



Legal Vice Presidency  
The World Bank

# Impact of Legal Aid: Ecuador



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# **Impact of Legal Aid: Ecuador**



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## **Foreword**

**L**egal services in Ecuador have historically suffered from serious shortcomings including a lack of institutionalization, insufficient funding, and limited human resources. For poor women and children, the situation is particularly critical, and was a key issue identified in the World Bank's first Legal and Judicial Sector Assessment completed in 1994. This Assessment led to the establishment of the Fund for Law and Justice through which the World Bank funded Judicial Reform Project provided funds to support civil society activities designed to improve the delivery of legal services throughout Ecuador.

This study is an important advance in our understanding of the impact of legal services on poor women and children. While the study's results illustrate that much has been achieved, much more remains to be done given our limited resources to expand such services. This study also demonstrates that, in addition to developing more efficient and specialized services to improve access to legal services for poor women, the Program for Law and Justice created an important mechanism through which civil society organizations were encouraged to participate in the process of legal and judicial reform and also facilitated cooperation between the justice sector and civil society.

At the highest levels of the Judiciary, we remain committed to implementing mechanisms to improve public defense in Ecuador. We also hope that the positive results this study analyzes will serve as a catalyst for similar initiatives around the world. We gratefully acknowledge the World Bank's commitment to sharing the results of the Program for Law and Justice, and hope that it will help those who wish to improve legal services for the poor.

Dr. Armando Bermeo Castillo  
President  
Supreme Court and National Judicial Council  
Quito, Ecuador  
February 2003

## Preface

The Judicial Reform Project evolved from the World Bank's first-ever Judicial Sector Assessment, carried out in 1994. The assessment highlighted a number of priorities, including improving the basic functioning of the courts to reduce delay and improve the enforcement of laws. Another priority was to address other pressing social issues—such as domestic violence—through the support of an active non-governmental organization NGO community. In 1996, the World Bank financed a US\$10.6 million loan for Judicial Reform, with three main components.

The first project component, court reform, included case administration, information support, judicial training, and infrastructure. This component piloted new case administration and information systems in 28 courts in the first stage and another 43 courts in the second stage in Quito, Guayaquil, and Cuenca. The second component, court annexed alternative dispute resolution mechanisms, piloted mediation centers and training in Quito, Guayaquil, and Cuenca. The third component, the Program for Law and Justice, supported activities initiated by civil society and innovations undertaken by the courts through a grants program and financed a professional development program for law professors and a study on the state of legal education, as well as research and

evaluation of pilot mediation centers and legal aid centers for poor women. Under this component, a special fund, the Fund for Law and Justice, financed twenty-four grants to support poor women, children, indigenous populations, legal NGOs, and law faculties.

This project lasted for five years and was recently completed in 2002. The project was prepared with the results of a legal and judicial sector assessment and a reform plan (*Plan Integral de Reforma*)<sup>1</sup> which had been prepared with input from a broad range of stakeholders. This plan identified judicial sector reform objectives and priorities, together with suggested areas of cooperation with international financial institutions and donors. The project was designed to implement a part of this plan. Specifically, it was designed to improve the efficiency and effectiveness of the judiciary and increase the available alternative dispute resolution mechanisms, as well as increase access to justice and competent legal training. It is not enough to have an efficient judiciary if those with legitimate claims cannot access the judiciary. As a result, Ecuador adopted a comprehensive approach to legal and judicial reform and the World Bank financed a pilot project that could be later expanded. The pilot Program for Law and Justice was an innovative way to involve civil society in the legal and judicial reform process; one of the specific activities included in this program was three legal aid clinics for poor women.

Ecuador chose to include legal aid clinics specifically for poor women during a time when domestic violence was being actively discussed, and women's groups were demonstrating against the obstacles perceived in the judiciary, including inefficiency, inequity, and bias. Approximately twenty percent of households in Ecuador are headed by single women, who form the poorest group in the country. Reinforcing this status are myriad obstacles precluding women from collecting social welfare benefits or child support payments, keeping them trapped in abusive domestic situations, and

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<sup>1</sup> "La Administración de Justicia en Ecuador: Plan Integral de Reformas," Grupo de Trabajo Conjunto del Sector Justicia y Corporación Latinoamericana para el Desarrollo (CLD), May 1995.

limiting their access to education and training. Support of organizations working to promote legal rights—such as rights designed to prevent gender or racial discrimination—can also keep some pressure on legal institutions.

Evaluating the legal aid progress is critical for understanding the impact that the provision of legal services for women has on their living standards. It is also important to glean lessons learned for application to similar activities underway or planned for other countries. As the legal aid clinics were progressing and the results seemed promising, a short review was prepared in 1999. *Empowering Women: An Assessment of Legal Aid Under Ecuador's Judicial Reform Project* (Rodríguez (2000)) reviewed the legal and social aspects of the legal aid clinics at the midpoint of their operation under World Bank financing. The assessment presents client information collected by the non-government organizations (NGOs) responsible for operating the activity and provided demographic profiles of the women who used these services. It was found, based on selective interviews and other qualitative data, that the legal aid services do improve clients' lives substantially. However, the review did not encompass quantifiable changes in the living standards of the women and their children.

Given that impact is critical to monitoring, an economic impact study was prepared. This evaluation reviews a portion of the Program for Law and Justice, looking specifically at a component pilot activity to provide legal aid services to poor women in Ecuador. The goal of the present study is twofold: first, to build on the 2000 assessment by finding a quantifiable economic link between the use of legal aid by poor women and their living standards; and second, to develop a model for evaluating legal aid programs in general, so that over time the World Bank and other institutions supporting or financing legal aid activities will be able to develop benchmarks against which to measure and compare the success of different legal aid programs. The development of this evaluation model is at the forefront of efforts to measure the impact of their work in the legal and judicial sector. The World Bank is working together with other donors to expand this model to other areas of legal and judicial reform.

Evaluating the legal and judicial sector, however, is exceedingly complex. The most critical methodological lesson learned in the context of this evaluation is that because legal and judicial reform projects may entail outcomes difficult to quantify, it is important to utilize an innovative combination of both quantitative and qualitative evaluation techniques. In this case, we bring together the hard data resulting from an analysis of how women with access to legal services fared compared to those who did not, complemented by the narratives of women the activity was designed to help. Statistics alone do not capture fully how the legal aid centers contributed to the lives of women, including their ability to participate in the economy. Capturing some of the intergenerational or indirect effects, such as providing more food to the family or the opportunity to attend school, is difficult given the short cycle of three to five years of many World Bank projects. The methods can be carried out in parallel, or sequentially, with the results of the first method, whether qualitative or quantitative, providing a framework for refining the tools of the second.

As part of the evaluation exercise, it is also necessary to identify the legal aid activity as an important complement to other legal and judicial sector reform projects in Ecuador. In particular, legal aid expands access to justice. Greater accessibility to the justice system, taken along with the results from other components of Ecuador's Judicial Reform Project, work to reinforce the rule of law. Empirical studies undertaken by the World Bank show a strong correlation between the rule of law and development indicators such as gross national income and infant mortality. Without the rule of law, economic growth and poverty reduction can be neither sustainable nor equitable.

Overall, the legal aid centers were successful. The financing from the World Bank allowed the centers to be open longer, hire additional staff, and train that staff. They provided legal, medical, and psychological services during an economic crisis when public social programs were eliminated and there was a drastic decline of state investment in health and education. Unemployment increased to over sixteen percent, and the annual inflation rate reached sixty percent. The poverty rate increased from 29.2 percent in 1995 to 43 percent in

1998 and 69 percent in 2000, while the number of people living in extreme poverty (insufficient income for a minimum food basket) doubled from 17 percent in 1997 to 34 percent in 1999. Poverty is highest in rural areas and among the indigenous and Afro-Ecuadorian populations. Domestic violence is known to increase under these circumstances.

Under these economic circumstances and under pressure to refocus scarce resources on the judiciary, the Judicial Council with the support of many other stakeholders maintained the legal aid centers, thereby providing an important service for poor women. These centers also made an important contribution to building a consensus for legal and judicial reform and broadening participation in the process. Women's NGOs, lawyers, and women in Congress actively participated in supporting the project and highlighted its importance to the community and the executive branch.

From the legal point of view, during implementation of the project, the 1998 constitutional recodification permitted criminal complaints to be filed by women against close male relatives, including husbands and fathers. This marked an important step toward decreasing violence against women. However, there is still no law that requires spousal support for women after divorce. The economic and legal status of women, as well as the ability of women to invoke legal rights to remedy legal injustices, social inequities, and economic disadvantages from which they suffer, is central to the development process.<sup>2</sup> Such legal rights and the ability to assert those rights are critical to empower the poor and improve their quality of life. The legal aid clinics provided legal awareness of those rights to women in the community, legal representation to enforce their rights, and training for judges to better understand the rights of women under national and international conventions.

This evaluation study has shown that women who used the legal aid centers are better off legally, economically, and subjectively, as reflected in qualitative and quantitative measures.

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<sup>2</sup> *Legal and Judicial Reform: Observations, Experiences, and Approach of the Legal Vice Presidency*, World Bank Legal Vice Presidency, July 2002.

Quantitatively, we found that, holding relevant characteristics constant, former clients of legal aid clinics are better off than non-clients. Specifically, participation in the legal aid clinics increases the probability of receiving child support payments, decreases the incidence of domestic violence after separation, and is associated with a more positive outlook toward the judicial system.

On a qualitative level, participants spoke of a number of promising developments. An increase in the level of child support payments obtained by those women using legal aid services led clients to say that although the amounts were small, the payments were still important because their families were in very precarious economic conditions. Clients also reported a greater ability to negotiate the judicial system, notwithstanding its problems, as a result of lawyers who have specific expertise in this area.

When asked what they had learned from legal aid, women spoke of ending a situation in which they had felt alone and disempowered. They reported a better knowledge of their own and their children's rights, and the impact of the legal process on paternal irresponsibility. They almost universally felt that they had been given a new attitude with which to face life. Clients articulated their hopes and goals from the legal system with clarity and sophistication. They also cited improved self-esteem and help in coping with the aftermath of domestic violence.

Methodologically, we have found through these activities that an impact evaluation should be an integral component of legal and judicial reform projects from the outset. In the case of legal aid clinics in Ecuador, the fact that the NGOs were required to keep a database of all those receiving legal and complementary services proved to be an invaluable tool for conducting the survey and focus groups.

Although narrowing the focus of our study to one legal issue (child-support) simplified the analysis considerably, future evaluations should consider the impact of the overall package of services received by program participants. Evidence from the focus groups illustrates that clients of the legal aid clinics have complex motivations and that there may be synergies in the provision of both legal services and, for example, psychological counseling. In order to

measure women's empowerment, we would do well to build evaluation of client goals directly into future projects.

Finally, measuring and monitoring results of legal and judicial reform projects is difficult, especially their impact on the rule of law. However, we must begin to develop methodologies to justify the allocation of scarce resources in a particular country. This study is a first step that can be expanded and improved upon. A future study could look at the consistency of judgments to determine predictability within the system. Improving base line data and gathering data during implementation is critical if we want to measure and monitor results in the future. Though it must, of course, be balanced with achieving results since our overall objective is to improve the rule of law.

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## **Introduction**

### ***Legal Aid Initiative and the Need for Evaluation***

The World Bank's (1994) assessment of Ecuador's judicial sector found, among other things, that there were virtually no legal resources for poor women suffering domestic violence or trying to obtain legal entitlements such as child support. The Bank's Judicial Reform Project, approved in 1996, took this into account in its design.

The Program for Law and Justice component included a Special Fund created to counter-balance top-down reforms by financing demand-driven solutions to the problem of access to justice, among other issues.<sup>3</sup> Specifically, the subcomponent *Legal Services Pilots for Indigent Women* gave partial grants to local non-governmental organizations (NGOs) that provided legal and complementary services to qualified women and their children. The goal of these grants was to enable poor women to obtain and secure their legal entitlements and begin to take action that would improve

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<sup>3</sup> Aside from the issue of access to justice, the Special Fund supports subprojects in legal education and information, law reform and research, and court modernization and decentralization to improve the administration of justice.

their socio-economic positions.<sup>4</sup> The program supported the work of three local NGOs: *Centro Ecuatoriano para la Promoción y Acción de la Mujer (CEPAM)*, *Corporación Mujer a Mujer*, and *Fundación María Guare*. These organizations provide not only legal information and representation, but also complementary services such as psychological counseling and referrals to shelters for battered women.<sup>5</sup> The geographical area served corresponds to three major cities (Quito, Guayaquil, and Cuenca) and two urban outskirts (Duale and Santa Elena). Financing for the NGOs was initially granted for the period April 1998 through March 2000, and was later extended until 2002. The total budget of the Program for Law and Justice exceeded US\$1.6 million dollars; the Legal Services Pilot addressed in this evaluation represents less than US\$400,000.

The intervention has several important characteristics that warrant an impact evaluation. First, the program tests an innovative approach to poverty reduction. Ecuador's Legal Aid for Indigent Women was the first Bank-financed project to include a legal aid component aimed squarely at poor women and their children.<sup>6</sup> Similar initiatives are currently being implemented under grants in Sri Lanka and Jordan.

Second, the program improves our understanding of the link between improved access to justice and poverty reduction, a topic that has been the focus of some research in the past few years.<sup>7</sup> For example, McQuay (2001) evaluates the impact of a legal empowerment program, sponsored by the Asian Development Bank, on the implementation of agrarian reform in the southern Philippines.<sup>8</sup> This important and innovative study finds evidence of a link between legal empowerment activities in rural communities and higher household welfare, gauged by the type of roofing on houses.<sup>9</sup>

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<sup>4</sup> World Bank (1996) p. 24.

<sup>5</sup> For more information on these three NGOs, see Rodríguez (2000).

<sup>6</sup> See Dakolias (2000) pp. S37-S45.

<sup>7</sup> See Buscaglia and Ratliff (2000).

<sup>8</sup> For more details on similar initiatives, see Asian Development Bank (2001).

<sup>9</sup> McQuay (2001) finds evidence of positive externalities or spillover effects that improved the well-being of persons who were not direct targets of the intervention. The significance of spillover benefits is explored in World Bank (2002a).

Third, the program was designed to have the highest poverty impact on a group in society that is particularly vulnerable. Single women with children are among the poorest people in Ecuador and their living standards are consistently inferior to those of men.<sup>10</sup> In addition, they are the victims of violence and abuse that affect not only their emotional well being, but their ability to escape poverty as well. In a study of the economic costs of domestic violence toward women, Morrison and Orlando (1999) found that domestic violence has a large, negative impact on women's earnings.

In order to simplify the analysis, we focus our attention on the effectiveness of the program in changing the economic status of women by means of improving their access to child support awards. Data were derived mainly from survey instruments designed for this purpose and administered in coordination with personnel from local NGOs.

Beyond the specific findings about the legal aid program in Ecuador, this report places emphasis on drawing methodological lessons that might be used to evaluate similar activities in other countries. Thus, we discuss at length the methodologies used, their strengths, and short-comings. Perhaps the most important lesson drawn is that, because legal and judicial reform projects may entail outcomes difficult to quantify, it is important to combine both quantitative and qualitative evaluation techniques.

### ***Methodology***

The ultimate question in evaluating the economic effect of the activities in Ecuador is, "Were women who had access to legal aid and related services better off than women who did not have such access, holding other factors equal?"<sup>11</sup> To simplify the analysis and facilitate comparisons with other activities, we focus on a single

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<sup>10</sup> See World Bank (1995, 2000).

<sup>11</sup> This is the ultimate question as to the *direct* economic effects of the project. There is a potentially much more important and difficult to measure indirect effect: the impact on non-clients' expectations, behavior and well-being derived from the information they received as a result of the project. See note 9. Evidence on the spillover benefits of this project is discussed *passim* on pages 36, 48-49, and 52 below.

category of cases: situations in which mothers had separated from the spouse or partner who fathered their child(ren). We consider whether access to legal aid:

1. Translates into better legal results (obtaining a favorable judgment entitling them to child support, or a favorable settlement or decision in paternity or custody disputes);
2. Translates into better economic conditions for poor mothers and their children;
3. Decreases a woman's chances of being battered;
4. Improves women's access to justice by improving their knowledge of their legal rights;
5. Improves women's access to justice by lowering the "transaction costs" of asserting a claim;
6. Improves women's access to justice by affecting how they made the decision whether or not to assert their legal claims;
7. Translates into any objective improvement in the situation of children; and
8. "Empowers" women, either subjectively or objectively.

Our economic task is to analyze the welfare consequences of a particular legal aid clinic's program aimed at helping poor women in Ecuador. To perform this analysis, we note that, at any given moment, individuals face many actual or potential legal conflicts. However, given limited resources and varying degrees of uncertainty, individuals can tackle only one, or a few, problems at a time. Although the program's legal aid clinics provide help on a range of legal matters, we narrow the focus of the analysis to women seeking child support. This issue was selected for several reasons: First, it represents a significant proportion of the caseload of the legal aid clinics under study. Second, the legislation regarding child support is less imprecise than that affecting other rights, which facilitates evaluating a given claim. Finally, there is a substantial

body of empirical literature on the subject of child support that, although geared toward developed countries, provides a reference point for conducting empirical work.<sup>12</sup>

Second, the issues related to child support cases lend themselves to quantitative analysis and controlled studies, as well as to cross-country, cross-project comparisons. Women either get custody or they do not; they either get child support or do not; the amount of support awarded can be expressed quantitatively (and is usually a matter of public record); and women can be surveyed as to the amount of support actually collected. These objectively measurable outcomes for women using legal aid programs can be compared to the measurable outcomes for control groups of similarly situated women not using legal aid programs. Results obtained by different legal aid providers in the same country can be compared with each other, as can results obtained by legal aid clinics in different countries. Measurements of spillover effects could be undertaken using the same methods, by comparing non-client populations that were and were not in a position to be affected by information flows arising from the intervention.

Third, in addition to lending themselves to quantitative economic analysis, these cases provide an entry point for quantitative (and qualitative) analysis of the impact of legal aid on domestic violence. As noted above, domestic violence was—along with access to legal entitlements—one of the basic concerns of the original 1994 judicial sector assessment. Nearly half of the legal aid clients who seek advice on child support matters describe themselves as victims of "severe physical violence" during the time they lived with the former husbands or partners. We are able to look directly at the impact of domestic violence in these cases, to see if legal aid decreased the level of post-separation violence. The results are dramatic and positive: legal aid clients are 17 percent less likely than non-clients to report severe physical violence *after* separating from their former domestic partners.

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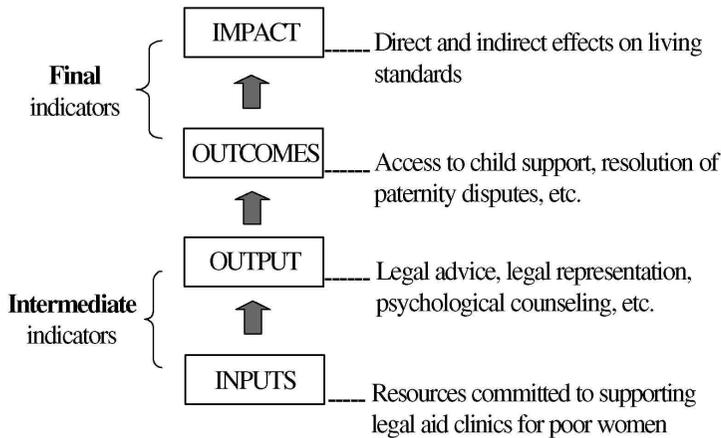
<sup>12</sup> See Beller et al. (1993), Del Boca and Ribero (2001), Argys and Peters (2001), Veum (1992), Aughinbaugh (2001).

Finally, we are able to look at the indirect impact of domestic violence on these cases, by comparing the cost-benefit analyses of legal aid clients with non-clients. While the primary focus of our study is on differences in results obtained by women who asserted claims with and without the help of legal aid, we also look at the reasons cited by those women who opted not to assert their claims.

One of the factors a woman considers in deciding whether to assert legal claims against her former spouse or partner is the risk that filing a claim will lead to physical violence against her. Violence thus can be viewed either as a potential obstacle to a woman's access to justice, or as a "transaction cost" of asserting her claim. We therefore asked those women in our survey who did not assert claims to identify their reasons for refraining from doing so. If legal aid does in fact reduce transaction costs, we would expect clients who did not assert claims to be more likely to cite "objective" reasons (e.g., father has no assets) and non-clients to be more likely to cite "subjective" reasons, such as fear of violence.

The ultimate goal of our evaluation, in principle, is to measure the impact of the legal aid program on the living standards of those receiving counseling and legal representation. Nevertheless, these benefits may take a long time to materialize fully. In addition, the legal aid program may have a positive effect that goes beyond those directly involved in the legal aid program. Specifically, those receiving improved access to legal entitlements may serve as disseminators of information and, at the same time, create a precedent that may induce changes in the behavior of non-litigants. This indirect benefit, or spillover effect, on non-litigants is perhaps the major potential impact of effective legal and judicial reform.

**Figure 1: Indicators**



*Adapted from Prennushi et al. (2000).*

We assume that transfers of economic resources to the mother from her former domestic partner(s) help to alleviate poverty simply because such women are likely to be worse off economically than their former partners. While this assumption is sufficient for present purposes, we note that such transfers may also reduce poverty by contributing to greater educational and employment opportunities for poor women and their children.

In many respects, evaluating the impact of legal reform is similar to assessing the effect of such traditional development programs as child immunization. Thus, we build on past experience accumulated in conducting such studies and adopt time-tested econometric practices.

For our purposes, we focus on the immediate outcomes of the intervention, namely:

- The amount of child support payments made by the absent fathers, including transfers in kind.
- The existence of an award (based on an entitlement), even if no transfers have actually been made. In this case, the award is still valuable as a claim on the father's future income.

- The settling of paternity disputes, which, in light of the social stigma carried by illegitimate children, may provide significant intangible benefits.
- The incidence of domestic violence, an issue that is frequently intertwined with paternity and child support disputes.

A first consideration is defining the metric that will be used to gauge outcomes for women whose children are entitled to child support. For ease of exposition, let us assume that both the existence and the amount of child support that any given mother is entitled to is fixed in the statutory code, and that it varies with her legally cognizable circumstances (marital status, number and ages of children, etc.), which the judge must determine. A measure of the effectiveness of the legal system in protecting such rights is given by the fraction of the entitlement that is actually received, i.e.,

$$\text{Effectiveness of legal system} = \frac{\text{Actual payment received}}{\text{Value of entitlement}} = \frac{\mathbf{P(x,y)}}{\mathbf{A(x)}}$$

$\mathbf{A(x)}$  is the entitlement in monetary units of any mother with legally relevant factual circumstances defined by the vector  $\mathbf{x}$ , and  $\mathbf{P(x,y)}$  is the actual average payment received by such a woman.<sup>13</sup> Here, the vector  $\mathbf{y}$  represents the mother's characteristics that are not relevant in the law to the determination of their entitlements, but which nevertheless affect her ability to obtain the entitlement, like social status, level of education, etc.

Note that this ratio can be easily extended to instances, such as Ecuador, where the amount of the entitlement is not fixed in the statutory code but instead is left to the judge's discretion. In that case, we can see the value of the entitlement as the sum of an average

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<sup>13</sup> Entitlements are not observable because Ecuador has no guidelines linking factual circumstances to specific monetary entitlement values. An "award," the term used below in the empirical sections, is the quantification of an entitlement by a court or mediator. Actual payments by fathers, which may or may not be pursuant to awards or affected by entitlements, are called "transfers" herein.

entitlement  $\mathbf{a}(\mathbf{x})$ , given by applicable case law and local practices, and a random term  $\varepsilon$  that reflects the judge's discretion, i.e.,  $\mathbf{A}(\mathbf{x}) = \mathbf{a}(\mathbf{x}) + \varepsilon$ . Although  $\varepsilon$  varies across women with the same set of characteristics, "generous" rulings cancel out "stingy" ones, so that for the whole population a given mother is granted  $\mathbf{a}(\mathbf{x})$  on average.<sup>14</sup>

The legal aid clinics assist the client in obtaining as much as possible of the full amount  $\mathbf{A}$  to which applicable law and practices entitle her. This intervention enters directly as a variable in  $\mathbf{y}$ , taking the form of legal information, legal representation, or psychological counseling. In addition, legal aid clinics might be able to help a woman increase  $\mathbf{A}$  by changing her legally relevant circumstances  $\mathbf{x}$ , such as establishing the paternity of her children in court.

A key question is whether, holding legally relevant facts constant, there is a statistically significant improvement in the outcome associated with the use of the legal aid clinic or the judicial system. Our null hypothesis is that former clients of the legal aid clinics are better off than non-clients. Specifically, the intervention is effective if, for a given set of observable characteristics ( $\mathbf{x}$  and  $\mathbf{y}$ ), participation in the legal aid clinic increases either the probability that a mother will be granted the entitlement,  $\text{Prob}(\mathbf{A}) > 0$ , the value of the entitlement  $\mathbf{A}$ , or the share of the entitlement actually received,  $\mathbf{P}/\mathbf{A}$ .<sup>15</sup> The impact of the program under study among former clients (the treatment group) is measured relative to another group of mothers with comparable characteristics, but without any previous contact with the legal aid clinics (the comparison group).

In order to test our hypothesis, we rely on both a household survey and focus group results. The purpose of this two-front strategy is to cover both the quantitative and qualitative dimensions associated with the program under study. Specifically, the survey instrument collects information on the legally relevant circumstances defining the existence and amount of entitlement, the mother's use of

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<sup>14</sup> We note that the data collected for this project may also be useful in assessing the predictability of judicial decisions affecting child support entitlements. More predictable decisions translate, in principle, into more settlements and greater positive externalities (spillover effects) on non-clients.

<sup>15</sup> We could also define the success ratio  $\mathbf{P}/\mathbf{A}$  as a dichotomous variable that takes only two values: 1 if some payment is received and 0 otherwise.

the judicial system and the legal aid clinics, and the extent of financial support from the absent father. In addition, we conducted focus groups that explore the mothers' motivations for using (or not using) the judicial system, as well as their subjective valuation of the assistance provided by the legal aid clinics.

### *Data Used in this Evaluation*

To measure the impact of the activities in Ecuador, we primarily draw on two sources, a survey of 180 women who had used the legal aid program and a control group of 182 similarly situated women who did not have access to legal aid, and three focus groups of a total of 24 mothers eligible for legal aid, of whom 14 were legal aid clients and 10 were non-clients. These sources are described in greater detail below.

We also rely on the Bank's previous reports and assessments of gender issues in Ecuador, including those related specifically to this activity.<sup>16</sup> Finally, we use secondary sources describing Ecuador's laws and socio-economic situation, such as Ecuador's latest LSMS survey (*Encuesta de Condiciones de Vida*, 1988-1989) conducted by its census bureau (INEC)<sup>17</sup>.

In seeking to develop a model for evaluating other legal aid clinics, we also draw heavily on research the World Bank has previously undertaken or commissioned in the areas of justice reform, gender and development.<sup>18</sup>

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<sup>16</sup> World Bank (1996), Rodríguez (2000), World Bank (2000).

<sup>17</sup> INEC (1995)

<sup>18</sup> Research by the World Bank in this area includes: *Ecuador Gender Review: Issues and Recommendations*, 2001; *Integrating Gender into the World Bank's Work: A Strategy for Action*, 2002; *Legal and Judicial Reform: Observations, Experiences, and Approach of the Legal Vice Presidency*, 2002.

## ***Results***

By almost any conceivable measure, the legal aid clinics were a success. The answer to every item in our earlier list of questions addressed is "yes."

1. Legal aid clients attain better legal results than non-clients. The intervention increases the probability of obtaining a child support award by 20 percentage points. This is in comparison with non-clients after controlling for relevant factors.
2. Legal aid clients attain better economic results than non-clients. The intervention increases the probability of actually receiving a child support payment by 10.4 percentage points. This is in comparison with non-clients after controlling for relevant factors.
3. Legal aid clients report drastically lowered rates of severe physical violence. While nearly half of all women in both the study group and the comparison group report suffering severe physical violence from their former spouse or partner during the relationship, those women with legal aid report lower levels of violence after separation. Virtually identical rates of severe physical violence prior to the separation are reported by legal aid clients and non-clients (47.6 percent and 49.4 percent, respectively). After the separation, the rate of such violence for legal aid clients is more than halved, to 22.9 percent, while for non-clients the decline was less significant (to 33.5 percent). As noted below, even after controlling for other possibly relevant factors, this translates into a significant reduction (by 17 percentage points) of the probability of such violence for clients in comparison to non-clients.
4. Legal aid helped narrow the information gap that prevents some mothers from seeking the child support to which they are entitled. Legal aid clients are more likely to

assert their legal rights to child support than non-clients. Moreover, among those women who did not assert claims, clients were less likely than non-clients to cite "lack of knowledge" as a reason for not asserting a claim.

5. Legal aid lowered the transaction costs of asserting a claim. The main deterrent to using the judicial system is the perception that courts are corrupt, nontransparent, and biased against women. Legal aid helps by cutting through the red tape and otherwise reducing transaction costs.

6. Legal aid clients show a high level of customer satisfaction and have a more positive outlook toward the judicial system. They are more likely than non-clients to recommend seeking child support "to a friend who is thinking about it."

7. Legal aid had positive intergenerational impact. Specifically, receiving child support payments increases the probability of the child attending school by 4.8 percentage points. In addition, the legal aid clinics have an indirect impact on the child's attendance rate by decreasing the incidence of domestic violence after separation (physical violence after separation decreases the child's probability of attending school by 4 percentage points).

8. Legal aid empowers women. In the focus groups, women describe important non-monetary gains from CEPAM's intervention, such as improved self-esteem and help in coping with the aftermath of domestic violence. When asked what they had learned from legal aid, women speak of ending a situation in which they had felt alone and helpless.

## **Ecuador's Legal Framework**

Identifying the set of legally relevant factual circumstances  $\mathbf{x}$  that define the existence of an entitlement  $\mathbf{A}(\mathbf{x})$  requires a review of the relevant legal framework.

### ***Child Support Legislation***

This section summarizes Ecuador's legislation regarding child support and the related issue of alimony. Although our primary concern is child support, it is also important to review the legislation regarding alimony because, under Ecuador's Civil Code, both entitlements belong to a group of financial obligations called *alimentos* (literally, "sustenance") that are based solely on family ties.

In principle, all individuals owe financial support to their immediate family; that is: spouse, children, parents, and siblings. These obligations depend on the individual's economic means and needs, the needs of the recipient, and, more critically, the existence of the familial link.

Ecuador's legislation regarding child support is relatively straightforward: Once the paternity has been established, the child is entitled to financial support as long as he/she is a minor or is unable

to support him/herself due to a mental or physical handicap. It is important to note, however, that the legislation does not provide specific quantitative guidelines for entitlements, leaving these to the discretion of the courts.

### *Who is eligible?*

All children are entitled to financial support from their legal parents. This protection extends to the unborn child.

The paternity/maternity of a child is established *prima facie* when the child is born into formal wedlock. This is the case if the child is born no earlier than 180 days after the wedding date and no later than 300 days after the official divorce date (or proven marital separation), or the death of the husband.

If a child was born out of wedlock, the paternity/maternity can be established through voluntary recognition by the professed parent(s). If only one of the parents professes kinship, he/she cannot disclose the identity of the person with whom the child was conceived.

In some cases, a child born out of wedlock who has not voluntarily been recognized by his/her father or mother can request a ruling regarding paternity/maternity. For example, a court can rule on paternity if it can be shown that a couple was living in a *de facto* marriage (*concubinato notorio*) during the period of conception.

### *For how long?*

A child is entitled to financial support from the moment a child support complaint is filed until: (i) the death of the child; (ii) the death of the parent who is providing child support; (iii) a final court ruling annuls the paternity/maternity link; (iv) a court ruling establishes that the parent providing for the child's support has been slandered (*injuria atroz*) by the child receiving the support; (v) the child turns 18 years old (21 years for those still attending school) and the parent providing support requests to be released from the obligation. These age limits do not apply whenever a child cannot support him/herself due to a mental or physical handicap.

### *How much?*

Each parent is responsible, according to his/her economic means, for providing the financial support necessary to cover the child's basic needs, including housing, education, and medical attention. The exact amount of child support should be set in terms of the prevailing minimum wage, so that it increases automatically with any increase in the minimum wage. The judge weighs both the needs of the child and the provider's economic means and needs. For example, a minor entitled to child support may end up receiving nothing if his/her father earns too little and has other children of his own to support. If the couple owns only one dwelling, the spouse who retains custody of the children will have the exclusive right to live in the dwelling, as long as there is a dependent child.

Because the legislation provides no specific guidelines regarding the quantification of entitlements to child support, the only potential source of predictability in valuing child support entitlements is consistency among judges in making such assessments.

### *Alimony and Other Transfers*

In evaluating child support payments, we should keep in mind that a couple might reach an agreement regarding financial transfers outside the legal system. If the outcome of judicial intervention is predictable and if courts are accessible, settlements will be common. The terms of such an agreement might be the result of explicit bargaining, either within the limits of the law or outside what is legally allowed, or tacit bargaining resulting from social customs or embedded values. For example, a couple might reach an agreement regarding *alimentos* as part of a broad negotiation that includes visitation rights<sup>19</sup> or the division of the couple's assets. Thus, we briefly review the legislation regarding alimony and the splitting of the couple's assets.

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<sup>19</sup> Ecuador's civil law favors the mother in assigning custody of the children.

Under Ecuador's law, *there is no alimony entitlement for divorced women*. If a married couple is separated (but not divorced), then the husband has an obligation to provide *alimentos* to his wife. This obligation expires when: (i) the marriage is terminated; (ii) either spouse dies; or (iii) a court rules that the wife has slandered the husband. For women in *de facto* marriages (*unión de hecho*), there is no alimony entitlement. Thus, establishing whether a woman is entitled to alimony requires very little information about the case.<sup>20</sup>

The exact level of alimony will depend on the wife's needs and the husband's economic means and needs. If the wife lacks economic means, the financial support should be enough to cover the wife's basic needs and allow her to live modestly, according to her social status. If the wife has personal means, the husband is responsible only for the difference, if any, necessary to support the wife.

Although a divorced woman is not entitled to alimony, she might have a claim on the couple's assets. In general, a divorced woman is entitled to a share of the joint family assets (*patrimonio conyugal*) and to any personal assets that she might have. This is also the case for *de facto* marriages. Under rare circumstances, a divorced woman might have a claim on her ex-husband's personal assets. In any case, a woman requesting financial support for herself and for her child cannot make both requests in the same trial.

### ***Child Support Enforcement***

Ecuadorian law establishes several safeguards regarding the enforcement of child support payments. For example, child support claims have seniority over any other debt, and those owing child support or facing a child support lawsuit cannot leave the country without first setting an escrow and obtaining the court's permission. Similarly, when payments are overdue, the parent responsible for the

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<sup>20</sup> Civil Code: *Código Civil*. Ley No. 104. RO/Sup 315 de 26 de Agosto de 1982; Juvenile Code: *Código de Menores*. Ley No. 170. RO/Sup 995 de 7 de Agosto de 1992; Code of Civil Procedures: *Código de Procedimiento Civil*. Codificación No. 000. RO/ Sup 687 de 18 de Mayo de 1987; Law on *de facto* Marriages: *Ley que Regula las Uniones de Hecho*. Ley No. 115. RO/ 399 de 29 de Diciembre de 1982.

child's support can be imprisoned (up to 8 days) until he/she pays the last two installments that are overdue. Nevertheless, anecdotal evidence suggests that such extreme measures are rarely applied.

In other cases, the law does not create the necessary incentives to comply. For example, if the parent responsible for child support receives a steady income, including wages and retirement benefits, the entity making these payments (e.g., employer) will be notified of the court's ruling and will be responsible for withholding the amount owed to the child. Nevertheless, failure to do so carries a fine to the employer of between 25 percent and 50 percent of the minimum wage, which in most cases might not be a significant deterrent.

There are two venues where child support entitlements are granted. In addition to the Civil Court, a Juvenile Court was established to give more expeditious treatment to legal matters affecting minors.<sup>21</sup> For example, when a child support lawsuit is filed in a Juvenile Court, this will always trigger temporary child support payments, pending a final ruling. However, the fact that Juvenile Courts are part of the executive branch, rather than the judiciary, has hampered their effectiveness, fostered mismanagement, and, in some cases, resulted in some redundancy (Rodríguez (2000)). For example, in divorce cases it is common for Civil Court judges to set an amount of child support, even if there is already a similar ruling by a Juvenile Court. This is due to the fact that a divorce is not valid until there has been a formal agreement regarding the custody of the children and their financial support.

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<sup>21</sup> Juvenile Courts are overseen by the executive branch, although there is a clear constitutional provision establishing jurisdictional unity. A draft law has been prepared that would transfer these tribunals, together with all the others overseen by the executive, including the military courts and police tribunals, to the judicial branch. Thus far, the draft has not been discussed in Congress and faces opposition from those employed by the Juvenile Courts, as well as from military officials and the police.



## Design

The Bank support of the legal aid clinics for poor women provided additional funds to expand the work of three local NGOs, as noted above: *CEPAM*, *Corporación Mujer a Mujer*, and *Fundación María Guare*. The largest and more established of the three NGOs is CEPAM, which operates in both Quito, Ecuador's capital, and Guayaquil, its largest city. These two cities contain almost half of the country's urban population. The provinces of Pichincha and Guayas, which include Quito and Guayaquil respectively, account for 35 percent of all cases filed in civil court during 2000<sup>22</sup> and half of the child support cases filed in juvenile court during 2001.<sup>23</sup> Due in part to budget and logistics limitations, we narrowed the scope of the study to the work carried out by CEPAM in Guayaquil.<sup>24</sup>

A primary consideration in selecting the sample design and planning the fieldwork was gaining access to the relevant mothers. During a pilot test conducted in October 2001, we found that eligible mothers were reluctant to participate in the interviews unless the

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<sup>22</sup> See Pico Mantilla (2000).

<sup>23</sup> Ecuador's Juvenile Court statistics, as cited in *El Comercio* (2002).

<sup>24</sup> Ecuador's LSMS survey treats both Quito and Guayaquil as their own analytical domains (strata) on account of their sizes and socio-economic characteristics.

initial contact was made through somebody they already knew and trusted, such as the personnel from the legal aid clinic.<sup>25</sup> In addition, we found that the mother's home was not the most appropriate place to conduct the interview due to concerns about confidentiality and safety, particularly for women subject to domestic violence. Tracking down a specific woman who received legal aid and asking about her dealings with a former spouse proved to be a lot more difficult than, for example, selecting a dwelling in a given city block at random and asking residents about their living standards. Thus, it was necessary to adapt the scope of our survey to the limited reach of local NGOs.

CEPAM-Guayaquil provided legal services to over 6,000 women from 1998 through mid-2001 and, for the same period, 733 mothers were given legal advice specifically on child support. We drew a simple random sample of 181 CEPAM clients from this roster, roughly 1 out of every 4 clients. When CEPAM was unable to contact a given client or to secure her cooperation, the observation was replaced by selecting, at random, another mother from the remaining pool of clients. We also selected a comparable sample of 181 mothers who had never received legal help from CEPAM.<sup>26</sup> Although the sample size is quite modest, it falls within the range used by comparable surveys.<sup>27</sup> As a comparison, Ecuador's 1998 LSMS survey used a sample size of 756 households to represent Guayaquil's urban population.<sup>28</sup>

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<sup>25</sup> A similar difficulty was encountered while conducting the focus groups in parallel with the survey. In that component of the project, the task of contacting the mothers selected for the focus groups was undertaken by the local survey company (ISVOS), rather than by CEPAM. As a result, the rejection rate was considerably higher compared to that for the survey.

<sup>26</sup> We also inquired whether the mother received free or low cost legal advice from other NGOs that operate in Guayaquil, like *Corporación Mujeres en el Desarrollo*, *Fundación María Guare*, University programs, etc. The mothers in our sample do not report using any of these alternative services.

<sup>27</sup> For example, in their study of the economic costs of domestic violence, Morrison and Orlando (1999) interviewed 310 women in Santiago (Chile) and 378 women in Managua (Nicaragua).

<sup>28</sup> See "Sample Design" in: [www.worldbank.org/lsm/country/ecuador/ec98docs.html](http://www.worldbank.org/lsm/country/ecuador/ec98docs.html).

The selection of the comparison group was made through purposive sampling techniques, with the help of CEPAM and related grass-roots organizations.<sup>29</sup> We established specific criteria for selecting and securing the help of a group of mothers comparable to our treatment group. Specifically, a mother was selected for the comparison group if she: (i) had at least one minor child (under 18 years of age) whose father was alive but was not a member of the household, (ii) had never received legal help from CEPAM or similar NGOs, (iii) was poor or lived in a neighborhood with high poverty levels, and (iv) was under 50 years of age (the maximum age observed in the pool of CEPAM clients). In addition, CEPAM kept a log of all non-clients contacted, detailing how the contact was made, which may help in detecting any unintended bias in the selection process.

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<sup>29</sup> Given that our sample design is not fully random, all standard errors are estimated using appropriate techniques. See Davison (1997) and MacKinnon (2002).



## Survey Results

This section discusses the major findings of our survey in two ways. The first is to describe the sample sizes and other characteristics, including the means of the variables. We also compare the means of variables for the two groups (clients and non-clients). The second is to describe the results of a statistical approach called multivariate regression analysis. Readers unfamiliar with statistical analysis may wish to review the U.S. Federal Judicial Center's *Reference Manual on Scientific Evidence* 2d. ed (2000), intended for use by lawyers, which has several chapters devoted to statistical evidence. For present purposes, it is important to keep in mind that a comparison of two means or frequencies, for example average incomes for clients and non-clients, may or may not be statistically significant, depending on the variances, and is not controlled for factors other than client status that might "explain" any difference in the means. A regression analysis, in contrast, attempts to "hold constant" or "control for" factors other than client status that might explain such differences.

We start by comparing our sample with a cross-section of all households in Guayaquil. Table 1 shows various socio-economic indicators for both the 362 mothers in our sample and the 765

households interviewed in Guayaquil during the 1998 LSMS survey. For most indicators, our sample shows lower standards of living than the average household in the city, which is what one would expect given that the poor are the target population of the legal aid clinics.

In this section, "cases" refers to mother-father pairs. It is of course the child, not the mother, who is entitled to child support. A given case may involve one or more children of a given mother-father pair; therefore certain regression results below are expressed on a per-child basis. "Entitlement" refers to a legally cognizable potential claim arising from factual circumstances, whether or not a transfer is sought from the father, or an award sought from the judiciary. Entitlements are not observable. An "award" is a formal recognition or quantification of an entitlement by a court or mediator. A "transfer" is a child support payment by a father, whether voluntary or not.

**Table 1 – Selected Household Characteristics**

	Our Survey (Guayaquil)	1998 LSMS Survey	
		Guayaquil	Urban Areas
Number of Households	362	765	3,291
Household Size	5.5	4.4	4.3
Number of Bedrooms	2.3	2.7	3.1
People per Bedroom	3.2	2.1	1.8
Female Head of Household (%)	71.0	22.4	21.2
House with Wood Walls (%)	1.7	1.4	2.4
House with Mud Walls (%)	27.9	21.2	15.4
House with Dirt Floor (%)	6.4	5.4	4.1
Networked Electricity (%)	99.4	99.6	99.6
Networked Water (%)	81.8	72.3	78.8
Toilet/Sewer System (%)	33.7	40.5	60.6
Telephone Connection (%)	28.7	32.0	35.6
Refrigerator (%)	61.9	77.4	73.0
Electric Washer (%)	6.1	12.3	11.7
Black and White TV (%)	37.6	36.9	41.2
Color TV (%)	56.9	72.5	73.7
Fan (%)	46.4	74.1	43.6
Air Conditioning (%)	2.2	11.0	4.6
Bicycle (%)	24.6	45.3	48.0

We now focus our analysis on those mothers in our sample who, *prima facie*, are entitled to child support—those with at least one child less than 18 years old whose father is alive but not a household member (for children attending school, the cut-off age is 21 years). Out of the 362 mothers interviewed, 357 are currently entitled (*prima facie*) to child support, or have been entitled to such support at some point during the 12-month period prior to the survey. Most mothers (81 percent) have between 1 and 3 children and, on average, each mother has 2 children eligible for child support. In some cases, there is more than one absent father. Specifically, for the selected 357 mothers, there are 445 absent fathers disaggregated in Table 2. Of these 445 cases (mother-father pairs), 208 correspond to CEPAM clients and 237 to non-clients.

**Table 2 – Number of Cases Considered**

Relevant Mothers	Absent Fathers	
	Per Mother	Total
279	1	279
68	2	136
10	3	30
357		445

***Frequency of Child Support Awards and Transfers***

Although in only 21.8 percent of the cases has the mother formally been awarded child support, either by a court or through mediation, the percentage of cases actually receiving some child support payment is almost double (40.7 percent). This includes transfers of both cash and goods. The cross-tabulations between cases receiving transfers and those with formal entitlement is as follows:

Table 3 – Number of Cases with Awards and/or Transfers

		Child Support Award		
		Yes	No	Total
Child Support Transfer	Yes	73	108	181
	No	24	240	264
	Total	97	348	445

Table 4 – Selected Characteristics of CEPAM Clients and Non-clients

	CEPAM client	Non-client	Both
<b>Number of cases</b>	208	237	445
Child support award (%)	38.5	7.2	21.8
Child support transfer (%)	52.4	30.4	40.7
<b>Relationship with absent father:</b>			
Formal marriage (%)	35.1	11.4	22.5
de facto marriage (%)	44.7	71.7	59.1
Never lived together (%)	20.2	16.9	18.4
<b>Mother characteristics:</b>			
Mother's age (years)	33.0	31.2	32
Currently lives with partner (%)	11.5	19.8	16.0
Some high sch. education (%)	62.0	47.3	54.2
Some college education (%)	27.9	3.8	15.1
Has a job (%)	69.2	57.0	62.7
<b>Absent father characteristics:</b>			
Has a job (%)	82.2	66.2	73.7
Visits his children (%)	28.4	25.3	26.7
Other children to support (%)	59.1	62.9	61.1
Paternity dispute (%)	31.7	30.0	30.8

If we compare frequencies across CEPAM clients and non-clients, we find that both child support awards and actual transfers are more frequent among the former group. Although this might be due to CEPAM's intervention, it is possible that CEPAM clients happen to have more favorable characteristics than non-clients. For example, clients are more likely to be married or to have a college education. Note that it is quite common (61 percent of eligible cases) for absent fathers to have other children of their own to support, which has a negative impact on the mother's probability of receiving transfers.

The type of conjugal relationship between the mother and ex-partner has a significant effect on the frequency of child support before controlling for other factors. Thus, having a formal award for child support or receiving transfers is more frequent among those mothers coming from a formal marriage. This is probably due to the fact that mothers from a formal marriage are less likely to face a paternity dispute (although they are not immune to such situations).

**Table 5 – Selected Characteristics by Marital Status**  
(Clients and Non-Clients)

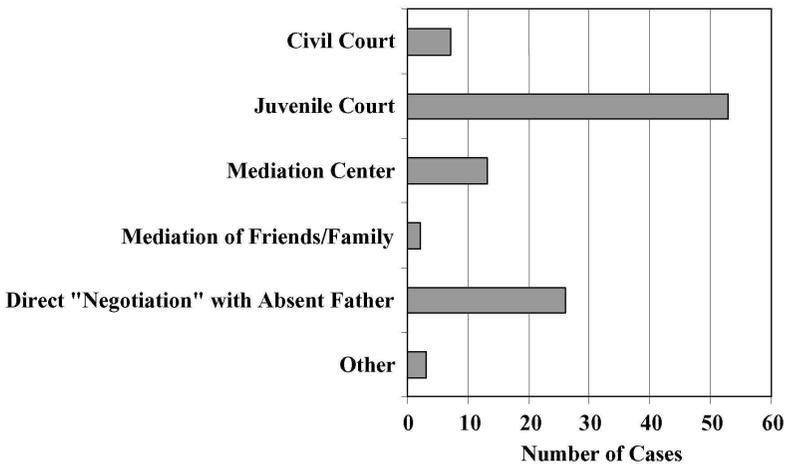
	Relationship with Absent Father			
	Formal Marriage	<i>De facto</i> Marriage	Never Lived Together	All Cases
<b>Number of cases</b>	100	263	82	445
Child support award (%)	45.0	13.3	20.78	21.8
Child support transfer (%)	58.0	34.6	39.0	40.7
<b>Mother characteristics:</b>				
Mother's age (years)	34.7	31.3	31.1	32.0
Currently lives with partner (%)	15.0	16.7	14.6	16.0
Some high sch. education (%)	65.0	49.4	56.1	54.2
Some college education (%)	22.0	12.5	14.6	15.1
Has a job (%)	72.0	62.0	53.7	62.7
<b>Absent father characteristics:</b>				
Has a job (%)	79.0	73.4	68.3	73.7
Visits his children (%)	29.0	27.4	22.0	26.7
Other children to support (%)	53.0	61.6	69.5	61.1
Paternity dispute (%)	16.0	30.4	50.0	30.8

### *Use of the Judicial System*

Determining which mothers sought child support is not an easy task because divorce proceedings automatically address this issue. During a pilot test conducted in October 2001, we found that divorced women receiving child support often indicated that they had never requested the award. In order to avoid confusion, our survey questionnaire only tries to determine who has child support, regardless of whether an explicit request was made.

As Figure 2 shows, the most common way to gain a child support award is through the Juvenile Courts, followed by direct negotiation between the mother and the absent father.

**Figure 2 – Mechanisms for Obtaining Child Support**



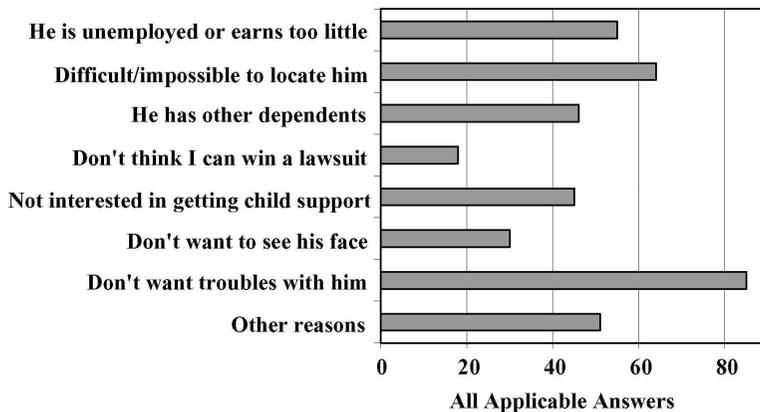
Of the 60 cases where the child support award was set by a court, only 44.6 percent have an award that was fixed as a proportion of the minimum wage and only 43.3 percent have made a formal request for an increase in the amount of child support. Fewer than one out of three of these requests for a larger amount were successful.

Although we cannot determine precisely who sought child support, we can tell who did not. Specifically, our questionnaire identifies those mothers who never were awarded or never received a transfer from the father in question and then asks them whether they

ever sought child support. Thus, we can identify 257 cases (or nearly 58 percent) that have never sought child support. We presented the mother with a list of reasons for not seeking child support from the father in question and asked her to choose all applicable options. Overall, the fear of (physical) retaliation and the inability to locate the father were cited most frequently.

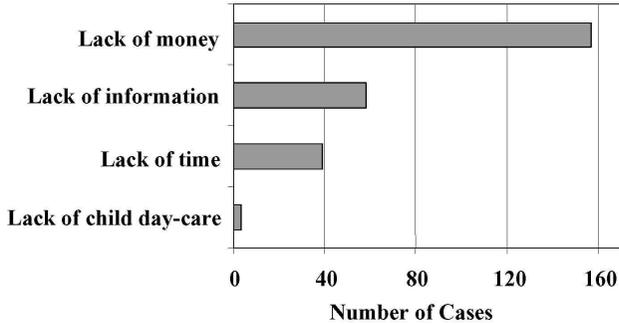
The category of "other reasons" for not seeking child support implicitly includes constraints that all poor mothers face to a certain extent, such as lack of money to cover the legal fees or lack of time for pursuing the necessary formalities.<sup>30</sup> In order to establish what is the biggest obstacle they face, we also asked those mothers who have never sought child support to choose only one out of four options: lack of money, lack of information, lack of time, or lack of child day-care. Not surprisingly, lack of money to cover legal fees is cited as the main obstacle by both CEPAM clients and non-clients. Nevertheless, the second biggest obstacle for CEPAM clients is lack of time, while for non-clients it is lack of information on how to proceed. This confirms the expectation that CEPAM intervention helps in part by narrowing the information gap that prevents some mothers from seeking the child support to which they are entitled.

Figure 3 – Reasons for Not Seeking Child Support



<sup>30</sup> Based on the results of the pilot test, this question about the major "obstacles" was drafted so as to avoid conveying the impression that the interviewer is dismissing the "reasons" given by the mother in the previous questions.

Figure 4 – Major Obstacle for Mothers Seeking Child Support



### *CEPAM Clients Have a More Positive Outlook Toward The Judicial System*

Each participant was asked at the end of her interview whether she would recommend seeking child support to "a friend who is thinking about it." This gives us an indirect assessment of the participant's own experience. We find that 85.6 percent of CEPAM clients and 77.2 percent of non-clients would recommend seeking an award. Of course, whether the respondent is actually receiving child support makes a difference but, even among those not receiving a transfer, CEPAM clients have a more positive outlook than non-clients (82.4 percent against 76.3 percent respectively).

Table 6 – Mothers who Recommend Seeking Child Support

	CEPAM client	Non-client	Both
Cases receiving transfer	88.0%	78.8%	84.3%
Cases not receiving transfer	82.4%	76.3%	78.7%
All Cases	85.6%	77.2%	81.4%

We also asked CEPAM clients to consider a hypothetical scenario where CEPAM's help was not available. Almost two thirds of CEPAM clients (63.6 percent) indicated that in such a scenario they would have to seek child support anyway, and over three quarters (75.2 percent) think that they would have done as well or better than they actually did. Of course, such *ex post* perceptions cannot be taken as a reliable indication of the mother's true behavior in a counter-factual scenario. However, they are useful as an indirect measure of customer satisfaction.

### ***CEPAM Intervention Increases the Probability of Child Support***

Our analysis to this point has been based on raw frequency distributions, which makes it difficult to isolate the impact of CEPAM's intervention. Hereafter, we use regression analysis to control for other relevant characteristics that are thought to be associated with changes in the dependent variable (i.e., the variable to be explained).<sup>31</sup> For example, whether or not the mother receives child support payments may be a function not only of CEPAM's intervention, but also of other explanatory variables such as the father's ability to pay.

We propose a model where the dependent variable takes only two possible values (0 or 1) and the explanatory variables are said to affect the probability of occurrence of the event in question. Specifically, the mother either has a child support award ( $Y_1=1$ ) or she does not ( $Y_1=0$ ). By the same token, the mother either receives child support payments ( $Y_2=1$ ) or she does not ( $Y_2=0$ ). Since both events are clearly interrelated, we consider a model where the probabilities of having a child support award ( $Y_1$ ) and/or actually receiving child support payments ( $Y_2$ ) are estimated jointly.

A statistical result is "significant" if the odds that it may be due to chance are less than some specified level, commonly 1 in 20. At this conventional significance level, CEPAM increases the

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<sup>31</sup> Annex III describes in more detail the statistical analysis used and Annex IV presents the regression results.

chances of a formal award but not of actually receiving a transfer. At a less stringent significance level (odds of error less than 1 in 10), CEPAM increases the probability of both the award and actually receiving something. Specifically, CEPAM intervention increases the probability of an award by 20 percentage points and the probability of receiving a transfer by 10.4 percentage points. This is in comparison with non-clients after controlling for relevant factors such as:<sup>32</sup>

- Whether there was a formal marriage between the mother and the absent father.
- Whether the mother is currently living with another spouse/partner.
- Whether there was a paternity dispute.
- Whether the absent father visits his children frequently or has a close relationship with them.
- The absent father's employment status and earnings potential.<sup>33</sup>
- The presence of severe physical violence prior to separation.

Not all variables are statistically significant in both equations. We find that in cases where there has been a paternity dispute, severe physical violence prior to separation, or where the father does not visit his children, the mother is less likely to receive a transfer, although these factors do not seem to affect the probability of obtaining an award. In addition, mothers who are currently living with a spouse/partner are more likely to receive an award, but this factor has no effect on the probability of actually receiving a transfer.

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<sup>32</sup> We tried a wide array of explanatory variables but reported only those determined to be statistically significant.

<sup>33</sup> Using data from Ecuador's 1998/99 LSMS survey, we estimated an equation where the father's share in the household budget is a function of his occupation, his age and education, his spouse's education, and the number of children. We then used this equation to predict the absent father's earnings potential as a function of the information reported by the mother.

As expected, unemployed fathers or those with low earnings potential are less likely to make child support payments, but the fact that they are also less likely to be required to do so may reflect a mother's tendency not to seek an award when the expected monetary payoff is very small.

### *CEPAM Intervention and the Amount of Child Support Received*

Table 7 presents summary statistics for the value of the award granted (**A**) per child, the payment actually received (**P**), and the payment-award ratio **P/A**. Judging by the sample means, it would seem that CEPAM clients have better outcomes than non-clients, and that children in cases with a formal marriage do better than those with no marriage. Nevertheless, there is great variability in the data in terms of both the standard deviation and the range of extreme values, particularly in the amount of the award. Variability reduces the statistical significance of the differences in the means. If we compare medians, which are less susceptible to extreme values, then the advantage of CEPAM clients or formal marriages remains unclear. For example, the top half of CEPAM clients obtained an award greater than \$16.98 per month per child, while the top half of non-clients were granted amounts over \$24 per month per child.

We try to estimate the impact of CEPAM intervention on the fraction of the award that is actually received (**P/A**), controlling for relevant factors such as the mother's marital status or the father's ability to pay. Nevertheless, virtually all explanatory variables in our dataset, including CEPAM intervention, prove not to be relevant at explaining the variation in the **P/A** ratio at conventional confidence levels. This probably reflects the fact that, in Ecuador's family law, there are no precise guidelines for setting the amount of the award reflecting the entitlement, so that two mothers with what is basically the same set of facts may be awarded different amounts in court. In other words, our survey data do not allow us to take the observed award **A(x)** and discriminate between the average award **a(x)** given by applicable case law and local practices and the random term **ε** that reflects the judge's discretion.

As a second resort, we try to determine whether CEPAM intervention has any impact on the amount of child support received  $\mathbf{P}(\mathbf{x},\mathbf{y})$ . One could view the payments actually received as the outcome of two interrelated decisions by the absent father: first, whether or not to pay any child support at all, and second, how much to pay. If both decisions are affected by common factors not observed in our data, estimating a payment equation with the subset of cases reporting some child support payment may result in biased coefficients. Using Heckman's approach to correct for this possible selection bias, we find that neither CEPAM intervention nor any of the independent variables tested is significant in explaining variations in the amount of child support actually received.

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<sup>34</sup> A two-step solution to this possible selection bias, originally suggested by Heckman (1979), consists of estimating an equation that explains the probability of receiving some child support for all the cases in our sample, and then using the predictions of such a model to create a proxy for the unobserved factors that affect the two interrelated decisions made by the absent father. Once such a proxy is added as an explanatory variable in the payment equation, estimations based on the subset of cases reporting some child support should yield unbiased coefficients.

Table 7 Amount of Child Support

	Mean	Median	Std dev	Min.	Max.	Cases
<b>A. Award (in \$ per month per child)</b>						
All cases	33.54	20.00	43.30	0.40	250.00	92
CEPAM clients	34.09	16.98	46.44	0.40	250.00	77
Non-clients	30.73	24.00	21.66	10.00	80.00	15
Wife or ex-wife	37.53	20.00	51.16	0.40	250.00	43
Ex <i>de facto</i> wife	28.99	20.00	38.27	2.00	200.00	33
Single mother	32.19	18.49	28.78	8.00	100.00	16
<b>B. Actual Transfer (in \$ per month per child)</b>						
All cases	19.38	12.50	22.18	0.21	120.00	181
CEPAM clients	22.77	17.25	24.15	0.33	120.00	109
Non-clients	14.23	6.38	17.76	0.21	88.33	72
Wife or ex-wife	25.80	18.17	27.93	0.21	120.00	58
Ex <i>de facto</i> wife	15.41	7.29	19.17	0.33	100.00	91
Single mother	19.03	15.99	15.23	0.42	61.67	32
<b>C. Transfer/Award Ratio (for those with award &gt; 0)</b>						
All cases	0.956	1.000	1.445	0	10.781	92
CEPAM clients	1.014	1.000	1.562	0	10.781	77
Non-clients	0.656	0.688	0.445	0	1.333	15
Wife or ex-wife	0.772	0.972	0.927	0	5.000	43
Ex <i>de facto</i> wife	1.093	1.000	1.937	0	10.781	33
Single mother	1.167	1.000	1.436	0	6.250	16
<b>D. Transfer/Award Ratio (those with both transfer &gt; 0 and award &gt; 0)</b>						
All cases	1.238	1.000	1.536	0.008	10.781	71
CEPAM clients	1.323	1.000	1.668	0.008	10.781	59
Non-clients	0.820	0.854	0.325	0.236	1.333	12
Wife or ex-wife	1.070	1.000	0.934	0.008	5.000	31
Ex <i>de facto</i> wife	1.443	1.000	2.116	0.033	10.781	25
Single mother	1.245	1.000	1.451	0.163	6.250	15

It is also possible that the data are affected by a reporting bias in which respondents "round off" small awards to zero. For example, a mother who during the 12-month period prior to the interview received a mere 25 cents, may report it as zero because of the long recall period or just because such a token contribution is perceived as "next to nothing."<sup>35</sup>

In order to deal with this possible statistical bias, we use what is called a censored regression or tobit model. Contrary to Heckman's approach, a tobit model uses all the observations in the dataset, including those cases with zero payment. Using this approach, we find that the CEPAM intervention increases the amount of child support actually received by about \$10 per month per child. This is in comparison with non-clients after controlling for the following relevant factors:

- Whether there was a formal marriage.
- The absent father's employment status and earnings potential.
- Whether there was a paternity dispute.
- The presence of severe physical violence prior to separation.
- Whether the absent father visits his children frequently or has a close relationship with them.

Whether \$10 per month per child has a material effect on economic well-being depends on the mother's circumstances.

### ***Child Support Payments Relative to Household Budgets***

Although half of the mothers entitled to child support did not receive any transfer during the 12-month period prior to the survey, an overwhelming 81.4 percent of them would recommend seeking an award. This at first may seem puzzling, given that even CEPAM clients have to invest time and money in the effort.

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<sup>35</sup> One of the mothers who participated in the focus groups indicated that the father "has never given anything at all, not even to buy a candy, or for school. All he does is to show up around Christmas and give [the kids] five dollars. Imagine, he gives them five dollars a year! and that's it." (emphasis added)

In order to address this issue, the survey collects detailed information about household expenditures on food, which allows us to establish the relative importance of child support payments to the family budget. Specifically, we compare the amounts received across households using a transfer index defined as:<sup>36</sup>

$$\text{Transfer index} = \frac{\text{Transfer per eligible child per month}}{\text{Food expenditure per household member per month}}$$

Sixty-two percent of the households in this subsample of 180 households received no child support transfers. For those that received some child support (68 households), we find that the amount received as a proportion of the household budget varies considerably across households. Nevertheless, their median transfer index is 39 percent. That is, half of the cases receiving some transfer received 39 percent or more of what the household spends a month in feeding one individual. And for the top quartile receiving child support, the transfer covers 92 percent or more of what the household expends feeding one individual.

Thus, child support payments make a significant difference in the standard of living of some households. This finding is corroborated by data collected from focus groups, and suggests that poor women see the transfers as one of many small sources of income. Even if the mother receives nothing today, the award is a claim on the absent father's income that may yield a transfer at some point in the future, and may contribute to self-esteem.

### ***CEPAM Intervention Reduces the Incidence of Domestic Violence***

Aside from the monetary gains from CEPAM's intervention, there is evidence that CEPAM clients benefit from a reduction in domestic violence. The incidence of domestic violence *before the separation* is about the same for CEPAM clients and non-clients. (Comparable data for Ecuador as a whole are not available.)

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<sup>36</sup> This index is computed only for half of the sample, selected at random for a second-round interview.

*After separation*, the incidence of violence from the absent father diminishes across the board. Nevertheless, this decrease is more pronounced for CEPAM clients than for non-clients, both in relative and percentage terms. Note that these findings exclude single mothers who never lived with the absent father, because in these cases it is not possible to define a comparable recall period (i.e., it is hard to set a precise date for the couple's breakup).

**Table 8 – Incidence of Domestic Violence**

	CEPAM client	Non- Client	Both
	Number		
Cases considered*	166	197	363
<b>Cases of violence before separation</b>			
Physical violence	102	129	231
Severe physical violence	95	117	212
Severe psychological violence	104	120	224
<b>Cases of violence after separation</b>			
Physical violence	50	84	134
Severe physical violence	44	79	123
Severe psychological violence	88	104	192
<b>Violence before separation</b>			
	Percent of cases		
Physical violence	61.4	65.5	63.6
Severe physical violence	57.2	59.4	58.4
Severe psychological violence	62.7	60.9	61.7
<b>Violence after separation</b>			
Physical violence	30.1	42.6	36.9
Severe physical violence	26.5	40.1	33.9
Severe psychological violence	53.0	52.8	52.9

\*Excludes mothers who never lived together with the father in question.

We explore this issue further by using regression analysis to control for relevant characteristics. We find that CEPAM reduces the probability of experiencing severe physical violence after separation by 17 percentage points. This is in comparison with non-clients after controlling for:

- Severe physical violence before separation.
- Whether the mother has ever reported abuse to authorities (Comisaría de Mujeres).<sup>37</sup>
- The mother's self-reported race (a proxy for cultural differences and social exclusion).<sup>38</sup>
- The father's employment status.

When the mother experiences physical violence prior to separation or the aggression was so severe that she reported it to authorities, the mother is more likely to experience severe physical violence after separation. Cases where the mother identifies herself as black/mulatto or the father is currently employed are more likely to experience physical violence after separation. Factors such as the household poverty level, the mother's age or education, or the father's education do not seem to play a role in explaining physical violence.<sup>39</sup>

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<sup>37</sup> Ecuador provides services for women through special police facilities, the *Comisaría de la Mujer* (Commissariat of Women). The *Comisaría*s, staffed by women and dedicated solely to crimes of violence against women, are charged with receiving complaints and safeguarding women from violence. They must report serious injuries to the criminal courts. *Rodríguez* (2000) p. 7.

<sup>38</sup> According to INEC (2000), most people in Guayaquil identify themselves as mestizo (67.7 percent) or white (21.9 percent), and only 8.3 percent as black or mulatto. In contrast, nearly 26 percent of the mothers in our sample describe themselves as black or mulatto.

<sup>39</sup> In their study on domestic violence in Lima, Peru, Gonzales de Olarte and Gavilano Llosa (1999), found that poverty is associated with a higher incidence of psychological and sexual violence against women but not of physical violence. Instead, they found that physical violence is more likely if the couple is not married, the man is employed, or if the mother asks for support from relatives or friends.

### ***Child Support Payments Do Not Seem to Affect the Mother's Employment Status***

We estimate a crude model of the mother's labor force participation, to see if child support payments have any effect on the mother's decision to work. We find no effect, after controlling for factors usually associated with labor force participation:

- The mother's age.
- The mother's years of schooling after secondary education.
- Whether the mother is currently living with another spouse/partner.

We find that younger mothers, those currently living with a spouse/partner, and those with no post-secondary schooling are less likely to work. We tested other factors, such as the number of children under 6 years of age, but they turned out to be not significant.

### ***Child Support Payments Increase Children's School Attendance Rate***

At a conventional 5 percent significance level, receiving child support payments increases the probability of the child attending school by 4.8 percentage points. This is in comparison with those not receiving a transfer and after controlling for relevant factors:

- The child's age and gender.
- The mother's years of schooling.
- The household's per capita consumption.
- The incidence of physical violence against the mother after separation.<sup>40</sup>

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<sup>40</sup> Violence against the mother contributes to an unsettling family environment and also is associated with violence against the children. According to CEPAM-Guayaquil's client database, out of the 946 mothers who for the period 1998-2001 reported being the victim of domestic violence, 35 percent also reported that the spouse/partner inflicted physical harm on their children.

We find that the school attendance rate decreases with the child's age and that this effect is more pronounced for boys than for girls. In addition, less educated mothers and those experiencing physical violence after separation are less likely to send their kids to school. Finally, higher poverty, measured in terms of per capita consumption, is associated with school desertion. Note that CEPAM's impact on the child's attendance rate is twofold: directly, by increasing the chances of receiving child support and indirectly by decreasing the incidence of domestic violence after separation (physical violence after separation decreases the child's probability of attending school by 4 percent).



## Focus Group Results

The survey indicates that most eligible mothers recommend seeking child support, despite the fact that most of them do not receive any transfer. In order to address such issues in a more flexible format, we conducted a series of focus groups that included both CEPAM clients and non-clients. Specifically, the themes explored during the sessions were:

- What are the benefits (both economic and extra-economic) of receiving child support?
- What are the major obstacles to getting child support? Why do some fathers not fulfill their obligation?
- What are the reasons for seeking child support? To what extent is the decision affected by related issues, like child custody, domestic violence, etc.?
- What is the level of satisfaction with CEPAM's services?

A total of twenty four mothers eligible for child support participated in three separate focus groups, lasting two and one half hours each. Of the twenty four participants, eighteen had initiated some type of legal action (fourteen through CEPAM and four by private means) and the other four had never requested child support.

The sessions were moderated by specialists on gender issues. Below is a summary of the major findings from the focus groups, which to some extent corroborate the survey results.

### ***Benefits of Legal Aid***

As we had anticipated, participants said that, although the amounts of child support were small, they were still important because their families were in very precarious economic conditions. One might view these transfers as just one of several small sources of income which, taken together, play a critical role in the mother's survival strategy.

"The ten dollars I receive [in child support] are not enough... what can I buy with it? Just a couple of things, [food] for two or three days... Whenever I can, I give my children some chocolate milk and, if there is some, a piece of bread at night. Of course, not always. Only when I can afford it, when I get some money washing clothes."

None of the mothers who obtained child support think that the amount set was fair or sufficient. All but two of the women spoke of the child support (*alimentos*) as paying for food; only two had enough to use it for health, education or clothing expenses.

The time period covered by the activity corresponded with a period of economic crisis in Ecuador that diminished the value of the amounts involved in the transfers. Ecuador's economy underwent both inflation and "dollarization" during the period covered by the activity. Nearly all of the women in the focus groups who had obtained child support payments prior to dollarization agreed that their economic status worsened after the transition.

There were also important non-monetary gains from CEPAM's intervention. Participants cited improved self-esteem and help coping with the aftermath of domestic violence.

" I always tell them [mothers in a similar situation] to go to CEPAM... not only to get child support, but also to receive psychological counseling... so that they can improve their self-esteem, so that their children are no longer mistreated."

Due in part to the stigma carried by illegitimate children, the primary concern for some mothers was to prove paternity, even if at the end they did not get child support payments. Some mothers complained that the father's lack of involvement in their children's lives was more damaging than the lack of financial support.

### *Obstacles to obtaining legal aid*

The main deterrent to using the judicial system is the perception that courts are corrupt, nontransparent, and biased against women. CEPAM helps by cutting through the red tape and otherwise reducing transaction costs. CEPAM clients reported that they were able to negotiate the judicial system notwithstanding its problems.

Fear of physical violence and other forms of retaliation is another major concern for mothers when deciding whether to seek child support, which is consistent with the results of the survey.

"I went [to the authorities] only once because he found out about it and threatened to beat me up. I already had problems with him because he wanted to take my daughter away from me... He said he could take her because I did not have a job to support her, because I was too young."

### *Satisfaction with CEPAM's services*

CEPAM clients reported a greater ability to negotiate the intricacies of the legal system than non-clients. In fact, women who used CEPAM recommended it to those who did not. Women who went through the courts without CEPAM's help would not recommend engaging the judicial system at all.

When asked what they had learned from legal aid, women spoke of ending a situation in which they had felt alone and disempowered, of gaining a better understanding of their own and their children's rights, of the power of the legal process to face paternal irresponsibility, and of having been given a new attitude with which to face life.

Conversely, for absent fathers, child support payments seem to be about more than just money. For some men, the lawsuit is an affront to their traditional dominant status. If, in addition, the absent father is facing economic hardship, the result may be increased violence toward the mother.

There is also some evidence of the leverage spillover effect of legal intervention. Some participants used the threat of legal action as a way to reach an out-of-court settlement with the absent father. In fact, some participants believe that the amount of child support fixed by the court is smaller than what could be received via an out-of-court settlement. In two instances, the mother indicated that, beyond any personal gain, standing up for her rights was a way to improve the conditions of all women.

"Yes, [I do recommend going to court] because, even if you get nothing, at least it contributes to diminish the number of irresponsible fathers. In some cases, just filing the complaint scares the father into reaching a settlement with the mother."

There are some popular beliefs and *de facto* rules, outside of what the law stipulates, that seem to shape individual decisions about child support. For example, because child support payments are commonly called *alimentos* (literally, "sustenance"), some women have the mis-conception that the father's obligation is limited to provide only enough for the child to eat. It is also a common belief amongst men that once the mother starts living with another man, or once she gets a job, there is no longer an obligation to provide child support. Even more disturbing is the fact that some men try to gain sexual favors from the ex-spouse in exchange for financial support.

## Gender Issues

This evaluation has shown that the specific legal aid clinic accomplished what legal aid clinics are supposed to do: help clients. For all the reasons discussed above, CEPAM clients were better off—legally, economically, and subjectively—than non-clients in the study group.

The activity we are evaluating brings together two aspects of the World Bank's mission and goals. It is part of a legal and judicial reform project which aims to promote the rule of law and includes integrated gender aspects to increase women's ability to enforce equality in rights and resources.<sup>41</sup>

Some of the most important links between gender and growth through human capital have to do with women's "empowerment."<sup>42</sup> The empowerment of women is, like the diminution of poverty, one of the Millennium Development Goals of the Bank. As World Bank publications (2002b) and (2001) point out, the interrelation of gender inequality and poverty is both intricate and pervasive.

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<sup>41</sup> World Bank (2001, 2002b, 2002c).

<sup>42</sup> World Bank (2002b) at pp. 4-5.

The primary pathways through which gender systems affect growth are the productivity of labor and/or and the allocative efficiency of the economy, specifically through:

- Investments in human capital, especially girls' and women's education and health;
- Investments in physical capital, especially women's access to capital or to the formal sector employment it creates; and
- The functioning of markets and institutions.

The concept of "empowerment" resists quantification. We may not be able to measure empowerment directly, but we do know that empowerment of women is linked not only to higher incomes for women and their families, but also to intergenerational effects on child schooling, nutrition and survival.<sup>43</sup>

Legal aid is by definition designed to "empower" women by increasing their access to justice. Yet the linkage between legal aid and some of the benefits associated with women's empowerment may not be provable in an individual activity, because the scale of the activity is too small to support this kind of analysis.

In this case we actually were able to show a link between women's empowerment and certain development indicators: The children of legal aid clients were more likely to still be in school than the children of non-clients.

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<sup>43</sup> Id. at pp. 4-6. See also World Bank (2001), Chapter 2, "Gender Inequality Hinders Development."

## Lessons Learned

**B**eyond the specific findings about the impact of the legal aid clinics, there are several methodological lessons that can be drawn from the experience in Ecuador:

First, because legal and judicial reform projects may entail outcomes difficult to quantify, combining quantitative and qualitative methods enhances the reliability of the results. Both methods can be applied in parallel, as in Ecuador, but perhaps a better approach would be to implement them sequentially, so that the quantitative results can serve as a framework for refining the qualitative tools, or vice versa.

Second, although the benefits of intervention might take a long time to materialize fully and the only or even primary beneficiaries (as in any access to justice program) are not necessarily the parties directly involved, some degree of quantitative, medium-term assessment is possible. This includes testing some of the premises on which the effectiveness of the activity under study rests. For example, the fact that some mothers use the threat of litigation to reach an informal arrangement regarding child supports suggests that legal aid programs have a spillover effect on non-litigants. As expected, the substantive focus on child support lent itself well to the collection of such quantitative data.

Third, impact evaluation should be an integral component of legal and judicial reform projects from the outset. In the case of legal aid clinics in Ecuador, the fact that NGOs were required to keep a database of all those receiving legal and complementary services proved to be an invaluable tool for conducting the survey and focus groups. Improvements in the design of the NGO's client tracking for subsequent legal aid activities would improve the ability to conduct future evaluations.<sup>44</sup> Greater involvement in developing indicators and a database at the start of the activity will make evaluation easier and cheaper to do. In the case of the Ecuador Special Fund for Law and Justice, the legal aid clinics were piloted as part of a much larger effort; as it was the Bank's first experience financing such services, the baseline goals could be further refined. The high demand for services which was in part due to the economic crisis was not envisioned during activity design, and many of the NGOs expanded their staff and operating hours to accommodate the number of clients. For future legal aid activities, we recommend that stronger mechanisms—perhaps in the form of providing or contracting for technical assistance—be built into the tracking of data. Client-tracking systems should be developed to facilitate comparison with a cross-section of the population, and comparisons among different legal aid clinics.

Fourth, Ecuador's economic crisis inevitably had a negative impact on our ability to gather accurate data years after the fact. In a country undergoing such rapid and negative economic change, it is easy for any measurable improvement in the women's economic status attributable to legal aid to be masked by the larger economic downturn. Similarly, any attempt to reconstruct the cost-benefit calculations of a litigant or potential litigant back in 1999 may be clouded by the changes that have taken place in the economy since then. As more experience and expertise in evaluating legal aid programs develops, means of separating out the impact of the activity from that of larger economic developments may also be

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<sup>44</sup> For example, although the form asks the client about various economic indicators, such as her employment status and housing conditions, the information cannot be matched with the LSMS survey or census data.

developed. For the moment, though, we have only retrospective tools. Once again, the simplest way of dealing with the problem would be to build a comparative study into the activity design at the beginning. Base line data is important, and perhaps, the adoption of user and non-user (clients and non-clients) surveys at the outset of this activity and again at periodic intervals, would have allowed a more complete picture of the impact of legal aid on their respective destinies.

Fifth, although narrowing the focus of the study to one legal issue simplified the analysis considerably, future evaluations should consider the impact of the overall package of services received by program participants. Evidence from the focus groups illustrate that clients of the legal aid clinics have complex motivations and that there may be synergies in the provision of both legal services and psychological counseling.

Sixth, implicit in any evaluation program of a legal and judicial reform project and its underlying data collection tools is a specific set of project objectives. However, projects often have different objectives (e.g., economic development, poverty reduction, rule of law, and equity). Given this, measuring impact must be consistent with the ultimate objective. To the extent a project includes economic objectives, the principles of economic analysis of law and legal systems should inform both the articulation and the measurement of goals.

Finally, one of the striking findings of the focus groups was the extent to which women valued access to justice for non-financial reasons. Participants articulated their hopes and goals from the legal system with both clarity and sophistication. These hopes are critical to promote the rule of law. To measure women's legal empowerment effectively, we should build evaluation of client goals directly into future impact studies.



## **Conclusion**

**T**his evaluation has confirmed the importance of and the need for improving court systems as well as improving access to the court system, with legal aid functioning as one method of helping people assert their individual and property rights. The results articulated in this report serve as a guide for programming scarce donor resources earmarked for promotion of the rule of law. The impact of the activity should also serve as an incentive for women in Ecuador not currently using legal aid to do so in the future, thereby contributing to an improvement in their standard of living.

Overall, the legal aid activity and the evaluation itself have also produced several notable results for beneficiaries and donors alike. First, the activity has had a direct positive impact on the lives of participants. As noted in the text of the evaluation, women were better off legally and economically, and reported possessing a better knowledge of their own and their children's rights. The children of women using legal aid were more likely to stay in school, an important intergenerational component. This should have a significant downstream economic impact, extending beyond the scope of this study.

Second, the methodology employed for this evaluation and the accompanying lessons learned provide the beginnings of a model based on qualitative and quantitative data that may be replicated by other actors in the legal and justice sector. Attention is increasingly being paid to the necessity of evaluating the impact of donor-assisted legal and judicial sector projects. This evaluation offers a significant step forward in this process.

Third, the impact of the legal aid clinics provides a strong argument for scaling up, expanding the clinics within Ecuador, particularly in rural areas (which were not covered under the legal aid service grants), and extending it to other countries which are working to improve the access of marginalized groups to legal and judicial institutions.

As part of the replication effort, several more legal aid clinics are being financed by the World Bank as part of an overall legal and judicial reform effort. In the case of Ecuador, legal aid clinics were an important complement to the overall legal and judicial reform program. Access to justice is one of the goals of legal and judicial reform, and legal aid is one example of providing increased access to legal services. However, it is only a complement, as increasing access to justice also depends on improving the efficiency and competency of the courts generally and specifically in issues related to women and the poor. It is for this reason that legal and judicial reform must be approached comprehensively.

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## **Annex I. Survey Instrument**

Although there is consensus about the need for making the legal system more responsive to poor people, it is far from clear what type of information should be collected for evaluation. Our main source of information is a household survey designed to collect relevant data from both our treatment and comparison groups. Specifically, the survey instrument collects information on:

Legally relevant circumstances defining the existence and value of the entitlement:

- The mother's marital history and relevant circumstances.
- The mother's standard of living and other characteristics.
- The absent father's ability to pay child support.
- Use of the judicial system.
- The extent of financial support from the absent father (outcome).

For the most part, we follow the layout and conventions commonly used in Living Standards Measurement Study (LSMS) surveys. These are multi-topic household surveys that collect data on living standards in developing countries and follow rigorous quality

control procedures.<sup>45</sup> Wherever possible, questions are drawn directly from Ecuador's latest LSMS survey (*Encuesta de Condiciones de Vida*, 1988-1989) conducted by the Ecuadorian census bureau (INEC). This facilitates comparisons with a cross-section of the population and minimizes implementation problems by incorporating questions that have been field tested and refined over the years. Following well-established practices, most questions are precoded (avoiding open-ended queries), and filter questions and skip codes are used to keep the answers to the questions simple. The unit of observation is the individual and each one is uniquely identified by an ID number, which is used as a reference throughout the questionnaire.

### *Scope of the Questionnaire*

Our survey differs from the traditional LSMS survey in its scope. Although we collect some information about all household members, our primary unit of interest (the family core) revolves around those children that, at least in principle, are eligible for child support. In order to understand this distinction, it is worth reviewing the different groups that, in some way or another, are relevant to the study of child support.

First, there is a group of *filial relationships* that encompasses the relevant mother and her children who, in principle, are eligible for child support. As long as the mother has legal custody of her children, she can act on behalf of the group in matters related to child support, even if they do not live in the same household.

Second, there is a group of *conjugal relationships* that links the mother to the father (or fathers) or her children. This group may include: (a) her current spouse or partner, if he is a member of the household; (b) any former spouse or partner with whom she lived at some point and with whom she had at least one child; (c) any other man who is the father of one of her children, even if they never lived together as a couple for any length of time (as, for example, in the case of rape). Out of this group of fathers, those who are not living in the household are potentially responsible for providing child support.

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<sup>45</sup> See Grosh and Glewwe (2000).

Finally, there are *household relationships* that connect the relevant mother with other members of her household, regardless of family ties. Following Ecuador's LSMS survey, a household is defined as a group of people who live together and eat at least one meal together each day. This group is relevant in our study to the extent that it affects the mother's standard of living and has some influence over her decisions.

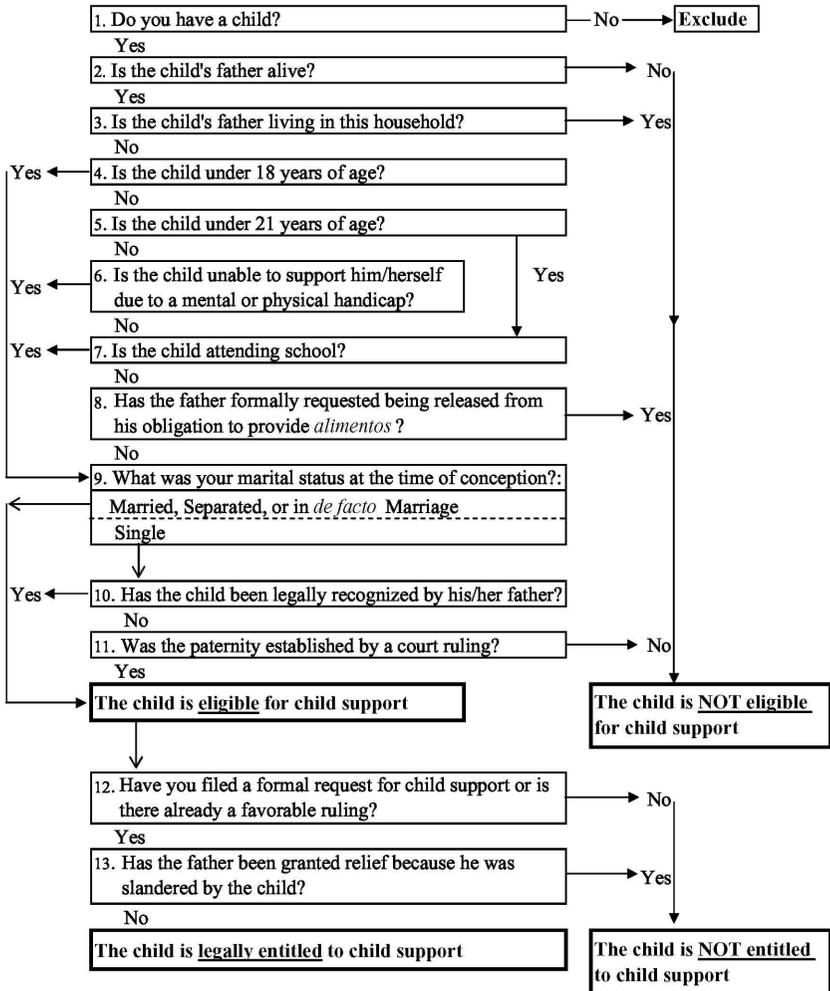
In some cases, all three sets of relationships will define the same group of individuals. This is true, for example, in the case of a household comprised solely of a widow and her only child. At the other extreme, it is possible that, except for the mother in question, there are no overlaps among the three sets of relationships. This would be true, for example, in the case of a single mother who works as a servant in the household where she lives, while her only child lives in his grandmother's household. In practice, most cases fall somewhere between these two extreme examples.

Ideally, one would like to collect as much information as possible for all individuals belonging to any of these three sets of relationships, but that would require a rather lengthy and complex interview process. Instead, we focus our attention on those individuals who are most relevant to our study, namely: the mother in question, her children, and any absent father who, at least in principle, has the obligation to provide child support. We label this group as the *family core*.

### ***Primary Respondent***

In our survey, the *primary respondent* for most questions about the household as a whole is not the head of the household, but rather the mother that we identified as being eligible for child support (although in some cases she might also be the head of the household). Accordingly, family ties are defined in terms of the relationship of each individual with respect to the primary respondent. In contrast, a typical LSMS survey defines family ties in terms of the relationship of each household member with respect to the head of the household.

Figure 1A. Ecuador's Child Support Flow Chart



### *Structure of the Questionnaire*

As a first step in developing the questionnaire content, we developed a flow chart summarizing the information required to determine the existence of the entitlement. As shown in Figure 1A, establishing whether a child is entitled to financial support (*alimentos*) requires relatively little information.

A more complicated matter is estimating the actual level of the entitlement, because, in setting the exact amount of child support award, the court weighs both the recipient's economic needs and the provider's economic means and needs. Although the former is observable, information on the man's ability to pay is not as readily available. One alternative is to ask the mother about her ex-spouse's income when they were living together. Nevertheless, this is subject to a considerable recall error and may no longer be valid (particularly regarding his employment status). Alternatively, one could ask the mother about her ex-spouse's current living standard, but this option is only viable when the mother still has some contact with the absent father. Thus, we opted for asking the mother as much as possible about her ex-spouse and, from this, try to piece together his income profile. Of course, to the extent that absent fathers have an incentive to conceal their sources of income, the information gathered from the mother is only an approximation.

In addition, we have to consider the respondent's characteristics  $\mathbf{y}$  that are not legally cognizable, but which nevertheless affect the actual payment received  $\mathbf{P}(\mathbf{x},\mathbf{y})$ . In the literature on child support the vector  $\mathbf{y}$  includes factors such as the mother's education, her age and work experience, her current marital status, the extent of her family support network, the number of children, the length of the marriage (or *de facto* marriage), and the expected costs involved in obtaining payments.

The questionnaire is divided into seven modules, each one with a unifying theme. The first two modules gather information for the household as a whole. The rest of the survey collects information for the family core only. Those sections dealing with more sensitive topics, such as domestic violence, were placed at the end of the

questionnaire in order to give the interviewer time to develop rapport with the primary respondent.

Here, we provide an overview of the content of each module.

**Household Roster.** This section starts by identifying the primary respondent and her family core, then it identifies the other household members and, finally, it asks about any child of the primary respondent who is not a member of the household. For each individual, the module collects basic information such as age, sex, marital status, and relationship to the primary respondent. For any minor child of the primary respondent, the module asks the name of any father who is alive and not a member of the household.

**Housing and Food Expenditures.** This section includes questions regarding type of dwelling, number of rooms, availability of basic services, ownership, etc., which gives some indication of living standards. In addition, it asks the primary respondent to give a gross estimate of the household's expenditures on food.

**Education and Employment.** This module applies only to the family core. It asks about level of education, school enrollment, employment status, and sources of income. In this context, and only when it is relevant, the module also asks if a given family core member is not working or studying due to a mental or physical handicap. For consistency with Ecuador's LSMS survey, the questions about education apply only to those who are six years or older and the questions about employment to those ten years or older.

**Absent Fathers.** This section asks about child support awards, where such information has not been collected in previous modules. It collects information for each relevant absent father identified in the Household Roster. It is divided into five sections: (a) Questions regarding the relationship of the absent father with the primary respondent, their marital history, and any paternity dispute. (b) Questions about the existence of the award, any transfers received, and the use of the legal system. (c) Questions on the absent father's education and current level of income. (d) Questions on the absent father's level of income when he was living together with the primary respondent. (e) A measure of domestic violence both before and after the separation.

Miscellaneous. This module complements the previous one by asking about other relevant issues, such as the mother's cultural background and her level of satisfaction with the legal system.

Food Expenditures. This module collects detailed information about household expenditures on food, which would allow us to establish the relative importance of child support payments to the family budget. It is very similar in content to one of the modules in Ecuador's LSMS survey.

Metadata. This module, placed at the front of the questionnaire, collects information about the survey itself. This includes: a unique code identifying the household; information on the dwelling location; the place, date, and time of the interview; basic information about the survey team and a log of quality control procedures.

### *Sequence of the Interview*

The questionnaire was designed to be completed in two interviews, each one lasting from forty to sixty minutes. The first interview consists of Modules 1 through 5, and the second-round interview consists of Module 6. In order to safeguard the confidentiality and safety of the selected mothers, the first interview took place at CEPAM's office or another safe location, like a nearby school or community center. The second interview took place at the primary respondent's home in order to facilitate the gathering of information regarding the household's food expenditures.

Two issues that required particular consideration were: (i) for some mothers there is more than one relevant absent father, which makes recall more difficult, and (ii) the need to tailor some questions to the type of conjugal relationship that existed between the mother and the absent father. For example, it would be inappropriate to ask a single mother about the father's income during the period they lived together, if they never lived together. Thus, we developed simple, yet innovative, approaches to control the flow of questions. Specifically, the interviewer starts by listing all household members and then collecting information for each family core member, including the names of all relevant absent fathers. Once Modules 1 through 3 have

been finished, the interviewer proceeds to Part A of the Absent Fathers Module, makes a list of all absent fathers, and then completes all questions in Part A for each father. This section, shown in Figure 2A, summarizes the mother's marital history, allowing for up to three absent fathers. The last question in Part A classifies the mother's relationship with each absent father, so that the category "Single Mother" includes only those cases where the child was born out of wedlock and, more importantly, the mother never lived together with the father. The interviewer then completes the rest of the module, one absent father at a time, skipping inapplicable questions when the mother falls into the "Single Mother" category. Note that this classification is specific to each mother-father pair, so that, for example, a given mother could be classified as "Ex-Wife" with respect to the first absent father and "Single Mother" with respect to the second one.



### *Measuring Domestic Violence*

We are interested in measuring domestic violence both as a control variable for taking legal action and as an outcome associated with legal aid intervention. As a control variable, one might argue that women who have been subject to violence and abuse are less likely to engage in litigation for fear of reprisal. In addition, the incidence of violence after separation may be viewed as an outcome associated with the access to legal counseling in general. For example, in the process of claiming child support, a woman may learn more about her legal rights and be more inclined to combat abuse.

We adopt a broad definition of domestic violence that includes inter-household violence between individuals who formerly belonged to the same household. Although there are several approaches to measuring domestic violence,<sup>46</sup> we chose to measure concrete violent acts and events, without trying to measure attitudes, causes, or consequences surrounding the incidents. Specifically, we followed a methodology similar to the Revised Conflict Tactics Scale (CTS2) developed by Straus et al. (1996). The CTS2 consists of a negotiation scale that gauges the couple's negotiation skills and four violence scales that measure the frequency and severity of psychological aggression, physical assault, sexual coercion, and physical injury.

We adapted the CTS2 framework, originally developed for couples living together, to the circumstances of individuals who are divorced or separated. Thus, we dropped items that seem less significant in our context (e.g., "He called me fat or ugly") and added items more relevant for ex-partners (e.g., "He threatened to take the children away from me").<sup>47</sup> We also eliminated sexual coercion as a

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<sup>46</sup> See Pico Mantilla (2000), Shrader (2001).

<sup>47</sup> For example, in their study of the economic costs of domestic violence, Morrison and Orlando (1999) interviewed 310 women in Santiago (Chile) and 378 women in Managua (Nicaragua). See "Sample Design" in: [www.worldbank.org/lsm/country/ecuador/ec98docs.html](http://www.worldbank.org/lsm/country/ecuador/ec98docs.html). The revision of the domestic violence scale was based in part on the results of a pilot test conducted in October 2001 for a small sample of CEPAM clients. The questionnaire included an open-ended question exploring domestic violence after separation.

separate scale, and instead added those acts to the psychological aggression and physical assault scales. Figure 3A lists the violent acts and events that are included in our questionnaire.

**Figure 3A. Scale for Measuring Severe Domestic Violence**

Subscale	Psychological Aggression Scale Items
Severe	Threatened to hit or throw something at you
Severe	Threatened to kill you
Severe	Destroyed something belonging to you
Severe	Threatened to take the children away from you
Severe	Harassed you at work or tried to make you lose your job
Severe	Threatened to assault you sexually or used threats to make you have sex
Subscale	Physical Aggression Scale Items
Severe	Punched or kicked you
Severe	Hit you with something that could hurt you
Severe	Choked you
Severe	Burned or scalded you on purpose
Severe	Used a knife or gun on you
Severe	Used force (like hitting, holding down, or using a weapon) to make you have sex
Severe	Assaulted you sexually or raped you
Minor	Pushed or shoved you
Minor	Grabbed you
Minor	Twisted your arm or hair
Minor	Slapped you
Minor	Threw something at you that could hurt
Subscale	Injury Scale Items
Severe	Had a broken bone from a fight with him
Severe	Passed out from being hit in the head by him in a fight
Severe	Went to a doctor because of a fight with him
Severe	Needed to see a doctor because of a fight with him, but you didn't
Minor	Had a sprain, bruise, or small cut because of a fight with him
Minor	Felt physical pain that still hurt the next the day because of a fight with him

In order to compress the interview time, our section on domestic violence is designed to detect only *severe violence*, which is defined as being the victim of at least one severe act of violence (e.g., "He beat me up,") or of frequent minor acts of violence (e.g., "He twisted my arm.") Thus, the interviewer has to read out loud all the items in Figure 3A only if the mother answers "NO" to all of them. Conversely, if the mother indicates that, for example, she was kicked

by her ex-husband, then there is no need to go over the other items in the physical assault and injury scales. In that case, the interviewer records the existence of severe physical violence and skips directly to the next module or the next absent father.

## **Annex II. Fieldwork and Quality Control**

Given the modest scope of the survey, both in terms of sample size and geographical dispersion, the interviews were conducted during a short, intense period of fieldwork. Although the planning and training phases of the survey started early in the year, the actual fieldwork was conducted during February and March of 2002, coinciding with the school recess. CEPAM was in charge of contacting those ex-clients selected for the survey and, with the help of local grass-roots organizations, identifying and contacting a comparable group of non-clients. ISVOS, the survey company selected for the fieldwork, was in charge of conducting the interviews, entering the data, and coordinating the entire operation. The household questionnaire was divided into two rounds, as noted above. First-round interviews with ex-clients took place at CEPAM's offices. For non-clients, the interview took place at a local school, church, or community center. Except for some rare instances where it was necessary to arrange for another location, most second-round interviews took place at the mother's home. The timing of the main activities of the fieldwork, illustrated below, required a considerable degree of coordination between CEPAM and ISVOS, as they moved from one neighborhood/sector to the next.

Lead	Activity	Week			
		1	2	3	4
CEPAM	Contact participants, set appointments	■	■		
ISVOS	1st round interview		■	■	
ISVOS	2nd round interview			■	■
ISVOS	Data entry and editing		■	■	■
Neighborhood -->		A: ■		B: ■	

Due to budget constraints, second-round interviews were conducted only for half of the survey participants (90 clients and 90 non-clients), selected at random at the end of the first-round interview period. Given the tradeoff between increasing the sample size slightly and collecting detailed consumption information for at least a subset of the sample, we chose the latter option. This allowed us to assess the significance of child support payments in the household budget. This is not a trivial matter given that some anecdotal evidence indicates that the amounts of child support received are very small with respect to the child's needs.

In order to minimize non-sampling errors, we implemented an extensive set of quality control procedures, notably:

- The questionnaire was designed to minimize errors by the interviewer and was kept at a reasonable length to avoid respondent fatigue. It was pilot tested and revised with the input of all key players involved. Given the content of the survey and the makeup of the sample, all interviews during the first round of the survey were conducted by female interviewers.
- All interviewers and data entry operators participated in a four-day training session. Their work was supervised by two field managers and one data manager. In addition, CEPAM's personnel was responsible for greeting the mothers as they arrived for the interview, introducing them to the interviewers, keeping an appointment log, and rescheduling interviews when necessary. No CEPAM staff was present during the interview itself.

▪ Data entry and editing was carried out at CEPAM's offices, concurrently with data gathering. A program routine was developed to check for errors and inconsistencies in the data. The task was done using CSPRO (Census and Survey Processing System), a specialized software package developed by the U.S. Census Bureau for entering, tabulating, and mapping census and survey data.<sup>48</sup> When omissions in the information gathered were detected, the questionnaire was sent back to the interviewer, who was then responsible for visiting the mother and completing the information.

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<sup>48</sup> See <http://www.census.gov/ipc/www/cspro/>



## Annex III. Econometric Specifications

### *The Probit and the Bivariate Probit Models*

We use a probit specification to estimate the impact of CEPAM's intervention on indicators like the incidence of domestic violence after separation, the mother's labor force participation, and the children's school attendance rate. On each case, the dependent variable (Y) is treated as a binary response that is equal to 0 or 1, depending on the value taken by an underlying index function  $Y^*$ :

Y	= 1 if $Y^* > 0$	yes
	= 0 otherwise	no

$Y^*$  is a function of a set of explanatory variables X (which includes CEPAM's intervention) and an error term  $\varepsilon$  with mean zero and variance equal to one:

$$Y^* = \beta X + \varepsilon$$
$$E[\varepsilon] = 0; \text{Var}[\varepsilon] = 1$$

A related specification, the bivariate probit, is used to estimate the impact of CEPAM's intervention on the probability of getting child support. Having a child support award ( $Y_1$ ) or actually receiving child support payments ( $Y_2$ ) are treated as binary variables

equal to 0 or 1, depending on the value taken by the underlying index function  $Y^*$ .

Y <sub>1</sub>	= 1 if $Y^*_{1}>0$	has award
	= 0 otherwise	no award
Y <sub>2</sub>	= 1 if $Y^*_{2}>0$	receives transfer
	= 0 otherwise	does not receive transfer

Where the error terms  $\varepsilon$  follow a joint distribution with mean zero, variance equal to one, and non-zero covariance:

$$\begin{aligned}
 Y^*_{1} &= \beta_1 X_1 + \varepsilon_1 \\
 Y^*_{2} &= \beta_2 X_2 + \varepsilon_2 \\
 E[\varepsilon_1] &= E[\varepsilon_2] = 0; \\
 \text{Var}[\varepsilon_1] &= \text{Var}[\varepsilon_2] = 1; \\
 \text{Cov}[\varepsilon_1, \varepsilon_2] &= \rho \neq 0
 \end{aligned}$$

Here, the vector  $X$  includes variables that affect the mother's decision to seek the award as well as variables that affect her chances of succeeding, including the father's willingness and ability to pay child support. The hypothesis that the covariance coefficient  $\rho$  is zero was tested and rejected. That is, our estimation yields better results than estimating two separate probit equations, one for  $Y_1$  and another for  $Y_2$ .

### *The Heckman Selection Model and the Tobit Model*

We use a Heckman selection model to estimate the impact of CEPAM's intervention on the amount of child support received. In this model, the father's decision to give any child support at all ( $Z$ ) is treated as a binary response that is equal to 0 or 1, depending on the value taken by an underlying index function  $Z^*$ :

Z	= 1 if $Z^*>0$	gives some child support
	= 0 otherwise	gives nothing

where:

$$Z^* = \beta_1 X_1 + \varepsilon_1$$

The amount of child support received ( $Y$ ) is observed only if  $Z=1$ , and it is given by the regression equation:

$$Y = \beta_2 X_2 + \varepsilon_2$$

$$E[\varepsilon_1] = E[\varepsilon_2] = 0;$$

$$\text{Var}[\varepsilon_1] = \text{Var}[\varepsilon_2] = 1;$$

$$\text{Cov}[\varepsilon_1, \varepsilon_2] = \rho \neq 0$$

That is, the unobserved term  $\varepsilon_2$  influencing the amount of child support received is correlated with the unobserved term  $\varepsilon_1$  influencing the decision to give any child support at all. In addition, we explore an alternative approach for estimating a transfer equation that uses all the observations in the dataset, including those cases with zero payment. In a tobit specification, there is an underlying function ( $Y^*$ ) representing the amount of child support actually received:

$$Y^* = \beta X + \varepsilon$$

where the error term with mean zero and variance is equal to one. The amount of child support reported by the mother ( $Y$ ) equals the underlying amount only if the latter is greater than a given threshold normalized to zero. Otherwise, the reported amount is equal to zero:

Y	= $Y^*$ if $Y^* > 0$	some child support is reported
	= 0 if $Y^* \leq 0$	no child support is reported



## Annex IV. Regression Results

**Table 1a**  
**Bivariate Probit Model: Probability of Obtaining Child Support Award**  
**and/or Receiving a Transfer**

Variable	Probability of Award		Probability of Transfer	
	Marginal Effect	Std. Error	Marginal Effect	Std. Error
CEPAM client	0.1999	0.0424***	0.1041	0.0585*
Wife/Ex-wife	0.2277	0.0561***	0.1806	0.0676***
Living with husband/partner	0.1181	0.0606*	-	-
Paternity dispute	-	-	-0.1521	0.0555***
Visits his children	-	-	0.4010	0.0551***
Number of eligible children	-	-	0.0629	0.0323*
Severe Violence (pre-separation)	-0.0671	0.0363*	-0.2250	0.0549***
Father's Earnings Potential:				
Employed	0.1111	0.0498 **	0.2181	0.0874 **
Unemployed	0.1064	0.0494 **	0.2129	0.0892 **
Unknown job status	0.0923	0.0502 *	0.1936	0.0882 **

Number of Observations = 445 cases

Wald Chi-Square (16) = 183.71

rho = .5132

Likelihood ratio test of rho=0:

Chi-Square (1) = 21.26

Standard errors are estimated using bootstrapping techniques.

\*\*\* Significant at 1% \*\* Significant at 5% \* Significant at 10%

**Table 2a**  
**Tobit Model: Amount of Child Support Received**  
**(\$ per child per month)**

Variable	Transfer Received	
	Coefficient	Standard Error
Constant	-392.457	105.350***
CEPAM client	10.471	5.332**
Wife/ex-wife	22.306	5.904***
Paternity dispute	-15.927	5.789***
Visits his children	35.162	5.382***
Number of eligible children	9.429	3.075***
Violence (pre-separation)	-14.020	5.146***
Father's Earnings Potential:		
Employed	26.355	7.627***
Unemployed	25.892	7.667***
Unknown job status	23.801	7.531***

Number of Observations = 445 cases

LR Chi-Square (9) = 167.16

Pseudo R-Square = 0.0751

Standard errors are estimated using bootstrapping techniques.

\*\*\* Significant at 1%\*\* Significant at 5% \* Significant at 10%

**Table 3a**  
**Probit Model: Probability of Severe Physical Violence After Separation**

Variable	Prob. Violence Post-separation	
	Marginal Effect	Standard Error
CEPAM client	-0.1712	0.0548***
Violence (pre-separation)	0.4007	0.0452***
Reported to authorities	0.2583	0.0679***
Mother black/mulatto	0.1075	0.0621*
Father employed	0.1081	0.0567*

Number of observations = 363 cases

LR Chi-Square (5) = 102.20

Pseudo R-Square = 0.2199

Standard errors are estimated using bootstrapping techniques.

\*\*\* Significant at 1% \*\* Significant at 5% \* Significant at 10%

Note: Excludes cases where the mother never lived together with the father.

**Table 4a**  
**Probit Model: Probability of the Mother Having a Job**

Variable	Prob. Having a Job	
	Marginal Effect	Standard Error
Receiving transfer from any father	0.0680	0.0586
Mother's age	0.0720	0.0254***
Mother's age squared	-0.0009	0.0004**
Living with husband/partner	-0.1687	0.0711**
Years post-secondary schooling	0.0439	0.0217**

Number of observations = 357 mothers  
 LR Chi-Square (5) = 37.64  
 Pseudo R-Square = 0.0795

Standard errors are estimated using bootstrapping techniques.  
 \*\*\* Significant at 1% \*\* Significant at 5% \* Significant at 10%

**Table 5a**  
**Probit Model: Probability of Child Attending School**

Variable	Probability of Attending School	
	Marginal Effect	Standard Error
Receiving transfer	0.0475	0.0211**
Violence (post-separation)	-0.0396	0.0228*
Age - boy	-0.0111	0.0032***
Age - girl	-0.0091	0.0031***
Mother's yrs. schooling	0.0154	0.0054***
Per capita consumption	0.0017	0.0007**

Number of observations = 430 children  
 LR Chi-Square (6) = 50.79  
 Pseudo R-Square = 0.1908

Standard errors are estimated using bootstrapping techniques.  
 \*\*\* Significant at 1% \*\* Significant at 5% \* Significant at 10%

Note: Excludes cases where the mother never lived together with the father.



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