Left Behind or Left Ahead?

Implications of Male Migration on Women's Political Behavior in India

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Abstract

While internal migration is more pervasive than international migration, its political consequences remain understudied. How does seasonal male-dominated migration from rural to urban areas, a key form of internal migration in the Global South, impact female political behavior? I study this in the context of India which has over 100 million internal migrants and where at least 18 million women spend prolonged periods of time in the absence of their migrant husbands. I use a nationally representative panel of 24,000 respondents to compare women whose husbands are migrants with those having co-resident husbands. I explain the underlying mechanisms using 20 qualitative interviews. I find that migration induced seasonal male absence creates a temporary shock to household equilibrium that empowers women politically both, within and outside the household. While this is encouraging, the effects do not last once migrants return home implying that seasonality in migration also drives women's political empowerment.

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1 Introduction

The COVID-19 crisis has exposed the dominance of an invisible form of migration prevalent in the low-income countries – seasonal internal migration from rural to urban areas. The political consequences of this form of migration have been far less studied than that of international migration (Kapur 2014; Burgess 2012; Goodman and Hiskey 2008). A particularly important feature of this migration, which is shared by many forms of international migration (Piper 2006), is that it is male dominated. It is therefore striking that the impact of migration – internal or international – on women's political lives remains largely ignored. In this article I provide the first study of the gendered political implications of internal migration in the Global South.

Existing theories on female political participation fall within three categories. According to resource-based explanations, political participation is a function of access to individual resources like income, property, education and civic skills (Burns et al. 2001; Verba et al. 1995). As women are less likely to have access to these resources relative to men, they also participate less in politics as a consequence. A second set of explanations highlight the role of societal factors like economic development, rising labor force participation, and state policies in explaining women's participation (Inglehart and Norris 2000; Iversen et al. 2010). Economic development brings with it egalitarian gender attitudes that empower women politically. Finally, a third and growing body of work has revived

the role of the household in determining political participation. It argues that men continue to participate in politics at higher levels than women despite economic development because household inequities continue to persist (Khan 2021; Prillaman 2019; Bernhard et al. 2020; Brulé 2020; Brulé and Gaikwad 2021; Chhibber 2002). However, this particular strand of the literature has yet to consider how the composition of households in itself can affect political participation. Seasonal male migration is an event that can alter household structures. Explaining its role in facilitating women's political empowerment is crucial to our understanding of this phenomenon in the developing world.

My contribution lies in putting the focus on the household structure itself by specifically analyzing the role of mere absence of male family members on women's political empowerment. Previous studies on this topic have identified drivers of female political participation like education, employment, policy reform among others. Unlike these long lasting drivers of women's participation, male migration is a temporary and external shock that involves the absence of primary gatekeepers from a woman's life which, in patriarchal settings, I argue creates conditions women's empowerment.

I hypothesize that the absence of their migrant husbands will lead to women's *substantive political empowerment* which is characterized by four dimensions or effects. In addition to an increase in political participation I anticipate three other effects. I expect to observe an *exposure effect* arising from a rise in mobility and information ex-

posure. Women are entrusted with household responsibilities previously reserved for men (Hondagneu-Sotelo 1992; Desai and Banerji 2008; Jetley 1987; Gulati et al. 1993) which requires them to traverse local boundaries. This, I argue, exposes them to information and heterogeneous networks that are crucial for political participation. I also anticipate a *gatekeeper effect* as male migration changes household composition particularly in patriarchal societies where men wield significant control on women's lives (Jayachandran 2015). In their absence I expect that women will have a greater say in crucial matters related to the household (Yabiku et al. 2010; Hadi 2001; Paris et al. 2005). This will influence resource distribution in the household which is related to political participation. I also suppose a *status effect* in that women with migrant husbands will see an improvement in their relative social and financial status vis-à-vis other members in the household (Boehm 2008). However, the circular and temporary nature of internal migration can make it difficult for women to experience empowerment since they are not exposed to long-term male absence in this case. Moreover, household hierarchies in patriarchal societies can (Desai and Banerji 2008) can affect the persistence and magnitude of women's substantive political empowerment.

I specifically refrain from using conventional forms of participation like voting. Instead I focus on everyday forms of active political engagement which defines the practice of politics in poor countries (Kruks-Wisner 2011). Elections are periodic events that are conducted on a massive scale for all levels of government. Men are more likely to return

for these one-off big events than, for example, to carry out routine interactions with officials to access entitlements. Therefore, the gender gap in participation is less likely to be observed for voting. However, it is in everyday matters that their absence is acutely felt. Citizens routinely encounter the state through social welfare programs run by the government in rural and urban areas (Auerbach and Kruks-Wisner 2020). Therefore in this study of women's political empowerment I measure how the absence of men affects active political participation or their propensity to express political opinions, engage in civic matters and have knowledge of their entitlements instead of one off acts like voting.

Methodologically, this article makes an important contribution to the study of women in sending regions. I situate my study in India which has over 100 million internal migrants.[1] 85% of these migrants are male and an estimated 18 million women spend

[1]The Census of India defines a migrant is as follows: When a person is enumerated in census at a different place than his/her place of birth, she/he is considered a migrant". Thus, it encompasses individuals who have migrated for employment, business, education, marriage, or individuals who moved after birth and with family. I calculate the number of individuals who moved for employment and business to arrive at this figure. This includes both, inter and intra-state migration. Deshingkar and Akter (2009) use the National Sample Survey to estimate the number of migrants employed across various sectors in India. See Table 4-5,p. 35-39.

prolonged periods of time in the absence of their migrant husbands.[2][3] Self-selection into who migrates has complicated efforts to rigorously identify the causal impact of migration on a variety of social, economic, and political outcomes. Existing studies on women's lives in sending regions in India are based on small samples, case studies (Gulati et al. 1993; Mascarenhas-Keyes et al. 1990; Paris et al. 2005; Dandekar 1986) or cross-sections (Desai and Banerji 2008) which can yield biased estimates. I overcome this limitation by using both rounds (2005-06 and 2011-12) of the Indian Human Development Survey (IHDS), a nationally representative panel survey of 41,000 households to analyze women's behavior both before and after men migrate. I use the household roster to develop a difference-in-differences (DD) framework that compares women whose husbands are migrants only at the time of the second wave of the survey with women who always co-resided with their husbands. I also expand on our understanding of political participation in the light of male migration using 20 qualitative interviews with elites including village heads, front line health workers, and resident men and women in Bihar – the state with the second highest male out migration in India.

[2]Whether we were to rely on the Census (Tumbe 2015), National Sample Survey (NSS) (Mazumdar et al. 2013) (Table 2, p. 55) or smaller studies (Paris et al. 2005) (Table 4, p. 2524), men make up close to 80-85% of all economic migrants.

[3]Calculated using IHDS (2011-12) where wives of migrants can be identified from the sample. Sampling weights were used to derive estimates at the national level.

This multi method study produces several key results. I find that migration empowers women both, within and outside the household despite the temporary nature of circular internal migration. Women experience political empowerment across all dimensions of active participation under study. Those with migrant husbands experience a significantly higher increase in their autonomy over mobility. Even in the presence of stringent household hierarchies, wives of migrants see significant gains in managing decision-making and their relative status within the household. While these results are encouraging, the short-term nature of circular migration means that the effects are short-lived. That is, the effects on follow the seasonality of male migration.

2 Internal Male Migration, Household Structures and Female Political Participation

Seasonal internal migration from rural to urban areas is a dominant form of migration in the Global South. Internal migration is more prevalent than international migration.[4] Yet, its political consequences remain mostly understudied. In this article, I put the focus on this ubiquitous yet often ignored form of migration and draw attention to how it influences the political lives of those in sending communities. Additionally, I study how

[4]According to the World Migration Report (2018), "Internal migration is even more prevalent, with the most recent global estimate (from UNDP 2009) indicating that more than 740 million people had migrated within their own country of birth."

the temporary nature of internal migration under consideration makes it a unique driver of political participation.

Internal migration, like many forms of international migration, is a male dominated phenomenon. Yet it is striking that the gendered political consequences of migration – internal or international – in sending communities remain largely overlooked. Existing scholarship on politics in migrant sending communities across the world has focused on two outcomes. One, a large body of work has studied the role of migrants in influencing attitudes, institutions and political norms in sending communities (Kapur 2014; Burgess 2012; Levitt 1998). Two, other related scholarship has focused on the political behavior of individuals in these communities (Pérez-Armendáriz and Crow 2010; Goodman and Hiskey 2008). However, they have not considered these outcomes through a gendered lens. In this article I provide a systematic study of political participation of women in migrant sending regions in the context of India.

Most existing research on migration and politics in India is focused on the dynamics within destination regions. The temporary nature of migration in India is exacerbated by the social and political exclusion migrants face in destination regions (Bhavnani and Lacina 2017; Thachil 2017; Gaikwad and Nellis 2020a). This makes it hard for them to assimilate when they move to new cities (Thachil 2020). Bureaucratic processes also prove onerous and come in the way of their participation in destination region politics

(Gaikwad and Nellis 2020b). In this article I shift the focus to the sending regions to understand how the temporary nature of migration influences the political behavior of those left behind.

With this analysis I highlight an obvious but highly underappreciated fact of migration – that it entails 'male absence' from patriarchal families, which has implications on political lives of women. I argue that in patriarchal settings where men are gatekeepers of women's lives (Drèze and Sen 2004; Jayachandran 2015; De Haan 1997), male migration disrupts household structures to empower women within and outside the household. A growing body of work has identified household composition and resource allocation as central to women's political participation (Brulé and Gaikwad 2021; Khan 2021; Bernhard et al. 2020). A change in relative power within the household is crucial to facilitate women's political participation (Prillaman 2019; Brulé 2020) especially in settings where strong norms relegate women to the household and restrict mobility (Jayachandran 2015). I hypothesize that in the absence of able-bodied male members due to migration empowers women along four different dimensions that characterize her *substantive political empowerment*.

First, I expect women to experience an exposure effect driven by an increase in mobility. In the absence of men, women are expected to take on responsibilities previously reserved for them. They experience higher mobility (Khaled 1995; Yabiku et al. 2010)

as they traverse local boundaries to do grocery shopping (Desai and Banerji 2008), visit health care centers, farms (Paris et al. 2005), and interact with economic and political institutions (Abadan-Unat 1977; Gulati et al. 1993). Stepping outside to secure entitlements from various social welfare programs for the family in the absence of their husbands also increases their knowledge about processes, services, and entitlements. Additionally, due to an increase in mobility women are likely to encounter a wider network of individuals. Interacting with individuals outside their immediate family increases their knowledge about local politics. Therefore, in this context higher mobility is an indicator of greater substantive political empowerment.

Second, I anticipate that women will experience a gatekeeper effect. When men migrate, women are left to take care of the household in the absence of their husbands or primary gatekeepers. I hypothesize that women in migrant households will partake more equally in decisions taken within the household. They will have a greater say in crucial matters related to household spending, children, health of family members, and marriage (Boehm 2008; Yabiku et al. 2010; Desai and Banerji 2008). Partaking equally in decision-making is a part of women's substantive political empowerment since it has implications for household distribution of resources that relate to political participation (Brulé 2020). Women in migrant households however might not always live in nuclear families (Gulati et al. 1993). Therefore, in the presence of other men and older women in the household, wives of migrants are likely to experience countervailing effects (Desai

and Banerji 2008) that suppress the gatekeeper effect.

I also expect a status effect in the form of a feedback loop that drives women's political participation. Women undertake responsibilities in the absence of their migrant husbands, they secure wage employment (Desai and Banerji 2008), mange farms (Paris et al. 2005) and gain financial autonomy. This exposes the family to progressive norms as they see women occupying positions previously reserved for men. The exposure gives rise to greater status within the household vis-à-vis other members. However, hierarchies within the household are hard to dismantle, especially in joint families. Due to the sticky nature of norms, women are likely to experience countervailing forces that will mediate the magnitude of the effect. [5]

Finally, I expect women in migrant households be more engaged in active forms of non-electoral political participation vis-à-vis women in non-migrant households. Voting is a one-time political activity and not an adequate measure of empowerment. Men are also more likely to return for an event like election which means the gender gap in participation is smaller for voting in the first place. Therefore, I measure political empowerment in three ways – 1) having knowledge of entitlements; 2) expressing political autonomy

[5] Desai and Banerji (2008) also find wives of migrants in joint families experience empowerment levels that are greater than non-migrant households even if lower than women in nuclear families.

by being able to discuss political opinions within the household; and 3) and engaging in public meetings on matters that concern an individual or the household. These outcomes of active political participation capture how women experience more substantive political empowerment within and outside the household.

Practice of politics in poor countries is dominated by interactions with the state (Kruks-Wisner 2011). Citizens in rural and urban areas encounter the state as they petition it for local goods and services (Auerbach and Kruks-Wisner 2020). Recipients of welfare programs on child nutrition and education, and maternal health are often women. Entitlements from these programs like food supplements, rations, health-checkups, immunizations among others are delivered through women. Knowledge of these services and entitlements is a crucial form of political participation as it also affects their overall well-being.

Households often make decisions about voting as one unit. Gender hierarchies are hard to shake off as women are less likely to participate in political decision-making in the household (Khan 2021; Prillaman 2019). The ability to confidently engage in politics within the household is an expression of autonomy, unlike the simple act of voting alone which in the Indian case is also driven by pressures from the state.[6] Moreover, women

[6]The Election Comission of India implemented Systematic Voter Education and Electorate Participation (SVEEP) program in 2009. One of the main goals of the program

are often confined to the household thus their political expression in settings like public meetings and other forms of political groups is a signal of empowerment. Therefore, in this analysis I follow recent scholarship on India (Kruks-Wisner 2011; Auerbach 2015) and move away from traditional outcomes of participation to study sustained and active political forms of participation that empower women in their everyday lives.

Each of the four dimensions discussed above merit individual examination for two reasons. First, having four different outcomes enables us to disentangle the nuances of women's political empowerment. Empowerment in one arena is not likely to be signal empowerment in another. For instance, active political engagement might not be accompanied by changes in intra-household decision-making but rather gains in financial status. Two, by studying them individually we can also understand how these measures perform in the context of male migration. That is, we can identify if there is something about migration that impacts the dimensions of women's substantial empowerment differently.

While both, internal and international migration, are male-dominated the circular nature of internal migration sets it apart from the latter. This difference can have consequences for political participation of those in sending communities. Migrants leave seasonally for a couple of months to a year and return home periodically during this time

was to increase female turnout which is also when turnout rates among women saw a sharp increase.

(Tumbe 2015). They maintain close ties with the community and are regularly in touch with their families. Unlike international migration where men are away for long periods of time (as seen even in the migration to the Middle-East from the state of Kerala, India), seasonal absence would mean that a large one time absence effect does not kick-in in this scenario. This becomes particularly salient when we think about changes in women's substantive empowerment. For a theory centered around male absence, it is likely that the temporary nature of this absence will reduce the overall size of the effect or the extent of empowerment that women experience when their husbands are away.

The implications of the temporary nature of internal migration are not limited to just the size of the effect but also the persistence of the effect. Other drivers of participation like education or labor force participation are lasting internalized changes in women's lives (Verba et al. 1995). However, male migration as a channel of political empowerment is external and temporary as men return home periodically. That is, the absence of male members is a temporary shock to traditional household structures that disrupts the equilibrium only until men *return* home. Women's ability to experience empowerment occurs in the period of absence. Therefore, the persistence of the effects upon their return needs further examination in the Indian context.

In other contexts there is mixed evidence on how a migrant husband's return affects women's empowerment. In Mexico (Boehm 2008) and Mozambique (Yabiku et al.

2010) women see a sustained increase in their autonomy even after their migrant husbands return. However, Archambault (2010) finds that women in Tanzania must conform to the expectations of their husbands once they return. Similarly, in her ethnographic study of women in migrant sending communities in Cairo, Brink (1991) finds that men and women return to their separate roles once men are back home. In some cases the duration of exposure to migration also has no effect on women's empowerment (Hadi 2001)

These findings lead to the final question of interest in this study – do the consequences of migration continue to have an impact on political empowerment when women experience it more regularly and once men return home? Social norms are sticky and salient across the country and traditional division of roles between spouses is likely to be re-established once men return home. In their presence it is less likely that women will continue to be responsible for tasks reserved for men. Based on previous work in India (Gulati et al. 1993; Jetley 1987; Banerjee 1981) we also know that women experience added household and financial burden in the absence of their husbands. A husband's return is likely to take some of the burden off a wife's shoulders. On the other hand, as women acquire knowledge about local processes, amenities and services (respondent 11, local male, interviewed August 3, 2020) it is likely that even after their return men will rely on their wives to get certain things. Mixed evidence on this front warrants a systematic study of how women's substantive empowerment is affected once their husbands return and also by prolonged exposure to intermittent migration.

3 Setting and Research Design

3.1 Background

Migration: Migrants are invisible contributors to the economy and often under counted in the Indian context.[7] Migration is predominant across the country and almost 20% of rural households have at least one economic migrant in their family (Tumbe 2015). According to the Census and smaller studies there are at least 100 million economic migrants moving from rural to urban areas within the country for employment related reasons (Deshingkar and Akter 2009; Mazumdar et al. 2013; Economic Survey of India (2016-17)). About 85% of economic migrants in India are male and they leave behind their wives and families when they migrate (Mazumdar et al. 2013).[8] Estimates from different sources including the Census, IHDS and other national surveys suggest that 92% of migrants move within the country i.e. they are internal migrants. Among internal migrants, intra-state migration is more common (61%) than inter-state migration because of the restrictions on social welfare schemes outside their home states (Kone et al. 2018).

[7] In this study I am only interested in economic migrants i.e. those that move for employment related reasons. All statistics presented here pertain to economic migrants. When I mention migrants, I mean economic migrants unless specified otherwise.

[8] This is not to say that women do not migrate. Women in India are the largest group of migrants but they mostly migrate for marriage. They comprise of only 15% of migrants moving for economic reasons.

The primary evidence collected from my qualitative interviews also corroborate the seasonal nature of internal migration in India. On average, respondents mentioned that migrants were away for anywhere between 1-8 months each year spending a minimum of 1-2 months at home if not more (See Figure A.2 and Table A2). The estimates from the IHDS match up to estimates from NSS at the national level (See **??** where I provide descriptive statistics on migration using both surveys).

Female political participation in India: Voter turnout among women in India has been on the rise since the mid-00s. The gender gap in turnout finally closed in the last national election. Like in other parts of the world, it continues to persist in other forms of non-electoral participation (Burns et al. 2001; Desposato and Norrander 2009). As per the IHDS the participation rates at public meetings is 29% for men and 8% of women. National public opinion data collected during elections shows that women are only 6-15% likely to attend campaign meetings and participate in door-door canvassing (Kumar and Gupta 2015). Prillaman (2019) finds that men are almost 35% more likely than women to contact their local elected representatives and men are 15% more likely to make claims for services from them. Voting is a one time activity and in this article I focus on non-electoral forms of participation which are more integral to day to day lives of most people in India.

3.2 Research Design

Self-selection into who migrates has complicated efforts to rigorously identify the causal impact of migration on a variety of social, economic, and political outcomes. Households that engage in migration might fundamentally differ from non-migrant households. That is, observable and unobservable variables that are related to migration might also affect women's behavior. Randomizing migration is almost impossible, and studies often rely on observational data. In order to get around the issue of endogeneity, several prior studies use instrumental variables or use a panel dataset to study the impact of migration in both sending and destination regions (McKenzie et al. 2010).

I leverage the panel structure of the IHDS within a difference-in-differences (DD) framework. Within a panel I can track the same individuals over time making it possible to account for unobserved time-invariant factors. The IHDS collects data on the current migration status of each household member. With this information I am able to identify male members of a household who were migrants at the time of the second wave. I use it to *compare women whose husbands were migrants in the second wave (treatment) with women who continue to reside with their husbands in both waves (control).*

I also conducted 20 phone interviews with elites including village heads, employment brokers, female frontline workers, and local men and women residing sending villages

in Bihar, India – the state with the second highest male out-migration in India. I use this data to provide a descriptive account of the political participation repertoires that women in migrant sending communities engage in. Additionally, I use it to explain the mechanisms that drive women's political participation in the context of male migration.

3.2.1 Qualitative Data

The qualitative data for this analysis was collected from Araria and Katihar districts in Bihar, India. These interviews were conducted between July and September, 2020 over the phone in light of the COVID-19 pandemic. I chose to conduct the interviews in Bihar for two reasons. One, Bihar has the second highest rate of male migration in India (Census of India) which makes it easier to discuss both individual and community level effects of migration. Two, I wanted to conduct the interviews on my own without the help of a translator. I am a native Hindi speaker which is also the most widely spoken language in Bihar.

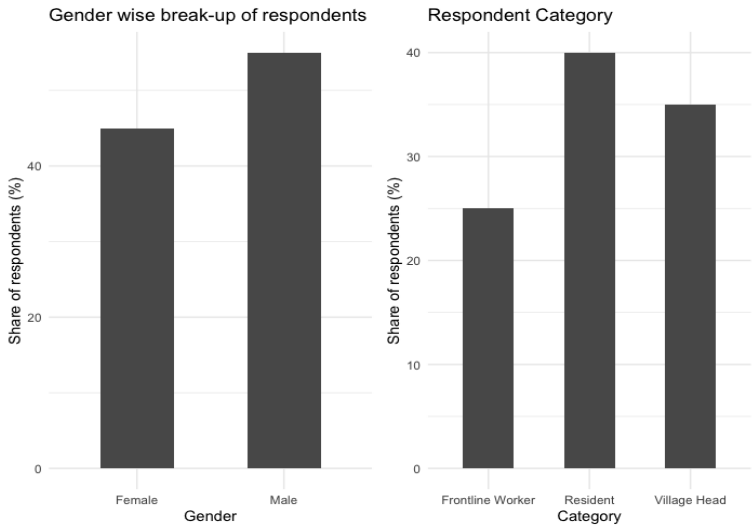

Figure 1: Details of interview respondents; N=20

The main respondents for the interviews included *mukhiyas* or elected village heads, frontline workers like health workers, and resident men and women. I leveraged two strategies to sample and contact respondents. With the help of local field surveyors I first sampled and contacted village heads from a roster of elected village level representatives available online on the State Election Commission website. After making initial contact, I sought an appointment for an interview. Similarly, from a list of Accredited Social Health Activists (ASHAs) or frontline health workers, I drew a sample of health workers to contact and interview. I built a relationship with three workers through repeated conversations during the three month period. ASHA workers are well connected within the community. I used their help to contact resident women in the village. The ASHA workers informed the interviewee and forwarded their contact details (after seeking consent to do so) to me.

The interviews were conducted over Skype. I made calls to their mobile numbers via Skype since I was calling from the United States. The interviews were conducted in Hindi and lasted anywhere between 30-60 minutes. Interviewing women was particularly difficult since many did not own their own mobile phones. Moreover, they are required to carry out most of the unpaid labour and care work within the household. These tasks keep them busy through the day leaving very small windows of availability.

3.2.2 Quantitative Data

The IHDS (Desai and Vanneman 2005) is a nationally representative panel of 125,000 individuals in over 40,000 households tracked over two time periods (2005-06 and 2011-12). IHDS-II was able to re-interview 83% of the original households from IHDS-I. This survey collects detailed information on health, education, income, migration and employment of all members in the household. The survey is administered through two questionnaires. The first captures household information on different dimensions. The second is directed at one ever-married woman between 15-49 years in the household and collects information about various dimensions of gender relations within the household and the community, in addition to information about mobility, health, fertility and activities outside the household.[9]

[9]Ever married women are women that are currently married, divorced or widowed.

Migrant Husband (IHDS-I)	Migrant Husband (IHDS-II)		Total
	No	Yes	
No	23 128	828	23 956
Yes	268	292	560
Total	23 396	1120	24 516

Table 1: Eligible women interviewed in both rounds split by whether or not they have a migrant husband. Divorced/widowed women are excluded from this table. In my analysis I compare women whose husbands turned migrants between waves with those with co-resident husbands (i.e. the two groups in the first row).

In this analysis I make use of the women's questionnaire administered to over 24,000 women in each round. The migration information in the household roster of the survey was used to identify wives of migrants interviewed for the women's questionnaire in both rounds. A cross tab of the women in the IHDS dataset split by whether or not they have a migrant husband in each round is given in Table 1.

I leverage the variation in husband's migrant status between wave one and two to conduct a difference in differences analysis using this data set. As per Table 1 there are 828 women out of 23,956 whose husbands turn migrants between round one and two. I compare them with women that reside with their husbands in both rounds in order to measure the impact of migration on women's lives (828 v/s 23128). This gives us 47,912

observations in total (over both rounds). The regression equation is as follows:

$$y_{it} = \alpha + MigH_i\beta_1 + Year_t\beta_2 + MigH_i * Year_t\beta_3 + X_{it}\beta_4 + \epsilon_{it} \quad (1)$$

y_{it} is the indicator of women's mobility/decision-making/socio-financial status/political participation (from Table A1). $MigH_i$ is the treatment dummy (1 for women whose husbands turn migrants by wave 2, 0 otherwise), $year_t$ is a period dummy (1 for the second wave, 0 otherwise) and X_{it} includes controls for wealth, education, social norms in the community. β_3 is the main estimator of interest since it captures how the difference in means for the treatment and control groups.

3.2.3 Dependent Variable

In order to assess the changes in women's lives I create four indices that capture women's decision making power in the household, social and financial status, mobility, and political participation (knowledge of services, political discussion and civic engagement).

The indices are built from questions included in Table A1. Each question given in the table is coded as a binary variable that takes the value 0 or 1. For example, the response of a woman who says she has a say in the purchase of luxury items will be coded as 1 else 0 and so on. Responses to each question within an index are first added before being standardized to a score between 0 and 1 to aid interpretation.

The *mobility index* captures the control that women have over making short distance trips. This index sets the stage for the *exposure effect*. Gender norms prohibit women from travelling too far without permission. Male members often do most of the work outside the household. In the absence of men, it is expected that this restriction is lifted and women experience an ability to exercise autonomy in mobility.

The *decision-making index* measures the *gatekeeper effect* i.e the say that women have in day to day decisions within the household. Men wield considerable control over women's lives. Male absence due to migration disrupts the status quo. Decision-making power in household matters can extend to politics as well since household often take political decisions as a unit (Prillaman 2019; Khan 2021).

Socio-financial standing index measures a woman's standing vis-à-vis other members in the household or the *status effect*. In the absence of able bodied male members due to migration, women are entrusted with responsibilities previously reserved for men. Seeing women take on these responsibilities is likely to change perceptions about their status within the household.

The *political participation index* measures women's political discussion, and knowledge of services and entitlements.

Political discussion can affect political participation (Huckfeldt and Sprague, 1995). Our immediate social circle comprising for family, friends, colleagues make up our political discussion networks. Political discussions within the network are informal, conversational (Klofstad, 2010) and at times persuasive (Schaffer and Baker, 2015). Political discussion can also considered as a measure of political awareness. With this outcome I measure a woman's ability to *discuss* politics with their husbands in a knowledgeable way. They get a score of 1 if they (always or often) discuss politics with their husbands, and 0 if they never do.

Knowledge of services and entitlements is a necessity when individuals are constantly interacting with the state in order to access government programs (Kruks-Wisner, 2018). The the Integrated Child Development Scheme (ICDS) is an important early childhood health and development program. Being able to identify ICDS services is an important indicator of women's knowledge about their entitlements since it is particularly targeted towards mothers of young children. Thus, I also this measure of knowledge of entitlements related to nutrition and immunization through the ICDS in the political index. [10]

[10]This question is asked to women in reference to their last-born child. Since it is most likely to be answered by younger women who have lesser exposure to migration and are likely to hold a lower household status, it is of particular interest. The results on this measure will not be mixed with the influence of prolonged exposure to migration and

For the sake of this analysis, in the main specification I combine both measures given above to create a political participation index. Since the question about ICDS is not applicable to all women (as described earlier), the size of the sample reduces. I only include the political discussion variable for women that are eligible for ICDS and immunization entitlements. While this does result in the loss of data, it is a reduced sample of younger women that have only recently been exposed to migration which has its own benefits as discussed earlier. The second round of the IHDS includes variables of *civic engagement*. I combine these variables into the index in an extension of the analysis where I limit myself to only the second wave of the survey (See section 6.3).

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other learned knowledge.

Variable	**Year**	**Husband migrated between waves**	**Co-resident husband in both waves**
Mobility Index	2005-06	0.27	0.34
		(0.31)	(0.32)
	2011-12	0.53	0.42
		(0.35)	(0.29)
Decision-making Index	2005-06	0.8	0.83
		(0.23)	(0.3)
	2011-12	0.9	0.89
		(0.21)	(0.23)
Social/Financial Status	2005-06	0.43	0.46
		(0.25)	(0.25)
	2011-12	0.63	0.60
		(0.20)	(0.21)
Political Participation	2005-06	0.37	0.47
		(0.27)	(0.28)
	2011-12	0.66	0.65
		(0.28)	(0.27)
Observations*		**828**	**23128**

Table 2: Summary Statistics on the Dependent Variable. The number of observations for each group might vary based on the index since respondents might not have answered the question if it is not applicable to them. The min and max for each index is 0 and 1 respectively.

4 Results

In Table 3 and Figure 2, I present the results from the main DD specification. The interaction between the migrant husband dummy and time (captured in variable Mig in Period 2*Period 2) is of interest here. It captures the effect of migration on women's behavior. The four main outcomes measured here capture the four dimensions of women's substantive political empowerment.

4.1 Does male migration affect women's political participation?

In line with my expectations, the absence of their migrant husbands has a positive effect on women's empowerment across all domains of political participation. Both groups of women see higher levels of political participation in wave two. However, women whose husbands turn migrants experience an increase that is 9.5-11.2 percentage points (pp) more than women who continue to reside with their husbands during the second round of the survey (Column 4 and 8 in Table 3). This is an increase of almost 78% for women in migrant households (38% increase for women with co-resident husbands). To put these findings into perspective, an additional year of education improves participation by only 1 pp. The significance of this effect holds even with individual controls. In fact, the effect only becomes stronger with controls. It is to be noted that the results hold even if we consider the political discussion (4 pp) or knowledge to services (15 pp) outcomes on their own.

4.1.1 Does migration improve mobility creating conditions for an *exposure effect*?

I find that migration creates a condition for women to experience an exposure effect through higher levels of mobility (Chhibber 2002; Prillaman 2019). Women whose husbands migrate after round one of the survey experience an increase in mobility that is 20-21 pp higher than that of women with co-resident husbands. These results align with qualitative interviews where mobility changes were revealed to be the most visible difference between women in migrant and non-migrant households.

Based on the magnitude of these results we can discern that on account of having to take on responsibilities previously reserved for men, women are routinely traversing local boundaries. These are crucial to their substantive political empowerment since they also signify greater access to information on politics and services.

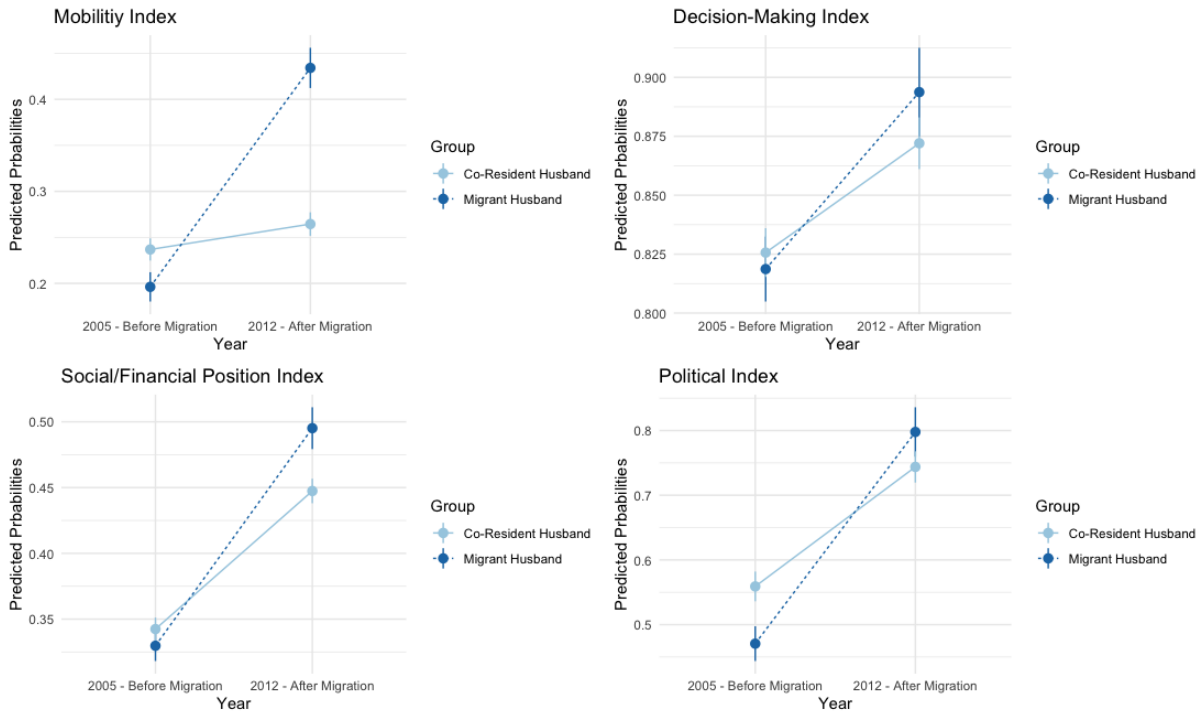


Figure 2: Women with migrant husbands (dotted line) are likely to see a higher increase in empowerment levels across all measures compared to women with co-resident husbands (straight line). This plots the difference in differences estimates for each group in both waves. These results plot the estimates from the model with added controls. Estimates are reported with 95% confidence intervals.

4.1.2 Does migration also give rise to a *status and gatekeeper effect* – other determinants of political behavior?

Interestingly, male migration continues to have a positive and significant impact on women's lives within the household even after controlling for their status within the household. Women in migrant households experience an increase in their soc-financial

status that is 3.8-5.2 pp greater than the increase experienced by women in non-migrant households. The same effect is 2.5-3.5 pp with respect to decision-making (Table 3). That is an increase of almost 46% on socio-financial status and 13% on decision-making.

Countervailing factors within the household decrease the magnitude of the effect but it remains large. In comparison to these results, an additional year of education increases decision-making and household status by 0.2-0.4 pp which is much lower than the increase due to migration. Despite the constraints imposed of household structures women with migrant husbands are able to experience empowerment along these dimensions which speaks to the ability of migration to disrupt traditional structures and create pathways for women in experience political empowerment.

4.2 Does the effect continue to persist once men return home?

Unlike other drivers of political participation, migration is temporary. Circular male migration disrupts traditional household structures but only for a short duration. Men return home periodically and status quo is established again. This warrants a systematic study of the women's empowerment in the event of a migrant's return. The IHDS data on eligible women also includes women whose husbands were migrants in wave one but returned home in wave 2. In order to test for the persistence of these effects, I compare women whose husbands return home in wave two with women with co-resident husbands in both rounds (Table 1; n = 268 v/s 23128).

	Dependent variable:							
	Mobility		Decision-Making		Socio-Fin		Political	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Migrant in Period 2	-0.034***	-0.014	-0.011	0.007	-0.005	0.008	-0.033**	-0.039***
	(0.011)	(0.011)	(0.009)	(0.009)	(0.008)	(0.008)	(0.014)	(0.014)
Period 2	0.062***	0.044***	0.070***	0.054***	0.142***	0.095***	0.189***	0.187***
	(0.003)	(0.003)	(0.002)	(0.003)	(0.002)	(0.002)	(0.005)	(0.006)
Mig in Period 2*Period 2	0.204***	0.210***	0.035***	0.025	0.052***	0.038***	0.095***	0.112***
	(0.015)	(0.020)	(0.012)	(0.017)	(0.011)	(0.014)	(0.020)	(0.032)
Constant	0.285***	0.336***	0.829***	0.929***	0.547***	0.325***	0.358***	0.535***
	(0.021)	(0.031)	(0.018)	(0.026)	(0.015)	(0.022)	(0.031)	(0.052)
Wives of migrants	828	828	775	775	796	796	342	342
Control	23128	23128	21265	21265	21616	21616	6235	6235
Time periods	Two	Two	Two	Two	Two	Two	Two	Two
Adjusted R^2	0.141	0.171	0.190	0.209	0.321	0.261	0.280	0.298
Controls	No	Yes	No	Yes	No	Yes	No	Yes
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: *p<0.1; **p<0.05; ***p<0.01

Table 3: Main results: Estimates from the difference-in-differences estimation testing the effect of male absence due to migration on women's lives. Mig in Period 2*Period 2 (Row 3) captures the effect of migration on women's lives. Wives of migrants see significantly higher gains across all dimensions. The political participation variable only includes women with ICDS eligibility therefore it is a smaller sample of women.

Based on Table 4, women whose husbands returned home see a visible decline in their mobility levels. The status effect also disappears. Their socio-financial status within the household in wave two is lower than those with co-resident husbands. Women with migrant husbands are able to hold on to their higher decision-making power within the household but the same cannot be said about political participation. It must be noted that this analysis is based on a limited sample of return migrants and must be considered in that light (Table 1). These results suggest that the seasonality in migration also drives women's empowerment.

	Dependent variable:			
	Mobility	Decision-making	Socio-Financial	Political
	(1)	(2)	(3)	(4)
Return Migrant in Period 2	0.180***	0.020	0.063***	-0.036
	(0.019)	(0.016)	(0.013)	(0.026)
Period 2	0.035***	0.056***	0.091***	0.165***
	(0.003)	(0.003)	(0.002)	(0.005)
Return Migrant * Period 2	-0.118***	0.00000	-0.047**	-0.004
	(0.026)	(0.022)	(0.018)	(0.041)
Observations	47,858	44,761	45,762	12,256
Time periods	Two	Two	Two	Two
R^2	0.096	0.074	0.267	0.234
Adjusted R^2	0.095	0.073	0.266	0.232
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 4: Test for whether women's empowerment on the four outcome measures continues to persist even after men return home. Women whose husbands who were migrants in wave one (n=268) and return home in wave two converge to the same levels as women with co-resident husbands in both rounds (n=23,128). Return Migrant * Period 2 (Row 3) captures the effect of migrant status on women's lives. Women whose migrants return home experience a negative effect on their empowerment levels pointing to the temporary nature of these effects. The sample of 'return' migrants is small and is further reduced in the specification for political participation given the variables included in the index.

While we observe a decline in women's substantive political empowerment once

their migrant husbands return home, we cannot rule out the existence of learning effects. The migration observed here is not a one off event but instead a repeated occurrence. Women are exposed to many such cycles of migration induced male absence. In Figure 3 I provide descriptive evidence of how varying levels of exposure to male migration affects women once men return. I find no incremental change (across all four dimensions) in the mean levels based on the duration of exposure to male migration measured by the number of months men have been away in the last five years. In other words, with the return of men women are likely to observe a reset to pre-migration levels thereby underscoring the seasonal nature of their empowerment.

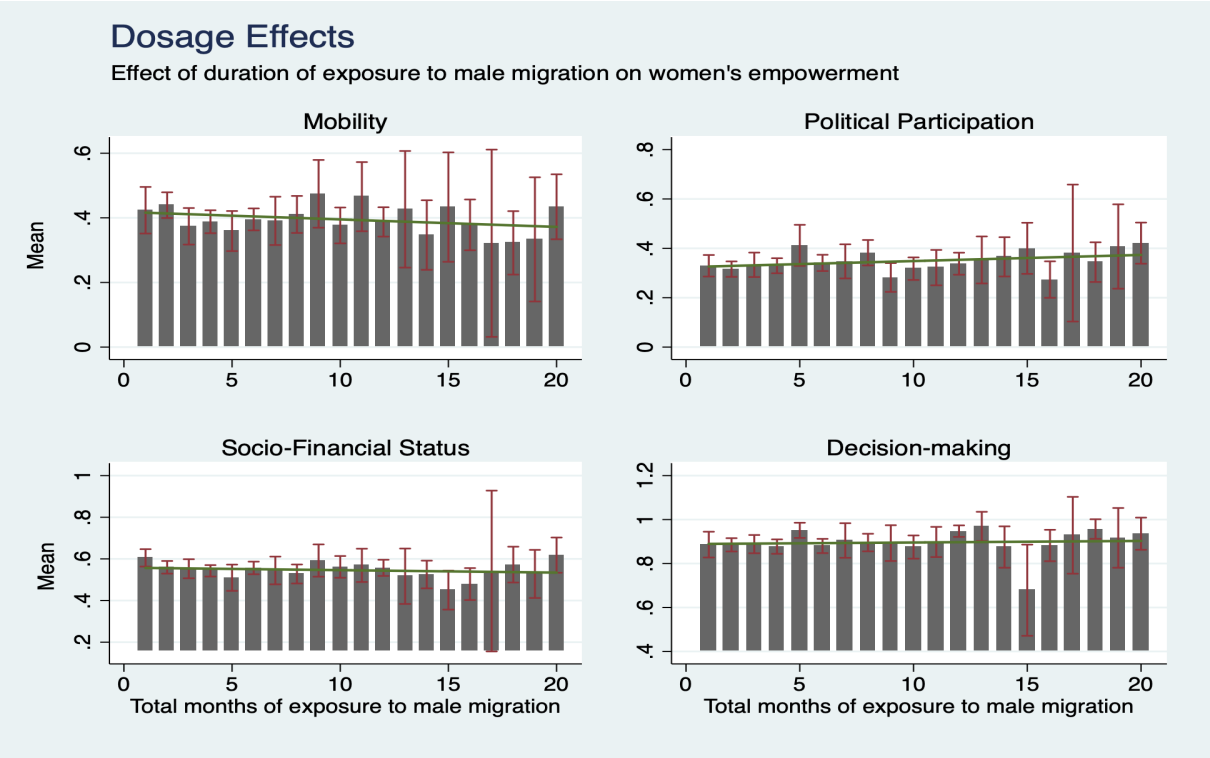


Figure 3: Women do not observe any incremental change in their empowerment levels based on the number of months their currently co-resident husbands had been away for in the last five years. Despite it being an iterated occurrence, these results show that there are no learning effects (flat trend line over time). N= 1,942 women whose husbands were "return migrants" in IHDS-II.

5 Robustness Checks

The preceding section provides evidence of the effect of migration on women's behavior within and outside the household. Before I discuss the nuances in the mechanisms driving

the results using qualitative evidence, I subject the results to robustness checks designed to address four major concerns: evidence on parallel trends assumptions, the similarity between the groups, validity of the results on an expanded definition of political participation and the effect of household structure on these outcomes.

5.1 Are differences between the two groups consistent over time?

One common concern raised by this analysis is that the treated group is not similar to the control. Parallel trends from the pre-treatment period are used to establish that the difference between the two groups is consistent over time. That is in the absence of treatment, any time trends would affect the treatment and control groups in the same manner – any (pre-treatment) differences between the two groups would remain the same over time in the absence of treatment. I use variables that are likely predictors of women's empowerment to analyze pre-trends for both groups.

The outcomes from the main specification can be measured only before and after migration i.e. two periods. However, the survey includes questions that can be used to obtain retrospective trends on measures that are likely to be correlated with women's empowerment. Fertility rates are an indicator of women's empowerment and likely to be correlated with political participation. Using the birth records for women in the DD sample I am able to identify the per capita number of births in each group going back to almost 15 years pre-treatment (see Figure 4). Women in migrant households give birth

to more children since they are likely to come from poorer households. Both groups of women see a consistent decline in fertility and the difference between them remains stable. The trends are consistent even in the years between the two waves. These results lend credence to the assumption that in the absence of treatment, the outcomes for both groups are likely to have changed at the same rate with the difference between them being stable.

The debt profile of a family is an indicator of its economic condition. Further, economic resources are crucial for political participation. We should expect that any major financial or economic condition to affect both groups in a similar fashion. Thus, the probability of taking a loan over the five year before treatment i.e. in the period between the two waves must follow the same trend for both groups. As seen in Panel B in Figure 4, both groups follow the same trajectory. This can assuage concerns that the effect of migration is possibly driven by factors that affect the treatment and control group differently, thus biasing the results.

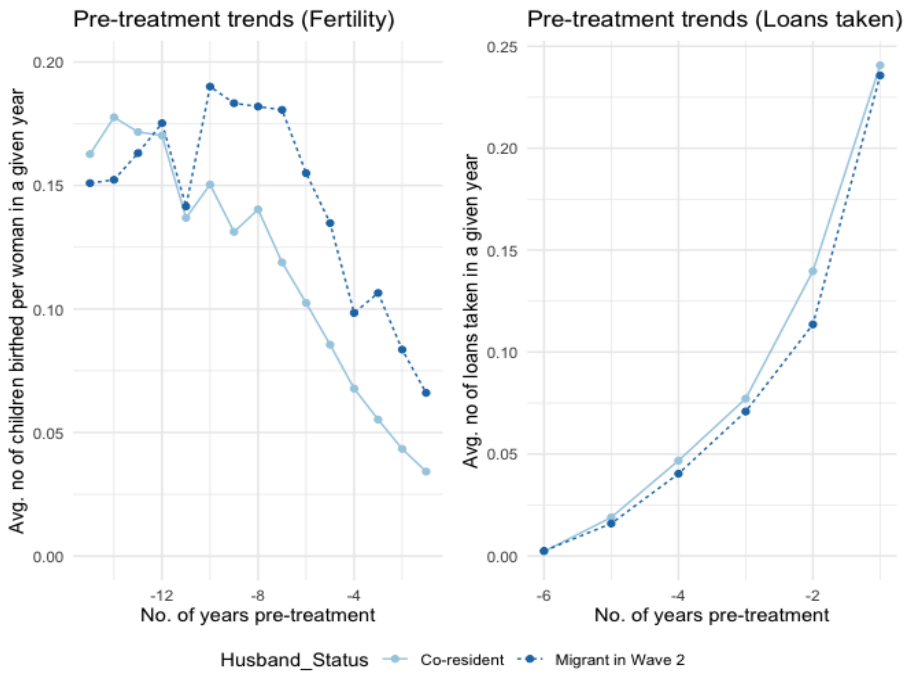


Figure 4: Pre-treatment trends on variables that are correlated with empowerment and migration. (*Left*) Panel A: Per capita number of children born in each pre-treatment year for each group. The difference between both groups remains consistent over time. (*Right*) Panel B: Time trend of loans taken by households in both treatment and control group over the last five years.

5.2 Are the two groups comparable?

Concerns about possible differences between the two groups affecting outcomes might still persist since families that decide to migrate are likely to be different from those that do not. A common way to get around this is by conducting a DD on a matched sample. One can use matching techniques to first create a sub-sample from the existing dataset

and then use the DD model on this sub-sample. A popular way to do so is through nearest neighbor matching on which assess each individual's "propensity" to have a migrant husband based on on pre-migration or pre-treatment individual and village level characteristics. Each treated case i.e. each woman with a migrant husband in wave two is then matched to the untreated case with the closest propensity score. Figure A.1 shows that matching does improve the balance between members and nonmembers, eliminating significant differences across these major confounders. The regression in equation 1 is re-run on the matched sample (See Table 5).

These results also show that migration has a positive influence on women's empowerment. Overall, while the results are noisy, they help contextualize the estimates from the main specification specially with respect to the magnitude and direction of the effect of migration.

5.3 Analyzing the results using an expanded definition of political participation

One might argue that the political variables included in the main specification are very narrow. In order to test if these results hold even when I include an expanded set of political variables, I conduct an extension of the analysis using only the second round of

	Dependent variable:			
	Mobility	Decision-Making	Socio-Financial	Political
	(1)	(2)	(3)	(4)
Migrant in Period 2	-0.005	0.008	0.015	-0.011
	(0.011)	(0.013)	(0.010)	(0.017)
Period 2	0.083***	0.063***	0.168***	0.215***
	(0.006)	(0.007)	(0.006)	(0.012)
Migrant in Period 2 * Period 2	0.148***	0.031*	0.022	0.048*
	(0.015)	(0.018)	(0.014)	(0.029)
Constant	0.229***	0.746***	0.478***	0.468***
	(0.022)	(0.025)	(0.020)	(0.053)
Wives of migrants	587	588	587	216
Co-residents with husband	2931	2714	2929	1030
Time periods	Two	Two	Two	Two
Adjusted R^2	0.129	0.045	0.255	0.278
Model	Matching+DD	Matching+DD	Matching+DD	Matching+DD
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 5: Estimates from a difference-in-difference specification using a matched sample. The estimates suggest a positive relationship between migration and women's empowerment. Matching is done on individual and village level observables before migration. Each woman with a migrant husband is wave two is matched with five women with co-resident husbands. Since the sample here is limited to rural areas, I lose 1/3 of the treated units. I only consider cases where women can answer all questions within an index. The political variable, as discussed earlier, is limited to women who are eligible for the ICDS scheme. However, although I lose power the results help contextualize how migration influences different aspects of women's lives. Note that not all treated units were matched with 5 controls due to data constraints.

the survey.[11]

	Dependent variable: Political participation		
	Civic Engagement	Political Discussion	Political Index
	(1)	(2)	(3)
Migrant Husband	0.044***	0.066**	0.051***
	(0.015)	(0.026)	(0.013)
Constant	0.030	0.631***	0.231***
	(0.046)	(0.081)	(0.041)
Observations	1,716	1,716	1,716
Wives of migrants	572	572	572
Co-residents with husband	1144	1144	1144
Time periods	One	One	One
Adjusted R^2	0.235	0.121	0.139
Note:			*p<0.1; **p<0.05; ***p<0.01

Table 6: Migration and women's political behavior using an expanded definition of participation – political knowledge, civic engagement including attending meetings and membership in political organizations. Women in migrant households are 5 percentage points more likely to participate in politics (Column 3). Political Index is an overall measure that subsumes column 1 and 2. These estimates are derived from a matched sample from wave two of the survey only.

[11]The second round of the IHDS included political variables on civic engagement in the women's questionnaire. These were missing in the first wave of the panel.

I match women in migrant and non-migrant households on observables as discussed earlier, I run an OLS regression on the matched sample comparing women with migrant husbands to those with co-resident husbands. Women in migrant household are 5% more likely participate in politics that includes attending public meetings, being members of different organizations and discussing politics with their husbands Table 6.

5.4 Heterogeneous effects of household structure

In my analysis thus far I have presented the average treatment effect across all sub-groups. In this scenario women are significantly empowered in the absence of their migrant husbands. But do we still observe these effects when there are other male gatekeepers within the household? I test this with a triple interaction in the main DD model using a dummy variable that takes a value of 1 if there is more than one male member in the household. Across all dimensions the results on the triple interaction are not significant at the 5% level. This signals that the effect of migration holds despite household structure differences.

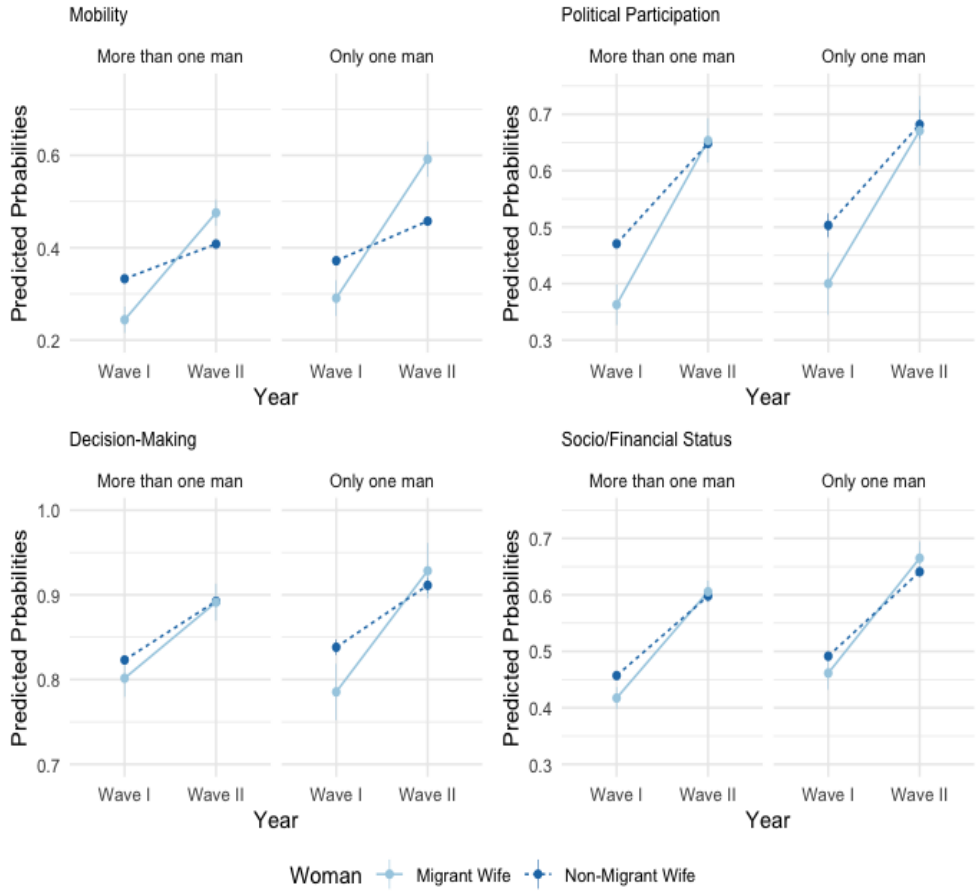


Figure 5: Heterogeneous effects of household structure on wives of migrants and non-migrants. Having more than one male member within the household reduces the empowerment levels of women in both groups but the rate is still higher for women in migrant households having other men than for women in non-migrant households with only one man.

However, women in migrant and non-migrant households with more than one man exhibit lower levels of empowerment across all dimensions (See Figure 5). Despite the presence of other male members, the rate of increase between the two waves is greater

among women in migrant households. Women in migrant households with more than one male member experience a 21 pp increase in mobility, 29 pp increase in political participation, 10 pp increase in decision-making and 29 pp increase in household status. In comparison even women with just one male member in the household only experience 8-17 pp increase across these dimensions. Thus, household structure might mediate the magnitude of the effects, women in migrant household with other men are still better off than women in co-resident households.

6 Qualitative evidence

The variables within the IHDS do not capture the types of political participation that women in migrant households engage in in the absence of their husbands. Additionally, although survey data provided robust evidence of the impact of male migration on women's substantive political empowerment, it cannot specify in what way the changes experienced by women in their husband's absence impact their political lives. In this section, I expand our understanding of women's political participation and its mechanisms in the context of male migration using primary data from qualitative interviews.

In the absence of their husbands women must themselves make multiple visits to the local village office, block office (outside the village), and other institutions (like courts, banks). This is common in a context like rural India where citizens must routinely engage

with the state for their livelihoods (Auerbach and Kruks-Wisner 2020). These trips are often necessary in order to fulfill paperwork related to access of services and entitlements like "an identification card or reimbursements for building a house" (respondent 14, local female resident, August 18, 2020). With these visits women also come in contact with local elected officials, bureaucrats and other intermediaries whom they seek out to get help with "correcting their names on their ration cards or getting their ration for that month" (respondent 8a, frontline worker, July 17, 2020). This is a potential source of gender gap in knowledge of local political actors since women are more "likely to know names and contact details of block officers which their husbands might have no idea since they are away" (respondent 10, local male broker, August 3, 2020).

Taking on responsibilities previously reserved for men involves greater mobility as women travel beyond their village for various reasons. This exposes women to different sources of information for instance if a "woman visits the local market and goes to the *chauraha* or village square she will hear what people say regarding local politics and candidates It influences women's voting decisions too" (respondent 8b, interviewed July 29, 2020). In fact, migrant men are "less aware of on ground, day to day activities since they are not around" (respondent 2, elected village head, June 6, 2020). Access to a heterogeneous network of individuals gives them political knowledge and increases their ability to partake in political discussion within the household. Additionally, being equipped with information that their husbands are not privy is "particularly important during elections"

as men who return to vote will seek them out for information (respondent 2, elected village head, June 6, 2020). Thus, gains in mobility lead to greater exposure of information which enables women to participate in political decision-making even if it is on "the sidelines and not in front of everyone" (respondent 19, political worker, interviewed September 1, 2020).

Finally, at the time of elections women in migrant households become integral for candidate performance in two ways. One, candidates "approach women to call their husbands to return home to vote" (respondent 22, village head, September 4, 2020). Candidates need to secure votes and getting help from wives of migrants to call them home increases their probability of victory. During these discussions, women also clearly state their "preferred candidate" (respondent 18, frontline worker, August 29, 2020) to their husbands. Two, before and during the campaign period, village elected heads agreed to having helped women in migrant households with "arranging transport to go beyond the village" (respondent 22, elected representative, September 4, 2020) or with "cattle, building houses" (respondent 1, elected head, June 6, 2020), job card corrections (respondent 6, local resident man, July 6, 2020), financial help for marriages (respondent 7, frontline worker, July 16, 2020) and roads (respondent 3, elected representative, July 8, 2020) in the hope to secure their votes. Thus, the absence of men is making women key actors in local political landscape in migrant sending communities.

7 Conclusion

The COVID-19 crisis has put the spotlight on a dominant yet understudied form of migration in the Global South - circular internal male migration from rural to urban areas within a country. While both international and internal migration are male-dominated, I investigate what happens when we shift our focus from long-term migration to circular and short-term internal migration. In this article I focus on a neglected consequence of this form of migration: the effects on women in migrant sending communities. Using a national level panel data set and qualitative interviews, I find that male migration significantly improves women's substantive political empowerment. However, given the temporary nature of male absence due to internal migration, women also experience seasonal empowerment that mimics the seasonal nature of migration.

These findings contribute to literatures on migration, gender and politics. First, migration is a gendered phenomenon and the scholarship of its political consequences in sending communities overlook this fact. In this article I provide one of the first analyses of how male migration influences women's political empowerment in migrant sending regions. Second, it adds to our knowledge of women's political behavior by underscoring the role of temporary male absence induced by migration as a potential channel of empowerment. Internal short-term male migration, unlike other drivers, is a temporary shock that disrupts the existing household equilibrium briefly making way for women's political

empowerment until men return. Third, by focusing on active forms of engagement rather than one off acts like voting, I provide an understanding of women as political actors who engage in civic and democratic practices at the local level.

I also find that the temporary nature of internal migration has specific consequences for political behavior. Despite the short-term but repeated male absence due to internal migration, one still observes significantly large improvements in women's substantive empowerment. Unlike what we would expect, even if men leave their wives in joint families the mere absence of their primary gatekeeper, albeit for short duration, has a significant effect on her empowerment across all dimensions. While these results are encouraging I find that not only do these effects not persist each time men return but there is also no evidence of a learning effect. Therefore, women's empowerment, like their husband's migration, is also seasonal. In fact, the duration of exposure to migration has no effect on their empowerment levels once their husbands return.

These results have also opened future lines of inquiry. They point out that it is the absence of men and not economic windfalls that matters for women's empowerment in this case. Poor migrants return home with money rather than send remittances regularly, therefore the scope for income effects to take root are minimal. However, future research must also parse out the possible role of income gains and how soon they kick-in relative to male absence alone. Further, understanding what this form of seasonal empowerment

means for women is crucial because millions are experiencing these cyclical highs and lows within the period of a year. Additionally, deeper examination of the various electoral and non-electoral repertoires that women engage in and the role of men in facilitating it is a remaining task. Finally, a systematic understanding of what male migration means for parties and their campaign strategies is required.

References

Abadan-Unat, N. (1977). Implications of migration on emancipation and pseudo-emancipation of Turkish women. *International Migration Review 11*(1), 31–58.

Archambault, C. S. (2010). Women left behind? Migration, spousal separation, and the autonomy of rural women in Ugweno, Tanzania. *Signs: Journal of Women in Culture and Society 35*(4), 919–942.

Auerbach, A. M. (2015). India's urban constituencies revisited. *Contemporary South Asia 23*(2), 136–150.

Auerbach, A. M. and G. Kruks-Wisner (2020). The geography of citizenship practice: How the poor engage the state in rural and urban india. *Perspectives on Politics*, 1–17.

Banerjee, B. (1981). Rural-Urban migration and family ties: An analysis of family considerations in migration behaviour in India. *Oxford Bulletin of Economics and Statistics 43*(4), 321–355.

Bernhard, R., S. Shames, and D. L. Teele (2020). To emerge? Breadwinning, motherhood, and women's decisions to run for office. *American Political Science Review*, 1–16.

Bhavnani, R. R. and B. Lacina (2017, May). Fiscal federalism at work? Central responses to internal migration in India. *World Development 93*, 236–248.

Boehm, D. A. (2008). "Now I am a man and a woman!" Gendered moves and migrations in a transnational Mexican community. *Latin American Perspectives 35*(1), 16–30.

Brink, J. H. (1991). The effect of emigration of husbands of husbands on the status of their wives: An Egyptian case. *International Journal of Middle East Studies 23*(2), 201–211.

Brulé, R. (2020). Reform, representation, and resistance: The politics of property rights' enforcement. *The Journal of Politics 82*(4), 1390–1405.

Brulé, R. and N. Gaikwad (2021). Culture, capital and the political economy gender gap: Evidence from Meghalaya's matrilineal tribes. *Journal of Politics 83*(3).

Burgess, K. (2012). Migrants, remittances, and politics: Loyalty and voice after exit. *Fletcher F. World Aff. 36*, 43.

Burns, N., K. L. Schlozman, and S. Verba (2001). *The private roots of public action*. Harvard University Press.

Chhibber, P. (2002). Why are some women politically active? The household, public

space, and political participation in India. *International Journal of Comparative Sociology 43*(3-5), 409–429.

Dandekar, H. C. (1986). *Men to Bombay, women at home: Urban influence on Sugao village, Deccan Maharashtra, India, 1942-1982*. Number 28. Popular Prakashan.

De Haan, A. (1997). Rural-urban migration and poverty: The case of India. *IDS Bulletin 28*(2), 35–47.

Desai, S. and M. Banerji (2008). Negotiated identities: Male migration and left-behind wives in India. *Journal of Population Research 25*(3), 337–355.

Desai, S. and R. Vanneman (2005). National Council of Applied Economic Research, New Delhi. India Human Development Survey (IHDS), 2005. Inter-university Consortium for Political and Social Research [distributor]. *Ann Arbor, MI*.

Deshingkar, P. and S. Akter (2009). Migration and human development in India. *Human Development Research Paper 2009/13*.

Desposato, S. and B. Norrander (2009). The gender gap in Latin America: Contextual and individual influences on gender and political participation. *British Journal of Political Science 39*(1), 141–162.

Drèze, J. and A. Sen (2004). Gender inequality and women's agency. *Readings in Indian Government and Politics: Caste, Class and Gender*, 338–387.

Gaikwad, N. and G. Nellis (2020a). Do politicians discriminate against internal migrants? Evidence from nationwide field experiments in India. *American Journal of Political Science*.

Gaikwad, N. and G. Nellis (2020b). The majority minority divide in attitudes toward internal migration: Evidence from Mumbai. *American Journal of Political Science 61*(2), 456–472.

Goodman, G. L. and J. T. Hiskey (2008). Exit without leaving: Political disengagement in high migration municipalities in Mexico. *Comparative Politics 40*(2), 169–188.

Gulati, L. et al. (1993). *In the absence of their men: The impact of male migration on women.* Sage Publications India Pvt Ltd.

Hadi, A. (2001). International migration and the change of women's position among the left-behind in rural Bangladesh. *International Journal of Population Geography 7*(1), 53–61.

Hondagneu-Sotelo, P. (1992). Overcoming patriarchal constraints: The reconstruction of gender relations among Mexican immigrant women and men. *Gender & Society 6*(3), 393–415.

Huckfeldt, R. R. and J. Sprague (1995). *Citizens, politics and social communication: Information and influence in an election campaign.* Cambridge University Press.

Inglehart, R. and P. Norris (2000). The developmental theory of the gender gap: Women's and men's voting behavior in global perspective. *International Political Science Review 21*(4), 441–463.

Iversen, T., F. M. Rosenbluth, and F. Rosenbluth (2010). *Women, work, and politics: The political economy of gender inequality*. Yale University Press.

Jayachandran, S. (2015). The roots of gender inequality in developing countries. *Annual Review of Economics 7*(1), 63–88.

Jetley, S. (1987). Impact of male migration on rural females. *Economic and Political Weekly 22*(44), WS47–WS53.

Kapur, D. (2014). Political effects of international migration. *Annual Review of Political Science 17*(1), 479–502.

Khaled, L. (1995). Migration and women's status: The Jordan case. *International migration (Geneva, Switzerland) 33*(2), 235.

Khan, S. (2021). Count me out: Gendered preference expression in Pakistan. *Unpublished manuscript*.

Klofstad, C. (2010). *Civic talk: Peers, politics, and the future of democracy*. Temple University Press.

Kone, Z. L., M. Y. Liu, A. Mattoo, C. Ozden, and S. Sharma (2018). Internal borders and migration in India. *Journal of Economic Geography 18*(4), 729–759.

Kruks-Wisner, G. (2011). Seeking the local state: gender, caste, and the pursuit of public services in post-Tsunami India. *World Development 39*(7), 1143–1154.

Kruks-Wisner, G. (2018). *Claiming the State: Active Citizenship and Social Welfare in Rural India*. Cambridge University Press.

Kumar, S. and P. Gupta (2015). Changing patterns of women's turnout in Indian elections. *Studies in Indian Politics 3*(1), 7–18.

Levitt, P. (1998). Social remittances: Migration driven local-level forms of cultural diffusion. *International migration review 32*(4), 926–948.

Mascarenhas-Keyes, S. et al. (1990). Migration,'progressive motherhood' and female autonomy: Catholic women in Goa. *Structures and Strategies: Women, Work and Family.*, 103–127.

Mazumdar, I., N. Neetha, and I. Agnihotri (2013). Migration and gender in India. *Economic and Political Weekly 48*(10), 54–64.

McKenzie, D., S. Stillman, and J. Gibson (2010). How important is selection? Experimental vs. non-experimental measures of the income gains from migration. *Journal of the European Economic Association 8*(4), 913–945.

Paris, T., A. Singh, J. Luis, and M. Hossain (2005). Labour outmigration, livelihood of rice farming households and women left behind: A case study in eastern Uttar Pradesh. *Economic and Political Weekly 40*(25), 2522–2529.

Pérez-Armendáriz, C. and D. Crow (2010). Do migrants remit democracy? International migration, political beliefs, and behavior in Mexico. *Comparative Political Studies 43*(1), 119–148.

Piper, N. (2006). Gendering the politics of migration. *International Migration Review 40*(1), 133–164.

Prillaman, S. (2019). Strength in Numbers: How Women's Groups Close India's Political Gender Gap. Unpublished Manuscript.

Schaffer, J. and A. Baker (2015). Clientelism as persuasion-buying: Evidence from Latin America. *Comparative Political Studies 48*(9), 1093–1126.

Thachil, T. (2017, October). Do rural migrants divide ethnically in the city? Evidence from an ethnographic experiment in India. *American Journal of Political Science 61*(4), 908–926.

Thachil, T. (2020). Does police repression spur everyday cooperation? Evidence from urban India. *The Journal of Politics 82*(4), 1474–1489.

Tumbe, C. (2015). Missing men, migration and labour markets: evidence from India. *58*(2), 245–67.

Verba, S., K. L. Schlozman, and H. E. Brady (1995). *Voice and equality: Civic voluntarism in American politics*. Harvard University Press.

Yabiku, S. T., V. Agadjanian, and A. Sevoyan (2010). Husbands' labour migration and wives' autonomy, Mozambique 2000–2006. *Population studies 64*(3), 293–306.

Zeldow, B. and L. A. Hatfield (2021). Confounding and regression adjustment in difference-in-differences. *Health Serv Res*, 1–10.

Appendix A

Variable	Question	Wave
Mobility (more like autonomy over mobility)	Do you need to seek permission of your husband or a senior family member to go to local grocery store, home of relatives or friends, local health center, short distance by train or bus?	I and II
Decision-making power in the household	Please tell me who in your family makes decisions regarding cooking, household spending on luxury items and weddings, and how many children to have?	I and II
Social and financial status	a) When your family takes the main meal, do women usually eat with the men b) Do you yourself have any cash in hand to spend on household expenditures? c) Is your name there on any bank account or property papers?	I and II
Political discussion	Do you discuss politics with your husband?	I and II
Knowledge of services	a) DD you get a card made to register your last pregnancy? b) Do you have immunization card with vaccinations recorded for your last born?	I and II
Membership	Are you member of a Mahila Mandal, SHG, credit saving group	II
Civic engagement	a) Are you member of a political party? b) Have you attended a public meeting/gram sabha?	II

Table A1: Dependent variable descriptions. Questions in IHDS I and II that will be used to construct the four main indices in the analysis. The questions in each group are binary variables that are summed up and re-scaled to form an index that lies between 0 and 1.

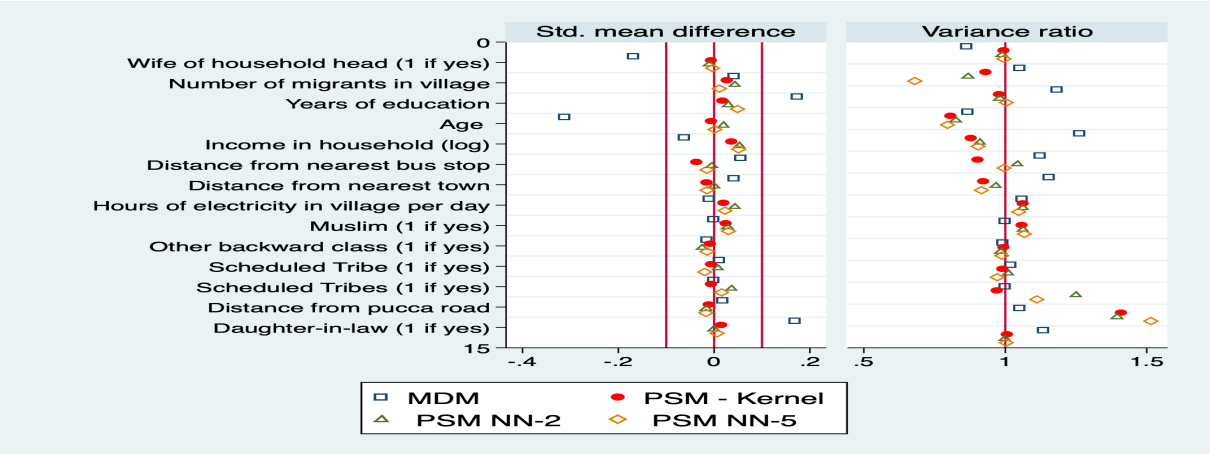
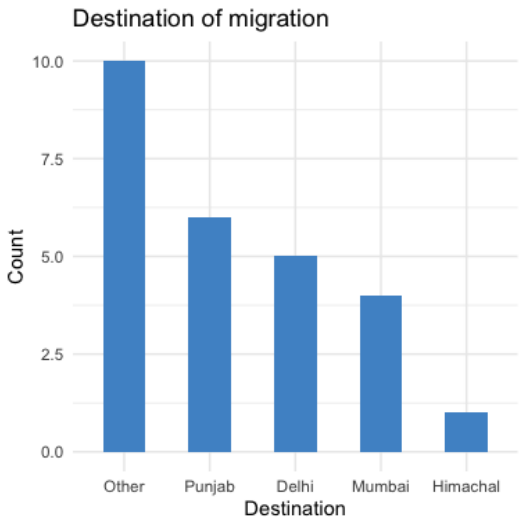
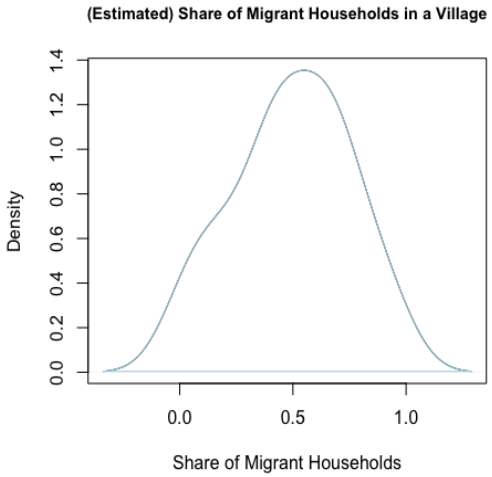


Figure A.1: Balance assessment across multiple matching techniques. Units are matched on pre-migration values from first round of the survey.

Propensity Score Matching (PSM) and Multivariate Distance Matching (MDM) are commonly used for this purpose. PSM involves matching on a unidimensional score and can be done using various techniques. I use PSM based on nearest neighbor matching for this analysis. In Figure A.1 I provide the balance assessments of the covariates use for matching (using PSM NN -2, NN-5, PMS- Kernel and MDM). A balance assessment describes how close the control and treatment groups stand along various covariates after matching. I use standardized differences since the sample size for the IHDS is quite large leading to low p-values if we use a t-test. While using standardized differences a common rule of thumb is to ensure balance between the two groups is between -0.1 an 0.1. Another numerical diagnostic tool is to check if standardized variance ratios are as close to 1 as possible; an acceptable measure is when the variance ratios are between 0.5 and 2.



(a) Destination of migrants in interview districts



(b) (Estimated) Distribution of Migrant Households in interview districts

Figure A.2: Descriptive data on the destination of migration (Left) and estimated distribution of migrant households in the villages that respondents come from. This evidence adds further context to understanding migration from a high out-migration state like Bihar.

Variable	**Estimated average**
Share of male migrant households in the village	50%
Duration of male absence (Long-term migration)	5.7 months to 8 months
Duration of male absence (Short-term migration)	1.3-2.3 months
Duration of stay upon return	1-4 months
Sectors of employment	Construction, Agriculture, Factories, Hospitality

Table A2: Descriptive account of seasonal migration based on evidence collated qualitative interviews; N = 20. These are meant to be estimates that provide a richer account of the nature of male migration from high-migration regions in India.

	Year	Husband migrated between waves	Co-resident husband in both waves	*p-val*
Rural (%)		83.66	68.61	0.00
Literate (%)		53.21	53.27	0.81
Daughter-in-law (%)		40.36	20.41	0.00
Upper Caste (%)		24.09	22.52	0.008
OBC/Dalit (%)		53.8	55.45	0.008
Muslim (%)		16.34	11.24	0.00
Age (years)	2005-06	31.01 (7.503)	33.7 (7.884)	0.00
	2011-12	37.82 (7.672)	40.09 (8.266)	0.00
Number of children	2005-06	2.63 (1.641)	2.68 (1.587)	0.334
	2011-12	3.19 (1.478)	3.00 (1.497)	0.00
Good Health (%)	2005-06	64	66	0.28
	2011-12	70	74	0.006
Income (in Rs.)	2005-06	45393.0 (55700.2)	52523.4 (81604.3)	0.017
	2011-12	111719.3 (129688.1)	136728.0 (236863.3)	0.00
Family/Marriage Norms Score	2005-06	0.55 (0.13)	0.54 (0.13)	0.54
	2011-12	0.54 (0.13)	0.53 (0.14)	0.007
Women's Safety Score	2005-06	.32 (.24)	0.33 (.26)	0.83
	2011-12	.37 (0.24)	.40 (0.25)	0.018
Observations		**828**	**23128**	

Table A3: Descriptive Statistics of both comparison groups based on the Eligible Women Dataset in IHDS I and II. It excludes widows/divorced/separated women. Only includes women present in both waves. Good health includes all women who said they were either in Very Good health or Good health. OK health, Poor and Very Poor categories make up the remainder. Family/marriage norms and women's safety score are the respondent's perception of these aspects within the community. Source: IHDS - I and II

Variable	**Year**	**Migrated between waves**	**Non-migrant in both waves**
Distance of village from town	2005-06	12.93 km	13.5 km
	2011-12	11.5 km	13.38 km
Availability of *pucca* roads in village	2005-06	64%	64%
	2011-12	89%	86%
Availability of electricity in village	2005-06	9.61 hours	11.67 hours
	2011-12	12.79 hours	13.41 hours
Share of households with electricity	2011-12	71%	79%
Migrants in the village	2005-06	145	115
	2011-12	181	94
Migrant households in the village	2011-12	108	71
Observations*		**696**	**15310**

Table A4: Village level characteristics split by migrant status in wave II. This information is based on village level module within IHDS I and II. Data was not collected from urban blocks and therefore this information is aggregated only over respondents in villages. Number of respondents will be less than original sample used in the difference in difference analysis because we only limit ourselves to rural areas. Sample only includes women with no migrant husbands in round 1 (baseline)

Appendix B (Online)

There are two types of confounders in a DD model – *time-invariant* and *time-varying*. Time-invariant confounders are unaffected by time. Examples include demographic variables like caste, gender, religion etc. Time-varying confounders change throughout the study like employment status, marriage, income/debt etc. However, the effect of both confounders on the outcome might vary over time. In order to deal with this, Zeldow and Hatfield (2021) propose that we include specifications with time-varying adjustment (TVA) into the DD model.[12] In the TVA model I interact covariates with time (to allow for the coefficient to vary over time and is as follows [13]:

$$y_{it} = \alpha + MigH_i\beta_1 + Year_t\beta_2 + MigH_i * Year_t\beta_3 + X_{it}\beta_4 + X_{it} * Year_t\beta_5 + \epsilon_{it} \quad (2)$$

X_{it} includes a number of carefully chosen controls given the DD specification. I also include state level fixed effects in each specification including a specification with state-time trends to capture changes in state policies between the two rounds that might affect women's empowerment. The list of time variant and invariant controls are discussed in the Appendix. The results (Table A5) continue to hold even after time varying adjustments.

[12]Covariate adjustment is included in the main specification given in equation 1.

[13]See Table 2 in Zeldow and Hatfield (2021). Also, in order incorporate state level differences that vary over time due to implementation of policies, I also include a specification with state-time fixed effects.

	Dependent variable:			
	Mobility	Decision-making	Socio-Financial	Political
	(1)	(2)	(3)	(4)
Migrant Husband	0.019*	0.002	0.015*	-0.012
	(0.011)	(0.010)	(0.008)	(0.014)
Migrant Wave	0.051	0.099**	0.263***	0.244***
	(0.048)	(0.042)	(0.034)	(0.085)
Mig Hus*Mig Wave	0.145***	0.038***	0.028***	0.041*
	(0.015)	(0.013)	(0.011)	(0.021)
Constant	0.268***	0.827***	0.155***	0.549***
	(0.034)	(0.030)	(0.024)	(0.054)
Observations	43,454	41,010	41,672	12,365
Adjusted R^2	0.156	0.119	0.303	0.276
Controls	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Note:				*p<0.1; **p<0.05; ***p<0.01

Table A5: Results from time-varying adjustment (TVA) controls. This is an extension to the main difference in difference estimation. I include time varying adjustment for confounders. The results hold even after the adjustment.

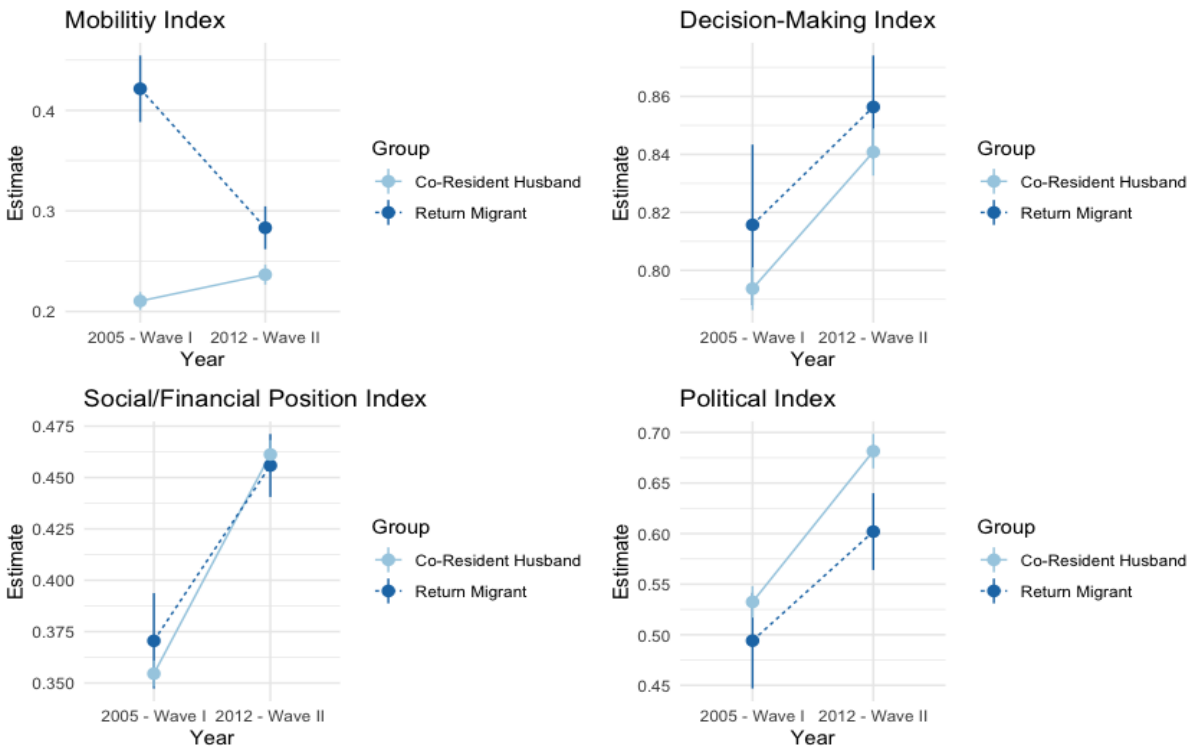


Figure B.1: The effect of migration on women's empowerment follows the seasonality of male migration. Women whose husbands were migrants (dotted line) in wave one see a significant decline in their mobility and socio-financial status when their husbands returned home (compared to women with co-resident husbands (straight line) in both waves. These results suggest that women's empowerment is less likely to persist once when return home. Estimates are reported with 95% confidence intervals.

Figure B.2: To investigate if the trends are indeed not arbitrary, I compare women whose husbands turned migrants with those who were always migrants i.e. in both rounds of the survey. Starting at different levels in wave one (owing to husband's migration within one group), the trends for women whose husbands migrated between wave one and two of the survey should appear to converge to the same levels as those whose husbands were always migrants. Women whose husbands turn migrants in wave two (dotted line) converge to the empowerment levels of women whose husbands are migrants in both rounds (straight line). The estimates are drawn from a smaller sub-sample of eligible women (828 new migrants husbands versus 292 always migrant husbands). This test corroborate the estimates from the main DiD model. This also shows that it is less likely that migration is likely to be the key driver of these results rather than something specifically about the set of migrant households.