

# Property Inheritance and Empowerment: An Econometric Analysis of the Effect of the Hindu Succession Law Reform on Married Women Decision Making

T. Lakshmanasamy\*

## Abstract

*The Hindu Succession Amendment Act, 2005 provides Hindu women equal inheritance rights in ancestral property. This legal reform empowers married women, enhance autonomy and increase married women decision making power in marital households. This paper estimates the impact of HSAA 2005 on women empowered and autonomy in their marital household in 24 states of India where the HSSS law has been implemented after 2005 using the 2015-17 National Family and Health Survey data and applying the nonparametric difference-in-difference (DID) method. The DID estimates show that the property rights reform has increased the decision making power of the post-2005 Hindu married women with respect to their health care, visit family and friends and major household purchases by 2 percent, and spending husband's earnings by 9 percent, and also of non-Hindu women. The HSAA 2005 reform of legal property rights to women has impacted married women with greater autonomy and more say in household decisions.*

**Keywords:** Hindu Succession Amendment Act, inheritance rights, women decision making, treatment effect, difference-in-difference estimation

## INTRODUCTION

Gender inequality and discrimination remains an overwhelming injustice against women across the globe. Women lag behind men in terms of access to education, labour market opportunities, political representation, decision making and basic legal rights. Gender equality is not only a fundamental human right but a necessary foundation for women empowerment. Beyond the essential importance of guaranteeing women basic human rights, it is widely believed that social rights and economic independence of women lead to other desirable outcomes such as higher economic productivity, improved health status and higher educational attainment for children. Women empowerment and socioeconomic development are closely related and development alone can drive down the inequality between men and women [1].

### \*Author for Correspondence

T. Lakshmanasamy  
E-mail: [tlsamy@yahoo.co.in](mailto:tlsamy@yahoo.co.in)

Formerly Professor, Department of Econometrics, University of Madras, Chennai, Tamil Nadu, India

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Women empowerment refers to increasing and improving the social, economic, political and legal strength of women by creating an environment where they can make decisions of their own for their personal benefits as well as the society [2]. Women empowerment encompasses many dimensions and has components. Principal among them is women's sense of self-worth, their right to have the power to control their own lives both within and outside the home, and their ability to influence the direction of social change to create just social and economic order.

In India, women empowerment heavily depends on various aspects of life that include age, education, occupation, social status (caste and class), geographical location, culture, demography, family structure, etc. Policies for women empowerment exist at national, state and local levels in many sectors including health, education, economic opportunities, violence and political participation. In spite of implementing various schemes and programmes aiming to empower women and gender equality, there exists a significant gap between policy achievements and actual practice in the country. The World Economic Forum's Global Gender Gap Report 2020 indicates that the gender gap is alarming and India's rank has slipped from 98 in 2006 to 112 in 2020 among 153 countries [3]. As Table 1 shows the gender gap in all sub-categories of women empowerment has declined in recent years.

**Table 1.** Indices of gender gap in India.

| Sub-indices of gender gap              | 2006 |       | 2020 |       |
|----------------------------------------|------|-------|------|-------|
|                                        | Rank | Score | Rank | Score |
| Global gender gap index                | 98   | 0.601 | 112  | 0.668 |
| Economic participation and opportunity | 110  | 0.397 | 149  | 0.354 |
| Educational attainment                 | 102  | 0.819 | 112  | 0.962 |
| Health and survival                    | 103  | 0.962 | 150  | 0.944 |
| Political empowerment                  | 20   | 0.227 | 18   | 0.411 |

Source: World Economic Forum (2020).

The basic foundation for women empowerment is their position within their household, especially their position to take decisions. Evidence shows that labour force participation of women and their contribution to the household budget as the key sources of women decision making power within the household [4, 5]. However, low education and occupational stereotyping make women's contribution and role in household resource allocation decisions marginal and vulnerability of women to marginalisation and discrimination within the household despite their economic independence. Research on the intrahousehold allocation of resources demonstrates that income in the hands of women will be mainly used for child health and education of especially girl children compared to income in the hands of men. The economic independence of women improves their status in the family and society and the progress towards gender equality.

The economic independence of women and their income contribution to the family are not the only factors that influence the decision making power within the household [4]. Women need more rights especially legal protection against male prejudice to actively participate in household decisions. A more formal empowerment process is therefore required to enhance women's decision making power in the household. Granting women property rights i.e. land titles can help them attain such economic independence [6], empower women [7], increase women bargaining power [8], and labour market participation [9] and reduce female mortality [10]. Owning property has a transformative effect not only on women's lives but also on their families like son preference [11] and children like child health [12, 13]. Women's ownership of property sharply reduces property turnover in urban settlements [14], household food security [15], budget share on food [16] and marital violence [17, 18].

Realising that women's position within the family is weak and the only way to empower women is to support them with legal rights, the union and state governments in India have come out with various legislative measures. An important legal reform that aims to improve the position of women is the reform in inheritance rights. The legal provision of women's land rights provides them with economic security in their marital relations and can make a notable difference to women's bargaining power within the household and community. Further, ownership of property enhances their confidence and sense of self-worth [19]. Inheritance rights improve the 'outside options' for women like labour force participation leading to greater bargaining power within the household [5]. Land rights reduce women's own as well as the household risk of poverty and discrimination. An

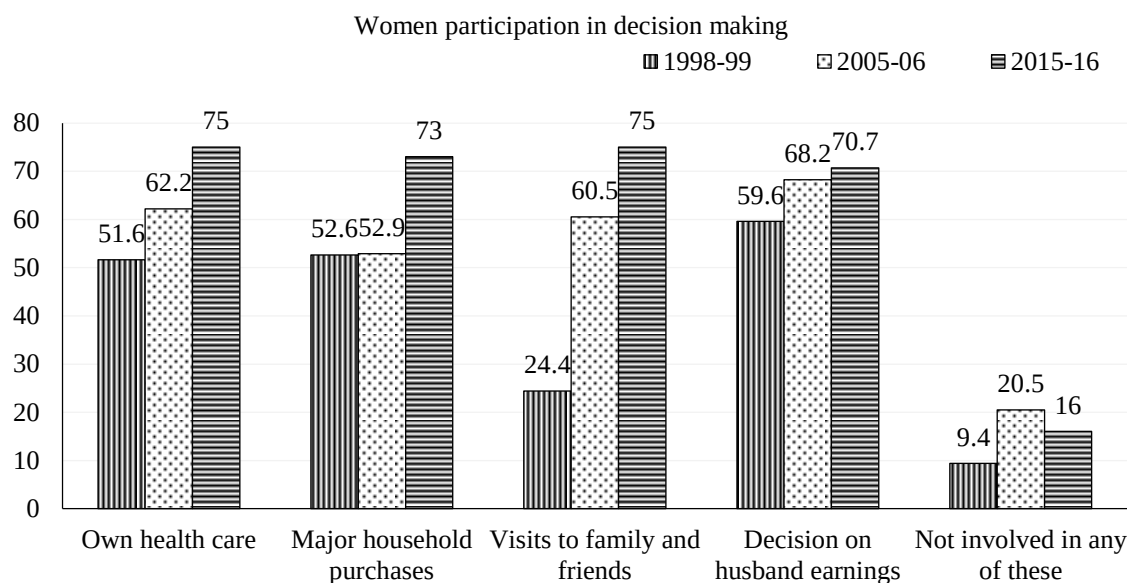
important legal remedy to women empowerment was provided by The Hindu Succession Act, 1956 (HSA, 1956).

Being a patriarchal society, Indian women have no access to family properties in the Hindu tradition, especially land rights. The absence of land ownership by women affects their social status, imposing the patriarchal views stringently and women's status is low within the social strata and their family [5]. Gender inequality in inheritance rights in India was entrenched in the HSA, 1956. The HSA, 1956 governed the property rights of Hindus, Buddhist, Sikh, and Jain nationally. Section 14 of the HSA 1956 provides that daughters of males dying intestate i.e. without a will, who are unmarried at the time of law have equal rights with their brothers to inherit their father's owned property but not to the ancestral property. Sons as coparceners have the right to inherit not only the separate property but also joint family property.

Such a weakness in the eligibility of women for the right to inherit joint family property has caused inefficient investment in female children and weaker position of women within their household [1]. Realising this important gap in the legal provision and to eliminate gender inequality, five state governments in India - Kerala (1976), Andhra Pradesh (1986), Tamil Nadu (1989), Karnataka (1994) and Maharashtra (1994) - have reformed the law, between 1976 and 1994, with equal property rights in the ancestral property among all siblings. Subsequently, there has been a significant improvement in the autonomy of women in these states after the implementation of the inheritance reform [4, 17, 18]. Following suit, the Government of India also enacted the Hindu Succession Amendment Act, 2005 (HSAA 2005) making the inheritance rights of women applicable nationwide, ensuring the eligibility of women of India who are married and born after 2005 for an equal share in ancestral property. Under the amended law, daughters are eligible to inherit not only their father's owned property but also ancestral property equally with their brothers from 5<sup>th</sup> September 2005. This has been recognised as a significant move toward gender equality since land rights were heavily biased against women in India before 2005 [19].

In the five states that legislated equal property rights for women much earlier than the national amendment of HSA, 2005, very few women have inherited joint family property from their parental family. However, there has been a significant increase in the decision making power of women after the HSAA 2005. As Figure 1 shows, between 1998-99 and 2015-16, women's decision making role in major household decisions has increased significantly. Still, a significant gender bias remains and only a few women have inherited joint family property from their parental family after the implementation of the law in the five states. The likelihood of inheriting land by women has only slightly increased as many women in remote areas are not aware of their right to inherit property [5, 20, 21].

Though the 2005 amendment of the law is significant for women status, the exact impact of the law on women inheritance and empowerment within the household are less understood. The literature on the impact of inheritance reform on women shows that the legal reform has enabled women to gain in multiple dimensions viz, education, health, labour force participation, female mortality and decision making power. However, evidence shows that the proportion of women inheriting ancestral property is negligible, son preference and female foeticide are much prevalent, and empowerment and decision making power in the marital household is highly restrictive and severely limited. The studies have analysed the effect of the legal reform on empowerment use data from the states Kerala, Tamil Nadu, Andhra Pradesh, Maharashtra and Karnataka where their laws enacted prior to 2005 did not include women inheriting ancestral property. The impact of the 2005 amendment of HSA to the inheritance law applicable to the entire nation which gives each and every Hindu woman in the country to inherit the ancestral property is not known, especially in north Indian states where the strong patriarchal system possibly overturns the laws. Virtually no evidence exists on the impact of the 2005 amendment in those states which implemented the law after 2005.



**Figure 1.** Participation of women in marital household decision making.

Source: Computed from the NFHS data.

Hence, it is imperative to know whether there has been any change in the decision making power of women in India after the amendment of the HSA in 2005. This paper attempts to examine the impact of the legal provision of property rights to women in the rest of the states i.e. 24 states where the law has been implemented after 2005. The main objective of this paper is to identify and estimate the extent to which the HSAA 2005 has empowered women and improved their autonomy within their marital household based on their involvement in decision-making in the family. The power of women in decision making within the household is analysed through the indicators of women empowerment presented in Figure 1. As the law applies to Hindu women (also Jain, Sikhs, and Buddhists) who are married after the implementation of the law, i.e. after 2005, this paper captures empowerment by the difference in the indicators between women married before and after 2005. In the empirical analysis, this paper uses the 2015-17 National Family and Health Survey data for 24 major states of India in which the law has been implemented after 2005. Empirically, the econometric technique of the nonparametric difference-in-difference (DID) method is used to estimate the impact of inheritance rights on the decision making power of women within the marital household.

### Data and Method

The data used in this paper is derived from the National Family Health Survey (NFHS-4) 2015-16, the fourth in the NFHS series, that contains information on various aspects of households for India and each state and union territories. All the four NFHS surveys have been conducted under the stewardship of the Ministry of Health and Family Welfare (MoHFW), Government of India. The primary objective of the 2015-16 National Family Health Survey is to provide essential data on health and family welfare, as well as data on emerging issues in these areas. NFHS administers five types of questionnaires - household, men, women, village and biomarker questionnaires. The women schedule provides information on socio-demographic characteristics for all women between the ages of 19 and 49 in each household. Besides, the women schedule contains a wealth of information that represent the autonomy of women within the household and their role in household decision making. The data has 5,00,918 married women and among them, 1,70,368 women are married after the HSA amendment i.e. after 5<sup>th</sup> September 2005. Hence, these women constitute the sample for this paper.

Public policies such as the HSA and its amendment are implemented with the expectation of improving the welfare of individuals by impacting the current status. Many intervention programmes might appear potentially promising before implementation yet fail to generate the expected benefits.

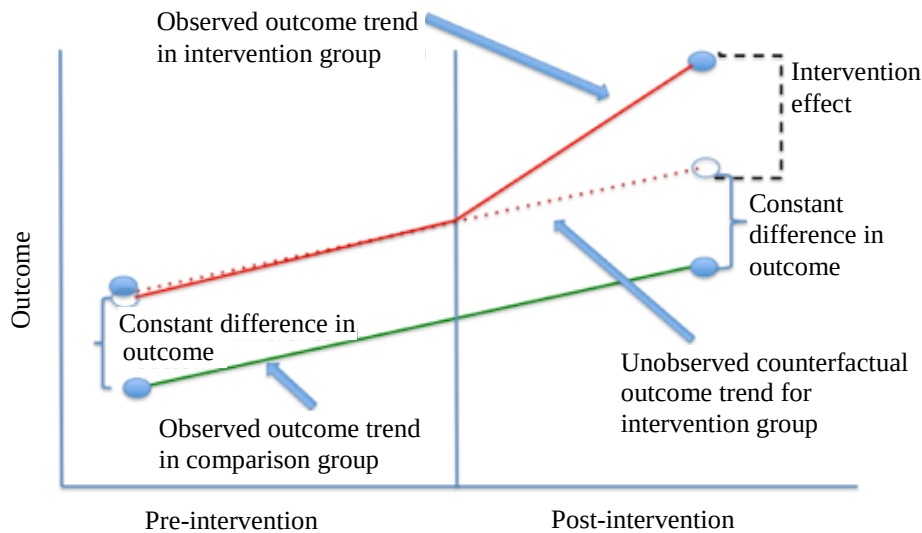
A better understanding of whether welfare programmes actually work as well as the likely level and nature of the impact on the intended beneficiaries is crucial for better planning and execution of any programme. Such needs impact evaluation help policymakers decide whether programmes are generating intended effects, promote accountability in the allocation of resources across public programs, and fill gaps in understanding what works and what does not. But, the challenge in programme evaluation is how to measure the outcome of the programme and how to attribute the measured changes in well-being to the particular project or policy intervention, as the benefits are many and are influenced by other factors also.

The aim of programme evaluation is to measure the causal effect of a policy on some outcome of interest, on which it is expected to have an impact. Actually, the programme's causal effect is identified as the difference between the outcome of the units affected by the programme i.e. actual outcome and the outcome that these same units would have experienced had the programme not been implemented i.e. potential outcome. If it is possible to identify the potential outcome of the programme - the counterfactual - then it is easy to measure the causal effect. The fundamental problem is that it is impossible to observe the same unit in the two scenarios simultaneously, i.e. the scenarios of the programme implemented and not implemented. The counterfactual is an elusive one to produce or simulate. The impact evaluation literature has suggested certain methods to estimate the required counterfactual that will help understand whether programmes actually confers the desired benefits to the targeted people. The difference-in-difference (DID) is one of the programme evaluation methods that is widely used in empirical analyses.

### **Nonparametric Difference-in-Difference (DID) Method**

The DID is a nonparametric estimation method that does not require a priori specification of the distribution function. Rather the data itself reveals its empirical distribution. The DID is typically used to estimate the effect of specific intervention or treatment by comparing the changes in outcome over time between the population participating in the programme (the treatment group) and a population that is not (the control group). The DID makes use of pre/post-intervention data to obtain an appropriate counterfactual to estimate the causal effect. The difference in the before-and-after outcome for the treated group - the first difference - controls for factors that are constant over time in that group, since the comparison is within the same group. But the outside time-varying factors may also influence the outcome. The effect of these time-varying outside factors can be captured by measuring the before-and-after changes in the outcome for a (control) group that did not undergo the treatment but was exposed to the same set of environmental conditions - the second difference. The difference between the two differences eliminates the main source of bias in the estimate of the outcome of the programme. The DID approach thus combines the two counterfactuals, the before-and-after comparisons, that compare the outcomes of programme participants prior to and subsequent to the introduction of a programme, and with and without comparisons between the treated and not treated, to produce a better estimate of the counterfactual. The DID method gives an effective estimator of the average change in the key outcome of those exposed to the treatment.

Figure 2 illustrates the difference-in-difference method. The red line represents the treatment group who are participants and the green line is the comparison group who are non-participants in the programme. The blue vertical line is the cut-off point of the eligibility criterion for intervention. In the pre-intervention period, both the treatment and comparison groups are the same over time. But in the post-intervention period the direction of the treatment group changes while the comparison group is the same. This is because, as the intervention is for the treated people, after the implementation, the treated people undergo changes i.e. benefit from the programme, so the line rises upward. The dotted line represents the counterfactual, the outcome for the treated group without intervention. The difference between the dotted line and red line in the post-intervention period is the estimated causal impact of the programme.



**Figure 2.** Difference-in-difference approach to impact evaluation.

Let  $y$  be the outcome of the intervention programme and  $d$  be the treatment status,  $d=t$  the treatment group i.e. individuals who receive treatment and  $d=c$  the control group i.e. individuals who do not receive the treatment. Let individuals be observed in two time periods,  $t=0$  before the treatment group receives treatment i.e. pre-treatment, and  $t=1$  after the treatment group receives treatment i.e. post-treatment. Individuals will typically have two observations each, one pre-treatment and one post-treatment. Let  $y_0^d$  and  $y_1^d$  respectively be the outcomes for the treatment group before and after treatment and let  $y_0^c$  and  $y_1^c$  be the corresponding sample outcomes for the control group. The subscripts correspond to the time period and superscripts to the treatment status. For individual  $i$ , the potential outcomes are  $y_0^i$  and  $y_1^i$  the value of the outcome variable under non-treatment and treatment respectively. However, the problem is that both  $y_1^i$  and  $y_0^i$  are not observed simultaneously as the each individual is either in the control group or in the treatment group.

The solution to this problem is to use average outcomes. Let  $\bar{y}_0^d$  and  $\bar{y}_1^d$  respectively be the sample average of the outcomes for the treatment group before and after treatment and let  $\bar{y}_0^c$  and  $\bar{y}_1^c$  be the corresponding sample average of the outcomes for the control group. The average treatment effect is the difference in the mean (average) outcomes between units exposed to the treatment and units in the control:

$$ATE = \frac{1}{n} \sum (y_1^i - y_0^i) \quad (1)$$

where the summation occurs over all  $n$  individuals. Then, the causal effect or the true impact of the intervention programme is obtained as:

$$ATE = (\bar{y}_1^d - \bar{y}_0^d) - (\bar{y}_1^c - \bar{y}_0^c) = [E(\bar{y}_1^d) - E(\bar{y}_0^d)] - [E(\bar{y}_1^c) - E(\bar{y}_0^c)] \quad (2)$$

Empirically, the regression controlling for the treatment is specified as:

$$y_i = \alpha + \beta d_i + \gamma t_i + \delta(d_i * t_i) + \varepsilon_i \quad (3)$$

$$\text{That is, } Treatment\ outcome_i = \alpha + \beta * treated_i + \gamma * time_i + \delta * (treated_i * time_i) + \varepsilon_i \quad (4)$$

where the coefficients  $\beta$  is the treatment group-specific effect that accounts for the average permanent difference between treatment and control,  $\gamma$  is the time trend common to control and treatment groups, and  $\delta$  is the true effect of treatment. The causal effect of the intervention  $\delta$  is obtained as the difference-in-difference:

$$\delta = \alpha + \beta + \gamma + \delta - (\alpha + \beta) - (\alpha + \gamma - \gamma) = (\gamma + \delta) - (\gamma) \quad (5)$$

The  $\hat{\delta}$ , the DID value is the difference in average outcome in the treatment group before and after treatment minus the difference in average outcome in the control group before and after treatment.

### Empirical Results

The states of Andhra Pradesh, Kerala, Karnataka, Maharashtra, Tamil Nadu gave women equal inheritance rights over agricultural land prior to 2005. After the HSA amendment in 2005 nationwide making women eligible to inherit joint family property, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Madhya Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Telangana, Tripura, Uttaranchal, Uttar Pradesh and West Bengal implementation of the HSA amendment law. The method of DID impact evaluation is applied to these 24 states to see whether there has been any change in the decision making power of women after the implementation of the law.

From Table 2, it can be noted that more than one-fourth of Hindu married women have the right to decide alone each of the four decisions, in contrast to the one-tenth of Muslim women. Nearly two-thirds of women in rural areas have more autonomy in decision making compared to one-third of urban women. About one-third of illiterate women, but only one-tenth of higher educated women have a say in decisions. The figures reveal the economic role of rural women in household activities and the housewife status of women in urban areas. Not surprisingly, the decision making power of Muslim women within the household is rather limited.

**Table 2.** Women alone takes decision on specific issues (Percent).

| Characteristics |              | Own healthcare | Major household purchase | Visit her family and friends | Spending husband's earnings |
|-----------------|--------------|----------------|--------------------------|------------------------------|-----------------------------|
| Religion        | Hindu        | 80.7           | 80.8                     | 81.9                         | 75.2                        |
|                 | Muslim       | 19.2           | 19.1                     | 18.1                         | 24.8                        |
| Residence       | Urban        | 33.3           | 33.5                     | 32.2                         | 34.6                        |
|                 | Rural        | 66.7           | 66.5                     | 67.7                         | 65.4                        |
| Education       | Primary      | 14.0           | 15.9                     | 14.8                         | 15.2                        |
|                 | Secondary    | 42.1           | 40.2                     | 41.9                         | 42.7                        |
|                 | Higher       | 11.6           | 8.4                      | 10.7                         | 9.3                         |
|                 | No education | 33.4           | 35.5                     | 32.6                         | 32.8                        |

Table 3 reveals that more than half of women (59 percent) and more than two-thirds (68.6) of women do not own a house or land respectively. The proportion of women owning a house or land either alone or jointly is much less, clearly showing the poor status of women rights even after a decade of the implementation of the law.

**Table 3.** Percent of women who own a property.

| Property owned | No   | Alone | Jointly | Both |
|----------------|------|-------|---------|------|
| Land           | 68.4 | 7.1   | 14.1    | 10.4 |
| House          | 59.0 | 10.4  | 17.7    | 12.9 |

The treatment variable considered in this paper is the year 2005, as the HSAA 2005 is applicable only to Hindu women married after the implementation of the law in the 24 states. The outcome variables considered in this paper that represent women empowerment, autonomy and decision making power, are based on questions in the NFHS survey related to bargaining power within the marital household. They are defined as four dummy variables denoting whether the woman has a say in decision making on:

- (i) Her own healthcare,
- (ii) Major household purchases,

- (iii) Visit her family and friends, and
- (iv) Spending husband's earnings.

The empirical specification for the nonparametric DID estimation is:

$$y_{ist} = \alpha + \beta m_{ist} + \gamma s_t + \delta(s_t * m_{ist}) + \theta x_{ist} + \varepsilon_{ist} \quad (6)$$

where  $y_{ist}$  is binary outcome variable for woman  $i$  in state  $s$  married in year  $t$ ,  $s_t$  is the dummy for the states that implemented the HSAA after the 2005 amendment,  $m_{ist}$  is a dummy for whether the woman married after 2005,  $s_t * m_{ist}$  is a dummy if the woman belongs to the amended state and has been married after the amendment, and  $x_{ist}$  is a set of socioeconomic and demographic control variables. The  $y_{ist} = 1$  if the woman alone has a say with respect to decisions on her own health care, major household purchases, family and friends visits and spending husband earnings, and 0 otherwise. The coefficient of interest is  $\delta$  which captures the impact of the reform on the women married in the states after the 2005 amendment, compared to women married in the states that implemented the reform before 2005. The sign of the estimated coefficient is expected to be positive. The DID model is estimated separately for Hindus (including Jain, Sikhs, and Buddhists) and non-Hindus (including Muslims and Christians), as the legal reform is applicable only for Hindus.

Table 4 presents the definition and descriptive statistics of the variables used in the paper. Women belonging to the 24 states constitute 83 percent and the average age of women is 33. The proportion of women married after 2005 is 34 percent. With respect to the empowerment of women, 11 percent of women have a say on their own health care decisions, 7 percent have the right to make the decision on major household purchases, 8 percent have the right to decide on visits to family and friends, and 6 percent of women have the right to decide on how to spend husband earnings. About 62 percent of households have less than 4 members in the family, 13 percent of households are women-headed.

**Table 4.** Descriptive statistics of variables.

| Variable                     | Description                                                                                 | Mean  | Standard deviation | Obs.   |
|------------------------------|---------------------------------------------------------------------------------------------|-------|--------------------|--------|
| <b>Outcome variables</b>     |                                                                                             |       |                    |        |
| Own healthcare               | If woman alone has a say = 1, 0 otherwise                                                   | 0.11  | 0.31               | 65695  |
| Major household purchases    | If woman alone has a say = 1, 0 otherwise                                                   | 0.07  | 0.25               | 65695  |
| Visits to family and friends | If woman alone has a say = 1, 0 otherwise                                                   | 0.08  | 0.27               | 65695  |
| Spending husband's earnings  | If woman alone has a say = 1, 0 otherwise                                                   | 0.06  | 0.24               | 65695  |
| <b>Treatment variables</b>   |                                                                                             |       |                    |        |
| Year married                 | If married after 2005 = 1, 0 otherwise                                                      | 0.34  | 0.47               | 403521 |
| State                        | If woman belongs to the states that implemented the HSA amendment act 2005 = 1, 0 otherwise | 0.83  | 0.37               | 447281 |
| Religion                     | If woman is Hindu (including Jain, Sikhs, and Buddhists) = 1, 0 otherwise                   | 0.80  | 0.40               | 538318 |
| <b>Control variables</b>     |                                                                                             |       |                    |        |
| Age                          | Age of woman (years)                                                                        | 33.00 | 8.48               | 447281 |
| Number of household members  | If no. of household members is less than 4 = 1, 0 otherwise                                 | 0.62  | 0.48               | 440180 |
| Community                    | If woman belongs to non-scheduled caste/tribe = 1, 0 otherwise                              | 0.90  | 0.29               | 438789 |
| Household head               | If woman is head of family = 1, 0 otherwise                                                 | 0.13  | 0.34               | 440180 |

Table 5 presents the difference-in-difference estimate of the causal effect of being exposed to the amended law on each of the outcome variables. The coefficient of  $s_t * m_{ist}$  is  $\beta_3$  from the specification captures. The pre-reform average level autonomy status of the Hindu women is



significantly lower than the post-reform autonomy i.e. there has been a significant increase in the decision making power of women after the amendment of HSA in 2005 in the 24 states. Hindu women married post-reform in states that implemented the HSAA 2005 are significantly more likely to have a say in their healthcare and other household decisions. The HSAA 2005 led to a statistically significant increase of 2 percent that a woman alone has a say in her decisions on her health care, visit family and friends and spending husband's earnings. It also caused a statistically significant increase of 9 percent that a woman alone has a say in major household purchases.

Adding covariates also do not alter the estimate of the causal effect of the legal reform on women decision making power in the marital household, as Tables 6 and 7 reveals. With controls, there has not been any change in own health care, major household purchase and visits to family and friends decisions. There has been a 1 percent statistically significant increase in women having a say on spending husband's earnings in urban Hindu households. Table 5 shows that rural women have an additional 1 percent autonomy in decision making compared to urban women in spending their husband's earnings. Thus, the amended inheritance rights regime in 24 states improved the autonomy status of the Hindu women married post-2005, both in urban and rural areas of India.

**Table 5.** DID estimate of the impact of women property rights reform on women decision making power in the marital household.

| Variable                      | Own health care    | Major household purchase | Visits to family and friends | Spending husband's earnings |
|-------------------------------|--------------------|--------------------------|------------------------------|-----------------------------|
| Married after HSAA 2005       | 0.027**<br>(0.002) | 0.291**<br>(0.011)       | 0.033**<br>(0.003)           | 0.032**<br>(0.002)          |
| Treatment ( $s_t * m_{ist}$ ) | 0.023**<br>(0.006) | 0.092**<br>(0.026)       | 0.019**<br>(0.007)           | 0.026**<br>(0.006)          |
| R-square                      | 0.03               | 0.03                     | 0.09                         | 0.02                        |
| Observations                  | 63886              |                          |                              |                             |

Note: Standard errors in parentheses. \*\* significant at 5 percent level.

**Table 6.** DID estimate of the impact of women property rights reform on urban Hindu women decision making power.

| Variable                      | Own health care     | Major household purchase | Visits to family and friends | Spending husband's earnings |
|-------------------------------|---------------------|--------------------------|------------------------------|-----------------------------|
| Married after HSAA 2005       | 0.031**<br>(0.005)  | 0.252**<br>(0.004)       | 0.039**<br>(0.006)           | 0.036**<br>(0.005)          |
| Treatment ( $s_t * m_{ist}$ ) | 0.027**<br>(0.006)  | 0.029**<br>(0.005)       | 0.024**<br>(0.007)           | 0.102**<br>(0.026)          |
| Residence                     | 0.0131**<br>(0.003) | 0.016**<br>(0.002)       | 0.014**<br>(0.002)           | -0.077**<br>(0.010)         |
| Community                     | -0.007<br>(0.004)   | -0.003<br>(0.003)        | -0.005<br>(0.004)            | 0.038<br>(0.016)            |
| Number of household members   | -0.014**<br>(0.003) | -0.021**<br>(0.002)      | -0.017**<br>(0.002)          | 0.20**<br>(0.010)           |
| Household head                | 0.100**<br>(0.004)  | 0.069**<br>(0.003)       | 0.079**<br>(0.003)           | -0.084**<br>(0.015)         |
| R-square                      | 0.21                | 0.22                     | 0.20                         | 0.21                        |

Note: Standard errors in parentheses. \*\* significant at 5 percent level.

Though the legal reform pertains only to the Hindu families, there may be some spillover effect of the law on other religious communities also, as there are separate inheritance laws for non-Hindu women. Table 8 presents the difference-in-difference estimate of the causal effect of HSAA 2005 on the decision making roles among non-Hindu women married post-2005 in these 24 states. The estimated results show that there has been a slight increase, but relatively less compared to that of

treated Hindu women, in women decision making power in some household decisions. There has been only a 1 percent increase in non-Hindu women having a say in their own health care decision, 2 percent increase in major household purchase decision, 3 percent increase in autonomy to spending husband's earnings. However, there has been no increase in women's decision on visits to family and friends, married post-HSAA 2005. The results reveal that Hindu women enjoy greater autonomy compared to non-Hindu women.

**Table 7.** DID estimate of the impact of women property rights reform on Rural Hindu Women decision making power.

| Variable                      | Own health care     | Major household purchase | Visits to family and friends | Spending husband's earnings |
|-------------------------------|---------------------|--------------------------|------------------------------|-----------------------------|
| Treatment ( $s_t * m_{ist}$ ) | 0.025**<br>(0.007)  | 0.026**<br>(0.006)       | 0.022**<br>(0.006)           | 0.117**<br>(0.026)          |
| Residence                     | 0.012**<br>(0.003)  | 0.016**<br>(0.002)       | 0.014**<br>(0.002)           | -0.077**<br>(0.011)         |
| Community                     | -0.007<br>(0.004)   | -0.003<br>(0.003)        | -0.005<br>(0.004)            | 0.035<br>(0.016)            |
| Number of household members   | -0.015**<br>(0.003) | -0.021**<br>(0.002)      | -0.017**<br>(0.002)          | 0.203**<br>(0.010)          |
| Household head                | 0.100**<br>(0.004)  | 0.069**<br>(0.003)       | 0.079**<br>(0.003)           | -0.082**<br>(0.015)         |
| R-square                      | 0.23                | 0.22                     | 0.20                         | 0.21                        |

Note: Standard errors in parentheses. \*\* significant at 5 percent level.

**Table 8.** DID estimate of the impact of women property rights reform on Non-Hindu women decision making power.

| Variable                      | Own health care     | Major household purchase | Visits to family and friends | Spending husband's earnings |
|-------------------------------|---------------------|--------------------------|------------------------------|-----------------------------|
| Treatment ( $s_t * m_{ist}$ ) | 0.012<br>(0.015)    | 0.024<br>(0.015)         | 0.001**<br>(0.014)           | 0.033<br>(0.055)            |
| Residence                     | 0.014**<br>(0.005)  | 0.007**<br>(0.005)       | 0.011**<br>(0.005)           | -0.062**<br>(0.019)         |
| Community                     | -0.005<br>(0.006)   | -0.073**<br>(0.005)      | -0.017<br>(0.005)            | 0.313**<br>(0.02)           |
| Number of household members   | -0.011**<br>(0.005) | -0.020**<br>(0.005)      | -0.016**<br>(0.005)          | 0.136**<br>(0.020)          |
| Household head                | 0.122**<br>(0.014)  | 0.109**<br>(0.007)       | 0.094**<br>(0.007)           | -0.107**<br>(0.027)         |
| R-square                      | 0.33                | 0.34                     | 0.27                         | 0.30                        |
| Observations                  | 14712               |                          |                              |                             |

Note: Standard errors in parentheses. \*\*significant at 5 percent level.

## CONCLUSION

This paper examines the causal effect of women's inheritance rights to ancestral property on their empowerment and participation in various household decisions within the marital household. The Hindu Succession Act 1956 entitles married daughters to have an equal share in their father's property. Five Indian states have reformed the law to bestow equal property rights in the ancestral property among all siblings. Expanding this nationwide, the Hindu Succession Amendment Act 2005 provides an equal share in the ancestral property also including land along with their brothers throughout the country. Only if she was married after the amendment was passed would she be eligible to inherit shares as per the new rule of the Hindu Succession Act. Hence, this paper has examined women empowerment in the 24 states that implemented the law post-2005. The exposure to the law amendment was jointly determined by the year of marriage and the 24 states that the woman

belonged to. Four decision indicators are used to measure the decision making power of women within the marital household. The data used is derived from the 2015-16 NFHS-4. The causal effect of the legal reform on property rights to women is estimated by the nonparametric difference-in-difference estimation method.

The empirical results of this paper show that granting inheritance rights to women at par with their brothers increases the degree of autonomy in their marital families. There has been a significant increase in women alone having a say in household decisions. The legal reform has increased the decision making power of women with respect to their health care, visit family and friends and major household purchases by 2 percent, and more importantly by 9 percent on spending husband's earnings among post-2005 married women in the 24 states. Non-Hindu women also experienced an increase in decision making power but not as much as Hindu women, as they have their own laws of inheritance. The findings of this paper point to the importance of gender equity in land rights where women's inheritance rights enhance their status and decision-making power in the marital household. Overall, the estimated results reveal that women enjoy greater autonomy and have more say in household decisions as a result of the legal entitlement to equal inheritance rights in ancestral property post-HSAA 2005 in India.

### Conflicts of Interests

The author declares no conflict of interest.

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