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Beyond Money: Does Migration Experience Transfer Gender Norms? Empirical Evidence from Kerala, India

George Joseph; Qiao Wang; Gnanaraj Chellaraj; Emcet O. Taş; Luis Andres; Syed Usman Javaid; Irudaya Rajan

The International Institute of Migration and Development, PO Box 695011, India, Phone:+91 9778 355 560, http://www.iimad.org, e-mail: info@iimad.org

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Author

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Empirical Evidence from Kerala, India

George Joseph, Qiao Wang, Gnanaraj Chellaraj, Emcet O. Taş, Luis Andres, Syed Usman Javaid, Irudaya Rajan[1]

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[1] The authors are affiliated with the World Bank, except for Irudaya Rajan who is affiliated with the Center for Development Studies, Thiruvananthapuram, Kerala, India. Financial support from the South Asia Gender Innovation Lab at the World Bank and comments from David McKenzie, Harjot Kaur and Kevin Tomlinson on an earlier version of this paper are gratefully acknowledged. The authors also thank Maria Beatriz Orlando, Isis Gaddis and Jayati Sethi for their support. The corresponding author is George Joseph, Senior Economist, The World Bank (gjoseph@worldbank.org).

1. Introduction

International migration has been a characteristic of the rapidly globalizing world, with an estimated 258 million people, about 3.5 percent of the global population, categorized as international migrants (IOM 2018). Despite emphasis on the negative impacts of brain drain (Kapur and McHale, 2005), the movement of people abroad has been accompanied by a significant flow of remittances to the migrant-sending countries. In 2017 alone, migrants sent US$466 billion, three times the size of official development assistance, to low- and middle-income countries. In the remittance receiving countries, these financial resources have had significant impacts on poverty reduction, human capital development, and macroeconomic stability. Yet, while most policy discussions about international migration patterns have focused on brain drain, trade and remittances, migration has also led to transmission of cultural norms across countries, prompting changes in law, racial norms, religious practices, dress codes, culinary practices, and social and moral values.

Exposure to different practices and norms from around the world can result in cultural change in developing countries, and migration is a likely catalyst in such transformation. Migrants, most of whom move on a temporary basis, often encounter new norms in their host countries and then bring them back home. Depending on context, some of the norms encountered abroad may result in unfavorable outcomes at home. For instance, anecdotal evidence suggests that migration to conservative countries can radicalize returning migrants and result in increased violence against women in their home countries. Similarly, exposure to the destination country cultures could negatively affect the attitudes of migrants on gender norms and progress toward gender equality in the source country. Despite the policy relevance of such "social remittances," previous work in this area has focused largely on the spread of political norms and behavior, such as democratic values, radicalization, and terrorism (Barsbai et al. 2017, Docquier et al. 2016, Chauvet and Mercier 2013, Batista and Vincent 2011, Helbling and Meierrieks 2020). Few studies examine the transfer of social norms, and those that do focus primarily on migrants returning to Middle Eastern countries such as Jordan (Tuccio and Wahba 2018) and the Arab Republic of Egypt (Samari 2021). The literature is particularly scarce for social norms pertaining to gender equality and the role of women in

society. Given the growing trend of globalization and increased migrant movements, these links need to be better understood, particularly in major migration corridors.

India has been the largest country of origin for international migrants since the turn of the 21st century (IOM 2019), as well as being the world's top recipient of remittances (World Bank 2019). Migration to industrialized countries from India began to increase with the liberalization of immigration laws in those countries during the 1960s. Since the 1980s, most of this migration has been permanent and comprised of highly skilled and well-educated migrants, with return migration being short-term in nature (Jain, 2013). Furthermore, migrants to industrialized countries are richer and well educated compared to the short-term migrants to the Gulf and Saudi Arabia (Rajan and Amuthan, forthcoming). With the increase in oil prices in the mid-1970s, temporary migrant flows surged from India to the Gulf Cooperation Council (GCC) countries: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (Kurian 1979). Migration to the GCC was partly driven by severe shortage of skills and large-scale dependence on skilled and unskilled foreign labor in these countries.[2] In 2015, 7.8 million Indian migrants out of a total of 11.4 million, or about 68 percent, were destined for the GCC (Chanda and Gupta 2018).

Many of the Indian migrants in the GCC are from the South Indian state of Kerala, although there has been an increase in the number of low-skilled workers from northern states in recent years. Kerala has been exposed to international trade for thousands of years,[3] but emigration on such a large scale is a relatively recent phenomenon. The first Kerala Migration Survey reported that nearly 1.4 million migrants from Kerala were in GCC countries in 1998 and that their annual remittances exceeded Rs. 130 million. This increased sharply to 2.4 million migrants by 2013, with annual remittances increasing to Rs. 710

[2] https://www.arabianbusiness.com/banking-finance/400036-wkd-uae-saudi-arabia-set-for-near-40bn-talent-shortage-timebomb http://saudigazette.com.sa/article/535108

[3] Kerala may have been engaged in trading activities as early as 3000 BC with Sumerians and Babylonians (Menon 2007). Phoenicians, Greeks, Egyptians, Romans, Jews, Arabs, and Chinese were attracted by a variety of commodities, especially spices and fabrics. Initially foreigners migrated to Kerala. Jews and trading communities from the Middle East settled in Kerala at the end of the first century. During the 15th century the Chinese had used Kerala as a trading base with the Middle East and East Africa. European arrival started with the Portuguese when Vasco da Gama arrived in Calicut in 1498 followed by the Dutch and the British. The British arrived in the 17th and 18th centuries with the East India Company.

million. Many emigrants returned home after a stay of about 10 years,[4] but the possibility of getting into an occupation resulting in upward social mobility (mainly self-employment or in the public sector) was associated with a shorter stay in the Gulf states, while the prospect of fewer job opportunities back home post-return significantly increased the length of stay (Czaika and Varela 2015).

Within the GCC countries, the distribution of migrants from Kerala has changed over time, with the Gulf countries becoming more popular over the past two decades. Temporary migration from Kerala to Saudi Arabia remained steady, barely increasing from 510,895 migrants in 1998 to 522,282 migrants in 2013. Migration to other Gulf countries increased substantially. Between 1998 and 2013, migrant flows from Kerala to the UAE more than doubled from 421,959 to 898,962; for Kuwait, it increased from 68,163 to 183,239; and for Qatar, it increased from 62,969 to 106,107. The GCC countries remain a major destination for migrants from Kerala, more so than other parts of India. According to the National Sample Survey of 2007–08, only 0.9 million migrant workers from Kerala were in other parts of India, compared to more than 2 million Kerala migrants in the GCC countries. Also, while residents of Kerala barely migrated to other Indian states, 2.5 million workers from other parts of India were temporarily working in Kerala during this period.

Previous literature has documented that Indian emigrants to GCC countries, and their remittances, significantly contributed to the state economy and improved the educational profile of the migrants (Rajan and Zacharia 2019). However, studies on the transfer of norms and values by return migrants from the Gulf or the Middle East to Kerala, India, or other South Asian countries are virtually non-existent. Given the scale and duration of migration from Kerala to GCC countries, it is possible that these migrants may have been exposed to new norms and values during their temporary stay and brought some of these back home with them. Moreover, substantial differences across the GCC countries suggest that migrants from Kerala may have been exposed to different norms and values depending on their destination country, suggesting

[4] There are more flights to the GCC countries from cities in Kerala than to other parts of India. https://economictimes.indiatimes.com/industry/transportation/airlines-/-aviation/kerala-airports-handle-more-international-passengers-than-domestic/articleshow/59568350.cms

that the values and norms imported into Kerala may correspond to the chosen destination of migrants within the GCC.

This paper analyzes the impact of Indian migrants returning to Kerala from the GCC countries and Saudi Arabia, with a focus on gender norms. Gender roles and norms are important for the distribution of equitable rights between men and women in households and society (Alesina et al. 2013, Myerson 2013). Across the Middle East, women have experienced improvements in educational attainment and labor force participation, as well as reduced emphasis on traditionally held female roles (Matcalfe 2008). However, among these countries, Saudi Arabia has remained more conservative than many other Gulf countries, due to a more extreme interpretation of women's roles in society as a result of the type of religious sect practiced in that country (Elamin and Omair 2010). For instance, recent female labor force participation figures indicate that Saudi Arabia ranks as one of lowest among Gulf countries, with 15.8 percent, followed by Qatar at 13.6 percent (Figure 1).

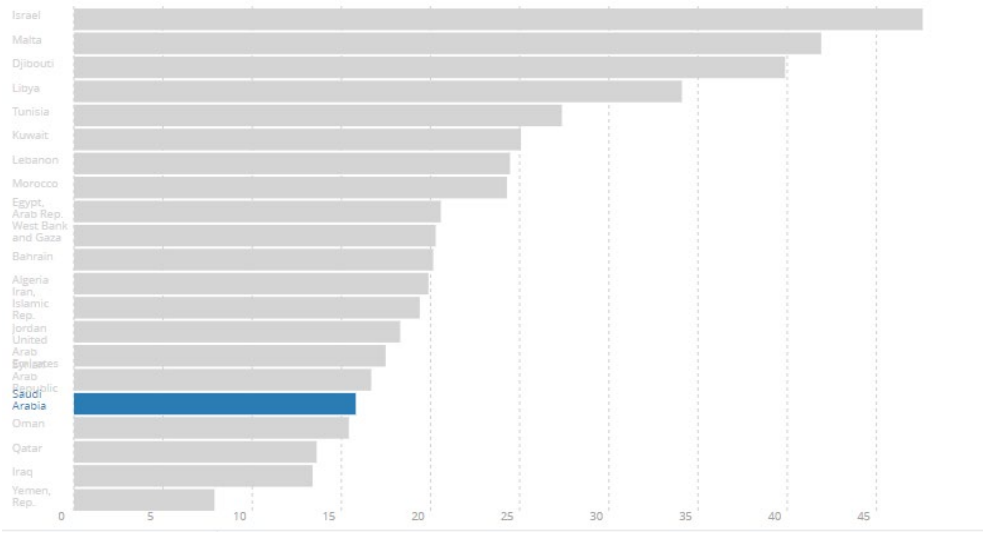
A recent study suggests that these conservative views are perpetuated in part because Saudi Arabian men underestimate how other men feel about women's roles, even if they hold more liberal views themselves (Bursztyn et al. 2020). Compared to the other GCC countries, Saudi Arabia is also less exposed to international populations. Just over 30 percent of the Saudi population consists of international workers, compared to 70 percent of the Kuwaiti, 80 percent of the Qatari and Emirati, 52 percent of the Bahraini, and 46 percent of the Omani populations. The high-skilled global workforce is mostly from industrialized countries, and it is likely that this high proportion in the Gulf offsets the influence of conservative attitudes of the local population as well as Middle Eastern immigrants, while the reverse is likely the case for Saudi Arabia where the local population dominates.

To examine these hypotheses, this paper uses a two-stage least squares approach, using instrumental variables, to determine whether gender norms in these destinations were transferred back to Kerala as a result of the migrants being influenced by the culture in their migration destination. To capture these differences across the GCC countries, our analysis divides the GCC into two subgroups: Saudi Arabia versus other Gulf countries (Bahrain, Kuwait, Oman, Qatar, and United Arab Emirates). The goal of this

analysis is to determine whether the transfer of gender norms by returning migrants in Kerala is similar to that of the experience of other countries in the region where studies have been undertaken, and whether migrants from Saudi Arabia remit conservative gender norms compared to those returning from other Gulf countries. The results indicate that returning migrants from Saudi Arabia tend to remit conservative values regarding gender-based violence (GBV) and extreme attitudes pertaining to perpetration of physical violence against women, while the opposite is true for migrants returning from other Gulf countries.

The rest of this paper proceeds as follows. The next section presents a brief overview of the relevant literature and the following two sections present the empirical approach and findings, respectively. The paper concludes with a discussion of implications for policies regarding gender equality in Kerala, as well as for other countries that temporarily send a large share of their populations overseas for work.

Figure 1: Female Labor Force Participation Rate (Percent of Total Population, Ages 15–64), 2019



Source: World Development Indicators using modeled ILO estimates.

2. Literature Review

Expectations upon return determine whether the migrants intend to return to their home countries. Ravauri (2013) showed that female migrants from Mexico are less likely to return than their male counterparts due to poor expectations. Bilgili et al. (2018) found that women have significantly worse

expectations of living conditions in Ethiopia than men. Attitudes of host country citizens such as Italy also had a significant impact on intention to return (de Coulon et al. 2016). Perceived gender discrimination also had a negative and significant impact on female return migration to Turkey (Sener, 2021; Elveren and Toksoz, 2019; Gungor and Tansel, 2014; Tansel and Gungor, 2003). However, perceptions of racism in host countries also played a major role. It was shown that while perception of racism against Turkish high-skilled migrants in Germany led to increasing return migration, this was not true for the United States where Turkish high-skilled migrants, particularly non-traditional Turkish women, perceived little or no racism (Sener, 2019). Tezcan (2019) also found that perceived racism had a significant and positive impact on return migration to Turkey from Germany.

Several studies have been undertaken on the transfer of cultural and political norms from destination to the countries of migrant origin. Such transfers are known as social and political remittances. In addition, there are knowledge remittances (Fackler et al. 2020, Theoharides 2017) and wage premiums (Wahba 2015). Some studies focused on political remittances, particularly the spread of democracy over the past three centuries (Krawatzek and Muller-Funk 2020). In recent years, Barsbai et al. (2017) found that migration and return migration spread democracy in Moldova, while Perez-Armendriz and Crow (2010), Pfutze (2012), and Waddell and Fontenla (2015) found similar results for Mexico. Political remittances of Russian migrants and return migrants include free and fair elections, human rights, civil freedoms, fighting corruption, environmental protection, antiwar activities, counteracting Russian propaganda, and the "hybrid war" (Fomina 2021). Rother (2009) found the reverse was true for the Philippines. Migrants to democratic countries induced improvement of governance in Cabo Verde (Batista and Vincent 2011), Mali (Chauvet and Mercier 2013), and Morocco (Tuccio et al. 2019). Docquier et al. (2016) found similar results for a cross-section of developing countries. Similar evidence was found for returning international students in developing countries since the 1950s (Park, 2019; Spilimbergo 2009). It was also found that all forms of violence in Mexico declined with return migration (Bucheli et al. 2019), while lax U.S. gun laws increased it in the border areas (Dube et al. 2013). In general, females in developing countries were politically empowered due to transfer of gender norms (Lodigiani and Salomone 2015).

Evidence also exists on the transmission of cultural norms by migrants and return migrants during the past two centuries. It was shown that migrants to the US from Germany and other European countries in the 1850s resulted in the transmission of anti-slavery values and contributed to the US Civil War and end of slavery (Dippel and Heblich, 2021; Doyle, 2015), and the return of African American servicemen from World War II resulted in the end of segregation in the US (Koch et al., 2021; Parker, 2009). However, the returning German migrants from the US transmitted Jim Crow values to Germany and contributed to the rise of Nazism (Grill and Jenkins, 1992) and these norms were transmitted to South Africa by returning international students who went on to become leaders in apartheid South Africa (Citino, 1991).

Social remittances include ideas, behaviors, identities, and social capital that flow from receiving to sending countries (Levitt 1998), including attitudes toward women. Furthermore, there are individual and collective social remittances (Levitt 2011). While individuals communicate ideas and practices to each other in their roles as friends, family members, or neighbors, they also communicate in their capacity as organizational actors, which have implications for organizational management and capacity-building. Furthermore, social remittances can scale up from local-level impacts to affect regional and national change and scale out to affect other domains of practice, including gender norms. It also includes transfer of legal norms in countries such as Ukraine (Kubal 2015).

For Poland, Grabowska and Garapich (2016) showed that while some migrants become ordinary agents of change regarding social remittances, others actively resist it. White (2019) showed that in Poland exposure to return migrants reinforces national trends (toward more open-to-difference attitudes, for example) even in social groups and geographical locations that are more conservative. Sabar and Pagis (2015) showed that African migrants returning from Israel transmit social norms related to entrepreneurship. For Mexico, Freyer (2018) showed that migrants returning to the impoverished Chiapas province came in with ideas that helped in its political and community transformation. Repeat-cycle returning migrants from Malaysia to Bangladesh transmitted new norms more effectively than first-cycle migrants (Hossein 2020). Finally, for migrants returning from Malaysia to the Palwan province of the Philippines social remittances are transmitted, diffused, and used at broader social and political units (Montefrio et al. 2014).

Several studies focused on the influence of migration on specific issues, such as fertility choice. Beine et al. (2013) found that a 1 percent change in the fertility norm to which migrants are exposed changes home country fertility by about 0.3 percent, an effect that was positive and significant. For Egypt, Bertoli and Marchetta (2013) showed that return migration from the Middle Eastern countries had a positive and significant impact on pregnancy and childbearing. Finally, Diabate and Mespe-Somps (2019) showed a negative and significant impact of return migration from Côte d'Ivoire to Mali on female genital mutilation, which suggests a positive cultural influence.

In contrast to the strands of literature summarized above, only a few studies have examined the impact of return migration on changes in gender norms in the migrant countries of origin. For Morocco, deHaas and Fokkema (2010) highlighted the role of intra-household power inequalities and conflicts in migration decision-making, as well as the effects of migration decisions for intra-household power relations. For Afghanistan, socioeconomic differences that existed before migration are reinforced by the migration experience, which results in strongly differentiated patterns of multidimensional embeddedness and transnational mobility (Van Houte et al. 2015). For Pakistan, Khalid (2011) found that returning migrant men and women either take on new patterns of behavior or maintain the traditional ones regarding gender norms only when these are congruent with financial concerns of the family or can be integrated into living conditions upon return.

To our knowledge, only two studies considered the impact of migration experience on gendered norms. For Egypt, Samari (2021) examined how gender norms and household gender dynamics were modified as a result of male return migration from other Arab countries using data from the 2006 and 2012 Egyptian Labor Market Panel Survey. The study estimated treatment effects for 7,314 married couples in 2006 and 8,992 married couples in 2012, using regression models of gender norms and household decision-making and return migration. Egyptian women with spouses who migrated to an Arab country and returned, valued more traditional gender norms. Women in households with a spouse who returned also made fewer household decisions compared to women in non-migrant households. Women with spouses who had migrated multiple times also made fewer household decisions compared to women who had a spouse

migrate before 2006. The findings suggest transformation of household gender dynamics and reinforcement of traditional gender ideologies by male migrants returning from other Arab countries.

A similar analysis was undertaken for Jordan (Tuccio and Wahba 2018). Controlling for both emigration and return migration selections, the study found that women with a returnee family member are more likely to hold traditional gender norms than women in households with no migration experience. Further analysis showed that results are driven by returnees from more conservative Arab countries, suggesting a transfer of conservative norms from destinations with highly traditional gender roles. In general, return migration from Middle Eastern countries had an adverse impact on female labor force participation, education, fertility, and gender equality.

Although exposure to new ideas and norms during migration and the impact of this exposure on home country conditions after the end of migration has been studied to some extent, no studies have considered the transfer of norms and values by return migrants from the Gulf or the Middle East to any Indian state or other South Asian countries. This paper addresses this gap given the large-scale South Asian migration to Middle Eastern countries and the potential implications of such exposure on future migration and gender equality policies in sending and destination countries alike.

3. Data

This paper uses data from the Kerala Migration Survey (KMS) 2013, the sixth in a series of migration monitoring surveys conducted by the Center of Development Studies since 1998 (Rajan and Zachariah 2013). The KMS 2013 includes a total of 14,575 households, representative at the level of 14 districts and covering all 63 *taluks*.[5] Interviews were conducted between December 2013 and May 2013. The survey collected demographic information for 63,230 household members, including 29,882 males and 33,341 females.

[5] An administrative district used for taxation purposes, typically made up of multiple villages.

3.1. Study Sample

This paper explores changes in gender attitudes after exposure to migration experience and subsequent normative cultural change for international migrants returning from Saudi Arabia and other GCC countries. The influence of migrant repatriation was assessed by comparing returning migrants from the GCC countries with non-migrants. A pure comparison group of non-migrants was chosen as the reference category, given that they had no potential spillover effects due to having no migration experience. Domestic migration patterns were analyzed as a separate analytical category of interest, since some Indian states have a more traditional outlook towards women working outside the home compared to some GCC countries, such as the UAE.[6] Respondents who had household members currently working or living outside Kerala or have ever worked or lived outside the state were excluded from this analysis because they could be potentially and indirectly influenced by their family members who had migration experience.

The selected sample included 322 returning migrants from Gulf countries (excluding Saudi Arabia), 256 returning migrants from Saudi Arabia, and 8,614 non-migrants. "Return migrants" is defined as household members who have worked and lived abroad. With the expectation that exposure to different cultures could change social norms, returning migrants were classified into cultural exposure categories: "returning international migrants from Gulf countries (excluding Saudi Arabia)," and "returning international migrants from Saudi Arabia". "Non-migrants" were defined as people who had never left Kerala, had no household members currently working or living outside Kerala, and have no one from the household who had ever worked or lived outside Kerala, either abroad or in other states. The "change" was defined as the degree of differentiation between various categories of "return migrants" and "non-migrants," after controlling for demographic, socioeconomic, and household characteristics.

[6] https://www.emirates.com/media-centre/emirates-acclaims-the-women-flying-high-in-aviation/
https://runwaygirlnetwork.com/2016/03/10/emirates-seeks-women-pilots-at-women-in-aviation-conference/

3.2. Gender Attitudes Composite Indexes

The module on gender attitudes consisted of 35 questions on employment, gender-based violence, decision-making, and general attitudes, answered by the main respondent of the household survey (Table 1). These 35 questions, asked to the respondents in Malayalam and English, were structured to elicit pointed answers that were recorded as: "Yes," "No," "Depends on the situation," and "Don't know."[7] This analysis took the affirmative responses into account, whereas "No," "Depends on the context," and "Don't know" are classified as 0. Thus, all the answers were coded as a binary variable with 1 for "yes" and 0 for "no."

The employment section had three questions: whether it is shameful for a wife to earn more than her husband, if a woman threatens a man's job opportunities and livelihood, and if a woman should not work outside her home if economic conditions improved. General attitudes, the second section, included 13 questions related to whether a woman's capacity to carry out her household chores was important to earn community respect and if it is shameful for a man to carry out household work. It also included paired questions to assist in the comparison of attitudes of male and female respondents on specific issues, such as whether girls and boys had to be brought up to be submissive and modest, and if outspoken and assertive boys and girls should be disciplined. Such a structure is crucial as it allows establishing if girls and women are at a comparative disadvantage than boys and men. The third section, decision-making, consisted of nine questions asked whether women should leave decision-making to men on a range of issues, such as property, family planning, and female participation in political and religious organizations, and self-help groups.

Thirteen questions on GBV, included in the last section, are the following: whether a woman's dressing style provokes men to behave badly with them, whether a woman should cover up being sexually abused to save family honor, if a woman who gets beaten by her husband loses community respect, and whether a man who beats his wife is respected by the society. It also featured questions to gauge comparative attitudes held by both genders on the same issues. Examples include paired questions on whether they felt men and women had to tolerate aggressive behavior from their spouses to protect their

[7] The formulation of the responses into these categories was undertaken after a series of pilot tests with respondents from various socioeconomic groups.

family honor. Within this section, a subset of five questions related to GBV consisted of very extreme cases of aggressive behaviors and sexual assaults.

Table 1: Gender Attitude Questions in KMS 2013

Section	Questions
Employment (3 questions)	1 Woman should not go for outside employment if the economic conditions are better
	2 When women work, they are taking job away from men
	3 It is shameful if a wife earns more than her husband
General attitude (10 questions)	4 Gender equality has already been achieved for the most part
	5 Work to achieve gender equality today benefits mostly well-to-do women
	6 A woman's most important role is to take care of her home and her family
	7 A woman who does not carry out her domestic chores satisfactorily does not get the respect of the community
	8 It is shameful for a man to do work like sweeping the floor or washing vessels
	9 Girls should be brought up to be submissive and modest
	10 Boys should be brought up to be submissive and modest
	11 Girls or women who are outspoken or assertive should be disciplined to behave
	12 Boys or men who are outspoken or assertive should be disciplined to behave
	16 A man loses respect in the community if his wife or daughter moves about freely outside the home
Decision-making (9 questions)	13 A woman who does not obey her husband does not get the respect of the community
	14 A man who cannot control his wife does not get the respect of the community
	25 A man should have the final word about decisions in his home
	26 If you were to have only one child you would rather have a son
	27 Women should leave the final decision to men about how many children to have and when
	28 Women should leave the final decision to men about property matters
	29 Women should leave the final decision to men about participation in religious or community groups of various kind
	30 Women should leave the final decision to men about participation in political organizations
	31 Women should leave the final decision to men about participation in self-help groups like Kudumbasree
GBV (13 questions)	15 A man has the right to beat his wife if she disobeys him*
	17 A woman should tolerate aggressive behavior by her husband in order to keep her family together*
	18 A man should tolerate aggressive behavior by his wife in order to keep his family together
	19 A woman should not report asexual molestation by others to avoid shame to her husband
	20 A woman or girl who goes out alone after dark is herself to be blamed if she gets molested
	21 Women's immodest dressing provides men to behave badly toward them
	22 A woman who has been sexually assaulted does not get the respect of the community*
	23 When a woman is raped, she usually did something careless to put herself in that situation*
	24 In any rape case, one would have to question whether the victim is promiscuous or has a bad reputation*
	32 A woman who is regularly beaten by her husband does not get the respect of the community
	33 A man who beats his wife does not get the respect of the community (reversely coded)
	34 A man who obeys his wife does not get the respect of the community
	35 A woman who obeys her husband gets the respect of the community

Note: * denotes variables categorized as "extreme gender attitudes".

The detailed summary statistics of the responses by different migrant groups are reported in Appendix A. Each binary variable is transparent and easy to understand. It takes the value of 1, for discriminatory conservative attitude, or 0, for a total open-minded attitude. It should be noted, however, that by classifying responses in this way, we are estimating the lower bound on conservative attitudes since people who reported "Depends on the situation" and "Don't know" could be holding conservative views though they were not willing to acknowledge that during the interview.

Different approaches can be adopted to aggregate the responses into composite indicators. Equal weights on responses are often preferred where no single variable is more important than the others. This analysis took binary values and used the most common statistical procedure, Principal Component Analysis (PCA) (Song et al. 2019, Lee et al. 2010), to determine the weight for each component of the composite indicator. The PCA extracts from a group of variables those orthogonal linear combinations that most accurately explain the common information. Weight determined by PCA represents the relative contribution the variables make to the variance to larger shares of variation. PCA is commonly used to reduce the dimensionality of a data set with numerous interrelated variables in social science studies where variables are highly correlated, such as household wealth (Mckenzie 2003), quality of life (Ram 1982), social capital (Hurtado et al. 2011), and socioeconomic status (Vyas and Kumaranayake 2006).

After creating the composite indices by the groupings listed in Appendix A, a standardized score was generated by subtracting each observation by the mean of the comparison group and dividing by the standard deviation of the comparison group. This is to ensure that the distributions of the PCA of the indexes are expressed relative to the distribution of the respective indexes of the comparison group. Thus, the differences between each migration category and the non-migrant comparison category could be interpreted as deviation from the mean of the comparison group, which was "zero" in this context. The non-migrant comparison group held a conservative position centered at zero, with positive distance from zero representing a more conservative attitude and negative distance from zero representing a more open-minded attitude, both measured as standard deviation of the comparison group.

3.3. Descriptive Statistics

The process of adaptation to cultural change is not independent of the individual characteristics that follow migrant repatriation. Therefore, a series of respondent and household characteristics were used to estimate the differences between returned migrants and non-migrants to account for changes in gender attitudes: demographic and socioeconomic variables (sex, age, religion, education, employment status, access to loan), and living conditions variables (number of children under 5 years old living in the household, household size, owning land or house, place of residence, and household wealth).

Table 2 reports the summary statistics of the covariate variables by types of respondents: returned migrants from Gulf countries and Saudi Arabia, as well as non-migrants. The average international returning migrant had lived abroad for about 11 years. Over 65 percent of the returning migrants were over the age of 45, over 90 percent were married, and a majority had completed secondary school. The average household size was between 4 and 5. Most migrants owned their own home, while less than 20 percent owned land. Nearly 30 percent of all migrants were from urban areas. Based on the PCA, most migrants belonged to the upper three quintiles of the Wealth Index, and nearly 50 percent of them came from North Kerala, i.e., from the districts of Kasaragod, Kannur, Wayanad, Kozhikode, Malappuram.[8]

Summary statistics on gender attitudes by type of migrants, presented in Appendix A, indicate some differences across migrant groups, with those returning from Saudi Arabia exhibiting more extreme views about women's economic participation, mobility, and role in preserving the honor of the household. For example, 20.3 percent of returned migrants from Saudi Arabia shared the view that women should not work outside the home if economic conditions are better, as compared to 17.3 percent of returned migrants from GCC countries. The corresponding figures for those thinking women took jobs away from men when they worked outside the home were 12.9 and 10.5 percent, respectively. On the other hand, less than 25 percent of returning migrants from the Gulf thought it is shameful if women earned more than the husband, while

[8] On the basis of geographical, historical, and cultural similarities, the districts are grouped into North Kerala (Kasaragod, Kannur, Wayanad, Kozhikode, Malappuram), Central Kerala (Palakkad, Thrissur, Eranak ulam, Idukki), and South Kerala (Thiruvananthapuram, Kollam, Alappuzha, Pathanamthitta, Kottayam).

25.4 percent of returning migrants from Saudi Arabia shared this belief. About 78 percent of returning migrants from Saudi Arabia believed that the most important role for women is to take care of home and children, and 84.8 percent also believe that a woman who does not carry out domestic chores properly does not get the respect of the community. The corresponding figures for the returned migrants from the Gulf are 81.9 percent and 78.6 percent.

With regard to power dynamics between men and women, a higher proportion of respondents returning from Saudi Arabia (75.3 percent) believed that a wife or daughter moving about freely outside the home results in the man losing respect in their community, as compared to those returning from the Gulf (67.7 percent). Almost 81 percent of the returning migrants from the Gulf believe that a man who cannot control his wife does not get the respect of the community, while 85 percent of the Saudi returning migrants did the same. While 61.1 percent of the Gulf return migrants and 64.8 percent of the Saudi return migrants are of the view that a man should have the final word at home, the corresponding figure was only 58.3 percent for non-migrants. Between 50 and 60 percent of the respondents believed that property decisions should be left to men, with little variation among the return migrants and non-migrants. Finally, 55.9 percent of the return migrants from Saudi Arabia were of the opinion that men should decide on participation in self-help groups, while only 50.6 percent of the return migrants from the Gulf felt the same, higher than those for non-migrants (42.1 percent).

Our main interest is with the impact of the migration experience on return migrants' attitudes toward GBV. The descriptive statistics regarding GBV clearly indicate that return migrants from Saudi Arabia have a more extreme attitude toward women, although attitudes observed across the entire sample are quite conservative. For example, about 43 percent of the returning Saudi migrants believe that a man has the right to beat his wife if she disobeys him, significantly higher than the corresponding figure for the Gulf return migrants at only 37 percent. Almost 32 percent of the Saudi return migrants, as compared to 35.2 percent of the Gulf return migrants, believe that a woman should tolerate aggressive behavior by her husband in order to keep her family together.

Table 2: Summary Statistics of Respondents and Household (HH) Characteristics

Variables	Variable descriptions	Returned migrants from Gulf countries		Returned migrants from Saudi Arabia		Non-migrants	
		N=332		n=256		N8,614	
		Mean	*sd*	*mean*	*sd*	*mean*	*sd*
Sex:							
Female respondent	1 if respondent was female	0.133	0.340	0.102	0.303	0.576	0.494
Age:							
14–29 years old	1 if respondent was between 14 and 29 years old	0.030	0.171	0.012	0.108	0.086	0.280
30–44 years old	1 if respondent was between 30 and 44 years old	0.226	0.419	0.305	0.461	0.290	0.454
45–69 years old	1 if respondent was between 45 and 69 years old	0.440	0.497	0.453	0.499	0.355	0.479
70–89 years old	1 if respondent was between 70 and 89 years old	0.304	0.461	0.230	0.422	0.269	0.443
Religion:							
Hindu	1 if respondent was Hindu	0.428	0.495	0.238	0.427	0.660	0.474
Christian	1 if respondent was Christian	0.184	0.388	0.125	0.331	0.207	0.405
Muslim	1 if respondent was Muslim	0.386	0.487	0.633	0.483	0.132	0.339
Household status:							
Currently married	1 if respondent was currently married	0.916	0.278	0.910	0.287	0.787	0.409
HH head or spouse	1 if respondent was HH head or the spouse of the HH head	0.819	0.385	0.859	0.348	0.819	0.385
Number of years living abroad	Number of years living abroad for returned international migrants	12.247	10.086	11.777	9.296		
Education level:							
Primary and less	1 if respondent completed primary school or had less than primary school education	0.274	0.447	0.266	0.443	0.282	0.450
Secondary	1 if respondent completed secondary school	0.563	0.497	0.625	0.485	0.607	0.489
College and above	1 if respondent completed college and above education level	0.163	0.370	0.109	0.313	0.111	0.314
Socioeconomic status:							
Currently employed	1 if respondent was currently employed	0.605	0.489	0.703	0.458	0.419	0.493
Received loan	1 if respondent ever received any loan	0.214	0.411	0.281	0.450	0.152	0.359
Behaviors:							
Any HH member smoked	1 if respondent from a HH with any HH member who had a smoking habit	0.105	0.308	0.148	0.356	0.067	0.250

Any HH member drank alcohol	1 if respondent from a HH with any HH member who had a drinking habit	0.105	0.308	0.074	0.263	0.070	0.256
Household characteristics:							
Number of children under 5 years old	Number of children who were under 5 years old	0.407	0.793	0.387	0.694	0.251	0.556
Number of current HH members	Number of HH members living in the HH	4.575	2.263	4.855	2.075	4.244	1.819
HH owned house	1 if HH owned the house	0.958	0.201	0.961	0.194	0.916	0.278
HH owned land	1 if HH owned any land	0.175	0.380	0.172	0.378	0.112	0.316
Urban residence	1 if HH was located in urban area	0.461	0.499	0.492	0.501	0.446	0.497
HH belonged to poor group (B40)	HH wealth index generated by Principal Component Analysis. 1 if HH wealth index belonged to lower two quintiles	0.271	0.445	0.328	0.470	0.489	0.500
HH belonged to non-poor group (T60)	HH wealth index generated by Principal Component Analysis. 1 if HH wealth index belonged to upper three quintiles	0.729	0.445	0.672	0.470	0.511	0.500
Districts:							
South	1 if HH was located at Southern Kerala state	0.328	0.470	0.293	0.456	0.272	0.445
Central	1 if HH was located at Central Kerala state	0.181	0.385	0.133	0.340	0.302	0.459
North	1 if HH was located at North Kerala state	0.491	0.501	0.574	0.495	0.426	0.495

Source: Author's calculations based on KMS 2013.

The respondents' attitudes against sexual violence show similar patterns. About 22 percent of the Saudi return migrants versus 20.5 percent of the Gulf return migrants believe that a woman should not report sexual molestation to avoid shame to her husband. Almost 53 percent of the Saudi return migrants and 50.3 percent of the Gulf return migrants believe that a women or girl who goes out alone after dark is to blame if she gets molested. About 70 percent of the Saudi return migrants versus 61.4 percent of the Gulf return migrants believe that women's immodest dressing provokes men to behave badly toward them, while almost 50 percent of the Saudi return migrants versus 42.5 percent of the Gulf return migrants believe that when a woman is raped, she usually did something careless to put herself in that situation. Finally, about 52 percent of the Saudi return migrants versus 53.6 percent of the Gulf return migrants believe that in any rape case, one would have to question whether the female victim is promiscuous or has a bad reputation, and accordingly, 68 percent of the Saudi return migrants versus 59.6 percent of the Gulf return migrants believe that a woman who has been sexually assaulted does not get the respect of the community.

4. Empirical Strategy

Five composite indicators were calculated using the PCA technique as dependent variables to estimate the impact of international return migration on discriminatory gender attitudes. Particularly, Y_I captured the Employment Index, General Index, Decision-Making Index, Gender-Based Violence Index, and Extreme Index. These indices are measured as standard deviations vis-à-vis the comparison group (comprised of non-migrants who had neither lived nor worked outside the state), where 0 is the standardized mean of the comparison group, with a positive distance to zero implying a more conservative attitude regarding gender norms, and a negative distance to zero implying more open-mindedness. The regression specification is as follows:

$$Y_i = \alpha_0 + \alpha_1 R_i^k + \alpha_2 X_i + \epsilon_i$$

where Y_I is the gender attitude index by individual i; R_i^k is the return migration variable, a dummy being 1 if the individual had ever worked/lived abroad or outside Kerala, with $k = 1, 2, \ and \ 3$ indicating type of returning international migrants from Gulf countries, returning international migrants from Saudi Arabia,

and returning international migrants from other foreign countries, respectively; X_i is a vector of individual respondent characteristics (including sex, age, marital, employment status, educational attainment, and access to loan, and household characteristics including number of children under 5 years old living in the household, household size, owning land or house, place of residence and household wealth); and ϵ_i is the error term with a mean of zero and standard error of 1.

A major confounding issue in the identification is the widely studied matter of selectivity of migrants. Individuals moving abroad or to another state are generally self-selected on the basis of unobservable characteristics as opposed to being randomly selected. For example, more open-minded people may be more likely to migrate internationally and have positive attitudes toward women. In addition, immigration destinations might not be randomly chosen and can be correlated with unobserved factors. More conservative people might choose to migrate to a more conservative country. Similarly, return migrants might also be a non-random group. For example, a bad migration experience can increase the likelihood a migrant will return to the home country, as is evident from the literature, and is likely to be correlated with negative attitudes and behaviors toward women.

Selection of migrants creates problems in the identification of causal effects. Ordinary Least Squares (OLS) is unlikely to provide unbiased estimates of the causal effect of an explanatory variable on the dependent variable as the assumptions of OLS regressions cannot be met without controlling for endogeneity and selectivity. Therefore, valid exclusion and restrictions for the emigration and return decisions are needed. Instrumental Variables (IVs) are commonly used to overcome the bias in OLS estimates by isolating a source of exogenous variation to estimate the true effect of an explanatory variable on the dependent variable of interest. IVs that are relevant for emigration and return migration decisions but not correlated with an individual's gender attitudes other than through the migration channel need to be identified. The relevance of the IVs, exogeneity, and whether they are "weak" or "strong" also need to be tested. In previous studies, IVs used for migration depended on both data availability and the outcome of interest, as summarized by McKenzie and Sasin (2007) into four categories: geographical distance; natural shock; cultural, historical, community, and political factors; and economic shocks.

To correct for endogeneity and selectivity, this paper used the Bartik shift-share analogy as IVs, following Bartik (1991). The Bartik shift-share instrument have been widely used in empirical research across various fields, including labor economics, international trade, public economic, macroeconomics, and finance (Goldsmith-Pinkham et al, 2020)**.** The canonical setting defines the IV as weighted averages of a common set of shocks, with weights reflecting heterogeneous shock exposure.

In this paper, the Bartik shift-share analogy of current migration exposure and returned migration exposure were taken into consideration. To predict the choice of migration destinations, the Bartik shift-share analogy used pre-period current migrants living in a specific country from a given *taluk*, as a share of total number of current migrants living abroad from the same *taluk* (the "shares"), and current-period leave-out-ratio of current migrants living in a specific country to the *taluk* population (the "shift"). The former ratio captures the historical migration shock, whereas the latter ratio generates variation at the local level (*taluk*) by exploiting variation in the national account of migration, which are less endogenous compared to the local conditions. To predict migrants returning from abroad, the Bartik shift-share analogy used pre-period returned migrants from a specific country back to the local *taluk*, as a share of total number of returned migrants from abroad to the local *taluk* (the "shares"), and current-period leave-out-ratio of returned migrants from a specific country to the *taluk* population (the "shift"). The former ratio captures the historical repatriation shock, and the latter ratio generates variation at the local level ("taluk") by exploiting variation in national aggregates, which are less endogenous compared with local conditions.

The "Bartik share" analogy IVs for returning international migrants (REM) in base year 2003 and current year 2013 are defined as $Z_{REM,2003} = REM^{k}_{t,2003}/REM_{t,2003}$ where $REM^{k}_{t,2003}$ is the number of returning migrants from migration destination k ($k = 1, 2, and\ 3$ indicating Gulf countries, Saudi Arabia, and other foreign countries, respectively) back to *taluk* t in base year 2003, and $REM_{t,2003}$ is the total number of returning migrants from migration destination k in base year 2003. Similarly, the "Bartik share" IVs for current international migrants (EMI) in base year 2003 and current year 2013 is defined as $Z_{EMI,2003} = EMi^{k}_{t,2003}/EMI_{t,2003}$, where $EMI^{k}_{t,2003}$ is the number of current migrants living in migration

destination k from *taluk* t in base year 2003, and $EMI_{t,2003}$ is the total number of current migrants living in migration destination k in base year 2003. The weights are calculated as $W_{REM,2013} = (REM^k_{2013} - REM^k_{t,2013})/POP_{t,2013}$ where $REM^k_{t,2013}$ is the number of returning migrants from migration destination k back to *taluk* t in current year 2013, REM^k_{2013} is the number of returning migrants from migration destination k in current year 2013, and $POP_{t,2013}$ is the population of *taluk* t in current year 2013. Similarly, $W_{EMI,2013} = (EMI^k_{2013} - EMI^k_{t,2013})/POP_{t,2013}$, where $EMI^k_{t,2013}$ is the number of current migrants living in migration destination k, EMI^k_{2013} is the number of current migrants living in migration destination k in current year 2013, and $POP_{t,2013}$ is the population of *taluk* t in current year 2013.

The IV regression was estimated using the following Two-Stage Least Squares (2SLS) model:

$$R^k_i = \beta_0 + \beta_1 Z_{REM,2003} + \beta_2 Z_{EMI,2003} + \beta_3 W_{EMI,2013} + \beta_4 W_{REM,2013} + \beta_5 X_i + \varepsilon_i$$

$$Y_I = \alpha_0 + \alpha_1 M^k_i + \alpha_2 X_i + \epsilon_i$$

where M^k_i is predicted from the instrumental variable, "Bartik Share" analogy of returning migrants $Z_{REM,2003}$ and $W_{REM,2013}$, and current migrants $Z_{EMI,2003}$ and $W_{REM,2013}$, using a Probit estimation.[9]

The 2SLS with IVs techniques consider not only the fact that emigrants are not a random sample of the population, but also that those migrants who return home are selected based on unobservable characteristics. Among various IV estimators, the 2SLS estimator is the most efficient and is obtained by

[9] As a robustness check, this paper also used migrant networks as an IV. For these estimations, the IVs accounted for the fact that it is less risky for migrants to migrate to an area with earlier migrants from the same origin because information is available through their social networks. The denser networks of migrants provide potential migrants with increasingly reliable information about the opportunities and challenges associated with the destination and about the migration process. The migrant network IV was defined as a leave-out mean ratio $Z^j_i = \sum^K_{\substack{k=1 \\ k\neq i}} Z^j_{k,m}/pop_m$ where $Z^j_{k,m}$ is the number of current migrants from household k of migrant group type $j = 1, 2, and\ 3$, and $\sum^K_{\substack{k=1 \\ k\neq i}} Z^j_{k,m}$ is the sum of current migrants from all households of migrant group type $j = 1, 2, and\ 3$ from *taluk* m, excluding household i where the respondent is from, and pop_m is the population of *taluk* m. A similar leave-out ratio was created to account for the success and comfort of the emigrant, as the higher the number of returning migrants in an individual's network, the higher the likelihood that individual will return home. This IV was defined as $W^j_i = \sum^K_{\substack{k=1 \\ k\neq i}} W^j_{k,m}/pop_m$ where $W^j_{k,m}$ is the number of returning migrants from household k in migration group type $j = 1, 2, and\ 3$, $\sum^K_{\substack{k=1 \\ k\neq i}} W^j_{k,m}$ is the sum of returning migrants from all households of migration group type $j = 1, 2, and\ 3$ from *taluk* m, excluding household i of the respondent, and pop_m is the population of *taluk* m. The results were qualitatively similar and are available upon request.

using all the instruments simultaneously in the first-stage regression (Wooldridge 2010). In this paper, a 2SLS-GMM (Generalized Method of Moments) [10] estimation technique (Arellano and Bond 1991) is adopted because it offers a general method for specification testing, with minimized value of the criterion function with and without the restrictions imposed, and for over-identified models, its estimator is asymptotically efficient if the weight matrix is optimal (Hayashi 2000). The GMM option implements a two-step efficient estimator that minimizes the GMM criterion function, where the exogenous variables or instruments in the equation are uncorrelated with the error term, and more efficiency can be gained than traditional IV/2SLS estimation. Over-identifying restrictions and the independent and identically distributed assumption can be relaxed in this context.

5. Results

The results are discussed with a specific focus on key coefficients of interest. In particular, Table 3 focuses on a part of the 2SLS results accounting for endogeneity and selectivity, but Appendix B shows the complete results with control variables. As mentioned above, the dependent variables are composite indexes that aggregate several responses to gender attitude questions by categories and standardized by the mean and standard deviation of the comparison group. Using non-migrants as a benchmark for gender attitudes, positive coefficients on the "Return Migrant" dummy indicate a relatively more conservative attitude and negative coefficients indicate a relatively more open-minded attitude, with the magnitude interpreted as standard deviations from the average of the comparison group. Due to few data points for migrants returning from countries outside the Gulf and Saudi Arabia, the equation for $k = 3$ is not estimated.

[10] The GMM-SYS estimator is a system that contains both the levels and the first difference equations. It provides an alternative to the standard first difference GMM estimator. In the Arellano–Bond method, first differences of the regression equation are taken to eliminate the individual effects. Then, deeper lags of the dependent variable are used as instruments for differenced lags of the dependent variable. In traditional panel data techniques, adding deeper lags of the dependent variable reduces the number of observations available. For example, if observations are available at T time periods, then after first differencing, only T-1 lags are usable. Then, if K lags of the dependent variable are used as instruments, only T-K-1 observations are usable in the regression. This creates a trade-off: adding more lags provides more instruments but reduces the sample size. The Arellano–Bond method circumvents this problem.

The first-stage Probit model regression results in Appendix C show that the "Bartik share" analogy instrumental variables are good predictors, with jointly significant F tests. Detailed results are presented in Appendix B. The bottom rows of Table 3 show a series of statistical tests for IVs. The first-stage IV F-statistics show the joint significance of IVs in the first-stage regression and validate the relevance condition. Hansen's J test for over-identifying restrictions with the joint null hypothesis indicates that the instruments are valid (Hansen 1982). The J-test for "return migrants from Gulf countries" is insignificant, which fails to reject the null hypothesis indicating correlation between IV variables and the error term. F-statistics above 10 indicate that the IVs are strong. Large LM-statistics show strong relevance and thus "under-identification" is also not an issue.

The findings indicate that change in gender attitudes varied by migration destination and migrant category. Specifically, retuning migrants from Saudi Araba had significantly more conservative attitudes across all categories compared to non-migrants, and less conservative attitudes toward employment. Return migrants from other Gulf countries did not show significantly different attitudes towards decision-making, GVB and extreme categories, but more conservative attitudes towards general gender equality issues and less conservative attitudes towards employment, compared to non-migrants.

For the Employment Index, returning migrants from Gulf countries showed a less conservative attitude compared to the non-migrant group by 4.0 standard deviations, and returning migrants from Saudi Arabia also showed an even less conservative attitude by 7.8 standard deviation, both significant at the 1 percent level. For the General Index, returning migrants from both the Gulf countries and Saudi Arabia exhibit significantly more conservative attitudes than non-migrants by 2.3 standard divisions and 6.0 standard deviations respectively. Migrants returning from Saudi Arabia were significantly more conservative on the issue of Decision-Making by 2.3 standard deviations relative to the non-migrant comparison group, while returning migrants from the Gulf countries did not exhibit a significant difference form non-migrants.

Table 3: Return International Migrants and Change in Gender Attitudes

	Employment Index		***General Index***		***Decision-making Index***		***GBV Index***		***Extreme Index***	
	R(k=GULF)	*R(k=SA)*	*R(k=GULF)*	*R(k=SA)*	*R(k=GULF)*	*R(k=SA)*	*R(k=GULF)*	*R(k=SA)*	*R(k=GULF)*	*R(k=SA)*
Difference	-3.975***	-7.809***	2.346***	5.795***	-0.0544	2.289***	0.468	2.954***	-0.689	2.553***
	[0.995]	[1.024]	[0.733]	[1.015]	[0.703]	[0.581]	[0.650]	[0.631]	[0.698]	[0.627]
LM-stats for under-identification	23.71	66.87	23.71	66.87	23.71	66.87	23.71	66.87	23.71	66.87
F-stats for weak identification	6.258	17.49	6.258	17.49	6.258	17.49	6.258	17.49	6.258	17.49
Hansen J-stats	90.70	52.03	50.88	52.03	26.80	43.69	112.9	117.9	14.55	30.80
Obs.	8946	8870	8946	8870	8946	8870	8946	8870	8946	8870

Notes: (1) All specifications with GMM standard errors. * p<0.10, ** p<0.05, *** p<0.01; (2) Data source: KMS 2013; (3) Full estimation results with corateis are provided in Appendix B.

Regarding GBV, returning migrants from Saudi Arabia also showed more conservative attitudes. They were more tolerant of physical violence against women by 3.0 standard deviations, a finding significant at the 1 percent level. On the other hand, migrants returning from the Gulf countries were more open-minded by 0.5 standard deviation, which was not significantly different from non-migrants. Regarding extreme attitudes, such as acceptance of sexual assault, migrants returning from Saudi Arabia were more conservative by 2.6 standard deviations, i.e., more likely to approve of extreme behavior towards women. Those returning from the Gulf had a less conservative attitude by 0.7 standard deviation, but this finding was not statistically significant.

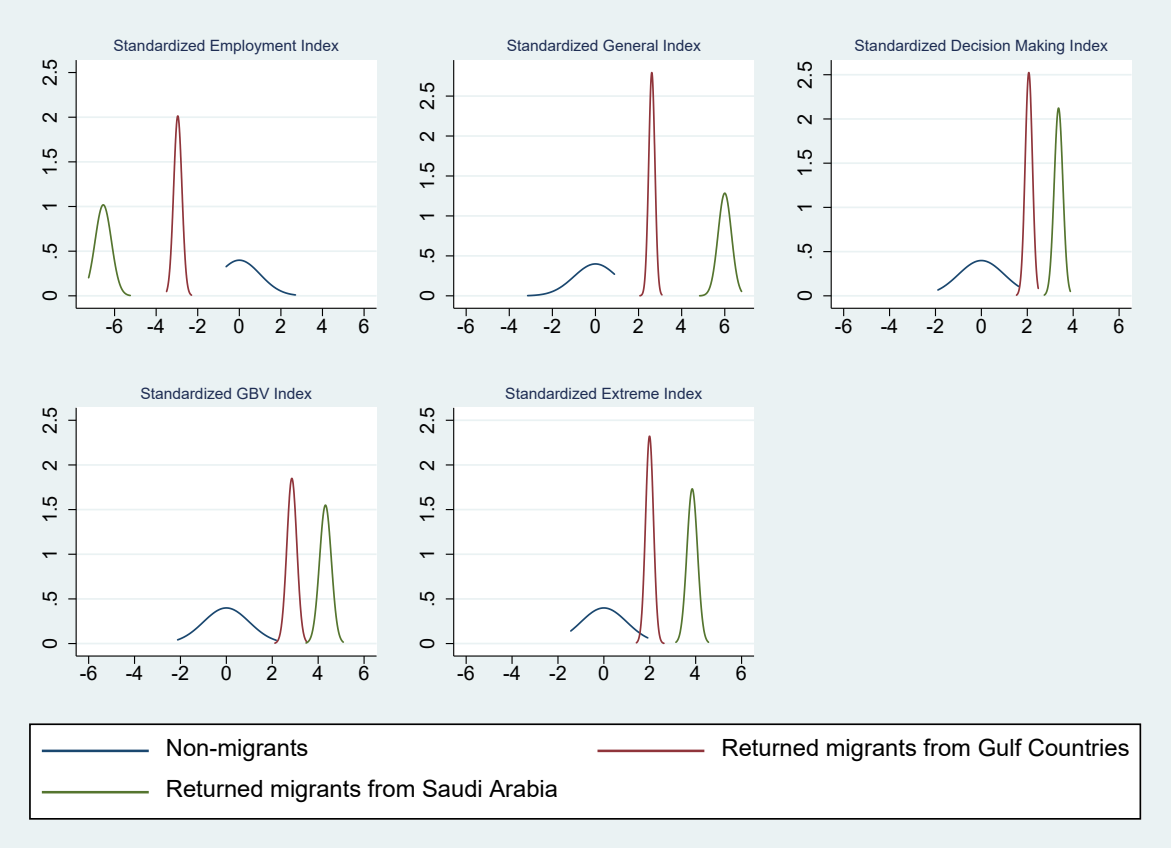
To compare migrants from different destinations versus non-migrants, Figure 2 exhibits the distribution of the indexes of each migrant group, with the distance to the center from zero showing standard deviations from the non-migrant comparison group. The gender attitude distribution indicates that apart from the standardized Employment Index, return migrants from Saudi Arabia hold conservative attitudes towards gender. The findings are particularly pronounced for general indicators, GBV, and extreme attitudes. They are also more likely to approve of extreme behavior towards women.

Some demographic characteristics, including gender, religion, education level, marriage status, and household role were statistically significantly associated with holding conservative attitudes. Interestingly, female respondents exhibited a more conservative attitude for all categories, except for showing a less conservative attitude towards employment. Both of these findings were statistically significant at 1 percent. Christians exhibited fewer conservative attitudes towards all indices except for employment, whereas Muslims did not exhibit a clear pattern in any category, with the exception of employment where they were more conservative relative to Hindus. Returning migrants who had attained secondary and higher education levels did not exhibit any significant difference from those with primary and less education level across all gender attitude categories. One exception was that respondents who had post-secondary education exhibited a less conservative attitude towards employment. Married respondents exhibited more conservative attitudes across all categories, and this was strongly significant for attitudes towards decision-making.

Being a household head or a household head's spouse was associated with being less conservative for all categories, except for employment.

Respondents who were from a household owning a house and who were poor or B40 (being in the bottom 40 percent of the income distribution) exhibited more conservative attitude across all categories, but a less conservative attitude towards employment. To the contrary, respondents from a household living in an urban area and owning land exhibited less conservative attitude across all categories, but a more conservative attitude towards employment. Other individual characteristics such as age, financial situation, employment status, and personal habits, and household characteristics such as household size and composition did not clearly define respondents' attitudes towards gender questions.

Figure 2: Post-Estimated Distribution of Gender Attitude Composite Indexes by Migrant Type



Data source: KMS 2003, 2013
The comparison group is the "Non-migrants" with composite index with mean centered at zero and standard deviation at 1.

6. Discussion and Conclusions

This paper analyzed the impact of return migration from Saudi Arabia and the Gulf countries on the transfer of gender norms to Kerala. After accounting for selectivity and endogeneity through IVs, the findings showed that returning migrants from Saudi Arabia tend to exhibit conservative values in all cases except employment, and particularly with regard to general attitudes and household decision making. In contrast, those returning from the Gulf did not exhibit significantly different attitudes compared to those with no migration experience. The two exceptions were general gender attitudes, where they were more conservative than non-migrants, and female employment, where they were relatively less conservative. These results are similar to previous studies of return migrants to Jordan and Egypt from other Middle Eastern countries.

With increasing migration trends globally, these findings have important policy implications. Often, the remittances to migrant sending countries are considered a blessing, while the impact of social remittances—including those on social norms and gender attitudes—are overlooked. This paper showed that even though social remittances can have beneficial impacts on migrant populations and their home communities (e.g., in terms of transfer of socially beneficial values such as those on education, fertility and education, as previous studies have pointed out), the potential harmful ones should not be overlooked.

The results indicate that there is considerable heterogeneity in social remittances across migrant destinations. This finding suggests that proactive steps are needed to mitigate the detrimental impacts of these social remittances in migrant sending countries. Measures should be adopted to mitigate the impact of the more extreme attitudes transferred from other countries, with a particular focus on migrants returning from destinations that are associated with the adoption of such extreme attitudes. These measures may include penalties for GBV and other extreme measures, as well non-discriminatory regulations regarding employment in migrant sending countries. The issues regarding GBV, extreme attitudes toward women, as well as discriminatory employment practices need to be addressed systematically through education and communication programs to prevent the transfer of such norms through return migration. Several migrant

sending countries and states including Kerala have already established institutions such as the Department of Nonresident Keralite Affairs (NORKA) to impart training and support to aspiring migrants and current and returned migrants and their households. Considering the importance of the transfer of social norms and values through migration experience, awareness programs and continued education through monitoring and social media outreach could also be explored focusing on households with migration experience. Future research in this area can explore the impact of such measures on mitigating the transfer of detrimental social remittances.

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Appendix A: Summary Statistics of Gender Attitudes Responses by Migrant Type

	Total		**Returned international migrants from Gulf countries**		**Returned international migrants from Saudi Arabia**		**Non-migrants**	
	n=9,482		n=332		n=256		n=8,614	
	mean	*sd*	*mean*	*sd*	*mean*	*sd*	*mean*	*sd*
Employment (3 questions)								
1 Women should not go for outside employment if the economic conditions are better	0.221	0.415	0.178	0.383	0.203	0.403	0.224	0.417
2 When women work, they are taking jobs away from mee	0.150	0.357	0.105	0.308	0.129	0.336	0.153	0.360
3 It is shameful if a wife earns more than her husband	0.204	0.403	0.208	0.406	0.254	0.436	0.205	0.403
General attitude (10 questions)								
4 Gender equality has already been achieved for the most part	0.433	0.496	0.383	0.487	0.391	0.489	0.435	0.496
5 Work to achieve gender equality today benefits mostly well-to-do women	0.414	0.493	0.440	0.497	0.520	0.501	0.412	0.492
6 A woman's most important role is to take care of her home and her family	0.757	0.429	0.819	0.385	0.781	0.414	0.754	0.431
7 A woman who does not carry out her domestic chores satisfactorily does not get the respect of the community	0.777	0.416	0.786	0.411	0.848	0.360	0.778	0.416
8 It is shameful for a man to do work like sweeping the floor or washing vessels	0.352	0.477	0.328	0.470	0.355	0.480	0.353	0.478
9 Girls should be brought up to be submissive and modest	0.862	0.345	0.892	0.311	0.906	0.292	0.860	0.347
10 Boys should be brought up to be submissive and modest	0.864	0.343	0.904	0.296	0.926	0.263	0.860	0.347
11 Girls or women who are outspoken or assertive should be disciplined to behave	0.808	0.394	0.810	0.393	0.867	0.340	0.806	0.396
12 Boys or men who are outspoken or assertive should be disciplined to behave	0.776	0.417	0.786	0.411	0.805	0.397	0.774	0.418
16 A man loses respect in the community if his wife or daughter moves about freely outside the home	0.677	0.468	0.753	0.432	0.746	0.436	0.673	0.469
Decision-making (9 questions)								
13 A woman who does not obey her husband does not get the respect of the community	0.826	0.380	0.855	0.352	0.863	0.344	0.824	0.381
14 A man who cannot control his wife does not get the respect of the community	0.769	0.422	0.807	0.395	0.852	0.356	0.766	0.423
25 A man should have the final word about decisions in his home	0.586	0.493	0.611	0.488	0.648	0.478	0.583	0.493

26 If you were to have only one child you would rather have a son	0.258	0.438	0.280	0.450	0.211	0.409	0.259	0.438
27 Women should leave the final decision to men about how many children to have and when	0.277	0.447	0.316	0.466	0.316	0.466	0.273	0.445
28 Women should leave the final decision to men about property matters	0.545	0.498	0.560	0.497	0.590	0.493	0.543	0.498
29 Women should leave the final decision to men about participation in religious or community groups of various kind	0.560	0.496	0.584	0.494	0.664	0.473	0.555	0.497
30 Women should leave the final decision to men about participation in political organizations	0.555	0.497	0.584	0.494	0.676	0.469	0.549	0.498
31 Women should leave the final decision to men about participation in self-help groups like Kudumbasree	0.429	0.495	0.506	0.501	0.559	0.498	0.421	0.494
GBV (13 questions)								
15 A man has the right to beat his wife if she disobeys him	0.381	0.486	0.370	0.484	0.426	0.495	0.380	0.485
17 A woman should tolerate aggressive behavior by her husband in order to keep her family together	0.328	0.469	0.352	0.478	0.316	0.466	0.324	0.468
18 A man should tolerate aggressive behavior by his wife in order to keep his family together	0.241	0.428	0.217	0.413	0.238	0.427	0.238	0.426
19 A woman should not report asexual molestation by others to avoid shame to her husband	0.238	0.426	0.205	0.404	0.219	0.414	0.238	0.426
20 A woman or girl who goes out alone after dark is herself to be blamed if she gets molested	0.446	0.497	0.503	0.501	0.527	0.500	0.440	0.496
21 Women's immodest dressing provokes men to behave badly toward them	0.590	0.492	0.614	0.487	0.703	0.458	0.584	0.493
22 A woman who has been sexually assaulted does not get the respect of the community	0.559	0.497	0.596	0.491	0.680	0.468	0.552	0.497
23 When a woman is raped, she usually did something careless to put herself in that situation	0.395	0.489	0.425	0.495	0.496	0.501	0.389	0.488
24 In any rape case, one would have to question whether the victim is promiscuous or has a bad reputation	0.470	0.499	0.536	0.499	0.523	0.500	0.464	0.499
32 A woman who is regularly beaten by her husbands does not get the respect of the community	0.516	0.500	0.527	0.500	0.547	0.499	0.514	0.500
33 A man who beats his wife does not get the respect of the community (reversely coded)	0.179	0.383	0.148	0.355	0.160	0.367	0.182	0.386
34 A man who obeys his wife does not get the respect of the community	0.646	0.478	0.687	0.465	0.711	0.454	0.643	0.479
35 A woman who obeys her husband gets the respect of the community	0.804	0.397	0.867	0.340	0.859	0.348	0.799	0.401

Note: The extreme group, consisted of very extreme cases of aggressive behaviors and sexual assaults from GBV group, including question 15, 17, 22, 23, and 24.

Appendix B: Return International Migrants and Gender Attitudes (2SLS)

	R(k=GULF)	R(k=SA)	R(k=GULF)	R(k=SA)	R(k=GULF)	R(k=SA)
	(1)	(2)	(3)	(4)	(5)	(6)
	Employment Index		***General Index***		***Decision-Making Index***	
Return migrant	-3.975***	-7.809***	2.346***	5.795***	-0.0544	2.289***
	[0.995]	[1.024]	[0.733]	[1.015]	[0.703]	[0.581]
Female respondent	-0.279***	-0.378***	0.129**	0.224***	0.00643	0.106***
	[0.0650]	[0.0532]	[0.0513]	[0.0535]	[0.0488]	[0.0367]
Age: 30 - 44 years old	0.0288	0.126**	0.0282	-0.0762	-0.00608	-0.0724
	[0.0577]	[0.0626]	[0.0503]	[0.0626]	[0.0477]	[0.0480]
Age: 45 - 69 years old	0.0410	0.109	0.0900	-0.00598	0.0327	-0.0390
	[0.0661]	[0.0668]	[0.0564]	[0.0664]	[0.0533]	[0.0499]
Age: 60 - 89 years old	-0.0370	0.0166	0.130**	0.0720	0.0930*	0.0448
	[0.0652]	[0.0709]	[0.0565]	[0.0696]	[0.0535]	[0.0518]
Religion: Christian	0.151***	0.158***	-0.164***	-0.185***	-0.0807***	-0.0954***
	[0.0344]	[0.0375]	[0.0297]	[0.0378]	[0.0269]	[0.0279]
Religion: Muslim	0.392***	0.942***	-0.0122	-0.455***	0.209***	-0.0109
	[0.0849]	[0.118]	[0.0660]	[0.120]	[0.0604]	[0.0722]
Married	0.121***	0.0636*	0.0227	0.0623*	0.119***	0.116***
	[0.0340]	[0.0378]	[0.0312]	[0.0378]	[0.0302]	[0.0302]
Household head or spouse	-0.0116	0.0277	-0.0987***	-0.159***	-0.0576*	-0.0589*
	[0.0432]	[0.0500]	[0.0360]	[0.0494]	[0.0350]	[0.0342]
Education: secondary	-0.0635*	-0.0149	0.0726**	0.0315	0.0429	0.0351
	[0.0325]	[0.0415]	[0.0291]	[0.0425]	[0.0266]	[0.0284]
Education: college and above	-0.126**	-0.142**	0.0611	0.0788	-0.0340	-0.0337
	[0.0514]	[0.0615]	[0.0441]	[0.0642]	[0.0418]	[0.0446]
Currently employed	-0.0514*	0.0476	-0.0727***	-0.148***	0.0218	0.000601
	[0.0303]	[0.0384]	[0.0274]	[0.0394]	[0.0251]	[0.0272]
Received loan	-0.0966***	-0.00149	0.122***	0.0606	0.0835***	0.0546*
	[0.0367]	[0.0529]	[0.0298]	[0.0541]	[0.0283]	[0.0325]
Any household member smokes	0.0123	0.228**	-0.0495	-0.244**	0.0110	-0.0460
	[0.0715]	[0.101]	[0.0585]	[0.109]	[0.0506]	[0.0584]
Any household member drinks	0.0496	-0.147*	-0.0103	0.152	0.0178	0.0856

	[0.0703]	[0.0869]	[0.0561]	[0.0927]	[0.0488]	[0.0558]
Number of children under 5 years old	0.0740**	0.0343	-0.0614**	-0.0654*	0.00519	-0.0126
	[0.0330]	[0.0352]	[0.0258]	[0.0368]	[0.0237]	[0.0232]
Number of household members	-0.0210**	-0.00616	0.0172**	0.00222	0.00820	0.00679
	[0.00896]	[0.0110]	[0.00795]	[0.0114]	[0.00712]	[0.00734]
Household owns house	-0.121**	-0.0918*	0.107**	0.0822	0.0953**	0.0728*
	[0.0478]	[0.0539]	[0.0443]	[0.0560]	[0.0400]	[0.0416]
Household owns land	0.0535	0.134**	-0.0362	-0.0765	-0.0432	-0.0655*
	[0.0440]	[0.0562]	[0.0379]	[0.0575]	[0.0343]	[0.0368]
Reside in urban area	0.169***	0.206***	-0.0613***	-0.0825**	-0.219***	-0.224***
	[0.0263]	[0.0319]	[0.0226]	[0.0321]	[0.0210]	[0.0224]
Poor(B40)	-0.0198	-0.0284	0.0541*	0.0659*	-0.00768	0.0171
	[0.0372]	[0.0379]	[0.0312]	[0.0391]	[0.0286]	[0.0257]
Central districts	-0.278***	-0.367***	-0.000710	0.0830*	-0.388***	-0.360***
	[0.0455]	[0.0453]	[0.0351]	[0.0435]	[0.0351]	[0.0319]
North districts	-0.167***	-0.251***	-0.376***	-0.335***	-0.445***	-0.437***
	[0.0355]	[0.0426]	[0.0286]	[0.0412]	[0.0277]	[0.0284]
Constant	0.457***	0.333***	-0.144	0.00962	0.150*	0.157*
	[0.108]	[0.109]	[0.0936]	[0.110]	[0.0874]	[0.0802]
LM-stats for under-identification	23.71	66.87	23.71	66.87	23.71	66.87
F-stats for weak identification	6.258	17.49	6.258	17.49	6.258	17.49
Hansen J-stats	90.70	52.03	50.88	52.03	26.80	43.69
Obs.	8946	8870	8946	8870	8946	8870

Notes: (1) All specifications with GMM standard errors. * p<0.10, ** p<0.05, *** p<0.01; (2) Data source: KMS 2003, 2013

Appendix B: Continued

	R(k=GULF)	R(k=SA)	R(k=GULF)	R(k=SA)
	(7)	(8)	(9)	(10)
	GVB Index		***Extreme Index***	
Return migrant	0.468	2.954***	-0.689	2.553***
	[0.650]	[0.631]	[0.698]	[0.627]
Female respondent	0.0839*	0.175***	0.0301	0.176***
	[0.0459]	[0.0382]	[0.0482]	[0.0380]
Age: 30 – 44 years old	0.0864*	0.0196	0.103**	0.0180
	[0.0464]	[0.0482]	[0.0467]	[0.0476]
Age: 45 – 69 years old	0.155***	0.0722	0.188***	0.0850*
	[0.0520]	[0.0509]	[0.0527]	[0.0501]
Age: 60 – 89 years old	0.222***	0.172***	0.237***	0.181***
	[0.0526]	[0.0530]	[0.0533]	[0.0526]
Religion: Christian	-0.167***	-0.172***	-0.130***	-0.142***
	[0.0268]	[0.0291]	[0.0269]	[0.0285]
Religion: Muslim	0.121**	-0.151**	0.150**	-0.163**
	[0.0574]	[0.0764]	[0.0602]	[0.0753]
Married	0.0103	0.0190	0.0218	0.0196
	[0.0294]	[0.0302]	[0.0298]	[0.0302]
Household head or spouse	-0.146***	-0.152***	-0.179***	-0.177***
	[0.0339]	[0.0357]	[0.0348]	[0.0355]
Education: secondary	0.00960	0.00168	-0.0272	-0.0278
	[0.0262]	[0.0299]	[0.0267]	[0.0295]
Education: college and above	-0.0217	-0.0269	-0.0118	-0.0198
	[0.0404]	[0.0468]	[0.0408]	[0.0454]
Currently employed	-0.00866	-0.0415	0.00352	-0.0223
	[0.0249]	[0.0283]	[0.0253]	[0.0280]
Received loan	0.158***	0.114***	0.135***	0.101***
	[0.0280]	[0.0350]	[0.0297]	[0.0348]
Any household member smokes	0.0282	-0.0461	0.0537	-0.00690
	[0.0505]	[0.0663]	[0.0541]	[0.0653]
Any household member drinks	0.0408	0.115*	0.0615	0.124**

	[0.0487]	[0.0619]	[0.0524]	[0.0619]
Number of children under 5 years old	0.0212	0.0124	0.0380	0.0121
	[0.0231]	[0.0248]	[0.0240]	[0.0241]
Number of household members	0.00277	-0.00254	-0.00144	-0.00305
	[0.00709]	[0.00771]	[0.00722]	[0.00757]
Household owns house	0.112***	0.0969**	0.0271	0.00843
	[0.0400]	[0.0433]	[0.0389]	[0.0415]
Household owns land	-0.0253	-0.0457	0.00636	-0.0114
	[0.0336]	[0.0393]	[0.0347]	[0.0390]
Reside in urban area	-0.206***	-0.219***	-0.0972***	-0.115***
	[0.0208]	[0.0233]	[0.0211]	[0.0230]
Poor(B40)	0.0623**	0.0807***	0.0335	0.0865***
	[0.0278]	[0.0269]	[0.0289]	[0.0264]
Central districts	-0.563***	-0.532***	-0.569***	-0.502***
	[0.0341]	[0.0327]	[0.0347]	[0.0328]
North districts	-0.357***	-0.336***	-0.269***	-0.236***
	[0.0288]	[0.0306]	[0.0291]	[0.0306]
Constant	0.165*	0.205**	0.257***	0.205**
	[0.0860]	[0.0828]	[0.0863]	[0.0814]
LM-stats for under-identification	23.71	66.87	23.71	66.87
F-stats for weak identification	6.258	17.49	6.258	17.49
Hansen J-stats	112.9	117.9	14.55	30.80
Obs.	8946	8870	8946	8870

Notes: (1) All specifications with GMM standard errors. * p<0.10, ** p<0.05, *** p<0.01; (2) Data source: KMS 2003, 2013

Appendix C: First-Stage Estimation – Probability of Being a Returned Migrant

	REM	REM(GULF)	REM(SA)	ROM
	first-stage	first-stage	first-stage	first-stage
Instrumental variables: "Bartik share" analogy				
Zrem, 2003	0.0155			
	[0.0871]			
Wrem, 2014	-1.524***			
	[0.224]			
Zemi, 2003	0.211**			
	[0.0895]			
Wemi, 2014	0.780***			
	[0.115]			
Zrem(Gulf), 2003		-0.162		
		[0.239]		
Wrem(Gulf), 2014		-1.765***		
		[0.363]		
Zemi(Gulf), 2003		0.281		
		[0.229]		
Wemi(Gulf), 2014		0.794***		
		[0.163]		
Zrem(SA), 2003			-0.0809	
			[0.270]	
Wrem(SA), 2014			-1.096***	
			[0.324]	
Zemi(SA), 2003			1.538***	
			[0.307]	
Wemi(SA), 2014			0.915***	
			[0.273]	
Zrom, 2003				-0.130**
				[0.0627]
Wrom, 2014				-1.163***
				[0.352]
Zomi, 2003				0.132***
				[0.0497]
Womi, 2014				0.575***
				[0.171]
Female respondent	-0.102***	-0.0593***	-0.0416***	-0.0551***
	[0.00620]	[0.00491]	[0.00413]	[0.00497]
Age: 30 – 44 years old	0.0454***	0.0248***	0.0246***	0.00787
	[0.00841]	[0.00635]	[0.00542]	[0.00608]
Age: 45 – 69 years old	0.0623***	0.0382***	0.0266***	0.0126*
	[0.00916]	[0.00688]	[0.00601]	[0.00656]
Age: 60 – 89 years old	0.0535***	0.0319***	0.0193***	0.0188**
	[0.0101]	[0.00745]	[0.00672]	[0.00753]
Religion: Christian	0.0217***	0.00781	0.00729**	0.0132***
	[0.00618]	[0.00480]	[0.00361]	[0.00514]

Religion: Muslim	0.149***	0.0708***	0.103***	0.0176***
	[0.0102]	[0.00826]	[0.00864]	[0.00528]
Married	0.0122**	0.0115***	0.00166	0.00578
	[0.00541]	[0.00400]	[0.00354]	[0.00404]
Household head or spouse	-0.0178**	-0.0162***	-0.00148	-0.00388
	[0.00778]	[0.00609]	[0.00535]	[0.00487]
Education: secondary	0.00833	-0.00111	0.00590	0.0238***
	[0.00618]	[0.00474]	[0.00449]	[0.00415]
Education: college and above	0.0168	0.00545	0.00191	0.0252***
	[0.0107]	[0.00844]	[0.00685]	[0.00766]
Currently employed	0.00158	-0.00206	0.0100**	-0.0306***
	[0.00595]	[0.00474]	[0.00395]	[0.00473]
Received loan	0.00750	0.000947	0.0137**	0.0132**
	[0.00798]	[0.00630]	[0.00602]	[0.00613]
Any household member smokes	0.00821	-0.00473	0.0276**	0.0173
	[0.0157]	[0.0130]	[0.0124]	[0.0121]
Any household member drinks	-0.0152	-0.000000265	-0.0245**	0.0248**
	[0.0149]	[0.0127]	[0.0100]	[0.0120]
Number of children under 5 years old	0.0170***	0.0160***	0.00386	0.00472
	[0.00582]	[0.00488]	[0.00407]	[0.00386]
Number of household members	-0.00307*	-0.00289**	0.000398	-0.00242**
	[0.00174]	[0.00134]	[0.00125]	[0.00119]
Household owns house	0.0106	0.00644	0.00294	-0.00397
	[0.00757]	[0.00560]	[0.00493]	[0.00586]
Household owns land	0.0210**	0.0107	0.00987	0.00969
	[0.00941]	[0.00749]	[0.00652]	[0.00734]
Reside in urban area	0.00227	0.00189	0.00262	-0.00604
	[0.00526]	[0.00419]	[0.00366]	[0.00383]
Poor(B40)	-0.0370***	-0.0237***	-0.0130***	-0.0204***
	[0.00532]	[0.00418]	[0.00377]	[0.00385]
Central districts	-0.0371***	-0.0198***	-0.0142***	-0.0406***
	[0.00712]	[0.00562]	[0.00423]	[0.00741]
North districts	-0.0161**	-0.00532	-0.0118**	-0.0207***
	[0.00704]	[0.00528]	[0.00484]	[0.00576]
Constant	0.0611***	0.0509***	-0.00341	0.0665***
	[0.0178]	[0.0140]	[0.0115]	[0.0139]
First-Stage: IV F-stats	26.86	11.63	10.60	9.610
Obs.	9260	8946	8870	8894

Notes: (1) All specifications with GMM standard errors. * p<0.10, ** p<0.05, *** p<0.01; (2) Data source: KMS 2003, 2013