ○ Clear rationale for choice of management methods, tools and package ○ Evidence of how analytic categories, classes, labels, etc. have been generated and used ○ Discussion, with examples, of how any constructed analytic concepts/typologies have been devised and applied • Analysis is balanced in the extent to which it is guided by preconceptions or by the data <ul style="list-style-type: none"> ○ Diversity of perspectives explored ○ Discussion of bias in forming the research question (e.g. gender of researcher?) ○ Examines the researcher's own role in influencing data collection • Detailed and clear portrayal of data sources and the context for data sources (e.g. background, personal context, origins) • Clear conceptual links between analytic commentary and presentation of original data <ul style="list-style-type: none"> ○ Explores alternative explanations ○ Displays negative cases and how they lie outside the main proposition, or how propositions have been revised to include them
Clarity and coherence of reporting	<ul style="list-style-type: none"> • Demonstrates link to aims of the study/research questions • Provides a narrative or clearly constructed thematic account, and has a useful structure and signposting to guide

Criteria	Quality indicators (possible features for consideration)
	<p>the reader</p> <ul style="list-style-type: none"> • Provides accessible information for intended target audience(s) • Key messages are highlighted or summarised
Clarity of assumptions that have shaped the form and output of the evaluation	<ul style="list-style-type: none"> • Discussion/evidence of the main assumptions, hypotheses and theoretical ideas on which the evaluation was based and how these affected the form, coverage or output of the evaluation • Evidence of openness to new and alternative ways of viewing the subject • Discussion of how error or bias may have arisen in design, data collection and analysis and how it was addressed, if at all • Reflections on the impact of the researcher on the research process
Attention to ethical issues	<ul style="list-style-type: none"> • Evidence of thoughtfulness/sensitivity about research contexts and participants • Documentation of: <ul style="list-style-type: none"> ○ how research was presented in study settings and to participants ○ consent procedures ○ confidentiality of data and procedures for protecting confidentiality ○ how anonymity of participants and sources was protected ○ any measures to offer information, advice and services, etc., at the end of the study (i.e. where participation exposed the need for these) ○ potential harm or difficulty through participation, and how it can be avoided • Approval obtained from an ethics committee

Appendix 2.4: Taxonomy of well-being indicators

Dimension	Example Indicators	
	Objective	Subjective
Material and physical	Income, wealth, assets, employment, consumption	Satisfaction with income/wealth, assessment of standard of living compared to others, and compared with the past
Human capital	Education, skills, physical health, relations of love and care	Satisfaction with health, self-concept and personality, self-efficacy, confidence, sense of competence and scope for influence
Social relations	Social/political/cultural identifiers, insecurity, gender equity, violence (domestic or outside the home), relations with the community and the state, access to services, networks, environmental resources	Perceptions of safety, assessment of support, perceptions of equity, perceptions of environmental quality

The table above presents the taxonomy of indicators of well-being, as adapted from work by the Well-being in Developing Countries Group (WeD) at the University of Bath. The table captures the convergence and consistency in qualities ascribed to well-being in the broader literature, including a consideration of the individual, and his/her priorities and perspectives (White, 2010).

Appendix 3.1: Search results by database

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
Web of Science	Database	30 July 2010	633	80	<p>Topic((((economic AND resources) OR ('allocation of resources') OR microcredit* OR micro-credit OR micro credit OR workfare OR subsidy OR subsidi* OR unearned income OR (cash OR asset OR assets OR food OR livestock) AND transfer*))) AND Topic=(gender OR woman OR women OR female* OR mother OR wife OR wives OR husband* OR father*) AND Topic=(impact* OR outcome* OR effect* OR benefit* OR wellbeing OR well-being OR well being OR success* OR fail* OR evidence OR efficient OR efficacy OR evaluation)</p> <p>Refined by: Subject Areas=(BUSINESS OR ECONOMICS OR SOCIOLOGY OR NUTRITION & DIETETICS OR PLANNING & DEVELOPMENT OR SOCIAL SCIENCES, BIOMEDICAL OR HEALTH POLICY & SERVICES OR BUSINESS, FINANCE OR WOMEN'S STUDIES OR FAMILY STUDIES OR REPRODUCTIVE BIOLOGY OR DEMOGRAPHY OR HEALTH CARE SCIENCES & SERVICES OR SOCIAL WORK OR MEDICINE, GENERAL & INTERNAL OR ANTHROPOLOGY OR GERONTOLOGY OR PSYCHOLOGY, MULTIDISCIPLINARY OR SOCIAL SCIENCES, INTERDISCIPLINARY OR SOCIAL ISSUES OR SOCIAL SCIENCES, MATHEMATICAL METHODS OR PUBLIC ADMINISTRATION OR EDUCATION & EDUCATIONAL RESEARCH OR URBAN STUDIES OR AREA STUDIES OR INDUSTRIAL RELATIONS & LABOR OR ETHICS OR MANAGEMENT OR POLITICAL SCIENCE OR OBSTETRICS & GYNECOLOGY OR BEHAVIORAL SCIENCES)</p>

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					<p>Timespan=1990-2010. Databases= Social Sciences Citation Index (SSCI); Arts & Humanities Citation Index (A&HCI); Conference Proceedings Citation Index- Social Science & Humanities (CPCI-SSH).</p> <p>Results: 983</p> <p>Number of results after duplicates removed: 633</p>
EconLit	Database	9 June 2010	459	64	<p>First search:</p> <p>('economic resources' OR (allocat* AND resource*) OR microfinance OR micro-finance OR micro finance OR microcredit* OR micro-credit OR micro credit OR workfare OR subsidy OR subsidi* OR unearned income OR ((cash OR asset OR assets OR food OR livestock) AND transfer*)) and TI (gender OR woman OR women OR female* OR mother OR wife OR wives OR husband* OR father*) and (impact* OR outcome* OR effect* OR benefit* OR wellbeing OR well-being OR well being OR success* OR fail* OR evidence OR efficient OR efficacy OR evaluation) Limiters - Date of Publication from: 19900101-20101231</p> <p>Search modes - Phrase searching (Boolean)</p> <p>Results: 458</p> <p>Second search:</p> <p>('economic resources' OR (allocat* AND resource*) OR microfinance OR micro-finance OR micro finance OR</p>

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					<p>microcredit* OR micro-credit OR micro credit OR workfare OR subsidy OR subsidi* OR unearned income OR ((cash OR asset OR assets OR food OR livestock) AND transfer*)) and SU(gender OR woman OR women OR female* OR mother OR wife OR wives OR husband* OR father*) and (impact* OR outcome* OR effect* OR benefit* OR wellbeing OR well-being OR well being OR success* OR fail* OR evidence OR efficient OR efficacy OR evaluation) Limiters - Date of Publication from: 19900101-20101231</p> <p>Search modes - Phrase searching (Boolean)</p> <p>Results(607)</p> <p>Total number of results after the two searches were combined and duplicates removed: 459</p>
Academic Search Elite	Database	26 January 2011	243	80	<p>'resource allocation' OR 'allocation of resources' OR (resource AND allocat*) OR micro finance OR micro-finance OR 'micro finance' OR microcredit* OR micro-credit OR 'micro credit' OR workfare OR subsidy OR subsidies OR unearned OR ((cash OR asset* OR food OR livestock) AND transfer*)</p> <p>AND</p> <p>gender OR woman OR women OR female OR females OR mother OR mothers OR wife OR wives OR husband OR husbands OR father OR fathers</p>

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					Results: 1,380 Total number of results after removal of duplicates and an initial scan for non-relevant references: 243
Inter-American Development Bank	Organisational Website	16 July 2010	64	No abstracts available ¹⁸	Search results: Finance; all: women. Records found: 8 Search results: Microempresa; Keywords: women. Records found: 2 Search results: Poverty reduction; Keywords: women. Records found: 37 Search Results: Health; Keywords: women. Records found: 10 Search Results: Gender. Records found: 7 Results: 64
DFID	Organisational Website	16 July 2010	6	No abstracts available	All publications relating to gender
Institute of Development Studies	Organisational Website	16 July 2010	42	No abstracts available	Search Theme: Gender

¹⁸For a number of the databases searched, abstracts were not provided. In these cases, we reviewed the full text for all of the included titles.

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
Asian Development Bank	Organisational Website	23 July 2010	47	No abstracts available	Exact phrase: cash transfer At least one of the words: gender woman women female mother wife wives maternal Topic(s): Finance/Social Development/Poverty Subtopics: Microfinance/Gender/Inequality and Access/Labor Market and Social Protection/Millennium Development Goals/Poverty Analysis and Inclusive Growth Document Type(s): Books/Reports/Journals/Working Papers
African Development Bank	Organisational Website	27 July 2010	2	No abstracts available	Topic 'Gender'
British Library for Development Studies	Database	05 August 2010	178	42	resources OR microfinance OR micro-finance OR microcredit* OR micro-credit OR workfare OR subsidy OR subsidies OR unearned OR transfers AND gender OR woman OR women OR females OR mother OR wife OR wives OR husband OR husbands OR father OR fathers - 0 hits ¹⁹ transfers AND women - 9 hits

¹⁹ It is possible this search retrieved zero hits because there were too many terms for the search to process. This search was repeated and the same result was achieved (zero hits). As such, the searches were broken down into smaller sets of two terms each.

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					<p>transfer AND women - 22 hits</p> <p>micro-credit AND women - 31 hits</p> <p>micro-finance AND women - 73 hits</p> <p>Resource allocation AND women - 43 hits</p> <p>Total number of results: 178</p>
IDEAS	Database	6 August 2010	509	No abstracts available	<p>Search for transfers + women. Search results: transfers: 9,781, transfer: 12,436, transferred: 14, transfer's: 0, women: 32,116, womens: 28, women's: 0. Records found: 269.</p> <p>Search for transfers+gender. Search results: transfers: 9,781, transfer: 12,436, transferred: 14, transfer's: 0, gender: 16,972, gendering: 40, gendered: 518, genders: 323, gender's: 0. Records found: 152.</p> <p>Search for 'resource allocation'+women. Search results: resource: 19,541, source: 13,881, sources: 16,208, source's: 0, resourcing: 27, resourced: 34, resources: 25,735, resource's: 0, allocation: 18,571, allocate: 1,799, reallocate: 205, allocative: 1,393, allocations: 3,765, allocating: 1,240, allocated: 1,939, allocates: 280, reallocation: 2,381, allocation's: 0, women: 321,21, women's: 28, women's: 0. Records found: 61.</p> <p>Search for microcredit+women. Search results: microcredit: 361, women: 32,121, womens: 28, women's: 0. Records found: 27.</p>

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					Total number of results: 509
Worldcat	Database	20 August 2010	907	79	<p>First search:</p> <p>(((((ti: economic w resources OR (ti: allocat* AND ti: resource*) OR ti: microfinance OR ti: micro-finance OR (ti: micro and ti: finance) OR ti: microcredit* OR ti: micro-credit OR (ti: micro and ti: credit) OR ti: workfare OR ti: subsidy OR ti: subsidi* OR ti: unearned w income)) or ((ti: cash OR ti: asset OR ti: assets OR ti: food OR ti: livestock) AND (ti: transfer OR ti: transfers OR ti: transferred OR ti: transferring)))) and (kw: gender OR kw: woman OR kw: women OR kw: female* OR kw: mother OR kw: mothers OR kw: wife OR kw: wives OR kw: husband OR kw: husbands OR kw: father OR kw: fathers)) not mt: juv) not mt: fic and yr: 1990-2010 and ((dt= 'bks') or (dt= 'ser') or (dt= 'com') or (dt= 'url'))).</p> <p>(Save Search)</p> <p>Results: 1,110 (English: 1,043)</p> <p>Second search:</p> <p>(((((su: economic w resources OR (su: allocat* AND su: resource*) OR su: microfinance OR su: micro-finance OR (su: micro and su: finance) OR su: microcredit* OR su: micro-credit OR (su: micro and su: credit) OR su: workfare OR su: subsidy OR su: subsidi* OR su: unearned w income)) or ((su: cash OR su: asset OR su: assets OR su: food OR su: livestock) AND (su: transfer OR su: transfers OR su: transferred OR su: transferring)))) and (kw: gender OR kw: woman OR kw: women</p>

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					<p>OR kw: female* OR kw: mother OR kw: mothers OR kw: wife OR kw: wives OR kw: husband OR kw: husbands OR kw: father OR kw: fathers)) not mt: juv) not mt: fic and yr: 1990-2010 and ((dt= 'bks') or (dt= 'ser') or (dt= 'com') or (dt= 'url')).</p> <p>Results: 1,186 (English: 1,099)</p> <p>Total number of results after the two searches were combined and duplicates removed: 907</p>
ArticleFirst	Database	20 August 2010	144	42	<p>(kw: economic w resources OR (kw: allocat* AND kw: resource*) OR kw: microfinance OR kw: micro-finance OR (kw: micro and kw: finance) OR kw: microcredit* OR kw: micro-credit OR (kw: micro and kw: credit) OR kw: workfare OR kw: subsidy OR kw: subsidi* OR kw: unearned w income) or ((kw: cash OR kw: asset OR kw: assets OR kw: food OR kw: livestock) AND (kw: transfer OR kw: transfers OR kw: transferred OR kw: transferring)) and (kw: gender OR kw: woman OR kw: women OR kw: female* OR kw: mother OR kw: mothers OR kw: wife OR kw: wives OR kw: husband OR kw: husbands OR kw: father OR kw: fathers) and yr: 1990-2010.</p> <p>Number of results after duplicates removed: 144</p>
Contemporary women's issues	Database	20 August 2010	111	8	<p>(kw: economic w resources OR (kw: allocat* AND kw: resource*) OR kw: microfinance OR kw: micro-finance OR (kw: micro and kw: finance) OR kw: microcredit* OR kw: micro-credit OR (kw: micro and kw: credit) OR kw: workfare OR kw: subsidy OR kw: subsidi* OR kw: unearned w income) or ((kw: cash OR kw: asset OR kw: assets OR kw: food OR kw:</p>

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					livestock) AND (kw: transfer OR kw: transfers OR kw: transferred OR kw: transferring)) and yr: 1990-2010. Number of results after duplicates removed: 111
PubMed	Database	20 August 2010	Not applicable	Not applicable	#8 Search 'economic resources' OR (allocat* AND resource*) OR microfinance OR micro-finance OR micro finance OR microcredit* OR micro-credit OR micro credit OR workfare OR subsidy OR subsidi* OR 'unearned income' Limits: Publication Date from 1990 to 2010 19:35:23 1820 #9 Search (cash OR asset OR assets OR food OR livestock) AND (transfer OR transfers OR transferred OR transferring) Limits: Publication Date from 1990 to 2010 19:35:48 11813 #10 Search #8 OR #9 Limits: Publication Date from 1990 to 2010 19:36:10 29971 #11 Search #10 AND (gender OR woman OR women OR female* OR mother OR mothers OR wife OR wives OR husband OR husbands OR father OR fathers) Limits: Publication Date from 1990 to 2010 19:37:16 8498 #12 Search #11 AND (impact* OR outcome* OR effect* OR benefit* OR wellbeing OR well-being OR well being OR success* OR fail* OR evidence OR efficient OR efficacy OR evaluation) Limits: Publication Date from 1990 to 2010 19:44:05 6099 #15 Search animal NOT (human OR humans) Limits:

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					<p>Publication Date from 1990 to 2010 19:46:25 1747404</p> <p>#16Search #12 NOT #15 Limits: Publication Date from 1990 to 2010 19:56:06</p> <p>Results:4783 Selected 26 cites out of the first 200. Given the small proportion of hits, this database was excluded from the search.</p>
JStor	Database	20 August 2010	189	8	<p>First search:</p> <p><< ((ti:("economic resources" OR (allocat* AND resources) OR microfinance OR micro-finance OR micro finance OR microcredit OR micro-credit OR micro credit OR workfare OR subsidy OR subsidize) OR ti:(subsidies OR "resource allocation" OR "unearned income" OR (cash OR asset OR assets OR food OR livestock) AND (transfer OR transfers OR transferred OR transferring))) AND ti:(gender OR woman OR women OR female OR females OR mother OR mothers OR wife OR wives OR husband OR husbands OR father OR fathers)) AND (year:[1990 TO 2010]) >></p> <p>Results: 49</p> <p>Second search:</p> <p><< ((ab:("economic resources" OR (allocat* AND resources) OR microfinance OR micro-finance OR micro finance OR microcredit OR micro-credit OR micro credit OR workfare OR subsidy OR subsidize) OR ab:(subsidies OR "resource allocation" OR "unearned income" OR (cash OR asset OR</p>

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					assets OR food OR livestock) AND (transfer OR transfers OR transferred OR transferring))) AND ti:(gender OR woman OR women OR female OR females OR mother OR mothers OR wife OR wives OR husband OR husbands OR father OR fathers)) AND (year:[1990 TO 2010]) >> Results: 160 Number of results after searches combined and duplicates removed: 189
Dissertation Abstracts	Database	23 August 2010	99	No abstracts available	(ti: economic w resources OR (ti: allocat* AND ti: resource*) OR ti: microfinance OR ti: micro-finance OR (ti: micro and ti: finance) OR ti: microcredit* OR ti: micro-credit OR (ti: micro and ti: credit) OR ti: workfare OR ti: subsidy OR ti: subsidi* OR ti: unearned w income or ((ti: cash OR ti: asset OR ti: assets OR ti: food OR ti: livestock) AND ti: transfer*)) AND (kw: gender OR kw: woman OR kw: women OR kw: female* OR kw: mother OR kw: mothers OR kw: wife OR kw: wives OR kw: husband OR kw: husbands OR kw: father OR kw: fathers) and yr: 1990-2010. Number of results after duplicates removed: 99
Centre for Global Development	Organisational Website	25 August 2010	8	No abstracts available	Search conducted using the terms “women” or “gender” and then browsing topics, “Economic Growth”, “Finance”, “Inequality” and “Poverty”.
World Bank	Organisational Website	23 August 2010 and 25 August 2010	131	No abstracts	First search: All fields containing 'resource allocation' OR All fields

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
				available	<p>containing 'allocation of resources' OR All fields containing 'economic resources' OR All fields containing 'microcredit' OR All fields containing 'workfare' in Books or Journals or Working Papers or Book Chapters Published Between 1990 and 2010) AND (Title or Subtitle containing 'women' OR Title or Subtitle containing 'gender' OR Title or Subtitle containing 'female' OR Title or Subtitle containing 'mother' OR Title or Subtitle containing 'wife' in Books or Journals or Working Papers or Book Chapters Published Between 1990 and 2010</p> <p>Second search:</p> <p>All fields containing 'allocation of resources' OR All fields containing 'resource allocation' OR All fields containing 'economic resources' OR All fields containing 'microcredit' OR All fields containing 'workfare' in Books or Journals or Working Papers or Book Chapters Published Between 1990 and 2010) AND (Title or Subtitle containing 'wives' OR Title or Subtitle containing 'maternal' in Books or Journals or Working Papers or Book Chapters Published Between 1990 and 2010</p> <p>Third search:</p> <p>All fields containing 'micro-credit' OR All fields containing 'micro credit' OR All fields containing 'subsidy' OR All fields containing 'subsidies' OR All fields containing 'transfers' in Books or Journals or Working Papers or Book Chapters Published Between 1990 and 2010) AND (Title or Subtitle containing 'women' OR Title or Subtitle containing 'female' OR</p>

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					Title or Subtitle containing 'gender' OR Title or Subtitle containing 'mother' OR Title or Subtitle containing 'wife' in Books or Journals or Working Papers or Book Chapters Published Between 1990 and 2010 Number of results after search results combined and duplicates removed: 131
Web of Science (Spanish language search)	Database	8 December 2010	59	No relevant hits	TS=((economic AND resources) OR (allocation AND resources) OR microcredit* OR micro-credit OR micro credit OR workfare OR subsidy OR subsidi* OR unearned income OR (cash OR asset OR assets OR food OR livestock) AND transfer*)) AND TS=(gender OR woman OR women OR female* OR mother OR wife OR wives OR husband* OR father*) AND Language=(Spanish) Timespan=All Years. Databases=Science Citation Index Expanded, Social Sciences Citation Index (SSCI); Arts & Humanities Citation Index (A&HCI); Conference Proceedings Citation Index- Social Science & Humanities (CPCI-SSH), Conference Proceedings Citation Index- Science. Number of results: 59
PubMed (Spanish language search)	Database	8 December 2010	128 (after duplicates removed)	No abstracts available	#1Search 'economic resources' OR (allocat* AND resource*) OR microfinance OR micro-finance OR micro finance OR microcredit* OR micro-credit OR micro credit OR workfare OR subsidy OR subsidi* OR 'unearned income' Limits: Spanish 16:09:04 286

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					<p>#2Search (cash OR asset OR assets OR food OR livestock) AND (transfer OR transfers OR transferred OR transferring) Limits: Spanish 16:09:31 34</p> <p>#3Search (#1 OR #2) AND (gender OR woman OR women OR female* OR mother OR mothers OR wife OR wives OR husband OR husbands OR father OR fathers) Limits: Spanish Sort by: PublicationDate 16:10:53 128</p>
WorldCat (Spanish language search)		8 December 2010	44	No relevant hits	<p>(((((ti: economic w resources OR (ti: allocat* AND ti: resource*) OR ti: microfinance OR ti: micro-finance OR (ti: micro and ti: finance) OR ti: microcredit* OR ti: micro-credit OR (ti: micro and ti: credit) OR ti: workfare OR ti: subsidy OR ti: subsidi* OR ti: unearned w income)) or ((ti: cash OR ti: asset OR ti: assets OR ti: food OR ti: livestock) AND (ti: transfer OR ti: transfers OR ti: transferred OR ti: transferring)))) and (kw: gender OR kw: woman OR kw: women OR kw: female* OR kw: mother OR kw: mothers OR kw: wife OR kw: wives OR kw: husband OR kw: husbands OR kw: father OR kw: fathers)) not mt: juv) not mt: fic and la= 'spa') or</p> <p>(((((su: economic w resources OR (su: allocat* AND su: resource*) OR su: microfinance OR su: micro-finance OR (su: micro and su: finance) OR su: microcredit* OR su: micro-credit OR (su: micro and su: credit) OR su: workfare OR su: subsidy OR su: subsidi* OR su: unearned w income)) or ((su: cash OR su: asset OR su: assets OR su: food OR su: livestock) AND (su: transfer OR su: transfers OR su: transferred OR su: transferring)))) and (kw: gender OR kw: woman OR kw: women</p>

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					OR kw: female* OR kw: mother OR kw: mothers OR kw: wife OR kw: wives OR kw: husband OR kw: husbands OR kw: father OR kw: fathers)) not mt: juv) not mt: fic and la= 'spa'). (Save Search) Number of results: 44
Science Direct ²⁰	Database	16 December 2010	714	17	First search: 9,318 articles found for: pub-date > 1989 and TITLE-ABSTR-KEY(allocation OR microfinance OR micro-finance OR 'micro finance' OR microcredit* OR micro-credit OR 'micro credit' OR workfare OR subsidy OR subsidies OR unearned OR transfer) and TITLE-ABSTR-KEY(gender OR woman OR women OR female* OR mother OR mothers OR wife OR wives OR husband OR husbands OR father OR fathers)[All Sources(Agricultural and Biological Sciences, Business, Management and Accounting, Economics, Econometrics and Finance, Nursing and Health Professions, Psychology, Social Sciences)] Second search: 6,771 articles found for: pub-date > 1999 Third search:

²⁰ The initial Science Direct search retrieved more than 9,300 hits. Several strategies were employed to attempt to decrease the number of hits to a manageable amount, as outlined above. In the end, we chose to restrict search parameters to studies published between 2004 and 2010, and assess their relevance. This alone resulted in 714 hits. Of the 714 hits, five studies were identified as potentially relevant to the review question, one of which was a duplicate of studies retrieved from the other databases. Due to the large number of irrelevant hits, we chose to restrict the Science Direct search to the years 2005 to 2010.

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					<p>1,150 articles found for: pub-date > 2009- downloaded 1000 samples</p> <p>Fourth search:</p> <p>1,456 articles found for: pub-date >2004 and TITLE-ABSTR-KEY('resource allocation' OR 'allocation of resources' OR microfinance OR micro-finance OR 'micro finance' OR microcredit* OR micro-credit OR 'micro credit' OR workfare OR subsidy OR subsidies OR subsidiz* OR 'unearned income') and TITLE-ABSTR-KEY(gender OR woman OR women OR female* OR mother OR mothers OR wife OR wives OR husband OR husbands OR father OR fathers)[All Sources(Economics, Econometrics and Finance, Medicine and Dentistry, Nursing and Health Professions, Social Sciences)]</p> <p>Fifth search:</p> <p>30 articles found for: pub-date >2004 and TITLE-ABSTR-KEY((cash OR asset OR assets OR food OR livestock) AND (transfer OR transfers OR transferred OR transferring)) and TITLE-ABSTR-KEY(gender OR woman OR women OR female OR females OR mother OR mothers OR wife OR wives OR husband OR husbands OR father OR fathers)[All Sources(Economics, Econometrics and Finance, Medicine and Dentistry, Nursing and Health Professions, Social Sciences)]</p> <p>Sixth search:</p> <p>714 articles found for: pub-date >2004 and TITLE-ABSTR-</p>

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
					<p>KEY('resource allocation' OR 'allocation of resources' OR microfinance OR micro-finance OR 'micro finance' OR microcredit* OR micro-credit OR 'micro credit' OR workfare OR subsidy OR subsidies OR subsidiz* OR 'unearned income') and TITLE-ABSTR-KEY(gender OR woman OR women OR female* OR mother OR mothers OR wife OR wives OR husband OR husbands OR father OR fathers)[All Sources(Economics, Econometrics and Finance, Social Sciences)]</p> <p>Seventh search:</p> <p>12 articles found for: pub-date >2004 and TITLE-ABSTR-KEY((cash OR asset OR assets OR food OR livestock) AND (transfer OR transfers OR transferred OR transferring)) and TITLE-ABSTR-KEY(gender OR woman OR women OR female OR females OR mother OR mothers OR wife OR wives OR husband OR husbands OR father OR fathers)[All Sources(Economics, Econometrics and Finance, Social Sciences)]</p>
Campbell Collaboration	Institutional website	14 December 2010	12	0	<p>resources OR microfinance OR micro-finance OR microcredit* OR micro-credit OR workfare OR subsidy OR subsidies OR unearned OR transfers - 100</p> <p>allocation OR microfinance OR micro-finance OR microcredit* OR micro-credit OR workfare OR subsidy OR subsidies OR unearned OR transfer - 20</p> <p>Number of results: 120</p>
3ie website	Institutional	13-14 December	60	18	allocation OR micro-credit OR micro credit OR microfinance

Database searched	Type of resource	Date searched	Number of titles retrieved	Number of abstracts reviewed	Search string
	website	2010			OR workfare OR subsidy OR subsidies OR subsidize OR transfer(s) OR gender OR women
Google Scholar	Search engine	26 January 2011	1,000	66	allocation OR 'micro finance OR micro-finance OR 'microfinance' OR microcredit* OR micro-credit OR 'micro credit' OR workfare OR subsidy OR subsidies OR unearned OR transfer OR gender OR woman OR women OR female OR mother OR wife OR wives OR husband OR father In subject areas 'Business Administration, finance or economics' and 'Social sciences, arts and humanities. Results: first 1,000 results reviewed
		TOTAL	5774	504	

Appendix 3.2: Studies that could not be located

Author	Title
Bagati D	Microcredit and the journey to empowerment: changing gender relations for women in an urban community in India
Das B	Role and impact of microfinance on poor: a study of clients using micro credit in two South Indian states
Dhungana S	Credit-based micro-enterprise development programmes in Nepal
Duc TTM	Gender and rural poverty alleviation through micro-credit in the context of transition: an analysis of the Vietnamese experience 1990-1999
Gebremedhin Y	Impact of 'Dedebit' microfinance programme on women's livelihood in Mekelle, Ethiopia
Goudge J	Intra-household resource allocation and child nutrition in Mukono district, Uganda
Hanak I	Sustainability, efficiency or equity? Work, gender relations and micro-finance in Uganda
Harper M	'Indian' self-help groups and Bangladesh Grameen Bank groups: a comparative analysis
IFPRI-World Bank Conference proceedings	Intrahousehold resource allocation: policy issues and research methods: an International Food Policy Research Institute-World Bank conference
Hoque S	Micro-credit and empowerment of women
Mehra R	Credit for women: why is it so important
Nakamura Y	Micro-finance for gender empowerment: case in JICA
Nawaz MS	An evaluation of microcredit as a strategy to reduce poverty and empower women: a case study of three microcredit programs in Bangladesh
Nirantar (centre for gender and education)	Micro-credit and women's empowerment: dilemmas and questions
Nyasulu D	Gender analysis of the Malawi health sector wide approach: an examination of resource allocation and targeting to different needs of women, men, and other groups
Patton J	The intra-household allocation of resources in the Côte d'Ivoire: is there evidence of gender bias?
Paxton JA	Guatemala CARE village banks project
Selman C	Women and micro-credit: gender relations and credit use in semi-urban Mozambique
unknown	Consultation on Gender and Microfinance: Ahmedabad, India
unknown	Fonkoze - Haiti's Bank for the Organized Poor

Appendix 3.3: List of excluded full-text studies

Author	Title	Year	Reason for exclusion
Abbabbo TBM	The gender impact of workfare policies in Italy and the effect of unpaid work	2000	topic relevance
Abdullah ST	Women, empowerment and intrahousehold resource allocation through micro-finance: a comparative study of two micro-finance institutions in Bangladesh	2003	topic relevance
Addis E	Gender in the Italian welfare state reforms	1999	topic relevance
Ahmed FE	Low-income progressive men: microcredit, gender empowerment, and the redefinition of manhood in rural Bangladesh	2003	unable to verify methodological quality
Albee A	The impact of credit and savings: Cam Xuyen District, Ha Tinh Province, Vietnam: a programme evaluation	1996	topic relevance
Amin R, Becker S, Bayes A	NGO-promoted microcredit programs and women's empowerment in rural Bangladesh: quantitative and qualitative evidence	1998	topic relevance
Anderson S, Baland J-M	The economics of Roscas and intrahousehold resource allocation	2002	topic relevance, does not consider household outcomes
Angelucci M	Love on the rocks: domestic violence and alcohol abuse in rural Mexico	2008	topic relevance
Anthony D, Horne C	Gender and cooperation: explaining loan repayment in micro-credit groups	2003	topic relevance
Arku C, Arku F	More money, new household cultural dynamics: women in micro-finance in Ghana	2009	topic relevance
Armendariz B, Roome N	Empowering women via microfinance in fragile states	2008	methodological rigour
Asadullah MN, Chaudhury N	Reverse gender gap in schooling in Bangladesh: insights from urban and rural households	2009	topic relevance
Baird S, Chirwa E, McIntosh C, Ozler B	The short-term impacts of a schooling conditional cash transfer program on the sexual behavior of young women	2009	topic relevance
Baird S, McIntosh C, Ozler B	Designing cost-effective cash transfer programs to boost schooling among young women in Sub-Saharan Africa	2009	topic relevance

Author	Title	Year	Reason for exclusion
Barsoum G	Who gets credit?: the gendered division of microfinance programs in Egypt	2006	topic relevance
Bekerman MOS	Microcréditos para sectores de bajos recursos en la Argentina: la experiencia del proyecto Avanzar	2003	topic relevance
Bennett T	Resource allocation to components of gender function in Lesquerellafendleri	1996	topic relevance
Blackstock S	Bandaaid bandwagon	1999	topic relevance
Bourguignon F, Ferreira FHG, Leite P G	Conditional cash transfers, schooling, and child labor: micro-simulating Brazil's Bolsa Escola program	2003	topic relevance, does not compare transfers to men versus women
Bradshaw S, Viquez AQ	Women beneficiaries or women bearing the cost? A gendered analysis of the Red de Protección Social in Nicaragua	2008	topic relevance
Brambilla P, Bell E, Sever C	Gender and micro credit: useful resources	2001	methodological rigour
Burjorjee DM, Deshpande R, Weidemann CJ	Supporting women's livelihoods, microfinance that works for the majority a guide to best practices	2002	topic relevance
Butterbaugh L	Workfare: can it work for women?	1997	methodological rigour
Chant S	The international handbook of gender and poverty: concepts, research, policy	2010	topic relevance
Chao S	Ghana gender analysis and policymaking for development	1999	topic relevance
Chari-Wagh A	Raising citizenship rights for women through microfinance programmes: an analysis of MASUM, Maharashtra, India	2009	topic relevance
Chaudhury N, Parajuli D	Conditional cash transfers and female schooling: The impact of the female school stipend program on Public enrollments in Punjab, Pakistan	2006	topic relevance
Cheston S	'Just the facts ma'am': gender stories from unexpected sources with morals for microfinance	2006	topic relevance
Chowdhury M, Alam J	Does the participation in the microcredit programs contribute to the development of women entrepreneurship at the household level	2008	topic relevance

Author	Title	Year	Reason for exclusion
Copestake J	Multiple dimensions of social assistance: the case of Peru's 'Glass of Milk' programme	2008	topic relevance
Corsi M, Botti F, Rondinella T, Zacchia G	Women and microfinance in Mediterranean countries	2006	topic relevance
Daley-Harns S	Pathways out of poverty: innovations in microfinance for the poorest families	2002	topic relevance
Dooley M, Lipman E, Stewart J	Exploring the good mother hypothesis: do child outcomes vary with the mother's share of income?	2005	topic relevance
Estudillo JP, Quisumbing AR, Otsuka K	Gender differences in wealth transfer and expenditure allocation: evidence from the rural Philippines	2001	topic relevance
Fernando J	Nongovernmental organizations, micro-credit, and empowerment of women	1997	topic relevance
Fletschner D	Women's access to credit: does it matter for household efficiency?	2008	topic relevance
Fuwa N, Ito S, Kubo K, Kurosaki T, Sawada Y	Introduction to a study of intrahousehold resource allocation and gender discrimination in rural Andhra Pradesh, India	2006	topic relevance
Fuwa N, Ito S, Kubo K, Kurosaki T, Sawada Y	Gender discrimination, intrahousehold resource allocation, and importance of spouses' fathers: evidence on household expenditure	2006	topic relevance
Haase D	Gender, microcredit, and the informal sector in Nicaragua	2006	topic relevance
Haddad L, Hoddinott J	Women's Income and Boy-Girl Anthropometric Status in the Cote d'Ivoire	1994	topic relevance
Haddad L, Hoddinott J, Alderman H	Intrahousehold resource allocation: an overview	1994	topic relevance
Haddad L, James PC, Nishida C, Quisumbing AR	Food security and nutrition implications of intrahousehold bias	1996	topic relevance
Handa S, Peterman A, Davis B, Stampini M	Opening up Pandora's box: the effect of gender targeting and conditionality on household spending behavior in Mexico's Progresa Program	2009	topic relevance
Hans A, Patel A, Agnihotri S	The need for a framework for combined disability and gender budgeting	2008	topic relevance

Author	Title	Year	Reason for exclusion
Hargreaves J, Hatcher A, Strange V, Phetla G, Busza J, Kim J, Watts C, Morison L, Porter J, Pronyk P, Bonell C	Process evaluation of the Intervention with Microfinance for AIDS and Gender Equity (IMAGE) in rural South Africa	2010	topic relevance
Harper M	Microfinance: evolution, achievements and challenges. Key writings on microfinance	2003	topic relevance
Hasan A	Gender-targeted conditional cash transfers: enrollment, spillover effects and instructional quality	2010	topic relevance
Hazarika G ,Guha-KhasnobisBasudeb	Household access to microcredit and children's food security in rural Malawi: a gender perspective	2007	methodological rigour
Hoffmann V	Psychology, gender, and the intrahousehold allocation of free and purchased mosquito nets	2008	methodological rigour
Holvoet N	The differential impact on gender relations of 'transformatory' and 'instrumentalist' women's group intermediation in microfinance schemes: a case study for rural south India	2006	topic relevance
Holvoet N	The impact of microfinance on decision-making agency: evidence from South India	2005	methodological rigour
Hoque S	Micro-credit and the reduction of poverty in Bangladesh	2004	topic relevance
IFPRI	Resource allocation and empowerment of women in rural Bangladesh	2000	topic relevance
Inchauste G	Intrahousehold allocation of resources: the Bolivian family	2001	topic relevance
Jackson C	Strengthening food policy through gender and intrahousehold analysis: impact assessment of IFPRI multicountry research	2005	topic relevance
James E, Edwards AC, Wong R	The gender impact of social security reform	2008	topic relevance
Johnson S	Gender impact assessment in microfinance and microenterprise: why and how	2000	methodological rigour
Johnson S	Gender relations, empowerment and microcredit: moving on from a lost decade	2005	topic relevance

Author	Title	Year	Reason for exclusion
Kabeer N	Conflicts over credit: re-evaluating the empowerment potential of loans to women in rural Bangladesh	2001	methodological rigour
Karim MR, Osada M	Dropping out: an emerging factor in the success of microcredit-based poverty alleviation programs	1998	topic relevance
Katz EG	Intra-household resource allocation in the Guatemalan Central Highlands: the impact of non-traditional agricultural exports	1992	topic relevance
Kelkar G, Nathan D, Jahan R	We were in fire, now we are in water: micro-credit and gender relations in rural Bangladesh	2003	topic relevance
Khandker S Samad HA, Khan ZH	Income and employment effects of micro-credit programmes: Village-level evidence from Bangladesh	1998	topic relevance
Leon M, Younger S	Transfer payments, mothers' income and child health in Ecuador	2007	topic relevance
Lott C	Why women matter: the story of microcredit	2009	topic relevance
Lundberg S, Pollak RA	Separate spheres bargaining and the marriage market	1993	methodological rigour
Lundberg SJ Pollak RA, Wales TJ	Do husbands and wives pool their resources? Evidence from the United Kingdom child benefit	2007	topic relevance
Mahmud S	Actually how empowering is microcredit?	2003	topic relevance
Marrez H, Schmit M	Credit risk analysis in microcredit: how does gender matter?	2009	topic relevance
Mayoux L	From vicious to virtuous circles? Gender and micro-enterprise development	1995	topic relevance
Mayoux L	Questioning virtuous spirals: micro-finance and women's empowerment in Africa	1999	topic relevance
Mayoux L	Tackling the down side: social capital, women's empowerment and micro - finance in Cameroon	2001	topic relevance
Mayoux L	Women's empowerment and micro-finance programmes: strategies for increasing impact	1998	topic relevance

Author	Title	Year	Reason for exclusion
McKernan SM, Pitt MM, Moskowitz D	Use of the formal and informal financial sectors: does gender matter? empirical evidence from rural Bangladesh	2005	topic relevance
Mkpado M Idu MA, AreneCJ	Effects of membership homogeneity on the performance of agricultural micro-credit groups in rural credit markets, Nigeria	2010	topic relevance
Mohindra K, Haddad S	Women's interlaced freedoms: a framework linking microcredit participation and health	2005	topic relevance
Molyneux M	Mothers at the service of the new poverty agenda: Progres/Oportunidades, Mexico's conditional transfer programme	2006	topic relevance
Molyneux M	Two cheers for CCTs	2007	topic relevance
Mookodi G	Gender and resources: some macro and micro level considerations	2004	topic relevance
Nader Y	Microcredit and the socio-economic wellbeing of women and their families in Cairo	2008	topic relevance
Narasaiah ML	Microcredit and women	2008	topic relevance
Naved RT	Intrahousehold impact of the transfer of modern agricultural technology	2000	topic relevance
Newaz W	Impact of micro-credit programs of two local NGOs on rural women's lives in Bangladesh	2003	topic relevance
Ngo T M-P, Wahhaj Z	Microfinance and gender empowerment	2008	topic relevance
Oficina Internacional del Trabajo	Grandes cambios con poco dinero: las mujeres y la microfinanciación, OIT	2008	topic relevance
Osmani LNK	Targeted micro-credit and women's relative well-being: evidence from the Grameen bank	1998	topic relevance
Osmani LNK	A breakthrough in women's bargaining power: the impact of microcredit	2007	topic relevance
Pande A	Intra-household resource allocation in India: is there a mother daughter link?	2005	topic relevance
Panjaitan-Drioadisuryo RDM, Cloud K	Gender, self-employment and microcredit programs: an Indonesian case study	1999	topic relevance
Paprocki K	Interrogating microcredit: the creation of an alternative microcredit program in Dhaka, Bangladesh	unknown	Topic relevance

Author	Title	Year	Reason for exclusion
Qian N	Missing women and the price of tea in China: the effect of sex-specific earnings on sex imbalance	2006	topic relevance
Quisumbing A, Maluccio J	Intrahousehold allocation and gender relations: new empirical evidence from four developing countries	2000	topic relevance
Quisumbing A, Yohannes Y	How fair is workfare? Gender, public works, and employment in rural Ethiopia	2004	topic relevance
Romero Castellanos V	Microfinanzas y capital humano: impactos de FFH/CRECER y SARTAWI en las mujeres y las niñas	2003	topic relevance
Roushdy R	Intrahousehold resource allocation in Egypt: does women's empowerment lead to greater investments in children?	2004	topic relevance
Ruijs O	Secondary data review: gender and evaluation aspects of credit and savings programmes	unknown	topic relevance
Ruiz-Arranz M, Davis B, Stampini M, Winters P, Handa S	More calories or more diversity? An econometric evaluation of the impact of the PROGRESA and PROCAMPO transfer programmes on food	2002	methodological rigour
Schady N, Rosero J	Are cash transfers made to women spent like other sources of income?	2007	topic relevance
Schatz E, Ogunmefun C	Caring and contributing: the role of older women in rural South African multi-generational households in the HIV/AIDS era	2007	topic relevance
Schreiner M	A cost - effectiveness analysis of the Grameen Bank of Bangladesh	2003	topic relevance
Simanowitz A	Combining microfinance and training on gender and HIV	2008	topic relevance
Ssewamala FM, Ismayilova L, McKay M, Sperber E, Bannon W, Alicea S	Gender and the effects of an economic empowerment program on attitudes toward sexual risk-taking among AIDS-orphaned adolescent youth in Uganda	2010	methodological rigour
Sundareshan SM	Microfinance: emerging trends and challenges	2008	methodological rigour
Swain R, Bali FY	Does microfinance empower women? Evidence from self-help groups in India	2009	topic relevance
Swaminathan H, Du Bois RS, Findeis JL	Impact of access to credit on labor allocation patterns in Malawi	2010	topic relevance

Author	Title	Year	Reason for exclusion
Tabbush C	Contesting gender narratives in development policies: women and conditional cash transfers in Argentina	2008	topic relevance
Vonderlack-Navarro R	Targeting women versus addressing gender in microcredit: lessons from Honduras	2010	topic relevance
Ward-Batts J	Do husbands and wives pool their resources? Evidence from the United Kingdom child benefit	2000	topic relevance
Wooley F	Why pay benefits to mothers	2004	methodological rigour
Zapata ME	Microfinanciamiento y empoderamiento de mujeres rurales: las cajas de ahorro y crédito en México	2003	topic relevance

Appendix 4.1: Details of studies included in the in-depth review

Reference and location	Study design	Time period of study	Sample size and characteristics	Data collection methods	Summary of relevant findings
Conditional cash transfer programmes					
Davis <i>et al.</i> , 2002 Mexico	RCT(PROGRESA) Study estimates gender and programme effects separately, using instrumental variables to reduce potential selection bias into programmes, and for gender within programmes	Surveys: 1997-1998 Data: 1996, 1998	12,625 households Client characteristics: primarily females from poor households (only enrol men if no woman available)	Census data (1997); PROGRESA evaluation sample household survey	Male recipients tend to reduce health expenditures more than female recipients; overall PROGRESA reduces health spending Female PROGRESA beneficiaries raise school enrolment Business investment only increases for female recipients and not males
Davis <i>et al.</i> , 2002 Mexico	Survey (PROCAMPO) Study estimates gender and programme effects separately, using instrumental variables to reduce potential selection bias into programmes, and for gender within programmes	Surveys: 1997-1998 Data: 1996, 1998	12,625 households 12,625 households Client characteristics: primarily females from poor households (only enrol men if no woman available); PROCAMPO: farmers, mostly but not exclusively men	Census data (1997); PROGRESA evaluation sample household survey	PROCAMPO beneficiaries always have a positive and significant effect on school enrolment, regardless of gender

Reference and location	Study design	Time period of study	Sample size and characteristics	Data collection methods	Summary of relevant findings
Gitter and Barham (2008) Nicaragua	RCT(RPS)	2000-2002	1,129 households in 42 communities	RPS evaluation sample household surveys (pre-programme 2000 and during, 2001,2002)	<p>More household resources are devoted to women and children when women are more powerful.</p> <p>However, results for girls' enrolment are consistent with a threshold effect: if women's power passes a certain threshold (measured by relative education levels), then girls' enrolment falls.</p> <p>While RPS significantly increases food and education expenditures, the impact is attributable primarily to non-income effects.</p>
Rubalcava <i>et al.</i> , 2009 Mexico	RCT(PROGRESA)	1998-2000	<p>22,882 households</p> <p>PROGRESA client characteristics: primarily females from poor households (the transfer goes to men if no woman are available)</p>	PROGRESA evaluation sample household surveys (every 6 months from 1998 to 2000)	<p>Transfers to women through PROGRESA correspond to a higher proportion of income spent on small livestock, higher-quality nutrient intake and children's clothing in households headed by couples.</p> <p>There is no difference in income treatment in single-headed female households.</p>

Reference and location	Study design	Time period of study	Sample size and characteristics	Data collection methods	Summary of relevant findings
Unconditional cash transfer programmes					
Bertrand <i>et al.</i> , 2003 South Africa	Retrospective cross-sectional study	Single wave of data collected in 1993	6,326 individuals Sub-sample of adults aged 16-50 from three-generation households from the Integrated Household Survey of South Africa (a random sample of 9,000 households)	Integrated Household Survey of South Africa	Prime-age individuals reduce working hours more when an elderly woman receives a pension than when a man does. The effect is stronger for prime-aged men than for prime-aged women. The effect is strongest for oldest sons.
Duflo, 2003 (and Duflo, 2000) South Africa	Retrospective cross-sectional study using a sub-sample of children aged 6-60 months	Single-wave of data collected in 1993	3,482 children National criteria state women receive pension at age 60, men at age 65, but local authorities have equalised age to 60 for all in some areas. Due to means testing, a majority of whites are excluded; most Africans receive maximum benefits	Integrated Household Survey of South Africa (a random sample of 9,000 households)	Pensions to women increased the weight for height of girls by 1.19 standard deviations but not significantly for boys, while pensions received by men are not associated with improved nutritional status of boys or girls.
Yanez-Pagans, 2008	Quasi-experimental study using a pre-post regression	2000-2001	1,380 children (school age children 6-13)	Two nationally representative	Pension eligibility for women increases children's school

Reference and location	Study design	Time period of study	Sample size and characteristics	Data collection methods	Summary of relevant findings
Bolivia	discontinuity design		years), 520 elders, 886 households	cross-sectional Living Standards Measurement Study Surveys; uses a stratified two-stage sampling	expenditure by 56-91% overall. There is no significant effect for men's eligibility. This is especially for non-indigenous versus indigenous women. Effects are greatest for boys.
Juarez, 2010 Mexico	Triple difference approach. A probit model is used to estimate the effect on participation in housework and market work. OLS regression is used for the effect estimation of housework, market work and leisure hours	Period from the second quarter of 2000 to the third quarter of 2004	Sample restricted to individuals at least 18 years of age, taken from a survey using a rotating panel of urban households Each household is included in the survey sample for a maximum of five quarters	Quarterly data from the Mexican Urban Employment Survey	Living with an eligible woman decreases housework and market work hours significantly for women aged 18-59 in poor neighborhoods in Mexico City. Living with an eligible woman has a negative but not significant effect on men's labour force participation, and a negative and significant effect on men's weekly hours of work.

Reference and location	Study design	Time period of study	Sample size and characteristics	Data collection methods	Summary of relevant findings
Grants to microenterprises					
de Mel <i>et al.</i> , 2009 Sri Lanka	RCT	2005-2008 (11 waves of data) (surveyed at baseline, then quarterly data collection for the first 2 years and semi-annually for the third year)	<p>617 enterprises were located, of which 387 were finally selected (excluding firms that were damaged by the tsunami, or firms with couples claiming joint owners).</p> <p>RCT was conducted in 25 localities in 3 districts. Firms were randomly selected and grants were allocated by lottery.</p> <p>The final sample included 197 males and 190 females, mostly retail (grocery stores) or small manufacturing (sewing, woodwork, bicycle repair etc.)</p>	Field experiment providing capital shocks to men versus women among randomly selected microenterprise owners	<p>Male recipients invested more of all grants; women invested from large but not small grants. Women appear to invest more than men in areas with uses in both the business and the home.</p> <p>Male recipients had a permanent increase in income by 9% (profits), resulting in purchase of durables and financial assets for their households, but women did not.</p>

Reference and location	Study design	Time period of study	Sample size and characteristics	Data collection methods	Summary of relevant findings
Microcredit					
Pitt, and Khandker, 1998 Bangladesh	Retrospective study using a quasi-experimental and regression discontinuity design using assignment to treatment rule	1991-1992 household survey	1,798 households from 29 randomly selected thanas (subdistricts), of which 24 had a credit programme, and 5 comparison villages had no credit	Multipurpose quasi-experimental household survey, with a random sample of 3 villages from each of 29 out of 291 thanas	Prime-age individuals reduce working hours more when an elderly woman receives a pension than when a man does. The effect is stronger for prime-aged men more than prime-aged women. The effect is strongest for oldest sons.
Pitt <i>et al.</i> 1999 Bangladesh	See above	See above	See above	See above	Credit for women reduces contraceptive use for 2 out of 3 programmes. Men's credit has no statistically significant effect. Women's credit has a weakly positive effect on fertility. Men's credit reduces fertility.
Pitt <i>et al.</i> 2003 Bangladesh	See above Factor-analytic design used to identify structural parameters	See above	See above	See above	Only the effect of male credit on girls' BMI has a close to significant positive effect on child BMI. Exogeneity of credit hypothesis cannot be rejected for the effect of credit on child BMI. Female credit has large

Reference and location	Study design	Time period of study	Sample size and characteristics	Data collection methods	Summary of relevant findings
					<p>positive statistically significant effects on height-for-age of boys and girls.</p> <p>Male credit effects overall are negative but not significantly different from zero.</p> <p>Female credit has significant and large positive effects on girls and smaller positive effects on boys. Male credit has positive effects on girls.</p>

Reference and location	Study design	Time period of study	Sample size and characteristics	Data collection methods	Summary of relevant findings
Pitt <i>et al.</i> , 2006 Bangladesh	Retrospective panel study with baseline and follow-up. Designed to continue analysis of previous studies by Pitt and colleagues	Baseline data: 1991/1992 Follow-up survey: 1998/1999	2,074 households	1991/1992 data collection is the same as Pitt and Khandker (1998) Households were revisited in a survey in 1998-1999, but with some new households (104 villages from 32 thanas)	Credit to women increases women's purchasing power, role in finance and borrowing, ability to oversee household projects, mobility and networking, activism, participation in discussing fertility and parenting, and overall household (but not men's) attitudes towards women's empowerment. Credit to men generally has negative effects on indicators of women's empowerment. Credit to men increases the probability of spousal fights over loans, decreases the likelihood of women overseeing household projects, female mobility and networking, the chance of the wife voting and discussion of family planning by women.

Reference and location	Study design	Time period of study	Sample size and characteristics	Data collection methods	Summary of relevant findings
Roodman and Morduch, 2009 Bangladesh	Difference in difference was used with controls. Replication exercise using difference in difference with controls, two-stage least squares regression	1991-1992 and 1998/1999	1,798 households, 87 villages	Same as Pitt <i>et al.</i> (2006)	They do not find a positive effect of women or men's borrowing. Results question the magnitude, sign and direction of Pitt and colleagues. However, Pitt (2011a and b) disputes this.
Montgomery and Weiss, 2011 Pakistan	Difference in difference was used with controls, exploiting the staggered introduction of bank services across villages	2006	2,881 households	A stratified random sample of 1,454 Khushhali Bank clients and future clients was drawn from 139 rural villages and 3 urban cities where the bank operates. A roughly equal number (1,427) of randomly selected non-clients from the same villages or settlements were also surveyed.	Overall, no evidence of effects on income growth. Women in households which received credit but who are not themselves the borrowers are more involved in decision making about children, fertility, housing and household enterprise. However, women borrowers are more likely to report making decisions about participation in community/labour force outside the home.

Appendix 4.2: key estimates from included studies

Outcome	Independent variable	Effect	Estimate
Unconditional Cash Transfers			
Duflo (2003) and (2000)			
Health - Weight-for-Height Z-score (girls)	Woman receives pension in household	+	1.19
Health - Weight-for-Height Z-score (girls)	Man receives pension in household	N/S	(0.10)
Health - Weight-for-Height Z-score (boys)	Woman receives pension in household	N/S	0.58
Health - Weight-for-Height Z-score (boys)	Man receives pension in household	N/S	(0.69)
Health - Added Height-for-age Z-score for younger (vs older) girls	Woman receives pension in household	+	1.16
Health - Added Height-for-age Z-score for younger (vs older) girls	Man receives pension in household	N/S	(0.07)
Health - Added Height-for-age Z-score for younger (vs older) boys	Woman receives pension in household	N/S	0.28
Health - Added Height-for-age Z-score for younger (vs older) boys	Man receives pension in household	N/S	(0.47)
Bertrand <i>et al.</i> (2003)			
Labour - Hours worked (prime-age adults)	Eligible woman in household (over 60)	-	(6.98)
Labour - Hours worked (prime-age adults)	Eligible man in household (over 65)	-	(2.73)
Labour - Added hours worked by prime-age women (vs men)	Eligible woman in household (over 60)	+	3.23
Labour - Added hours worked by prime-age women (vs men)	Eligible man in household (over 65)	N/S	0.71
Juarez (2010)			
Labour - Any housework 2003 (Women 70+)	Individual is eligible	N/S	(0.02)
Labour - Housework hours 2003 (Women 70+)	Individual is eligible	N/S	(2.40)
Labour - Any work 2003 (Women 70+)	Individual is eligible	N/S	0.05
Labour - Work hours 2003 (Women 70+)	Individual is eligible	N/S	1.93
Labour - Leisure hours 2003 (Women 70+)	Individual is eligible	N/S	0.38
Labour - Any housework 2003 (Men)	Individual is eligible	N/S	0.05

70+)			
Labour - Housework hours 2003 (Men 70+)	Individual is eligible	N/S	1.20
Labour - Any work 2003 (Men 70+)	Individual is eligible	N/S	(0.00)
Labour - Work hours 2003 (Men 70+)	Individual is eligible	N/S	(0.04)
Labour - Leisure hours 2003 (Men 70+)	Individual is eligible	N/S	(1.08)
Labour - Any housework 2003 (Women 70+)	Individual is eligible+ other eligible in household	N/S	(0.97)
Labour - Housework hours 2003 (Women 70+)	Individual is eligible+ other eligible in household	–	(5.61)
Labour - Any work 2003 (Women 70+)	Individual is eligible+ other eligible in household	N/S	(0.02)
Labour - Work hours 2003 (Women 70+)	Individual is eligible+ other eligible in household	N/S	(1.24)
Labour - Leisure hours 2003 (Women 70+)	Individual is eligible+ other eligible in household	N/S	4.47
Labour - Any housework 2003 (Men 70+)	Individual is eligible+ other eligible in household	N/S	(0.06)
Labour - Housework hours 2003 (Men 70+)	Individual is eligible+ other eligible in household	N/S	0.42
Labour - Any work 2003 (Men 70+)	Individual is eligible+ other eligible in household	N/S	0.16
Labour - Work hours 2003 (Men 70+)	Individual is eligible+ other eligible in household	N/S	8.70
Labour - Leisure hours 2003 (Men 70+)	Individual is eligible+ other eligible in household	N/S	(9.53)
Labour - Any housework 2003 (Women 60-69)	Individual near-eligible	N/S	0.01
Labour - Housework hours 2003 (Women 60-69)	Individual near-eligible	N/S	2.02
Labour - Any work 2003 (Women 60-69)	Individual near-eligible	N/S	(0.03)
Labour - Work hours 2003 (Women	Individual near-eligible	N/S	(1.97)

60-69)			
Labour - Leisure hours 2003 (Women 60-69)	Individual near-eligible	N/S	(0.19)
Labour - Any housework 2003 (Men 60-69)	Individual near-eligible	N/S	0.04
Labour - Housework hours 2003 (Men 60-69)	Individual near-eligible	N/S	(0.18)
Labour - Any work 2003 (Men 60-69)	Individual near-eligible	N/S	0.07
Labour - Work hours 2003 (Men 60-69)	Individual near-eligible	N/S	2.32
Labour - Leisure hours 2003 (Men 60-69)	Individual near-eligible	N/S	(2.16)
Labour - Any housework 2003 (Women 60-69)	Individual near-eligible+ other eligible in household	N/S	(0.01)
Labour - Housework hours 2003 (Women 60-69)	Individual near-eligible+ other eligible in household	N/S	7.58
Labour - Any work 2003 (Women 60-69)	Individual near-eligible+ other eligible in household	N/S	0.27
Labour - Work hours 2003 (Women 60-69)	Individual near-eligible+ other eligible in household	N/S	5.96
Labour - Leisure hours 2003 (Women 60-69)	Individual near-eligible+ other eligible in household	N/S	(13.69)
Labour - Any housework 2003 (Men 60-69)	Individual near-eligible+ other eligible in household	+	0.19
Labour - Housework hours 2003 (Men 60-69)	Individual near-eligible+ other eligible in household	N/S	10.73
Labour - Any work 2003 (Men 60-69)	Individual near-eligible+ other eligible in household	-	(0.38)
Labour - Work hours 2003 (Men 60-69)	Individual near-eligible+ other eligible in household	N/S	(32.03)
Labour - Leisure hours 2003 (Men 60-69)	Individual near-eligible+ other eligible in household	N/S	21.23
Labour - Any housework 2003 (Women 18-59)	Eligible individual in household	N/S	0.02

Labour - Housework hours 2003 (Women18-59)	Eligible individual in household	-	(3.35)
Labour - Any work 2003 (Women18-59)	Eligible individual in household	N/S	0.24
Labour - Work hours 2003 (Women18-59)	Eligible individual in household	+	12.12
Labour - Leisure hours 2003 (Women18-59)	Eligible individual in household	-	(6.81)
Labour - Any housework 2003 (Men18-59)	Eligible individual in household	N/S	0.08
Labour - Housework hours 2003 (Men18-59)	Eligible individual in household	N/S	(0.21)
Labour - Any work 2003 (Men18-59)	Eligible individual in household	N/S	0.01
Labour - Work hours 2003 (Men18-59)	Eligible individual in household	N/S	1.53
Labour - Leisure hours 2003 (Men18-59)	Eligible individual in household	N/S	(0.94)
Labour - Any housework 2003 (Women18-59)	Eligible woman in household	N/S	(0.05)
Labour - Housework hours 2003 (Women18-59)	Eligible woman in household	N/S	7.75
Labour - Any work 2003 (Women18-59)	Eligible woman in household	N/S	(0.13)
Labour - Work hours 2003 (Women18-59)	Eligible woman in household	N/S	(8.48)
Labour - Leisure hours 2003 (Women18-59)	Eligible woman in household	+	0.94
Labour - Any housework 2003 (Men18-59)	Eligible woman in household	N/S	(0.06)
Labour - Housework hours 2003 (Men18-59)	Eligible woman in household	N/S	1.54
Labour - Any work 2003 (Men18-59)	Eligible woman in household	N/S	(0.02)
Labour - Work hours 2003 (Men18-59)	Eligible woman in household	N/S	(12.64)
Labour - Leisure hours 2003 (Men18-59)	Eligible woman in household	N/S	3.53
Conditional Cash Transfers			
Davis <i>et al.</i> (2002)			
Expenditure - Total expenditure	Amount of PROGRESA transfer received by woman	+	0.28

Expenditure - Total expenditure	Amount of PROGRESA transfer received by man	N/S	0.05
Expenditure - Total expenditure	Amount of PROCAMPO transfer received by woman	+	0.55
Expenditure - Total expenditure	Amount of PROCAMPO transfer received by man	+	0.34
Expenditure/Consumption - Total expenditure on food	Amount of PROGRESA transfer received by woman	+	0.25
Expenditure/Consumption - Total expenditure on food	Amount of PROGRESA transfer received by man	N/S	0.12
Expenditure/Consumption - Total expenditure on food	Amount of PROCAMPO transfer received by woman	+	0.45
Expenditure/Consumption - Total expenditure on food	Amount of PROCAMPO transfer received by man	+	0.28
Expenditure/Education - Total expenditure on children's education	Amount of PROGRESA transfer received by woman	+	0.02
Expenditure/Education - Total expenditure on children's education	Amount of PROGRESA transfer received by man	N/S	0.02
Expenditure/Education - Total expenditure on children's education	Amount of PROCAMPO transfer received by woman	N/S	0.01
Expenditure/Education - Total expenditure on children's education	Amount of PROCAMPO transfer received by man	N/S	0.00
Expenditure - Total expenditure on children's clothing	Amount of PROGRESA transfer received by woman	+	0.02
Expenditure - Total expenditure on children's clothing	Amount of PROGRESA transfer received by man	N/S	0.01
Expenditure - Total expenditure on children's clothing	Amount of PROCAMPO transfer received by woman	N/S	0.01
Expenditure - Total expenditure on children's clothing	Amount of PROCAMPO transfer received by man	+	0.01
Expenditure/Health - Total	Amount of PROGRESA	N/S	(0.00)

expenditure on health	transfer received by woman		
Expenditure/Health - Total expenditure on health	Amount of PROGRESA transfer received by man	-	(0.06)
Expenditure/Health - Total expenditure on health	Amount of PROCAMPO transfer received by woman	N/S	0.07
Expenditure/Health - Total expenditure on health	Amount of PROCAMPO transfer received by man	+	0.02
Expenditure/Health - Total expenditure on energy	Amount of PROGRESA transfer received by woman	N/S	0.00
Expenditure/Health - Total expenditure on energy	Amount of PROGRESA transfer received by man	N/S	(0.01)
Expenditure/Health - Total expenditure on energy	Amount of PROCAMPO transfer received by woman	N/S	0.03
Expenditure/Health - Total expenditure on energy	Amount of PROCAMPO transfer received by man	N/S	0.01
Expenditure/Health - Total expenditure on adult clothing	Amount of PROGRESA transfer received by woman	N/S	0.00
Expenditure/Health - Total expenditure on adult clothing	Amount of PROGRESA transfer received by man	N/S	0.00
Expenditure/Health - Total expenditure on adult clothing	Amount of PROCAMPO transfer received by woman	N/S	(0.00)
Expenditure/Health - Total expenditure on adult clothing	Amount of PROCAMPO transfer received by man	+	0.01
Investment - Investment (total)	Amount of PROGRESA transfer received by woman	+	0.08
Investment - Investment (total)	Amount of PROGRESA transfer received by man	N/S	(0.11)
Investment - Investment (total)	Amount of PROCAMPO transfer received by woman	+	0.55
Investment - Investment (total)	Amount of PROCAMPO transfer received by	+	0.51

	man		
Investment - Investment (Agriculture)	Amount of PROGRESA transfer received by woman	+	0.03
Investment - Investment (Agriculture)	Amount of PROGRESA transfer received by man	N/S	(0.07)
Investment - Investment (Agriculture)	Amount of PROCAMPO transfer received by woman	+	0.35
Investment - Investment (Agriculture)	Amount of PROCAMPO transfer received by man	+	0.33
Investment - Investment (Business)	Amount of PROGRESA transfer received by woman	N/S	0.29
Investment - Investment (Business)	Amount of PROGRESA transfer received by man	N/S	0.43
Investment - Investment (Business)	Amount of PROCAMPO transfer received by woman	N/S	0.33
Investment - Investment (Business)	Amount of PROCAMPO transfer received by man	N/S	0.01
Education - School enrolment (all children)	Amount of PROGRESA transfer received by woman	+	0.00
Education - School enrolment (all children)	Amount of PROGRESA transfer received by man	N/S	0.00
Education - School enrolment (all children)	Amount of PROCAMPO transfer received by woman	N/S	0.00
Education - School enrolment (all children)	Amount of PROCAMPO transfer received by man	+	0.00
Gitter and Barham (2008)			
Education - School enrolment (all children)	Woman eligible to receive RPS transfer	+	0.17
Education - School enrolment (all children)	Woman eligible to receive RPS transfer X Female Power	N/S	(0.03)
Education - School enrolment (all children)	Woman eligible to receive RPS transfer X	N/S	0.00

	FemalePower ²		
Education - School enrolment (boys)	Woman eligible to receive RPS transfer	+	0.15
Education - School enrolment (boys)	Woman eligible to receive RPS transfer X Female Power	N/S	(0.03)
Education - School enrolment (boys)	Woman eligible to receive RPS transfer X FemalePower ²	N/S	0.00
Education - School enrolment (girls)	Woman eligible to receive RPStransfer	+	0.18
Education - School enrolment (girls)	Woman eligible to receive RPS transfer X Female Power	N/S	(0.03)
Education - School enrolment (girls)	Woman eligible to receive RPS transfer X FemalePower ²	N/S	0.01
Expenditure/Consumption - Per Capita Spending on Food	Woman eligible to receive RPS transfer	+	445.20
Expenditure/Consumption - Per Capita Spending on Food	Woman eligible to receive RPS transfer X Female Power	N/S	(237.00)
Expenditure/Consumption - Per Capita Spending on Food	Woman eligible to receive RPS transfer X FemalePower ²	N/S	25.30
Expenditure/Education - Per Capita Spending on Education	Woman eligible to receive RPS transfer	N/S	(0.70)
Expenditure/Education - Per Capita Spending on Education	Woman eligible to receive RPS transfer X Female Power	N/S	1.10
Expenditure/Education - Per Capita Spending on Education	Woman eligible to receive RPS transfer X FemalePower ²	N/S	0.10
Expenditure/Consumption - Per Capita Spending on Milk	Woman eligible to receive RPS transfer	+	72.00
Expenditure/Consumption - Per Capita Spending on Milk	Woman eligible to receive RPS transfer X Female Power	N/S	(45.60)
Expenditure/Consumption - Per Capita Spending on Milk	Woman eligible to receive RPS transfer X FemalePower ²	N/S	8.40
Rubalcava et al. (2009)			
Assets - Probability: Chickens and Turkeys	Amount of PROGRESA transfer received by women (000s)	N/S	5.57

Assets - Probability: Pigs	Amount of PROGRESA transfer received by women (000s)	+	13.36
Assets - Probability: Cows	Amount of PROGRESA transfer received by women (000s)	N/S	0.92
Assets - Probability: Horses and Donkeys	Amount of PROGRESA transfer received by women (000s)	N/S	2.51
Assets - Number of: Chickens and Turkeys	Amount of PROGRESA transfer received by women (000s)	+	0.32
Assets - Number of: Pigs	Amount of PROGRESA transfer received by women (000s)	+	0.33
Assets - Number of: Cows	Amount of PROGRESA transfer received by women (000s)	N/S	0.21
Assets - Number of: Horses and donkeys	Amount of PROGRESA transfer received by women (000s)	N/S	0.08
Consumption - Ln(per capita calories)	Amount of PROGRESA transfer received by women (000s)	-	(0.13)
Consumption - Protein per calorie	Amount of PROGRESA transfer received by women (000s)	+	0.15
Expenditure/Consumption - Budget share on food	Amount of PROGRESA transfer received by women (000s)	-	(5.97)
Expenditure/Consumption - Budget share on vegetables	Amount of PROGRESA transfer received by women (000s)	-	(1.51)
Expenditure/Consumption - Budget share on fruits	Amount of PROGRESA transfer received by women (000s)	N/S	(0.05)
Expenditure/Consumption - Budget share on tortillas and beans	Amount of PROGRESA transfer received by women (000s)	-	(2.66)
Expenditure/Consumption - Budget share on meat	Amount of PROGRESA transfer received by women (000s)	+	1.88
Expenditure/Education - Budget share on education	Amount of PROGRESA transfer received by women (000s)	+	2.28
Expenditure/Consumption - Budget	Amount of PROGRESA	+	2.96

share on boys' clothing	transfer received by women (000s)		
Expenditure/Consumption - Budget share on girls' clothing	Amount of PROGRESA transfer received by women (000s)	+	3.14
Yanez-Pagans (2008)			
Expenditure/Education - Total expenditure on children's education	Eligible indigenous woman in household	N/S	0.56
Expenditure/Education - Total expenditure on children's education	Eligible indigenous man in household	+	0.58
Expenditure/Education - Total expenditure on children's education	Eligible non-indigenous woman in household	+	0.91
Expenditure/Education - Total expenditure on children's education	Eligible non-indigenous man in household	+	0.17
Expenditure/Education - Total expenditure on children's education	Eligible multi-ethnic woman in household	+	0.60
Expenditure/Education - Total expenditure on children's education	Eligible multi-ethnic man in household	+	0.01
Expenditure/Education - Added exp. on boys education (vs girls)	Eligible indigenous woman in household	+	0.58
Expenditure/Education - Added exp. on boys education (vs girls)	Eligible indigenous man in household	N/S	0.37
Expenditure/Education - Added exp. on boys education (vs girls)	Eligible non-indigenous woman in household	N/S	(0.22)
Expenditure/Education - Added exp. on boys education (vs girls)	Eligible non-indigenous man in household	N/S	0.40
Expenditure/Education - Added exp. on boys education (vs girls)	Eligible multi-ethnic woman in household	N/S	(0.16)
Expenditure/Education - Added exp. on boys education (vs girls)	Eligible multi-ethnic man in household	N/S	(0.44)
Microenterprise grants			
De Mel <i>et al.</i> (2009)			
Investment - Capital stock	Grant amount of 100	+	1.38
Investment - Capital stock	Grant amount of 100Xfemale	-	(1.39)
Investment - Capital stock	Grant amount of 200	+	1.22
Investment - Capital stock	Grant amount of 200Xfemale	N/S	0.48
Investment - Capital stock (short run)	Grant amount of 100	+	0.63
Investment - Capital stock (short run)	Grant amount of 100Xfemale	N/S	0.41

Investment - Capital stock (short run)	Grant amount of 200	+	1.43
Investment - Capital stock (short run)	Grant amount of 200Xfemale	N/S	0.46
Enterprise performance - Adjusted real profits	Grant amount of 100	+	13.58
Enterprise performance - Adjusted real profits	Grant amount of 100Xfemale	-	(14.15)
Enterprise performance - Adjusted real profits	Grant amount of 200	+	12.95
Enterprise performance - Adjusted real profits	Grant amount of 200Xfemale	N/S	(14.83)
Education - School attendance (5-12)	Grant amount of 100	N/S	(0.08)
Education - School attendance (5-12)	Grant amount of 100Xfemale	N/S	0.11
Education - School attendance (5-12)	Grant amount of 200	N/S	(0.05)
Education - School attendance (5-12)	Grant amount of 200Xfemale	N/S	(0.11)
Education - School attendance (12-15)	Grant amount of 100	N/S	(0.04)
Education - School attendance (12-15)	Grant amount of 100Xfemale	N/S	0.16
Education - School attendance (12-15)	Grant amount of 200	N/S	0.01
Education - School attendance (12-15)	Grant amount of 200Xfemale	N/S	(0.03)
Education - School attendance (17-18)	Grant amount of 100	N/S	0.11
Education - School attendance (17-18)	Grant amount of 100Xfemale	N/S	0.24
Education - School attendance (17-18)	Grant amount of 200	N/S	(0.08)
Education - School attendance (17-18)	Grant amount of 200Xfemale	N/S	0.25
Expenditure/Consumption - Monthly expenditure on groceries	Grant amount of 100	N/S	(9.35)
Expenditure/Consumption - Monthly expenditure on groceries	Grant amount of 100Xfemale	N/S	15.19
Expenditure/Consumption - Monthly expenditure on groceries	Grant amount of 200	N/S	(10.90)
Expenditure/Consumption - Monthly	Grant amount of	N/S	21.29

expenditure on groceries	200Xfemale		
Expenditure/Health - Monthly expenditure on health	Grant amount of 100	N/S	1.31
Expenditure/Health - Monthly expenditure on health	Grant amount of 100Xfemale	N/S	(6.25)
Expenditure/Health - Monthly expenditure on health	Grant amount of 200	N/S	(0.62)
Expenditure/Health - Monthly expenditure on health	Grant amount of 200Xfemale	N/S	2.68
Expenditure/Education - Monthly expenditure on education	Grant amount of 100	N/S	(3.05)
Expenditure/Education - Monthly expenditure on education	Grant amount of 100Xfemale	N/S	2.99
Expenditure/Education - Monthly expenditure on education	Grant amount of 200	N/S	0.34
Expenditure/Education - Monthly expenditure on education	Grant amount of 200Xfemale	N/S	(1.22)
Assets - Household asset index	Grant amount of 100	+	0.58
Assets - Household asset index	Grant amount of 100Xfemale	N/S	(0.38)
Assets - Household asset index	Grant amount of 200	+	0.48
Assets - Household asset index	Grant amount of 200Xfemale	N/S	(0.52)
Microcredit			
Pitt and Khandker (2008)			
Expenditure - Log of weekly total per capita expenditure	Amount borrowed by woman from BRAC	+	0.04
Expenditure - Log of weekly total per capita expenditure	Amount borrowed by man from BRAC	N/S	0.02
Expenditure - Log of weekly total per capita expenditure	Amount borrowed by woman from BRDB	+	0.04
Expenditure - Log of weekly total per capita expenditure	Amount borrowed by man from BRDB	N/S	0.02
Expenditure - Log of weekly total per capita expenditure	Amount borrowed by woman from Grameen Bank	+	0.04
Expenditure - Log of weekly total per capita expenditure	Amount borrowed by man from Grameen Bank	N/S	0.02
Assets - Log of Women's Non-land Assets	Amount borrowed by woman from BRAC	N/S	0.03
Assets - Log of Women's Non-land	Amount borrowed by	N/S	0.10

Assets	man from BRAC		
Assets - Log of Women's Non-land Assets	Amount borrowed by woman from BRDB	N/S	0.13
Assets - Log of Women's Non-land Assets	Amount borrowed by man from BRDB	N/S	0.03
Assets - Log of Women's Non-land Assets	Amount borrowed by woman from Grameen Bank	N/S	0.11
Assets - Log of Women's Non-land Assets	Amount borrowed by man from Grameen Bank	+	2.05
Labour - Log Hours in Past Month (Women)	Amount borrowed by woman from BRAC	N/S	(0.01)
Labour - Log Hours in Past Month (Women)	Amount borrowed by man from BRAC	N/S	(0.04)
Labour - Log Hours in Past Month (Women)	Amount borrowed by woman from BRDB	N/S	(0.01)
Labour - Log Hours in Past Month (Women)	Amount borrowed by man from BRDB	N/S	(0.01)
Labour - Log Hours in Past Month (Women)	Amount borrowed by woman from Grameen Bank	N/S	0.02
Labour - Log Hours in Past Month (Women)	Amount borrowed by man from Grameen Bank	N/S	(0.06)
Labour - Log Hours in Past Month (Men)	Amount borrowed by woman from BRAC	-	(0.18)
Labour - Log Hours in Past Month (Men)	Amount borrowed by man from BRAC	-	(0.14)
Labour - Log Hours in Past Month (Men)	Amount borrowed by woman from BRDB	-	(0.23)
Labour - Log Hours in Past Month (Men)	Amount borrowed by man from BRDB	-	(0.14)
Labour - Log Hours in Past Month (Men)	Amount borrowed by woman from Grameen Bank	-	(0.22)
Labour - Log Hours in Past Month (Men)	Amount borrowed by man from Grameen Bank	-	(0.16)
Education - School enrolment (girls)	Amount borrowed by woman from BRAC	N/S	(0.02)
Education - School enrolment (girls)	Amount borrowed by man from BRAC	N/S	0.05
Education - School enrolment (girls)	Amount borrowed by	N/S	(0.01)

	woman from BRDB		
Education - School enrolment (girls)	Amount borrowed by man from BRDB	N/S	0.03
Education - School enrolment (girls)	Amount borrowed by woman from Grameen Bank	N/S	0.01
Education - School enrolment (girls)	Amount borrowed by man from Grameen Bank	N/S	0.06
Education - School enrolment (boys)	Amount borrowed by woman from BRAC	N/S	0.04
Education - School enrolment (boys)	Amount borrowed by man from BRAC	N/S	(0.00)
Education - School enrolment (boys)	Amount borrowed by woman from BRDB	+	0.12
Education - School enrolment (boys)	Amount borrowed by man from BRDB	N/S	0.04
Education - School enrolment (boys)	Amount borrowed by woman from Grameen Bank	+	0.10
Education - School enrolment (boys)	Amount borrowed by man from Grameen Bank	N/S	0.07
Pitt <i>et al.</i> (1999)			
Fertility - Contraceptive use among women14-30	Amount borrowed by woman from BRAC	–	(0.14)
Fertility - Contraceptive use among women14-30	Amount borrowed by man from BRAC	N/S	0.03
Fertility - Contraceptive use among women14-30	Amount borrowed by woman from BRDB	–	(0.22)
Fertility - Contraceptive use among women14-30	Amount borrowed by man from BRDB	N/S	0.07
Fertility - Contraceptive use among women14-30	Amount borrowed by woman from Grameen Bank	–	(0.13)
Fertility - Contraceptive use among women14-30	Amount borrowed by man from Grameen Bank	N/S	(0.01)
Fertility - Fertility among women14-30	Amount borrowed by woman from BRAC	N/S	0.04
Fertility - Fertility among women14-30	Amount borrowed by man from BRAC	N/S	0.01
Fertility - Fertility among women14-30	Amount borrowed by woman from BRDB	N/S	0.01

Fertility - Fertility among women14-30	Amount borrowed by man from BRDB	–	(0.11)
Fertility - Fertility among women14-30	Amount borrowed by woman from Grameen Bank	N/S	(0.09)
Fertility - Fertility among women14-30	Amount borrowed by man from Grameen Bank	–	(0.11)
Pitt <i>et al.</i> (2003)			
Health - Arm circumference (boys)	Ln (Amount borrowed by man) + 1	N/S	(0.19)
Health - Arm circumference (boys)	Ln (Amount borrowed by man) + 1	+	0.54
Health - Arm circumference (girls)	Ln (Amount borrowed by woman) + 1	N/S	0.30
Health - Arm circumference (girls)	Ln (Amount borrowed by woman) + 1	+	0.63
Health - Body Mass Index (boys)	Ln (Amount borrowed by man) + 1	N/S	(0.09)
Health - Body Mass Index (boys)	Ln (Amount borrowed by man) + 1	N/S	(0.15)
Health - Body Mass Index (girls)	Ln (Amount borrowed by woman) + 1	N/S	0.30
Health - Body Mass Index (girls)	Ln (Amount borrowed by woman) + 1	N/S	(0.14)
Health - Height-for-age (boys)	Ln (Amount borrowed by man) + 1	N/S	(0.32)
Health - Height-for-age (boys)	Ln (Amount borrowed by man) + 1	+	1.53
Health - Height-for-age (girls)	Ln (Amount borrowed by woman) + 1	N/S	(0.48)
Health - Height-for-age (girls)	Ln (Amount borrowed by woman) + 1	+	1.14
Pitt <i>et al.</i> (2006)			
Female empowerment - Factor 1: purchasing	Credit available to woman in household	+	0.22
Female empowerment - Factor 1: purchasing	Credit available to man in household	N/S	(0.02)
Female empowerment - Factor 2: resources	Credit available to woman in household	+	0.51
Female empowerment - Factor 2: resources	Credit available to man in household	–	(0.15)
Female empowerment - Factor 3:	Credit available to	+	0.37

finance	woman in household		
Female empowerment - Factor 3: finance	Credit available to man in household	–	(0.17)
Female empowerment - Factor 4: transaction management	Credit available to woman in household	+	0.30
Female empowerment - Factor 4: transaction management	Credit available to man in household	N/S	(0.09)
Female empowerment - Factor 5: mobility and networks	Credit available to woman in household	+	0.43
Female empowerment - Factor 5: mobility and networks	Credit available to man in household	–	(0.28)
Female empowerment - Factor 6: activism	Credit available to woman in household	+	0.19
Female empowerment - Factor 6: activism	Credit available to man in household	N/S	(0.07)
Female empowerment - Factor 7: household attitudes	Credit available to woman in household	N/S	0.11
Female empowerment - Factor 7: household attitudes	Credit available to man in household	N/S	0.03
Female empowerment - Factor 8: husband's behaviour	Credit available to woman in household	N/S	0.12
Female empowerment - Factor 8: husband's behaviour	Credit available to man in household	N/S	(0.04)
Female empowerment - Factor 9: fertility and parenting	Credit available to woman in household	+	0.34
Female empowerment - Factor 9: fertility and parenting	Credit available to man in household	–	(0.19)
Female empowerment - Factor 10: all variables	Credit available to woman in household	+	0.47
Female empowerment - Factor 10: all variables	Credit available to man in household	–	(0.17)
Female empowerment - Factor 1: purchasing	Credit available to woman in household	+	0.03
Female empowerment - Factor 1: purchasing	Credit available to man in household	N/S	(0.00)
Female empowerment - Factor 2: resources	Credit available to woman in household	+	0.06
Female empowerment - Factor 2: resources	Credit available to man in household	N/S	(0.02)
Female empowerment - Factor 3: finance	Credit available to woman in household	+	0.05
Female empowerment - Factor 3: finance	Credit available to man in household	N/S	(0.00)

Female empowerment - Factor 4: transaction management	Credit available to woman in household	+	0.04
Female empowerment - Factor 4: transaction management	Credit available to man in household	N/S	0.01
Female empowerment - Factor 5: mobility and networks	Credit available to woman in household	+	0.05
Female empowerment - Factor 5: mobility and networks	Credit available to man in household	-	(0.03)
Female empowerment - Factor 6: activism	Credit available to woman in household	+	0.02
Female empowerment - Factor 6: activism	Credit available to man in household	N/S	(0.01)
Female empowerment - Factor 7: household attitudes	Credit available to woman in household	+	0.02
Female empowerment - Factor 7: household attitudes	Credit available to man in household	N/S	0.02
Female empowerment - Factor 8: husband's behaviour	Credit available to woman in household	N/S	0.02
Female empowerment - Factor 8: husband's behaviour	Credit available to man in household	N/S	0.01
Female empowerment - Factor 9: fertility and parenting	Credit available to woman in household	+	0.04
Female empowerment - Factor 9: fertility and parenting	Credit available to man in household	N/S	(0.02)
Montgomery and Weiss (2011)			
Female empowerment - Child schooling (d)	Credit accessed by man in household	+	0.49
Female empowerment- Child marriage(d)	Credit accessed by man in household	+	0.64
Female empowerment- Whether have another child (d)	Credit accessed by man in household	N/S	0.62
Female empowerment - Repair/construction of house (d)	Credit accessed by man in household	+	0.62
Female empowerment- Sale/purchase of livestock (d)	Credit accessed by man in household	+	0.84**
Female empowerment- Borrowing money (d)	Credit accessed by man in household	+	0.67
Female empowerment- Woman participating in community political activity (d)	Credit accessed by man in household	N/S	0.19
Female empowerment- Woman deciding to work outside home (d)	Credit accessed by man in household	N/S	0.25
Female empowerment - Child	Credit accessed by	N/S	0.13

schooling (d)	woman in household		
Female empowerment- Child marriage(d)	Credit accessed by woman in household	N/S	-0.18
Female empowerment- Whether have another child (d)	Credit accessed by woman in household	N/S	0.4
Female empowerment - Repair/construction of house (d)	Credit accessed by woman in household	N/S	0.05
Female empowerment- Sale/purchase of livestock (d)	Credit accessed by woman in household	N/S	0.8
Female empowerment- Borrowing money (d)	Credit accessed by woman in household	N/S	-0.07
Female empowerment- Women participating in community political activity (d)	Credit accessed by woman in household	N/S	1.94
Female empowerment- Women deciding to work outside home (d)	Credit accessed by woman in household	+	1.25

Notes

- (a) N/S - not statistically significant ($p > 0.05$ or equivalent)
- (b) Female power= (Female household head schooling + 1)/(Male household head schooling + 1)
- (c) Household asset index = first principal component of 17 household assets
- (d) Questions about participation in decision-making domains asked to married females, answers grouped into yes = 1/no = 0 binary variable; logit coefficients reported

Appendix 4.3: Categorisation of included studies by indicators of well-being analysed

Dimension	Indicators	
	Objective	Subjective
Material and physical	Wealth/assets/investments: Davis et al. (2002) de Mel et al. (2009) Rubalcava et al. (2009) Employment/labour force participation Pitt and Khandker (1998) Bertrand et al. (2003) Juarez (2010) Consumption de Mel et al. (2009) Roodman and Morduch (2009) Rubalcava et al. (2009)	<i>Unanalysed indicators</i> Satisfaction with income/wealth, assessment of standard of living compared to others, and compared with the past
Human capital	Education Pitt and Khandker (1998) Davis et al. (2002) Gitter and Barham (2008) Yanez-Pagans (2008) de Mel et al. (2009) Rubalcava et al. (2009) Physical health/health care Davis et al. (2002) Duflo (2003) Pitt et al (1999) Pitt et al. (2003) Gitter and Barham (2008) <i>Unanalysed indicators</i> skills, relations of affection and care	<i>Unanalysed indicators</i> Satisfaction with health, self-concept and personality, self-efficacy, confidence, sense of competence and scope for influence
Social relations	Gender equity Pitt et al. (2006) Montgomery and Weiss (2011) <i>Unanalysed indicators</i> Insecurity, violence, relations with the community and the state, access to services, networks, environmental	<i>Unanalysed indicators</i> Perceptions of safety, assessment of support, perceptions of

	resources	equity, perceptions of environmental quality
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The authors of this report were supported by the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre).

The Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) is part of the Social Science Research Unit (SSRU), Institute of Education, University of London.

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This material has been funded by the Department for International Development. However the views expressed do not necessarily reflect the department's official policies. The report was first published in 2012 by:

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ISBN: 978-1-907345-22-7
Cover image ©IFAD/Giacomo Pirozzi

The views expressed in this work are those of the authors and do not necessarily reflect the views of the EPPI-Centre or the funder. All errors and omissions remain those of the authors.

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