The impact of a social program on women bargaining

power: The case of AUH in Argentina

Matias Ciaschi*

Santiago Garganta

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There is a vast literature studying the effects of social transfers on women's decision-making

power within households. The evidence typically shows a positive impact in this regard measured

by female expenditure-related decisions. However, the higher women's relevance as a decision-

maker driven by social programs could also increase their responsibilities, limit their autonomy

in other several dimensions and hence exacerbate traditional gender roles. In this paper we em-

pirically evaluate the theoretically ambiguous effect of a CCT program in Argentina - the AUH -

on women's intra-household bargaining power. The implementation of the AUH implied a signifi-

cant increase on women's household income share given that they were prioritized as recipients of

the benefit. However, our main results suggest the program increased couple stability and did not

change women's probability of being the main household member in charge of domestic chores.

Moreover, we find that the program decreased bargaining power for women with more children, for

whom the AUH benefit is larger.

JEL codes: H55, I38, J12, J16.

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*Contacts and affiliations: Matias Ciaschi, CEDLAS-IIE-FCE Universidad Nacional de La Plata & CON-ICET (mciaschi@cedlas.org). Santiago Garganta, CEDLAS-IIE-FCE Universidad Nacional de La Plata (sgar-

ganta@cedlas.org).

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1 Introduction

Conditional Cash Transfer (CCT) programs have increased their relevance as social policy instrument in Latin America over the last decades (Levy and Schady, 2013; Alvaredo and Gasparini, 2015). They have been proved to be a successful tool to alleviate poverty and increase child enrollment (Gasparini and Cruces, 2010; Glewwe and Kassouf, 2012; Galiani and McEwan, 2013; Edo et al., 2017). Although there are some design's differences across countries, they are commonly received by adult women with children. Hence, these cash transfer programs not only increase total household income but also women's relative income. It represents a consensus in the literature that this gender-based targeting promotes women participation in household expenditure-related decisions and that its beneficial for children's health and education outcomes (Thomas, 1990; Rubalcava et al., 2009; Bobonis, 2009; Attanasio and Lechene, 2014; Bergolo and Galván, 2018). However, increased women's relevance as a decision-maker could also imply more responsibilities within the household and thus limit their autonomy in some dimensions, for example their labor participation. In this sense, little is known about how these programs affect women empowerment measured in terms of the distribution of household chores and couple stability. In this paper, we help to close this gap in the literature by studying the effects of the Universal Child Allowance (AUH for its acronym in Spanish) in Argentina, a program that increased women's income, on non-labor measures of female empowerment.

Household members' time devoted to household chores is directly related to their intrahousehold bargaining power. However it can also be explained by different preferences and productivities in housework and labor market (Browning et al., 2014). For instance, an increase in husband's time dedicated to domestic tasks do not necessarily imply a higher women empowerment since both member's participation in household chores can be complementary. Moreover, an increase in husband's participation can be followed by an even larger increase in women's time devoted to household chores. Under an ideal setting, we would identify a women empowerment situation if husband's increased participation in housework is followed by an increase in his wife's leisure or

labor market participation. But, since we do not observe leisure time, we follow Berniell et al. (2020) using shared housework indicators. This allows us to identify whether the program produced a more equal distribution of household chores, which is considered as a direct evidence of women empowerment.

The CCT's effect on the distribution of domestic chores are theoretically ambiguous and the literature on this topic is still not conclusive. On the one hand, previous contributions showed that CCT's decreased female labor participation (Garganta et al., 2017a) and reduced incentives for labor market formalization (Garganta and Gasparini, 2015; Bergolo and Galván, 2018; Bergolo and Cruces, 2021). This result could imply more leisure consumption but also can be explained by an increase in women's relative participation in household chores or childcare with respect to her husband. In fact, Garganta et al. (2017b) found that the AUH increased fertility and Berniell et al. (2021) show that informal jobs prevent female worker from leaving the labor market upon motherhood. On the other hand, the increase in women relative income can rise her bargaining power and negotiate for a more equal distribution of housework with his partner, as contributions based on expenditure-related measure of bargaining power demonstrate (Attanasio and Lechene, 2002; Rubalcava et al., 2009; Bobonis, 2009; Handa et al., 2009; Bergolo and Galván, 2018).

The increased household income from a CCT can also affect couple stability or formation. However, the effects are also theoretically unclear. Early approaches analyzing couple stability predicted higher divorce rates with the increase in women's incomes (Becker, 1973; Ross et al., 1975), which was labeled as the "independence effect" hypothesis. Also, the CCT could create couple conflicts about how to use the monetary benefit and how to comply with the program's conditionality requirements. However, when a household is benefited by a cash transfer program, not only women relative income increases but also total household income. This can imply less economic stress in the household leading to a higher couple stability. Available empirical contributions are still scarce and provide mixed results about this topic. Some studies find that increased women income raised separation or divorces (Litwin et al., 2019; Berniell et al., 2020), but other contri-

butions show both higher divorce rates and couple formation (Bobonis, 2009) or higher couple stability and formation (Bergolo and Galván, 2018).

In this paper we empirically evaluate the theoretically ambiguous effects of the CCT program in Argentina (AUH) on women empowerment. Our objective is to help to close the gap in the literature regarding the effects of these kind of programs on women's situation in the household. By doing so, we evaluate the effect of the AUH on women's likelihood of being in charge of household chores. We also estimate if the program affected couple stability. The AUH represents an ideal setting to analyze how an increase in women's relative income affects their intra-household bargaining power.

Our results suggest that, on average, the AUH did not increase women bargaining power. However, for women with at least 3 children, it increased their likelihood of being at charge of household chores in about 7.5%. These results hold even when controlling for potential sample selection into marriage or cohabitation. In fact, our findings also suggest that the AUH increased couple formation in 1.6 pp (about 2.2%), respect to what would happened in the absence of the program. These findings provide a relevant contribution to further discuss how these widely spread social transfers affect women situation in the household, suggesting the need for a debate about the design of these programs in order to prevent unintended impacts.

The remainder of this paper is organized as follows: Section 2 describes the AUH program, Section 3 the data and our identification strategy. Section 4 shows the results of this paper, and Section 5 concludes.

2 Institutional background: the AUH

Implemented on the last quarter of 2009 by the decree 1602/09, the Universal Child Allowance (AUH for its acronym Spanish) is the most important social assistance program in Argentina. Targeted to poor households with children whose members are either unemployed or unregistered workers, it covers a large proportion of the country population, especially among low-income households. The AUH covers about 29% of all children in the country and 15% of total house-

holds. Moreover, the monetary benefit is high according to international standards (Fiszbein and Schady, 2009; Stampini and Tornarolli, 2012). The cash transfer represents about 15% of total income for poor households, a number that increases to 43% for typical poor households with three children (Stampini and Tornarolli, 2012).

As it usual with conditional cash transfer programs, the AUH monthly benefit is attached to the fulfillment of children's health and education requirements: vaccination and health checks for children under 4 years old, and school attendance for children aged 5 or older. However, households which do not meet these conditionalities would not be taken out of the program but they would only receive 80% of the transfer.

An important feature of the AUH is that the benefit is almost exclusively received by women: about 97% of the recipients are women, mostly the child's mother. This is a typical characteristic of conditional cash transfer programs in which this women-targeting is based on the existing consensus regarding the positive welfare effects that entails in terms of family well-being. Importantly, the reception of the cash transfer increases women relative income, which could imply unintended behavioral consequences in terms of women situation in the household. For example, previous studies found that the program discouraged female labor participation (Garganta et al., 2017a) and increased fertility Garganta et al. (2017b). In line with these findings, the AUH could also affect the distribution of household chores and decisions on couple formation, hence changing women's bargaining power. The reception of the transfer almost exclusively by women and the importance of the AUH in terms of its coverage and the size of transfers it delivers, represents an ideal setting to analyze how an increase in women's relative income affects female empowerment.

3 Data and methodology

This paper is based on data from the *Encuesta Permanente de Hogares* (Permanent Household Survey; hereinafter, EPH), the main household survey in Argentina which covers 31 large urban

¹By the time of its implementation, AUH beneficiaries received a monetary transfer of around US\$ 50 for each child under 18 years old up to a maximum of 5 dependent children. The corresponding benefit for disabled children have no age restriction and is about three times the standard benefit.

areas and is representative of about 68% of the country's urban population. We use information for the period 2004-2015: five periods prior to the AUH implementation in late 2009 and six after the program implementation. On average, each period has about 129,000 observations. The EPH permits to clearly identify couples and children as well as their individual characteristics related to education, employment, individual incomes and housework. We restrict the sample to women between 19 and 59 years old; the 96.7% of program benefit holders are contained in this age bracket.

From the available information, we compute the share of women who has a heterosexual couple in order to identify the evolution of couple formation and divorces/separations rates through the whole period. Unlike marital status, individuals' intra-household bargaining power is not directly observable. Moreover, the EPH does not contain information regarding individual's time use. Then, we follow Berniell et al. (2020) to compute changes in the distribution of household chores within the household. This information is available since the survey enables to identify who is the member mainly in charge of the housework and whether other household members collaborate with those tasks. Under this approach, it is considered that women increased their bargaining power if, after receiving the cash transfer, they decreased their probability of being the only or the main member at charge of household chores. We analyze this proxy measure of bargaining power for women cohabiting with her partner.

Unfortunately, the EPH does not include specific questions to identify the beneficiaries of the AUH program. For this reason, we estimate the intention-to-treat effect by dividing women according to their potential eligibility to participate in the program. As noted above, two important conditions to be eligible for the program are unemployment or labor informality, and child presence. Then, the treatment group is composed by women living in informal households ² with at least one children under 18 years old. The rest of the women in our main sample who do not meet all the conditions to be eligible conform the control group.

We estimate the program's impact on women empowerment and couple stability using a difference in difference (DD) methodology. In particular, we estimate the following linear models:

²Unregistered or informal workers are identified in the EPH with a question asking whether the individual have deductions for pensions in their job.

$$y_{it} = \alpha + \gamma Treat_i + \delta Post_t + \beta Treat_i * Post_t + \eta_i^r + \eta_t + \nu X_i^{'} + \varepsilon_{it}$$

where y_{it} represents the outcome of interest of women i in year t: whether or not she have a couple and two dummy variables indicating if she is the only or main member at charge of household chores, our empowerment indicators. For this last variable we only consider a sample of cohabiting women in order to avoid contamination from sample selection. $Treat_i$ is equal to one for eligible women and zero for non-eligible ones, while $Post_i$ is valued one for the period 2010-2015 and zero for 2004-2009. We include regional and yearly fixed effects, $\eta_i^r + \eta_t$, respectively as well as a vector of individual characteristics X_i' such as education, age, household size, employment status and a dummy indicating if the woman is the head of the household. We are interested in estimate the coefficient β which identifies the effects of the AUH program. Lastly, we cluster the standard errors in ε_{it} at the large urban areas level thus allowing for correlation between error terms of different years in the same area.³

4 Results

In this section, we present the main results of this paper. Section 4.1 shows the program's impact estimates on women's likelihood to have a couple in order to evaluate possible biases in previous contributions assuming couple stability. Then, in Section 4.2 we focus on the estimations regarding the potential effect of the AUH on women's bargaining power measured by their likelihood to be in charge of household chores. We analyze the effects on the probability of being the main or the only household member in charge of housework as an alternative bargaining power measure. We also discuss the heterogeneous effects of the program by women's age, poverty status, child presence and women's relative participation in household income. Finally, in order to give robustness to our empirical strategy, in Section 4.3 we run diverse false experiments specifications in order to evaluate the program's impact as if the policy would have been implemented prior to the date in which it was actually carried out.

³Results from Section 4 are robust to computing standard errors using wild bootstrap.

The implementation of the AUH program implied a significant increase in women's relative income given that they were selected as a priority to be the recipients of the benefit. Figure 1 reflects some evidence in this regard capturing the evolution of the difference in the share of women receiving any income between eligible and non-eligible groups. In particular, we find that before the program there were almost no divergences between treated and non-treated women in this outcome. However, this similarity seems to have ended from 2010 (the program inception) onwards, in which a relative growth of up to 10 percentage points in the share of treated women receiving any income is observed.

Similar differential trends are evidenced when analyzing the percentage of women having a couple. Figure 2 shows that while prior to the AUH treated women were about 10 percentage points more likely to have a couple, this difference between groups widened about 4 percentage points since the program started. Lastly, Figure 3 shows also a changing situation of women regarding domestic tasks: after the AUH, treated women seem to have increased their relative likelihood of being the main member in charge of household chores. This suggests that after an asymmetric income shock, a more unequal distribution of household chores was achieved, implying that beneficiaries women ended up with a lesser intrahousehold bargaining power after the program.

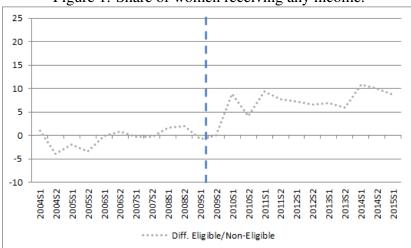


Figure 1: Share of women receiving any income.

Source: EPH, own estimates

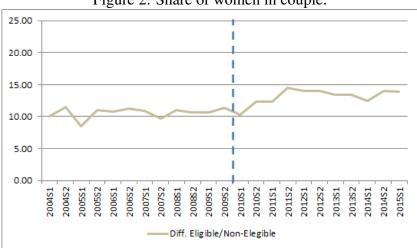


Figure 2: Share of women in couple.

Source: EPH, own estimates

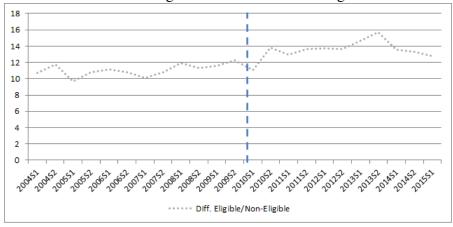


Figure 3: Share of women being the main member in charge of household chores.

Source: EPH, own estimates

These Figures are useful to motivate the main research question we analyze in this paper. However, they reflect a non-conditional result and hence their validity should be checked through a multivariate regression framework in order to estimate the conditional treatment effect and evaluate its potential heterogeneity across groups.

4.1 Couple stability

Table 1 shows the effect of the program on women's likelihood of having a couple considering different samples of women. Columns 1 shows that, as a response to the program, women increased their probability of being in couple in about 1.6 percentage points (about 2.2%), while column 2 shows similar estimates suggesting that the effect is not very sensitive to different women age brackets. However, the effects are clearly larger when considering women from poor households.⁴ Results from column 3 and 4 suggest that the likelihood of having a couple increased about 2.2 percentage points (3.1%) for poor women. In sum, these estimates provide evidence favoring the hypothesis that the cash transfer have alleviated household economic stress and conflicts regarding resource allocation, leading to a higher couple stability, over the "independence hypothesis".

In Table 2 we analyze the heterogeneous effects of the program on couple stability by child presence. Columns 1 and 2 consider household with up to two and three or more children, respectively. Results suggest that the effects are about twice bigger in the last group of households. Since the total amount of the received transfer depends on the number of children, households with more children receive higher transfers. The potential effects of the program can also be sensitive to whether the households interpret the income shock as permanent or transitory. Then, the impact of the program is expected to be larger for parents with younger children as they could receive this benefit for a longer time period. Columns 3 to 5 in Table 2 show results in line with this expectation. These findings also suggest that the transfer may have helped to reduce economic stress in the household, thereby promoting couple stability. Lastly, in Table 3 we evaluate the effects of the program on couple stability inspecting potential differential effects regarding women's household income share. Both considering total and labor household income, the estimations show a general positive and significant treatment effect which decreases with a higher the share of women on household income. Despite results from Table 1 showed that the "independence hypothesis" do not represent the main channel explaining couple formation decisions, estimates from Table 3 suggest that this channel can not be completely ruled out.

⁴For the sake of simplicity, we consider households belonging to the left half of income distribution as "poor".

		<u> </u>	D [10.50]	1
	All: [19-59]	AII: [25-55]	Poor: [19-59]	Poor: [25-55]
Post*Treated	0.016***	0.017**	0.022***	0.020***
	(0.005)	(0.007)	(0.005)	(0.006)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Average	.72	.74	.74	.74
Observations	202418	161262	137536	113481

Table 1: Estimates on the probability of having a couple.

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

Table 2: Estimates on the probability of having a couple by child presence.

	Num. Children: [1-2]	Num. Children: [3+]	Child age: [0-6]	Child age: [7-14]	Child age: [15-17]
Post*Treated	0.012** (0.006)	0.021*** (0.005)	0.023*** (0.007)	0.010** (0.004)	-0.003 (0.007)
Controls	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
Average Observations	.71 162957	.69 117729	.72 140322	.67 125030	.64 93602

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

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Table 3: Estimates on the probability of having a couple by women's share of household income.

	Total Income	Labor Income
Post*Treated=1	0.051***	0.044***
	(0.003)	(0.006)
Income Share	-0.389***	-0.290***
	(0.011)	(0.007)
Post*Treated=1 \times Income Share	-0.048***	-0.061***
	(0.010)	(0.008)
Controls	Yes	Yes
Year FE	Yes	Yes
Region FE	Yes	Yes
Average	.72	.72
Observations	202418	202418

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head. Income share takes values between 0 and 1.

4.2 Household chores

As noted above, the literature is not clear about the effect of the CCT programs on women's bargaining power. There exist a vast literature showing that these programs increased women's expenditure-related decision-making power and interpret it as increased bargaining power (Thomas, 1990; Attanasio and Lechene, 2014; Bergolo and Galván, 2018, among others). However, some contributions have found that CCT programs decreased female labor participation, and increased fertility and labor informality for women (Garganta et al., 2017a; Berniell et al., 2021). In Tables 4 and 5 we estimate the effect of the program on women's bargaining power measured by the inverse probability of being the main or the only household member in charge of household chores, respectively. Results suggest that, on average, the program did not affect women's bargaining power. Different from expenditure-related measures, this result suggest that the program did not reduced women's responsibilities within the household, a result more in line with previous contributions finding decreases in labor participation and formal employment. These findings are particularly

⁵In the Appendix Section, Tables A.1 and A.2 show that, using our identification strategy, the program decreased female labor participation in line with previous contributions (Garganta et al., 2017a). We were not able to estimate the effects on female labor informality, which is likely to be related to increased fertility and household reponsibilities (Berniell et al., 2021), since we use household member's informality status as source of identification.

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relevant since we previously shown that the program increased the likelihood to have a couple for treated women.

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Table 4:	Estimates	on	women's	bargaining	power.

	All: [19-59]	All: [25-55]	Poor: [19-59]	Poor: [25-55]
Post*Treated	-0.006	-0.009	0.013	0.015
	(0.007)	(0.012)	(0.010)	(0.013)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Average	.24	.24	.21	.2
Observations	73575	60440	48877	41432

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Bargaining power measured as the inverse probability for women to be the main household member at charge of household chores. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

Table 5: Estimates on women's bargaining power (stronger).

			<u> </u>	
	All: [19-59]	All: [25-55]	Poor: [19-59]	Poor: [25-55]
Post*Treated	0.009	0.014	0.009	0.008
	(0.009)	(0.009)	(0.006)	(0.013)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Average	.53	.52	.53	.52
Observations	121896	98467	85643	71084

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Bargaining power measured as the inverse probability for women to be the only household member at charge of household chores. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

In Tables 6 and 7 we evaluate possible heterogeneous effect of the program on women's bargaining power by child presence. Results suggest that the decrease in this indicator was particularly important for women with more children while we find no effects on other groups of households. Women with at least three children increase their likelihood of being the main member at charge of household chores in about 7.5%. As noted in Section 4.1, households with more and younger

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children receive a larger and more permanent transfer. The results then indicate that the program's negative impact on women's bargaining power is likely to increase with the amount of the transfer.

Table 6: Estimates on women's bargaining power by child presence.

	Num. Children: [1-2]	Num. Children: [3+]	Child age: [0-6]	Child age: [7-14]	Child age: [15-17]
Post*Treated	-0.002 (0.010)	-0.018*** (0.006)	-0.006 (0.006)	-0.007 (0.010)	-0.010 (0.013)
Controls	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
Average Observations	.26 57364	.24 43226	.25 48462	.25 45375	.27 33768

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Bargaining power measured as the inverse probability for women to be the main household member at charge of household chores. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

Table 7: Estimates on women's bargaining power (stronger) by child presence.

			<u> </u>	<u>U </u>	
	Num. Children: [1-2]	Num. Children: [3+]	Child age: [0-6]	Child age: [7-14]	Child age: [15-17]
Post*Treated	0.009	0.011	-0.005	0.026***	0.014
	(0.011)	(0.008)	(0.010)	(0.008)	(0.020)
Controls	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
Average	.54	.49	.55	.49	.48
Observations	94622	67117	84345	68381	48856

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Bargaining power measured as the inverse probability for women to be the only household member at charge of household chores. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

Finally, the effects of the program on women's bargaining power can also be shaped by couple members' relative earnings and employment status. On the one hand, an increased women's participation in household income can be related to a higher likelihood of labor participation and independence, leading to a relatively smaller housework involvement. However, recent contributions have found that under traditional gender identity norms there exist an aversion to situations where the wife earns more than her husband which lead to the former to spend more time on household chores (Bertrand et al., 2015; Zinovyeva and Tverdostup, 2021). In Tables 8 and 9 we estimate the effects on the program on women's bargaining power separately for those living with

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an employed or non-employed husband. In addition, Tables 10 and 11 show the heterogeneous effects by women's individual and labor share of total household income. Results suggest that the impact of the program on women's bargaining power is not statistically different by their partner's employment status or share in household income.

Table 8: Estimates on cohabiting women's bargaining power by husband's employment status.

	Employed husband	Non-Employed husband
Post*Treated	-0.009	0.010
	(0.007)	(0.017)
Controls	Yes	Yes
Year FE	Yes	Yes
Region FE	Yes	Yes
Average	.23	.29
Observations	57839	15736

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Bargaining power measured as the inverse probability for women to be the main household member at charge of household chores. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

Table 9: Estimates on cohabiting women's bargaining power (stronger) by husband's employment status.

	Employed husband	Non-Employed husband
Post*Treated	0.007	0.004
	(0.006)	(0.030)
Controls	Yes	Yes
Year FE	Yes	Yes
Region FE	Yes	Yes
Average	.54	.46
Observations	100194	21702

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Bargaining power measured as the inverse probability for women to be the only household member at charge of household chores. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

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Table 10: Estimates on women's bargaining power and share in couple income.

	Total Income	Labor Income
Post*Treated=1	-0.006	-0.011
	(0.011)	(0.007)
Income Share	0.109***	0.163***
	(0.005)	(0.010)
Post*Treated= $1 \times$ Income Share	-0.015	0.007
	(0.016)	(0.007)
Controls	Yes	Yes
Year FE	Yes	Yes
Region FE	Yes	Yes
Average	.24	.24
Observations	73575	73575

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Bargaining power measured as the inverse probability for women to be the only household member at charge of household chores. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head. Income share takes values between 0 and 1.

Table 11: Estimates on women's bargaining power (stronger) and share in couple income.

	Total Income	Labor Income
Post*Treated=1	0.011	0.013
	(0.011)	(0.010)
Income Share	-0.061***	-0.082***
	(0.008)	(0.009)
Post*Treated= $1 \times$ Income Share	0.002	-0.016*
	(0.013)	(0.009)
Controls	Yes	Yes
Year FE	Yes	Yes
Region FE	Yes	Yes
Average	.53	.53
Observations	121896	121896

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Bargaining power measured as the inverse probability for women to be the only household member at charge of household chores. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head. Income share takes values between 0 and 1.

4.3 Placebo tests

4.3 Placebo tests

In this subsection, we perform placebo test focusing on evaluate the robustness of our identification strategy. Particularly, we estimate the program impact as if the policy had been implemented prior to the date on which it was actually implemented. These false experiments are particular relevant in the Argentinean case since a pension reform law was launched in 2007 which have been demonstrated that increased divorce rates and empowerment, measured using the same indicators as in this paper, for senior women (Berniell et al., 2020). Importantly, Pinto (2022) showed that this reform increased labor market participation for mothers co-residing with retirement-eligible grandmothers. Then, it is crucial to evaluate whether our identification strategy is contamined by this previous reform. Tables 12, 13 and 14 show the estimates of the placebo test as if the program would have started in 2008, 2007 or 2006. We find that the effects are not statistically significant providing support to our empirical strategy.

Table 12: Estimates on the probability of having a couple. Placebo pre-treatment.

	Post=2008	Post=2007	Post=2006
Post*Treated	-0.000 (0.005)	0.007 (0.005)	0.006 (0.005)
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Region FE	Yes	Yes	Yes
Average Observations	.75 102219	.75 102219	.75 102219

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

	Post=2008	Post=2007	Post=2006
Post*Treated	0.000	-0.021	-0.007
	(0.016)	(0.021)	(0.018)
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Region FE	Yes	Yes	Yes
Average	.23	.23	.23
Observations	37852	41332	37852
Adjusted-R2	.05	.05	.05

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Bargaining power measured as the inverse probability for women to be the main household member at charge of household chores. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

Table 14: Estimates on women's bargaining power (stronger). Placebo pre-treatment.

	Post=2008	Post=2007	Post=2006	
Post*Treated	-0.009	-0.008	0.013	
	(0.016)	(0.013)	(0.013)	
Controls	Yes	Yes	Yes	
Year FE	Yes	Yes	Yes	
Region FE	Yes	Yes	Yes	
Average	.53	.53	.53	
Observations	63501	63501	63501	
Adjusted-R2	.11	.11	.11	

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Bargaining power measured as the inverse probability for women to be the only household member at charge of household chores. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

5 Conclusions

In this paper we evaluate a large and women-targeted social transfer's impact on intra-household women's bargaining power. Previous contributions found an increasing participation of women in expenditure-related decision making, interpreting it as an increase of women empowerment. However, in this paper we argue that this could imply more responsibilities within the household.

19 Appendix Section

For this reason, we focus on some direct and indirect measures of women's bargaining power: the relative charge of household chores and couple stability. The use of the former indicator is more in line with previous studies finding that social transfers decreased female labor participation, increased fertility and the prevalence informal jobs prevent female worker from leaving the labor market upon motherhood. We also test whether the program have also affected couple formation decisions aiming to consider possible biases from sample selection into marriage or cohabitation.

Contrary to previous studies focused on expenditure-related decision making measures of empowerment, we found that the AUH program did not affect women bargaining power on average. However, for women with at leat 3 children, our results suggest an increase in their likelihood of being at charge of household chores in about 7.5%. These results hold even when considering potential sample selection into cohabitation. In fact, we also found that the transfer increased couple formation or stability in about 2.2%. Our results are particularly relevant for women with more children, which is associated with a larger transfer.

Our findings provide a relevant discussion about how these widely spread social transfers affect women situation in the household, highlighting the need for a debate about the design of these programs in order to prevent unintended consequences.

ONLINE APPENDIX

A Effects on female labor participation

Table A.1: Estimates on female labor participation.

	All: [19-59]	All: [25-55]	Poor: [19-59]	Poor: [25-55]
Post*Treated	-0.017***	-0.022***	-0.023***	-0.028***
	(0.005)	(0.008)	(0.007)	(0.008)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Average	.48	.51	.43	.45
Observations	139159	112419	95284	79063

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

Table A.2: Estimates on female labor participation.

	Num. Children: [1-2]	Num. Children: [3+]	Child age: [0-6]	Child age: [7-14]	Child age: [15-17]
Post*Treated	-0.018*** (0.005)	-0.014*** (0.005)	-0.018*** (0.006)	-0.015*** (0.003)	-0.008 (0.010)
Controls	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
Average Observations	.5 109107	.46 77161	.46 96299	.51 79469	.5 57609

Notes: Standard errors clustered by urban area. *Source*: EPH, own estimates. Controls include: age, education, occupational status, number of household members and a dummy indicating whether the woman is household head.

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