

Cultural Crossroads: Gender Roles and Family Dynamics in Post-WWII Taiwan

Ruikun Ma

November 21, 2024

Abstract

The 1949 Kuomintang (KMT) retreat brought 1.2 million political refugees to Taiwan, increasing the population by 20% in just a few years. This migration was distinct due to its predominantly male (80%) and elite composition. Upon arrival, migrants established Juancuns, unique housing communities. Using historical records of Juancuns and modern survey data, this research examines how the influx of single elite males influenced local women's intra-household relationships and gender norms. Findings show that early exposure to migrants correlates with higher marriage satisfaction, greater bargaining power, and more equitable household labor division for women. However, no significant changes were observed in traditional gender norms, such as son preference. Intermarriage and government-supported facilities, like cultural centers and the Women's League, emerged as mechanisms fostering progressive family interactions. These findings shed light on how migration shapes gender roles and family structures, emphasizing the importance of institutional support in promoting societal change.

1 Introduction

Significant upheaval, conflicts, wars, and large-scale migrations marked the mid-20th century. In the aftermath of WWII, refugees fleeing war and conflict were common across many continents. Following the Chinese Civil War (1945–1949), Kuomintang (KMT) supporters retreated to Taiwan to flee Communist rule. They brought approximately 1.2 million people, increasing Taiwan’s population by nearly 20 percent within a year. At the time, Taiwan was an agrarian society that had just escaped half a century of Japanese colonisation. The sudden influx caused a significant shock to the society. Early arrivals and government officials seized properties left by Japanese colonisers, while later arrivals and the poor constructed temporary shelters. Both of these forms of housing arrangements created clusters of migrant settlements known as “Juancuns” (military dependents’ villages), where millions of mainland migrants and their descendants resided. While much research has focused on the impacts of migration on labour markets and political outcomes for host populations, there is limited evidence of how large-scale population resettlement might affect their family dynamics and traditional gender norms. ([Abramitzky and Boustan, 2017](#)).

This paper examines the impact of the Kuomintang (KMT) retreat from mainland China to Taiwan in 1949, focusing on two aspects. The first are family dynamics, such as marriage satisfaction and the division of household labour between husbands and wives. The second is the persistence of traditional gender norms, such as son preference. Son preference is a common form of gender bias in East Asian societies, which prioritises the value of sons over daughters and can contribute to issues like the “missing women” phenomenon ([Qian, 2008](#)). By addressing these aspects, the research sheds light on the long-term effects of migration on women’s experiences and family interactions.

To achieve this, I analysed the unique housing arrangements of the migrants, known as Juanucn, to study their distribution throughout Taiwan. Three historical factors play a significant role in this study and add uniqueness to the case: First, approximately 80% of the migrants were men. Among them, many were single or had left their families in China. It is believed that this had a significant impact on the local marriage market. Secondly, unlike typical war refugees who often face greater disadvantages than their host

populations, many of these migrants belonged to the ruling class, were highly educated, and were regarded as elites. Thirdly, this migration occurred within a very strict time frame. The influx of migrants was a significant one-time shock, as no official records allowed migration after 1955. These features make examining how this group may have shaped the local communities especially relevant.

To examine these effects, I use an intention-to-treat design, defining treatment as exposure to migrants before age 16. I chose this age because early adolescence plays a crucial role in shaping values and beliefs. Additionally, focusing on this age minimises mobility concerns, as many local Taiwanese typically relocate after completing or nearing the end of secondary education. Therefore, The treated group are females who live within a 5-kilometre radius of migrant communities (Juancuns). Those without migrant communities within the same range comprise the control group, significantly reducing their exposure risk. The analysis focuses on the impact of both the presence and intensity of migrant exposure on women's perceived traditional gender norms and family dynamics later in life.

In addition to examining the impact of migrant exposure, I also conduct heterogeneity checks through a cohort analysis to explore whether the effect of migrant exposure varied across individuals born in different cohorts and born in rural versus urban areas. For the cohort analysis, I divided the sample into three-year birth cohorts. I examined how cohort indicators interacted with the treatment to determine whether specific cohorts primarily drove the effects. I explore two potential mechanisms that might have channelled such changes: intermarriage and government-funded supporting facilities. To ensure the robustness of the chosen 5-kilometre radius, I also provide results using alternative radius thresholds of 2, 7, 10, and 15 kilometres. I also conducted the analysis using Conley standard errors that correct for spatial correlations, which provided a consistent result.

An important assumption for this design is that the treatment assignment must be as random as possible. In this context, the placement of Juancuns in relation to local residents should be random at the district level. Specifically, the location of Juancuns within a district should not be associated with factors that could affect gender norms and family interactions. Additionally, women with particular gender norm perceptions should not have intentionally moved closer to the Juancuns. I deal with this potential

issue by only including those samples who have stayed in the same district since birth. For this study, I use the comprehensive survey data from the 2000 Panel Study of Family Dynamics (PSFD), which provides detailed insights into Taiwanese society. To capture the migration shock, I restrict the sample to Taiwanese-born women born between 1935 and 1976. Additionally, I incorporate census data conducted between 1956 and 1970 as control variables to account for potential confounding factors. These variables help ensure that the analysis accurately reflects the impact of migrant exposure by controlling for socioeconomic and demographic characteristics. In addition, I use the locations of Juancuns as a proxy for the distribution of migrants. I digitised data for all the 866 Juancuns established after the KMT's retreat, including their geographic locations, sizes, and establishment dates. This is a significant contribution to the literature, as it is the first study to use the precise locations of Juancuns for analysis.

The first key finding is that women exposed to migrants during their early years tend to benefit from a more supportive and progressive family dynamic. These include higher levels of marriage satisfaction, a more equitable household labour division, and greater bargaining power in household wealth allocation, particularly regarding expensive goods and housing investments. However, when examining the impact of migrants on traditional gender norms, the results are not significant. Although migrant exposure introduced some progressive attitudes, there is no significant evidence that it altered son preference norms. Fertility decisions among local women remain unchanged, and the gender gap in educational attainment between male and female descendants even widened in this sample.

Furthermore, the heterogeneity analysis showed no significant differences across cohorts, suggesting that the treatment similarly influenced all cohorts. The comparison between respondents from rural and urban areas revealed that women exposed to migrants in urban settings were more likely to remain in the workforce after marriage.

I then presented some historical evidence in support of the mechanism analysis. The evidence demonstrated that women who marry mainland husbands are more likely to have a satisfied marriage and to work outside the home. The second channel involves government-funded cultural centres and the Woman's League. These supporting facilities offer a wide range of reading materials and provide spaces for local women to form

networks through cultural events. They also offer training courses and childcare services, vastly reducing the burden on local women. These supporting facilities could lead to increased employment opportunities after marriage. To demonstrate the robustness of the work, I present results using alternative exposure radii and an alternative standard error clustering method. Both show consistent results.

This study makes contributions to multiple strands of literature. Firstly, it adds to the body of work on the long-term consequences of sex ratio imbalances resulting from demographic shocks ([Grosjean and Khattar, 2018](#); [Baranov et al., 2023](#); [Walker et al., 2024](#); [Francis, 2011](#); [Chang et al., 2021](#); [Teso, 2018](#); [Goldin, 1991](#); [Tsay, 2006](#)). My findings align with previous results in [Grosjean and Khattar \(2018\)](#) and [Francis \(2011\)](#), demonstrating that an excess of men enhances women’s intra-household bargaining power, particularly in decisions related to household wealth allocation. Moreover, this study extends the literature by exploring women’s marriage satisfaction, revealing significant improvements in male-biased contexts. It also expands on the work of [Francis \(2011\)](#) and [Chang et al. \(2021\)](#) regarding the Kuomintang retreat by focusing on women’s perceived cultural norms and found no significant reduction in son preference norm. However, it diverges from [Grosjean and Khattar \(2018\)](#), which found more conservative cultural attitudes among women. Instead, my findings indicate that women tend to adopt more progressive views, particularly regarding the division of household labour.

This study also contributes to the literature on the long-term impact of migration on receiving communities ([Abramitzky and Boustan, 2017](#); [Alesina and Tabellini, 2024](#); [Dustmann and Glitz, 2011](#); [Murard, 2023](#); [Abramitzky et al., 2014](#); [Alesina and Tabellini, 2024](#)). The context of the KMT’s retreat is unique, as the migrants were part of the ruling class with significant social networks. Thus, one of the key contributions of this work is examining how elite migrants affect the local population. Furthermore, I leverage the distinct societal structure of Juancun and its geographic characteristics to explore the influence of migrants on local social norms. Lastly, this study expands on research investigating the impact of proximity to military bases on nearby residents. [Booth et al. \(2000\)](#) noted that women living near military bases are generally less likely to participate in the workforce and tend to earn lower wages. My work showed that workforce participation can increase when cultural facilities that foster social networks can support

residents' career prospects.

The rest of the paper is organised as follows: Section 2 provides some important historical context. Section 3 describes the data in more detail. Section 4 discusses the empirical strategy. Section 5 presents the main results. Section 6 conducts some heterogeneity analysis and robustness checks. Section 7 concludes and discusses.

2 Historical Background

2.1 The Great Exodus from China

Taiwan is an island that had 6 million population by 1945. Despite being peripheral to world politics attention, it was temporarily put on the central stage of the world. Its fate was also drastically changed after World War II. Following Japan's surrender in 1945, a civil war broke out in China. The war was between the Chinese Communist Party (CCP), led by Mao Zedong, and the ruling Kuomintang (KMT), led by Chiang Kai-shek. Although Chiang's forces initially held the advantage, the CCP gradually gained the upper hand in the battle and quickly occupied northern China by early 1949. Within months, the CCP crossed the Yangtze River and seized the heartland of Chiang's regime, Nanking. Chiang Kai-shek and his KMT forces had to retreat to Taiwan, one of their regime's last remaining strongholds, by the autumn of 1949. Within a few months in 1949, nearly 1.2 million Chinese refugees fled to Taiwan, running away from the war and the Communist Party's rule. ¹.

After 1955, the hostile relationship between the CCP and KMT governments halted formal resettlement from mainland China to Taiwan, effectively limiting post-war migration to a span of roughly ten years. From 1945 to 1955, roughly 1.2 million migrants entered Taiwan through mainland China, ² 1949 was the year that peaked in the migrant count. Figure 1 illustrates the migration flow from mainland China to Taiwan over the ten-year

¹The most accurate estimate is 1.2 million. There are other estimates about the total number of mainland migrants, ranging from 60,000 to 2 million (Yang, 2020)

²Following Japan's surrender in 1945, the Kuomintang government took over the control of Taiwan and started stationing troops in Taiwan.

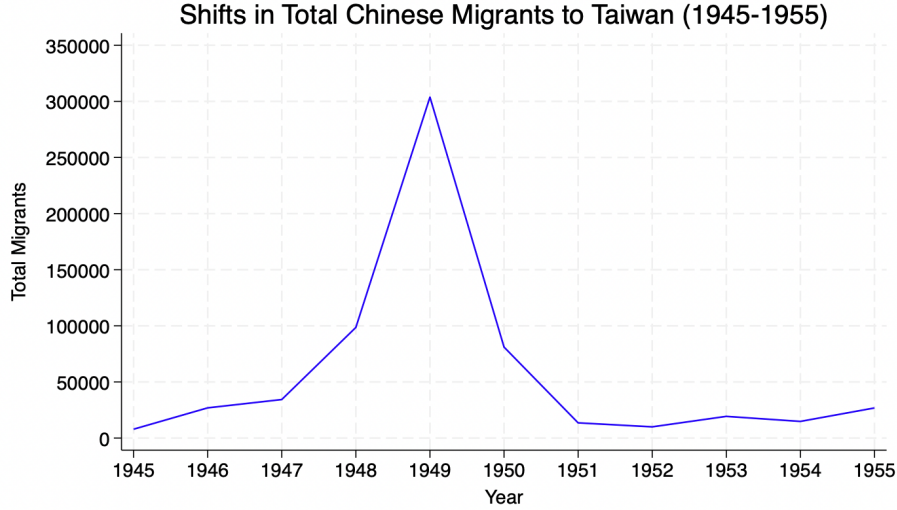


Figure 1: Migrants Across Time

period.³

2.2 “Benshengren” – the locals

The “Benshengren” population is referred to as the locals; its population was primarily composed of three demographic groups: Hokkien (79.75%), Hakka (14.88%), and Indigenous (5.37%). The Hokkien and Hakka were migrants from coastal China (Fukien and Canton areas); their roots of migration could date back to the 17th century, during the late Ming dynasty, driven by Manchu’s invasion and the widespread peasant rebellions across China (Lin, 2003). Although both groups are Han Chinese, they have distinct cultures and dialects compared to other Han Chinese communities. The Indigenous peoples are the original inhabitants of Taiwan, and historical records trace their presence on the island back 4,000 years (Andrade, 2003).

In 1895, following China’s defeat in the First Sino-Japanese War, Taiwan was ceded to Japan, marking the beginning of 50 years of Japanese colonisation. According to Yang (2020), the local Taiwanese population became semi-Japanised during this period, as they were required to speak Japanese and were subjected to Japanese governance and education. Japan made an effort to industrialise Taiwan during the course of the colonisation,

³The data for this figure is sourced from the 1956 population and Housing Census of Taiwan, which was the first census after KMT’s retreat (Executive Yuan, 1956). Note that the migrant count does not include servicemen, as the census did not include them until 1970.

but Taiwan remained an agrarian island, with about 70% of its population remaining in the agricultural sector by the mid-20th century (Ho, 1968). Given these characteristics of the local population, the sudden influx of mainland Chinese migrants had a profound and lasting impact on the local community.

2.3 “Waishengren” – the migrants

Within a year, approximately 1.2 million KMT personnel and Chinese civilians followed Chiang Kai-shek’s retreat to Taiwan (Dickson, 1993). Unlike many war-related refugees who suffered from persecution and came from disadvantaged backgrounds, a significant portion of these mainland migrants belonged to the ruling class. Government officials, scholars, businessmen, and high-ranking military officers accounted for almost half of the migrants. They possess considerable wealth and extensive social networks (Wang, 2015; Lin, 2009). The other half were lower-ranking soldiers who retreated to Taiwan only following military orders.⁴ Although their pay was not comparable to the elites, they were still better off than local farmers due to their stable incomes.

Another significant feature of these migrants is that nearly 80% were males (Lin, 2009). Two factors contributed to this disproportionate male population. First, servicemen who account for 50% of the migrants were young, single males in their 20s. Secondly, many men from the ruling class could not bring their partners across the Taiwan Strait. As a result, areas near migrant settlements experienced a highly skewed sex ratio, which could have significant effects on the local marriage market.

Like the local population, the “Waishengren” group also had diverse origins. They originate from over 30 provinces across China, primarily from the eastern and northern coastal regions, such as Zhejiang, Jiangsu, Henan, and Shandong. Only 12.5% of these migrants were from Fukien province, who shared a similar cultural background to that of the local Taiwanese. Most businessmen and government officials hail from Zhejiang and Jiangsu, historically more developed (Excutive Yuan, 1956). Meanwhile, most northern-origin migrants, particularly from Shandong and Henan, were lower-ranking servicemen.⁵ Figure 2

⁴However, the number of servicemen recorded in the 1956 census was likely underestimated due to confidentiality reasons.

⁵Regarding footnote number 4, it also implies that the actual proportion of migrants from northern China may have been higher than officially reported (Excutive Yuan, 1956).

showed the distribution of migrants' origin, with areas with darker colours that delivered more migrants from mainland China to Taiwan.

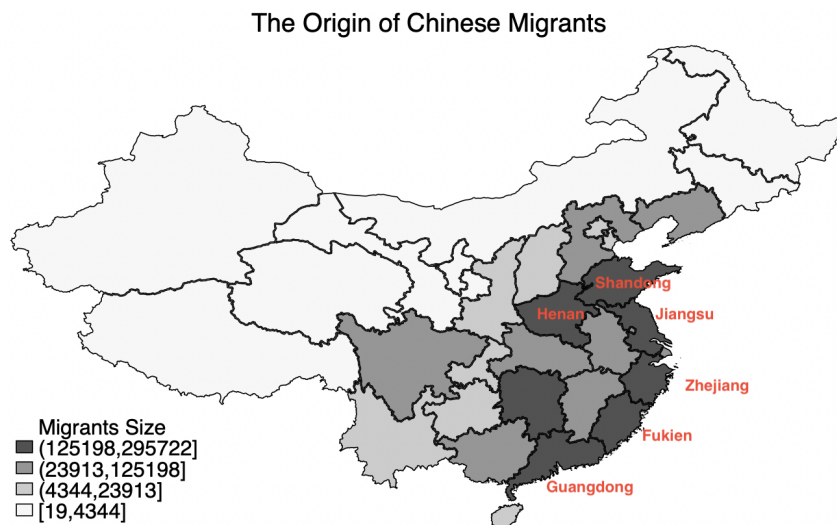


Figure 2: The Origin of Chinese Migrants

I included more details of migrant's composition across time in Figure 13, please refer to Appendix Section 8.1 for more details of migrants composition across time.

2.4 The Clustered Migrants Settlement – “Juancun”

As millions of people arrived in Taiwan in such a short period, a severe accommodation shortage was inevitable. “Juancun” (military dependant's villages) emerged as a unique solution to this housing crisis and became a distinct cultural and societal feature in Taiwan. These migrants from the mainland formed exclusive clusters, referred to as “Juancun,” providing distinct resources to their inhabitants. The descendants of these clusters also received exclusive resources, suggesting potential advantages over their local counterparts (Dickson, 1993).

Figure 3 illustrates the distribution of Juancuns across Taiwan, showing that these migrant clusters were dispersed throughout the island's habitable regions, with lower population density in the central hilly areas.

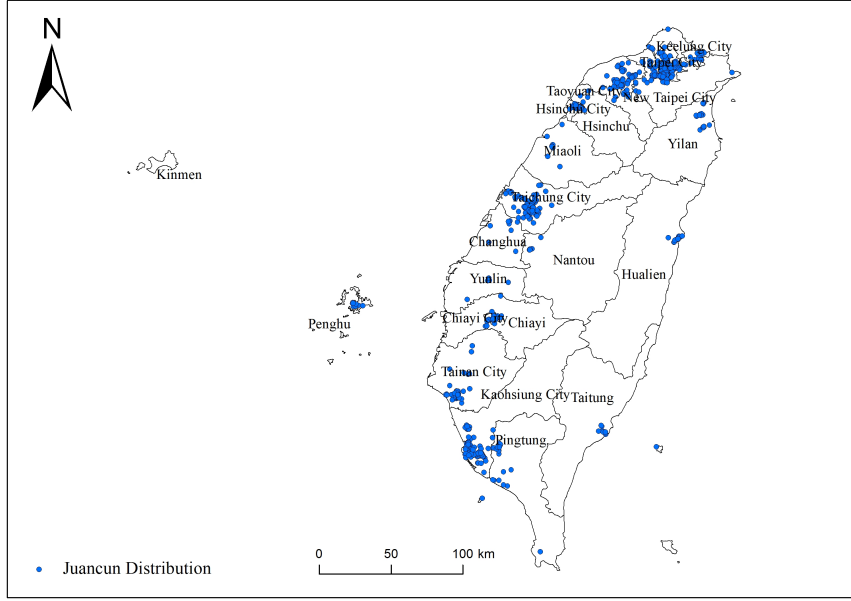


Figure 3: The Distribution of Juancun Across Taiwan

The construction of Juancuns was not a one-off project; it spanned several decades, from 1945 to the late 1970s. The number and size of Juancuns also expanded over the years. Upon arrival, early migrants occupied properties previously owned by Japanese colonisers, often taking over military bases, hospitals, and schools and turning them into dependent villages. However, the Japanese properties were scarce relative to the number of migrants. Those who arrived later had to build their own homes. Servicemen and their families initially established Juancuns as temporary settlements. Over time, other migrants constructed more Juancuns, which gradually expanded in size and spread across the island. These villages became a distinctive element of Taiwan’s migration culture. This clustering resulted in concentrated migrant communities in certain areas, significantly impacting local dynamics and integration (Lee, 2021, 2015).

Culturally, the “Waishengren” migrants had distinct differences from the local Taiwanese regarding customs, dialects, and overall way of life. Many of these migrants were employed in the military or government, which further set them apart from the semi-Japanised locals. This cultural and occupational divide led to tensions between the two groups. The

locals viewed the migrants as outsiders who had forcibly disrupted their lives, while the migrants, in turn, often looked down on the locals with a sense of superiority. As a result, the two communities struggled to integrate and remained largely separate for several years after the retreat (Yang, 2020).

The Juancuns also exhibit significant variations in size. The number of households registered in a Juancun can vary from 9 to 900. Some Juancuns are as small as an ally, while others are as large as a village. The Appendix contains two examples of Juancuns Figure 17 and Figure 18, one large and the other small .

2.5 Conservative Legacy

The outcome variables I examine, such as son preference and household labor division, date back to ancient China and its Confucian values. Regions with a stronger foundation in Confucian values tend to uphold more conservative practices, such as favouring sons and maintaining a division of labour that expects women to prioritise family over personal interests and careers. To understand how incoming migrants might have influenced local Taiwanese women, it is crucial to illustrate the relatively conservative cultural legacy in Taiwan/Fukien compared to other parts of China. This is especially relevant because cultural norms are often passed down through generations (Boucher et al., 2023; Bisin et al., 2011). I used an area’s degree of Confucian values as a proxy to measure conservatism. Areas that historically emphasise Confucian values are more likely to have retained these conservative norms during the retreat.

I calculated the Conservative legacy proxy by summing the number of Confucian temples and chaste women recorded during the Qing Dynasty, adjusted for population. The higher this value, the more conservative the region is considered. To visualise how conservativeness differs by region, I created a heat map to show the neoconservatives index in Chinese provinces; see Figure 4.

The construction of Confucian temples, where related rituals were practised, was a key method of promoting Confucianism (Kung and Ma, 2014). Thus, the more Confucian temples built in an area, the stronger the promotion of Confucian ideology. Similarly, female chastity was a significant cultural norm in East Asia. Local gazetteers praised

and recorded women who committed suicide or remained widowed for life after their husbands' deaths for their chastity. More chaste women per 10,000 population indicates stronger preservation of traditional norms in that region.

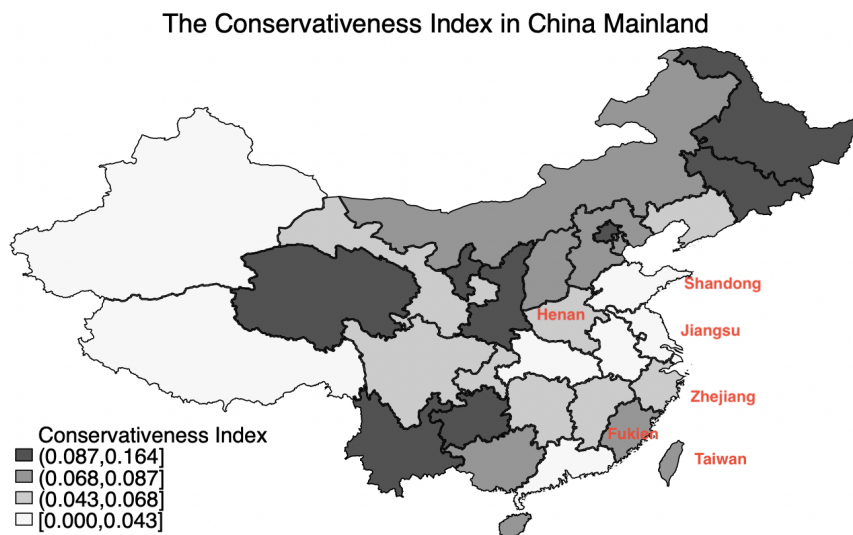


Figure 4: Conservatives Index

The wealthier coastal regions of mainland China maintained less adherence to traditional conservative Confucian norms, while the more agriculturally based inland areas remained more conservative. When comparing Figure 2, which shows the origin of migrants from mainland China, with Figure 4, it is evident that the provinces sending the most migrants to Taiwan (Jiangsu, Zhejiang, Shandong, Henan, Sichuan) were less conservative than the Taiwan/Fukien region. This suggests that migrants came from less culturally conservative areas than Taiwan, potentially bringing more progressive norms than those held by the local Taiwanese population.

2.6 KMT's Cultural Policy Following the Retreat

2.6.1 Education

Despite Japan's efforts to promote education and establish elementary schools in Taiwan for the entire population, including girls, opportunities for Taiwanese girls to pursue secondary education during the colonial period were still limited. For those who did attend secondary school, much of the curriculum focused on cultivating Taiwanese girls

to become graceful wives and fostering loyalty to Japan, rather than subjects like science, mathematics, or language studies (You, 1988; Hu, 2015). As described in Hu (2024), the aim of women’s education at that time was summarised by the phrase “Good Wife, Wise Mother”. These evidence shows that Eastern Asian traditional gender roles were even reinforced rather than diminished under Japanese rule. On the other hand, the KMT has placed significant importance on women’s rights since its funding. The KMT played a pivotal role in the May Fourth Movement of 1919, which marked the beginning of China’s enlightenment era and the women’s liberation movement (You, 1990).

2.6.2 Cultural Centres

The KMT government made significant efforts to promote Chinese culture among the Taiwanese population to counter the influence of Japanese rule (Hu, 2018). In secondary education, the schools promoted gender equality and encouraged further education among the girls (You, 1988). According to Yang (2020), the KMT government supported the establishment of “hometown associations”, comprised of notable cultural figures and scholars who had migrated from the same regions in mainland China. These government-funded associations aimed to promote Chinese culture and language in Taiwan through various initiatives. For instance, they disseminated articles locally through magazines and newspapers. Additionally, various associations contributed to the establishment of cultural centres across Taiwan. These cultural centres include libraries, function rooms and museums. In addition to serving as a popular meeting point for residents, it also hosted cultural events such as public lectures and musical festivals to attract attendance from the general public (Association for Local Literature Studies, 1985). Around 20 cultural centres were built across Taiwan by 1985, drawing tens of thousands of local residents to participate in these events. The distribution of these cultural facilities relative to Juancuns can be seen in Figure 12. These cultural events might help spread values and networks among residents.

3 Data

To study the effect of migrants' exposure on the female population's perceived gender norm, I match individual-level data from the PSFD to the historical census data and the geolocation of Juancuns across Taiwan. This section describes the data.

3.1 Survey Data

This study investigates various aspects of cultural perceptions, including son preferences, gender norms, and family dynamics. I use the Panel Study of Family Dynamics (PSFD) survey to examine the changes in these aspects. The PSFD survey, initiated in 1998, provides rich insights in Taiwanese society. It includes detailed information on respondents and their partners, such as early life experiences, work history, and income. My analysis focuses primarily on local Taiwanese women whose upbringing was significantly influenced by the presence of KMT migrants. I included female respondents born between 1935 and 1976 for this study. I then divided the sample into several cohorts, each consisting of individuals born within a three-year range, creating fourteen cohorts in total. The data I used for the study was collected in 1999, 2000, and 2003 respectively. Each collection wave covers individuals born during specific periods. For instance, the 1999 sample includes those born between 1954 and 1964, and the 2000 sample consists of individuals born from 1935 to 1953. I then pooled all these samples together for further analysis. Even with this birth period restriction, the sample spans 341 out of 370 districts in Taiwan, covering over 90% of the total population. Figure 5 shows the distribution of the PSFD samples I included in my study. The study covered most of the areas, with the exception of the mountainous region in the central area.

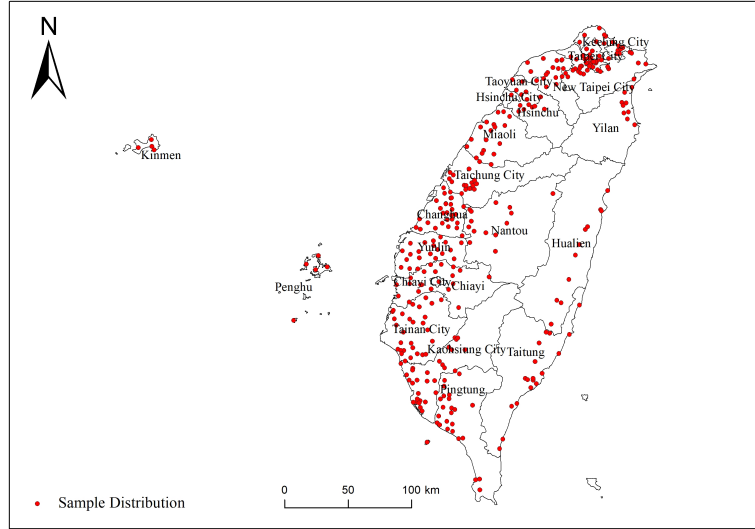


Figure 5: PSFD Sample Distribution Across Taiwan

One of the main challenges to the identification is that some women may choose to move close to Juancuns to increase their chances of marrying a migrant, and these women might be more likely to hold certain cultural beliefs. To minimise the potential bias caused by such mobility, I restricted the sample to women who had not relocated before 16. While this may not eliminate the bias, it is the best I can do given the data availability.

In the following paragraphs, I will describe the main variables that I use for this analysis: The main outcome variables in this study focused exclusively on women's attitudes and marriage life, with a particular emphasis on two key areas: traditional cultural norms and intra-household dynamics.

3.1.1 Family Dynamics

The first area of focus is family dynamics, which looks at women's marital satisfaction and household labour divisions. One key variable measures the division of housework hours between husbands and wives. In more equitable families that value gender equality, husbands are more likely to share household chores with their wives. I calculate this variable by dividing the wife's weekly housework hours by the husband's. A smaller magnitude for this variable suggests a lower burden of housework for women. I also

examine women’s satisfaction in marriage through the question: “Do you have a good relationship with your spouse?” Responses are rated on a scale from one to five, where one is least satisfied, and five is very satisfied.

Next, I explore to what extent the respondent supports the traditional division of household roles by asking: “To what extent do you agree that husbands should be the breadwinners and wives should take care of the family?” This provides insight into the likelihood of women’s participation in the labour force. Responses are measured on a scale from one to five, with one being “least agreed” and five being “very much agreed.” A higher value for this variable would indicate stronger support for progressive norms among the respondents. Lastly, I analyse whether exposure to more migrants influences women’s decision to remain in the workforce after marriage. In East Asian cultures, there is a tendency for women to quit their jobs and stay at home after getting married and prioritise family affairs. I coded it as a dummy variable that equals one if she quit her job after getting married and zero if she did not. For this variable, I only include women participating in the labour force.

Figure 6 displays the heat map of the key outcome variables. Geographically, there are no discernible patterns evident for these variables.

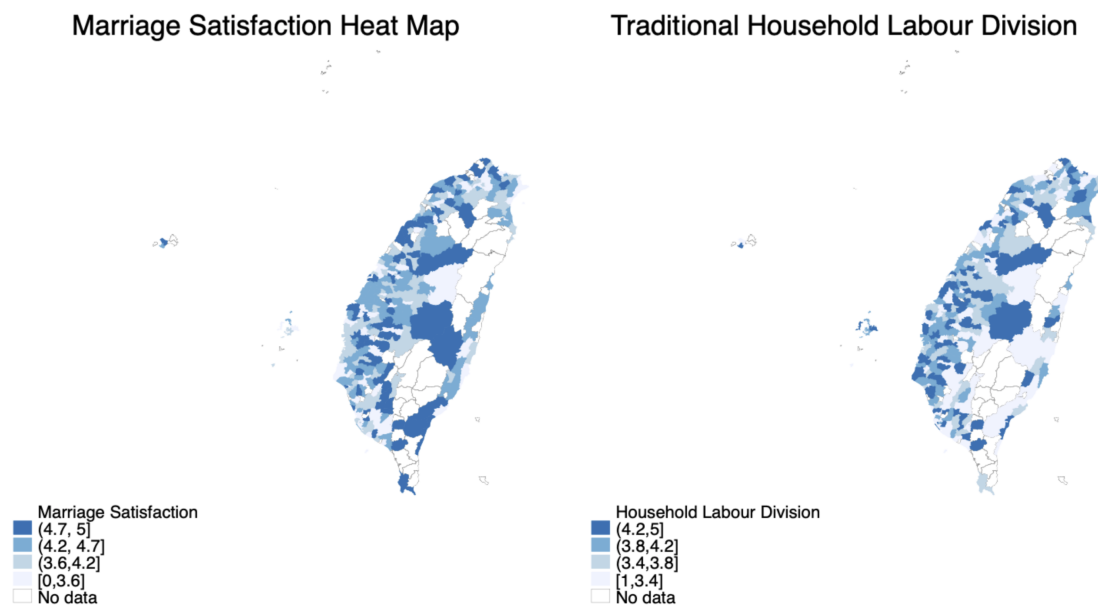


Figure 6: Heat map for Marriage Satisfaction and Household Division

3.1.2 Traditional Gender Norms

Traditional gender norms are another very important aspect that is very crucial for women's development. Among all the Eastern Asian traditional gender norms, son preference is one of the most salient ones. The PSFD dataset encompasses a variety of traditional gender norms, one of which is the degree of support for the traditional norm of son preferences. This is measured by asking respondents, "To what extent do you agree that one must have a son to carry on the family line?" Responses are rated on a scale from one to five, where one indicates "least agreed", and five indicates "strongly agreed."

In addition to measuring perceptions of traditional cultural norms, I also measure sex-selective fertility behaviour using childbirth data from the PSFD. Sex-selective fertility refers to a couple continuing to have children until they have a male descendant, even if their earlier-born children are female. I mark this behaviour in the dataset as evidence of son preference in real life.

I also measure the fertility choices of local Taiwanese women, including the total number of children and the number of daughters and sons. Furthermore, I examine the relationship between mothers and their daughters and sons. Finally, I assess the level of son preference by comparing educational attainment between female and male descendants. I construct this variable by comparing the educational attainment of sons and daughters within a household. This analysis's sample size is smaller than the other analysis because I need to study households with at least one son and a daughter.

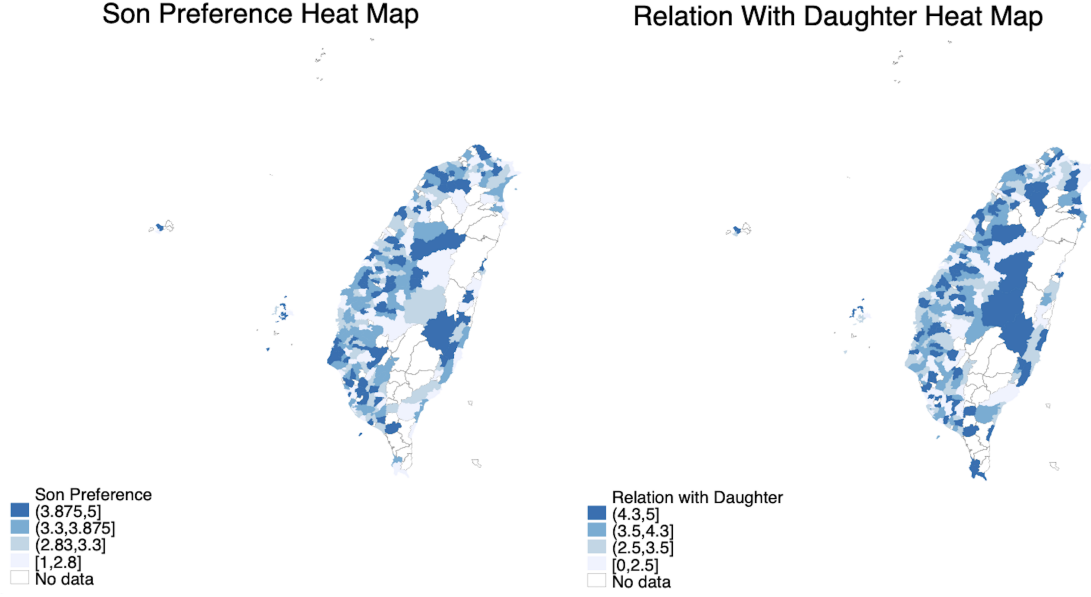


Figure 7: Heat map of Son Preference and Relation With Daughter

Figure 7 shows the spatial variation in gender norms within the family, specifically son preferences and relationships with daughters. No significant geographical patterns can be identified.

3.1.3 Intra-household Bargaining Power

Finally, I analyse the intra-household bargaining power of local Taiwanese women after marriage. The PSFD survey includes several questions to measure decision-making power within households. These aspects cover five major areas of household wealth allocation. These are investment decisions, purchasing expensive items, daily expenditures, and decisions about children’s education and housing. To determine if decision-making power is influenced, I define a dummy variable that equals one if the wife has the ultimate authority over these decisions and zero otherwise.

3.2 Juancun – the Migrants Settlement

This study leverages the variation in the locality and timing of the construction of military-dependent villages (Juancun) based on the sample respondents’ areas of upbringing, making the geolocation and timing of Juancun’s development critical data points. This research is the first to digitise and apply this data for economic analysis. I have digi-

tised detailed information on the location and construction dates of Juancuns, as recorded by the Department of Defence of Taiwan. The dataset, referenced in [Kuo \(2005\)](#), includes precise details on the location, year of establishment, and the number of households registered for each 877 Juancuns across Taiwan. The original data source can be seen in Appendix Figure 16 in Section 8.3. Juancuns emerged after 1945 when KMT troops arrived in Taiwan following Japan’s surrender in World War II. The first wave of soldiers occupied the housing and military camps previously built by Japanese colonisers, leading to the emergence of the first Juancuns. In my dataset, nearly 12% of the Juancuns are remnants of the Japanese colonial era. The construction of Juancuns continued over several decades, lasting from the late 1940s through the early 1980s. Most of these villages were located in major Taiwanese cities, particularly in Taipei, Hsinchu and Kaohsiung, where the correlation between the clustering of migrants and the distribution of Juancun can be as high as 80% ([Chang et al., 2021](#)). The distribution and expansion of Juancuns are illustrated in Figure 3.

3.3 Linking Juancuns to Survey Data

To measure exposure, I utilise the fact that Juancuns were built over a prolonged period. The expansion of Juancun construction overtime can be seen in Figure 15 in Section 8.2. I link the location and size of Juancuns to the respondents based on their place of residence at age 16. In doing so, I hope to capture the exposure to migrant communities during their childhood and teenage years, which is crucial for value formation. I selected age 16 because the PSFD dataset only provides information on where respondents lived up to this age. I will then use an example to explain it clearly. If a respondent were born in 1949, at the peak of the KMT retreat, she would turn 16 in 1965. If any Juancuns were built or migrants settled near her residence before she turned 16, these would be included in the exposure measure, weighted inversely by the distance from her location. However, it would not count towards exposure if a Juancun were built after she turned 16.

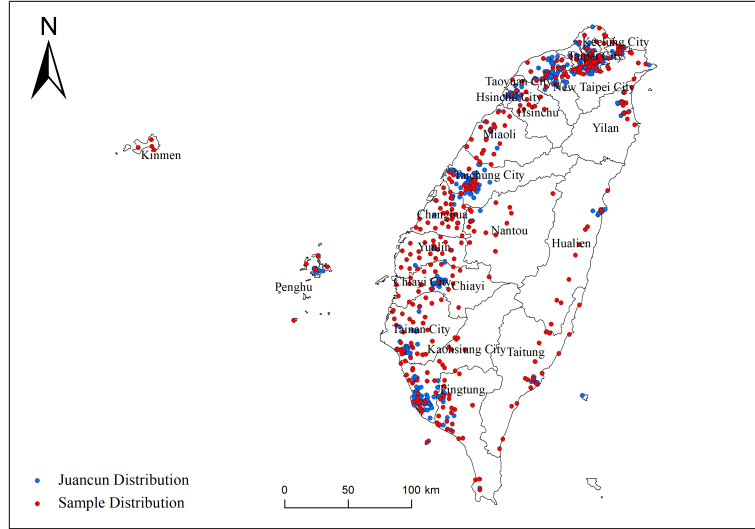


Figure 8: The Distribution of Juancuns and Female Sample in PSFD

Figure 8 shows the distribution of PSFD samples relative to Juancun locations. The Juancun and sample distributions have significant overlap. Both are densely populated in western Taiwan near major urban centres. In contrast, both distributions are relatively sparse in the more rural eastern regions. This represents that the exposure measurement provides decent variation for identification.

3.4 Summary Statistics

I show the summary statistics in Table 1. I break down the variables into several panels, including family dynamics, fertility choices and intra-household bargaining powers. For the baseline analysis, I only included female samples born in Taiwan. Many samples didn't provide reasonable responses for some specific variables, so the sample sizes for each regression might differ slightly. For the baseline regression, the sample size is 1267. For example, for the variable "Quit after Marriage", I only included those who entered the job market before getting married.

The summary statistics table consists of the key variables' mean, standard deviation, minimum and maximum values. Some variables that range from one to five represent the degree of support towards certain ideologies. For example, marriage satisfaction ranges

from one to five. The mean of this variable is 3.8, representing a generally satisfied marriage across Taiwanese women. One being extremely dissatisfied and five being very satisfied. On the other hand, there are also dummy variables that take on values of zero or one. For example, whether the female sample quit after marriage is a dummy variable.

4 Empirical Strategy

This study examines how exposure to migrants from mainland China may influence socio-economic factors that shape Taiwanese women’s lives. Specifically, it explores the impact on women’s roles in the family and society, their decisions around fertility and work, and family power dynamics. The central hypothesis is that greater exposure to mainland Chinese migrants during the women’s early upbringing might bring more progressive norms. I will later test whether a female-dominant bargaining power exists within the household, whether intermarriage with mainland migrants plays a role in this process, and how local cultural facilities contribute to this process. I begin by outlining the definition and calculation of migrant exposure in this study. I use the distribution of Juancuns as a proxy for migrant distribution, based on evidence showing up to an 80% correlation between the spatial distributions of Juancuns and migrants ([Chang et al., 2021](#)). This makes it the best available proxy for representing migrant distribution. To measure exposure to migrants, I compute a distance-weighted average of Juancun households within a 5-kilometre radius of each female respondent’s location. I then take a log transformation for the regression. Next, I calculate the exposure for each individual i as follows:

$$\ln(Exposure\ 5KM_i) = \log \left(\sum_{j=1}^n \mathbf{1}(Distance_j \leq 5km) \times \frac{1}{Distance_j^2} \times HH_j \right) \quad (1)$$

I determine the exposure level in this equation by summing the distance-weighted number of Juancun households (HH_j) within a 5-kilometer radius, measured before the individual in the sample reaches the age of 16. Note that the exposure measurement includes only Juancuns constructed before the individual turns 16, excluding those built after.

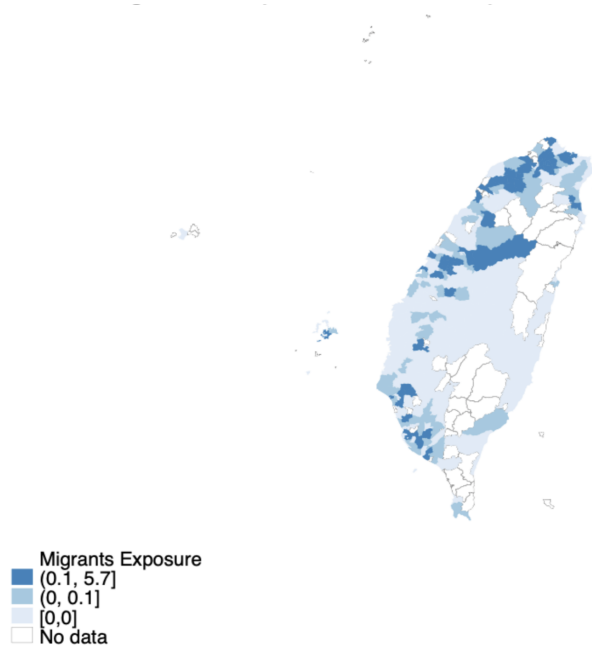


Figure 9: Heat map of Treatment Intensity

Figure 9 presents a heat map illustrating the presence and intensity of treatment. In areas with available data, a significant portion shows no treatment exposure. Among the regions that are exposed, some exhibit high levels of treatment intensity. Notably, the distribution of treatment intensity aligns closely with the spatial distribution of Juancuns. I will clarify the variable $Exposure\ 5KM_i$ with an example. Imagine Person A lives in an area with two Juancuns within a 5-kilometre radius. Juancun 1 is 1 kilometre away and has ten households, while Juancun 2 is 5 kilometres away and has 100 households; according to Equation 1, Person A's exposure would be ten from Juancun 1 and 4 from Juancun 2, resulting in a total exposure of 14. I weight each migration household's influence inversely based on its distance from the respondent, assigning more importance to closer households and less weight to those farther away. The squared inverse weighting amplifies the penalty for greater distances. It is important to understand that this exposure measure is an index that only allows for comparison of relative exposure between respondents without direct real-life implications. For example, if Respondent A has an exposure of 20 and Respondent B has an exposure of 10, it simply means that Respondent A's exposure is twice that of Respondent B.

I selected the 5-kilometre cut-off for two reasons. First, it encompasses an area of approx-

imately 79 square kilometres, the typical size of an average Taiwanese district. Second, 5 kilometres is a manageable distance for daily activities without a car. This is especially important because car ownership was uncommon in Taiwan during the studied period (1950s-1980s). The calculation is based on Juancun's establishment before the respondent reached age 16.

A potential threat to this estimation strategy is that some women, belonging to specific social statuses and adhering to traditional cultural norms, may move closer to a Juancun as they approach marriageable age, thereby increasing their chances of marrying migrants. This could undermine the assumption that the assignment of treated and control groups should be as close to random as possible. To address this issue, I excluded observations of those who moved after birth until 16. Even though it does not entirely eliminate the endogeneity concerns, it helps to minimise the potential bias in the analysis. Another possible problem for the empirical strategy is that the treatment could be perceived as weak or partial. For instance, a respondent living just beyond the 5-kilometre threshold (e.g., 5.1 kilometres away from a Juancun) would be classified as part of the control group. However, they could still be influenced by the presence of Juancuns. This situation implies that when comparing outcomes between the control and treated groups, the estimated treatment effect may be biased downward, reflecting a smaller impact than the true effect. An essential aspect of the exposure treatment is that nearly half of the respondents had no migrant exposure within a 5-kilometre radius, which put them into the control group. The treatment intensity varied significantly for the remaining respondents who were in the treated group. The exposure measurement distribution exhibits a long right-tail skew. To address this, I applied a log transformation to the exposure measurement, adding 1 for cases with zero exposure. This transformation allows me to better capture the variation in the treatment variable.

The empirical specification can be written as the following:

$$Outcome_{icd} = \alpha + \beta_1 \ln(Exposure\ 5KM)_{icd} + \lambda_c + \gamma_d + \beta'_2 X_{icd} + \varepsilon_{icd} \quad (2)$$

In this study, i stands for the individual, c stands for the cohort the person is from, and d

stands for the district the person lived in before she turned 16. The variable $Outcome_{icd}$ represents the outcome variables representing family dynamics and gender norms for individual i who comes from cohort c and grew up in district d . $\ln(Exposure\ 5KM)$ measures the logged exposure to migrants within the 5-kilometre cut-off, as defined in Equation 1. λ_c stands for the cohort-fixed effects, γ_d stands for the district-fixed effects. The cohort-fixed effects are included to control for unobserved, time-invariant characteristics specific to each birth cohort. Such characteristics can be historical events or education reforms specific to certain cohorts. The district-fixed effect was included to control for time-invariant, district-specific factors that may influence the outcome variable but are unrelated to the treatment. Such factors might include geographic features, baseline economic development, and infrastructure levels. X_i refers to individual-level control variables, including the respondent's and their husband's education level and husband's income represented in standard deviations. Higher education is often linked to more progressive norms. Moreover, a husband's income level might play a very important role in shaping their decision to work or not. These control variables seek to help to account for pre-existing beliefs.

5 Results

I will discuss the main results regarding women's socio-economics conditions, fertility choices and work choices and changes in perceived norm for Equation 2 in this part.

5.1 Family Dynamics

In Table 2, I will show the results of exposure to migrants on the family dynamics outcomes among Taiwanese women. The outcome variables include a split of hours of housework within a household between husbands and wives in Column 1 and the score of marriage satisfaction in Column 2. Column 3 records the degree to which the female respondents agree that the wife should stay home. Finally, Column 4 records whether the woman quit her job after marriage.

The results indicate that greater exposure to migrants during adolescence is associated

with higher marital satisfaction. Given that the average scoring of marriage satisfaction is 3.8 out of 5, an increase of 0.676 can be as large as 17%. At the same time, these women also show increased support for women working outside of the family. A negative coefficient of 0.736 represents nearly 20% more progressive views on continuing working after marriage. Then, in real life, although not statistically significant, women with greater exposure to migrants tend to have reduced household work split. Additionally, consistent with a progressive view on household labour division, greater exposure to migrants is linked to a lower likelihood of leaving the workforce after marriage.

5.2 Gender Norm

Then, in Table 3, I examined how exposure to migrants affected the traditional gender norms for local Taiwanese women. As introduced in the data section, son preferences are a crucial indicator of Confucian traditional gender norms.

The results suggest that neither the perceived norms on son preferences (represented by the variable “support for son preferences”) nor the real-life sex-selective fertility behaviours didn’t seem to be affected by the exposure of the migrants. However, the results on the relationship with daughters and the relative education attainment of daughters versus sons reveal some interesting insights. It seems that with more exposure to the migrants, controlling for education level and family income, local Taiwanese women are more likely to have a more harmonious relationship with their daughters than their sons. However, when a woman has sons and daughters within a household, the daughter will receive significantly less education than the son. A significant coefficient of -0.957 represents almost two years less schooling under Taiwan’s education system.

5.3 Intra-Household Bargaining Power

Next, I explore an important factor influencing women’s marital satisfaction – bargaining power within the household. I assess this power across five aspects of household wealth allocation. Table 4 shows that women exposed to migrants tend to have more decision-making authority over purchasing expensive items and housing decisions than those not exposed. Although the coefficients for investment decisions and children’s education are

insignificant, they remain positive. The coefficient for women’s decision-making power in daily expenses is negative but very small in magnitude and statistically insignificant. In general, the women exposed to migrants are more likely to be on the dominant side in household decision-making, and the increased chance can be as high as 30%.

6 Robustness Checks

6.1 Heterogeneity Analysis

6.1.1 Cohort Analysis

Respondents born in different cohorts might have gone through drastically different experiences in marriage, family roles, and cultural norms. In the following section, I also aim to explore whether the effects of exposure to migrants vary across different cohorts. My selected sample was born over a 40-year span, which might make them inherently different when reacting to societal changes. To account for this, I divided the sample into three-year birth cohorts. By interacting the cohorts with the treatment I measure, I aim to examine whether exposure to migrants differs across age groups, which also helps me to determine whether younger or older individuals were influenced differently by these factors

$$\begin{aligned} Outcome_{icd} = & \alpha + \beta_1 \ln(Exposure\ 5KM)_{icd} \\ & + \beta_2 \ln(Exposure\ 5KM)_{icd} \times Urban_{icd} + \lambda_c + \gamma_d + \beta'_3 X_{icd} + \varepsilon_{icd} \end{aligned} \quad (3)$$

$Cohort_c$ represents the sample’s cohorts. The term λ_c captures cohort-fixed effects, while γ_d accounts for district-fixed effects.

I show the results of the cohort analysis by showing the coefficients of the interaction terms β_2 of each cohort. The results can be seen below:

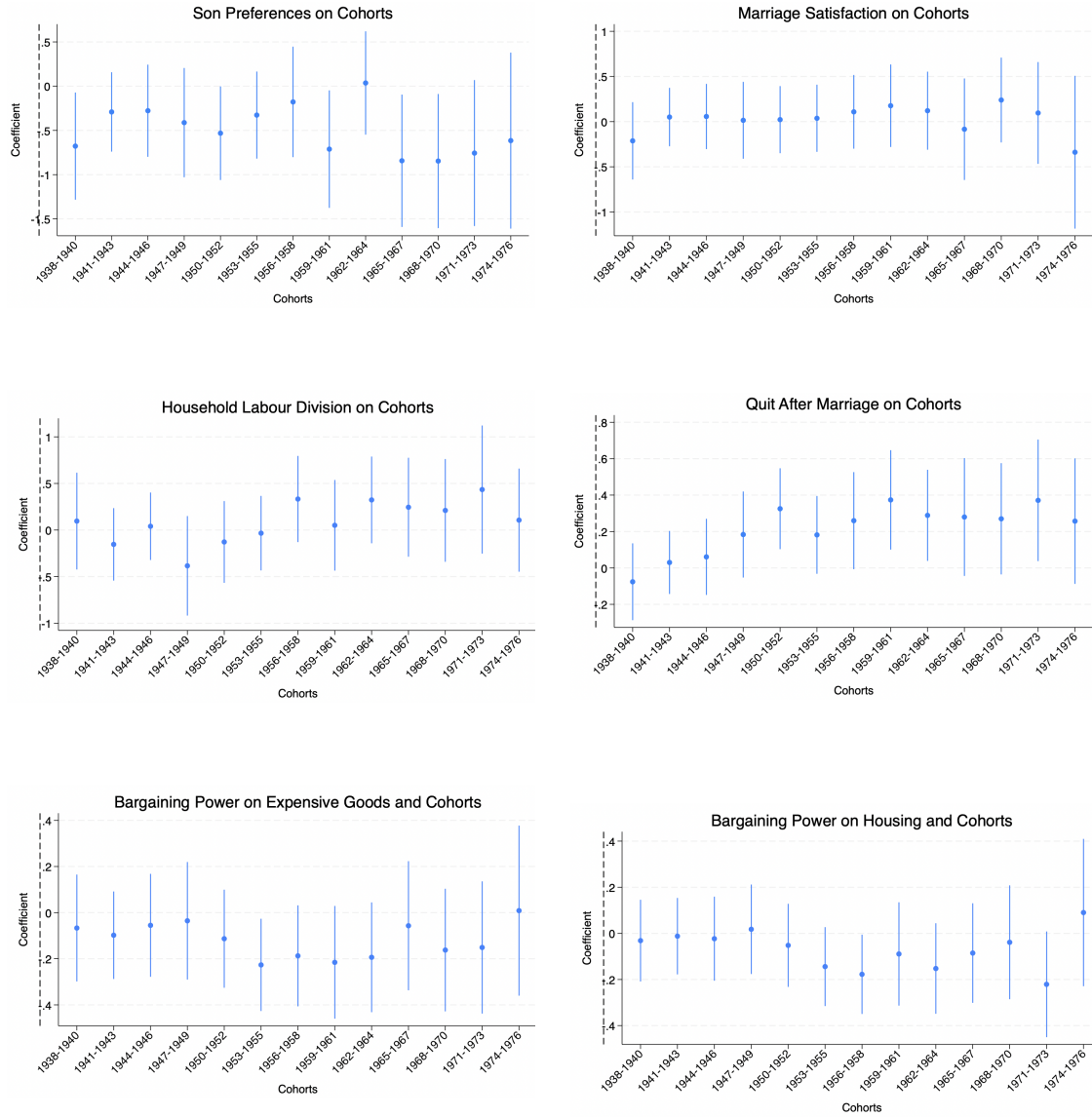


Figure 10: Cohort Analysis Across Outcome Variables

The cohort analysis revealed that none of the coefficients for the interaction term were statistically significant. This suggests no clear evidence of a differential effect across the analysed cohorts. In other words, the impact of the main variable of interest does not appear to vary significantly between cohorts, indicating a consistent effect regardless of the cohort.

6.1.2 Heterogeneity Analysis on Metro Vs Rural Areas

I conducted a heterogeneity analysis that compares urban and rural residents, as these groups may behave differently due to differences in development levels and community

backgrounds. For a more straightforward interpretation, I ran the regression model as shown in Equation 2, but with an interaction term between $\ln(Exposure5KM)_{icd}$ and whether the respondent is located in an urbane area. The results can be shown in Table 5.

Having exposure to migrants while also staying in urban areas is associated with a better relationship with daughters and a very significant chance of not quitting jobs after getting married. However, the urban versus rural heterogeneity test revealed no significant interaction effects, indicating that the treatment impact was consistent across both urban and rural settings.

6.2 Falsification Test

I conduct a falsification test using the male sample to verify that the migrant's exposure affected the females and males differently. Using the male sample in this test helps ensure that general factors affecting both genders do not drive the observed effects in the female sample. If the male sample produces fundamentally different results, it supports the argument that the findings in the female sample are robust, gender-specific, and likely driven by the hypothesised mechanisms. I then present the results of the falsification test, focusing on the outcome variables that demonstrate significant results.

In Table 7, I show the results of the falsification test. The results for the male sample show that the significant effects seen for female samples, particularly regarding marital satisfaction and household labour division, are not present for men. Exposure to mainland migrants does not significantly increase marriage satisfaction for men. Additionally, being close to migrants is related to more conservative views on household labour division, although this effect is not statistically significant. These findings suggest that the impact of proximity to a Juancun on social norms and family dynamics differs by gender.

6.3 Correct for Spatial Correlations

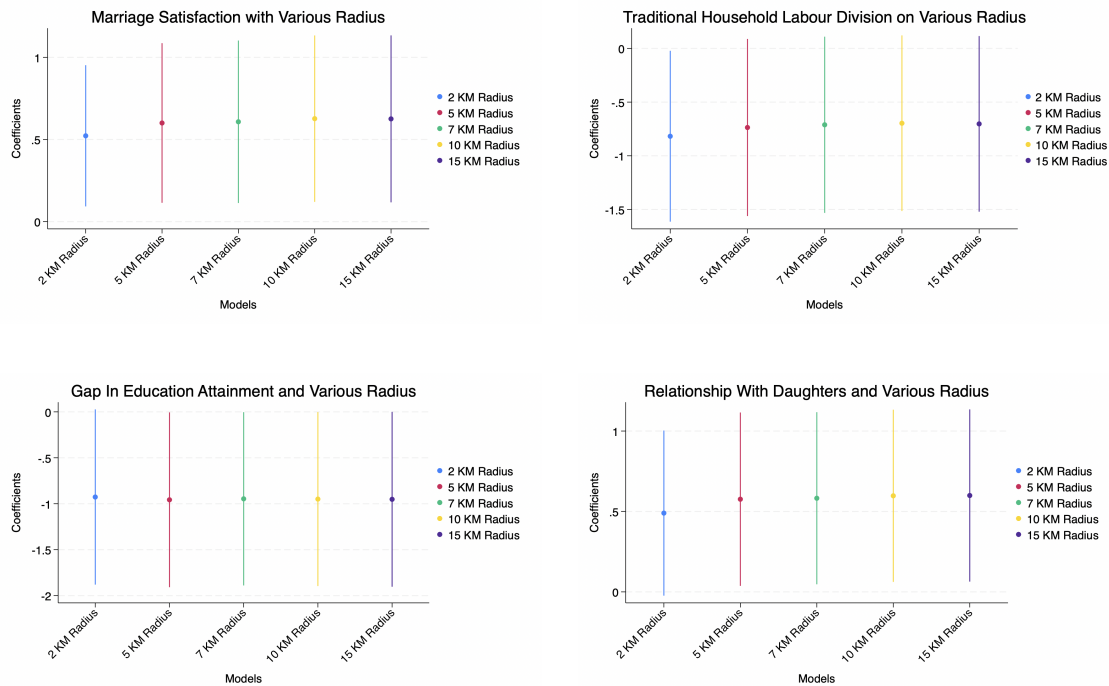
In this section, I assess the robustness of the results using Conley standard errors, as introduced by Conley (1999), to address potential spatial correlation in the data. Unlike standard clustering methods, which rely on predefined clusters (such as districts), Conley

standard errors adjust based on the actual spatial proximity of observations. Here, I account for spatial correlation by treating observations within 5 kilometres of each other as correlated. The aim is to offer a more accurate estimate of the standard errors.

The results are shown in Table 6. Furthermore, adjusting for spatial correlations in the error term results in smaller standard errors than district-level clustering. This indicates that spatial correlation between samples might not have been significant in determining the outcome variables, and the district-level clustering might be a more conservative method. In summary, the Conley standard errors are consistent compared to the baseline results.

6.4 Alternative Radius Cut-off

To verify whether the chosen distance for defining migrant exposure affects the results, I tested several alternative radius cut-offs. I redefined the migrant's exposure to distance from the female sample to 2 km, 7 km, 10 km, and up to 15 km and plotted the corresponding coefficients. As shown in Figure 11, these alternative radii values did not significantly alter the coefficients or standard error estimates. This indicates that the exposure measurement provides a consistent estimation for the analysis.



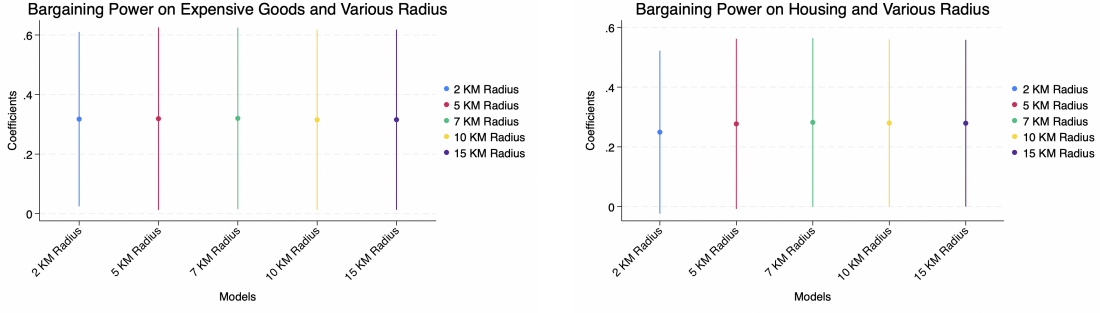


Figure 11: Robustness on Marriage Satisfaction Result with Different Radius

6.5 Mechanisms

In this section, I discuss the mechanisms that might be associated with the changes in female samples that were discussed before. I discuss two potential mechanisms—intermarriage between local women and Chinese migrants and the existence of cultural centre and Women’s League.

6.5.1 Inter-marriage

In this section, I explore how intermarriage with mainland migrants may have influenced local Taiwanese women, focusing on the cultural legacy as a key mechanism. I use an index calculated from the construction of Confucius’s temples and the number of chaste women in a region to represent historical conservatism. As discussed in Section 2.5, the provinces in mainland China where most migrants originated (Zhejiang, Jiangsu, Shandong, and Henan) were historically less conservative than the Fukien/Taiwan region. By the late 19th century, the cultural norms in the Fukien/Taiwan area were more traditional and conservative than those in these mainland provinces (see Figure 4). This suggests that mainland migrant men likely brought relatively more progressive cultural norms with them, in contrast to the local Taiwanese men, who adhered to stricter conservative values. In addition, these migrants, on average, had more years of education than the local males; many of them worked in government or were scholars themselves.

I then present historical evidence to demonstrate that local women enjoyed a happier marriage with their migrant husbands. In the historical archive Kuo (2005), it recorded some interview transcripts of the migrant men and their local partners, and I quote some

of their transcripts.

Marriage Satisfaction: “... Local Taiwanese used to say, “Mainlanders tend to treat their wives better”. In rural areas, if a girl married a mainland-born soldier and was thought to have a good life, the neighbouring families would eagerly follow suit, hoping to marry their daughters to mainland soldiers as well.”

Household Labour Division: “...My wife usually worked on side jobs at home, often doing embroidery or taking raw materials from a food factory to process at home. A day’s pay from embroidery could cover a day’s grocery expenses, and this income was even higher than that of a major.”

In summary, despite limited quantitative evidence, historical evidence suggests that local women who are married to migrants experience greater marital satisfaction and adopt more equitable views on the division of household labour.

6.5.2 Support Facilities

Another potential mechanism influencing cultural norms is the establishment of government-funded cultural centres and other support facilities. As discussed in Section 2.6, the KMT government actively promoted progressive cultural norms by supporting the creation of “hometown associations” and the Women’s League. These associations facilitated the establishment of cultural facilities near migrant-centred settlements and fostered cultural transmission. Additionally, these facilities may have helped local women build social networks, supporting the development of new norms ([Association for Local Literature Studies, 1985](#)).

To illustrate this relationship, I present the distribution of Juancuns alongside government-funded cultural centres. Their distributional patterns demonstrate a strong spatial correlation between their locations.

As seen in Figure 12, cultural centres are more likely to be located near migrant settlements.⁶ These facilities provided reading materials to local women and fostered social networks by drawing residents to participate in community activities. Moreover, they

⁶The data and location of the cultural centres comes from [Association for Local Literature Studies \(1985\)](#).

Distribution of Juancuns And Cultural Centres

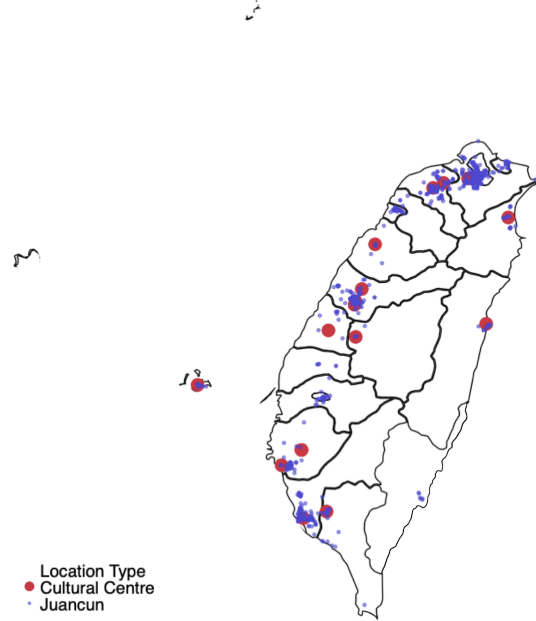


Figure 12: Spatial Distribution of Juancuns and Cultural Centres

likely played a significant role in promoting progressive norms.

6.5.3 Women's League

Besides cultural facilities, the women's league also actively participated in activities that aided women's lives near the Juancun communities. In the historical archive, [Kuo \(2005\)](#) recorded the establishment of the women's league in great detail. The Women's League primarily consisted of the wives of high-ranking government and military officials. One notable contribution of the League was the establishment of sewing factories, which served as workspaces, creating employment opportunities for women living in or near Juancun and paying them wages. Additionally, the League organized skill training programs to equip women living in and surrounding Juancun with practical abilities, such as sewing, weaving, nursing, and even driving. These programs significantly improved the economic conditions in Juancun.

The Women's League also prioritised child nutrition by setting up milk distribution stations and providing milk to Juancuns and surrounding communities. The Women's League trained women from Juancuns in hygiene before sending them to manage these stations. Most importantly, the Women's League helped to establish institutions like daycare

centres, orphanages, and scholarship programs. Both Juancun residents and neighbouring households had access to these services, which significantly reduced their domestic burdens and allowed them to work outside the house. All the above-mentioned practices significantly increased employment opportunities for women in and around Juancuns and improved the overall living conditions in these communities. Also, with all the training and job opportunities in place, the women would gain a much higher bargaining power and perceive a much more modern labour division within the household.

7 Discussion and Conclusion

In this study, I examine the impact of exposure to elite male migrants on local Taiwanese women's interactions and broader traditional gender norms. To measure the intensity of migrant exposure, I use the distribution and sizes of migrant settlements, or Juancuns, as a proxy. The findings reveal that women exposed to migrants during their early adolescence are more likely to experience satisfying marriages, a more equitable division of household labour, a more dominant bargaining stance, and stronger relationships with their daughters. However, while these results point to more progressive norms for women within the household, there is no significant reduction in traditional son preference. Attitudes towards son preference remained largely unchanged, fertility choices showed no notable shifts, and the educational attainment gap between boys and girls widened among the sampled families.

A cohort-based heterogeneity analysis shows that the treatment similarly affected all cohorts. Being in urban versus rural areas didn't affect these findings. Also, checks for robustness, such as using different radii to define exposure and clustering with Conley standard errors, confirmed that the results were consistent. Additionally, I explored potential mechanisms driving these effects, such as intermarriage and government-funded cultural centres. These mechanisms, supported by qualitative evidence, likely provided local women with resources and support from their households and local communities, amplifying the observed outcomes.

However, this study has some limitations. First, I cannot fully address the endogene-

ity issue regarding the location of Juancun. Areas with more migrant settlements may attract additional investment, leading to increased educational resources and job opportunities for local women. Second, I cannot entirely rule out the possibility that some local women with specific beliefs or norms may have chosen to move closer to Juancun to increase their chances of marrying a migrant. In future works, it would be beneficial to address these limitations by incorporating more granular data on local industries and socio-economic levels and longitudinal data that capture changes over time to help disentangle the complex relationships between migration, economic development, and societal norms.

In summary, as highlighted by [Murard and Sakalli \(2018\)](#), refugees often contribute to economic growth in resettlement areas by introducing new skills and knowledge. This study extends that understanding by showing that migrants can offer more than economic benefits—they can also bring progressive norms and cultural values. In the context of a male-biased society, the experience of local women in Taiwan differs from those described in [Grosjean and Khattar \(2018\)](#), illustrating how such circumstances can create unique opportunities for empowerment. Highly educated migrants may introduce transformative social norms. At the same time, substantial government support—such as education, training, childcare facilities, and cultural centres—plays a crucial role in fostering women’s development and empowerment. These insights might help future policies that promote equity and resilience in communities.

Table 1: Summary Statistics table on Main Variables

	N	Mean	Std. Dev	Min	Max
<i>Panel A: Family Dynamics</i>					
Housework Split	993	9.811	11.945	0.034	85
Marriage Satisfaction	1075	3.858	1.714	1	5
Traditional Household Labour Division	1021	3.762	1.186	1	5
Quit After Marriage	1020	0.394	0.489	0	1
<i>Panel B: Fertility Choices</i>					
Support for Son Preference	1267	3.383	1.504	1	5
Sex-Selective Fertility Behaviour	1267	0.043	0.204	0	1
Number of Children	1267	2.642	1.477	0	9
Number of Daughters	1267	1.268	1.161	0	8
Number of Sons	1267	1.375	0.990	0	6
Relationship with Daughters	921	3.399	2.141	1	5
Girl Vs. Boys in Education Attainment	425	1.344	1.416	0.111	13
<i>Panel C: Intra-Household Bargaining Power</i>					
Bargaining Power: Investment	1253	0.388	0.487	0	1
Bargaining Power: Expensive Goods	1267	0.320	0.467	0	1
Bargaining Power: Expenditure	1267	0.438	0.496	0	1
Bargaining Power: Children's Education	1186	0.325	0.469	0	1
Bargaining Power: Housing	1252	0.270	0.444	0	1
<i>Panel D: Treatment and Control Variables</i>					
Exposure to Migrants 5Km	1267	1.306	14.472	0	295.953
Log Exposure 5KM	1267	0.272	0.574	0	5.694
Education Level	1267	5.410	3.644	1	15
Spouse's Education Level	1267	5.206	3.814	0	15
Urban	1267	0.208	0.406	0	1
Mainland Husband	1267	0.058	0.235	0	1
Cultural Centre	1267	0.109	0.312	0	1

Note: This table provides summary statistics for key variables used in the regressions. The number of observation, mean, standard deviations, minimum and maximum values are reported for these variables. The sample consists of Taiwan-born females born between 1935 and 1976. The number of observations for certain variables may vary based on response rates for each question.

Table 2: OLS Estimation Results for Family Dynamics and Gender Norm Outcomes by Migrant Exposure: Family Dynamics

	(1) Housework Split Within Household	(2) Marriage Satisfaction	(3) Traditional Household Labour Division	(4) Quit After Marriage
Log Exposure 5KM	-2.752 (7.177)	0.676** (0.328)	-0.736* (0.419)	-0.215 (0.260)
Sex Ratio	0.031 (0.122)	-0.021 (0.014)	0.010 (0.014)	0.007 (0.006)
Husband's Income (Std)	0.018 (0.504)	-0.054 (0.036)	-0.014 (0.040)	0.033* (0.017)
Husband's Education Level	-0.175 (0.206)	0.025* (0.013)	0.006 (0.020)	-0.017* (0.010)
Education Level	-0.072 (0.302)	0.010 (0.016)	-0.126*** (0.026)	0.008 (0.011)
N	993	1075	1021	1020
R ²	0.358	0.341	0.417	0.375

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ Standard errors in parentheses

Note: The dependent variables reflect traditional cultural norms and family dynamics. Standard errors, clustered at the district level, are reported in parentheses. All regressions include district-fixed effects and cohort-fixed effects. Regressions contain all Tuiwan-born female samples that provided answers to the correspondent survey questions. Column 4 doesn't contain samples that had never entered the workforce.

Table 3: OLS Estimation Results for Family Dynamics and Gender Norm Outcomes by Migrant Exposure: Traditional Gender Norms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Support for Son Preference Norm	Sex-Selective Fertility Behaviour	Number of Children	Number of Daughters	Number of Sons	Relationship with Daughters	Relationship with Sons	Girl Vs. Boys Education Attainment
Log Exposure 5KM	0.161 (0.590)	-0.032 (0.039)	-0.273 (0.692)	-0.195 (0.490)	-0.078 (0.444)	0.577** (0.270)	0.294 (0.275)	-0.957** (0.482)
Sex Ratio	0.006 (0.016)	0.001 (0.001)	-0.005 (0.006)	-0.004 (0.006)	-0.001 (0.006)	-0.003 (0.009)	-0.001 (0.011)	0.010 (0.035)
Husband's Income (Std)	0.028 (0.050)	0.004 (0.007)	0.063 (0.039)	0.058 (0.041)	0.005 (0.030)	-0.010 (0.024)	0.000 (0.025)	0.081 (0.094)
Education Level	-0.078*** (0.026)	0.001 (0.003)	-0.153*** (0.017)	-0.058*** (0.014)	-0.095*** (0.013)	0.013 (0.014)	0.010 (0.014)	-0.071 (0.057)
Spouse's Education Level	0.009 (0.019)	0.001 (0.002)	0.064*** (0.014)	0.029** (0.012)	0.034*** (0.010)	0.025** (0.010)	0.025** (0.011)	0.043 (0.054)
N	1267	1267	1267	1267	1267	921	1011	425
R ²	0.342	0.331	0.584	0.406	0.422	0.371	0.329	0.692

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ Standard errors in parentheses

Note: The dependent variables reflect traditional cultural norms and family dynamics. Standard errors, clustered at the district level, are reported in parentheses. All regressions include district-fixed effects and cohort-fixed effects. Regressions contain all Taiwan-born female samples that provided answers to the correspondent survey questions. Column 8 contains only families that have both male and female offsprings.

Table 4: OLS Estimation Results for Family Dynamics and Gender Norm Outcomes by Migrant Exposure: Intra-Household Bargaining Power

	(1)	(2)	(3)	(4)	(5)
	Bargaining Power: Investment	Bargaining Power: Expensive Goods	Bargaining Power: Daily Expenditure	Bargaining Power: Children's Education	Bargaining Power: Housing Decisions
Log Exposure 5KM	0.101 (0.171)	0.319** (0.156)	-0.018 (0.183)	0.095 (0.168)	0.277* (0.145)
Sex Ratio	0.005 (0.004)	0.004 (0.004)	0.008* (0.004)	0.007 (0.006)	0.003 (0.003)
Husband's Income (Std)	-0.013 (0.015)	-0.004 (0.014)	0.012 (0.017)	0.006 (0.015)	-0.003 (0.013)
Education Level	0.034*** (0.007)	0.029*** (0.007)	0.033*** (0.007)	0.027*** (0.008)	0.033*** (0.006)
Spouse's Education Level	-0.034*** (0.006)	-0.040*** (0.006)	-0.030*** (0.006)	-0.033*** (0.006)	-0.043*** (0.005)
N	1253	1267	1267	1186	1252
R ²	0.378	0.363	0.328	0.318	0.409

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ Standard errors in parentheses

Note: The dependent variables reflect traditional cultural norms and family dynamics. Standard errors, clustered at the district level, are reported in parentheses. All regressions include district-fixed effects and cohort-fixed effects. Regressions contain all married female samples that provided answers to the correspondent survey questions.

Table 5: OLS Estimation Results for Family Dynamics and Gender Norm Outcomes by Migrant Exposure: Urban Vs. Rural Heterogeneity

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Marriage Satisfaction	Relationship with Daughters	Traditional Household Labour Division	Quit After Marriage	Girl Vs. Boys in Education Attainment	Bargaining Power Expensive Goods	Bargaining Power Housing
Log Exposure 5KM	0.387 (0.414)	-0.047 (0.296)	-1.180 (0.935)	0.491* (0.291)	-1.798* (0.945)	0.280 (0.319)	0.162 (0.314)
Urban=1	-0.847** (0.364)	-0.357 (0.280)	0.565* (0.329)	0.709*** (0.140)	0.387 (0.875)	0.318** (0.133)	0.147 (0.114)
Urban=1 $\times$ Log Exposure 5KM	0.582 (0.585)	0.960** (0.483)	0.682 (1.046)	-1.053*** (0.328)	1.008 (0.958)	0.055 (0.334)	0.172 (0.321)
Husband's Income (Std)	-0.054 (0.036)	-0.012 (0.024)	-0.017 (0.041)	0.035** (0.017)	0.083 (0.093)	-0.004 (0.014)	-0.004 (0.013)
Education Level	0.008 (0.016)	0.013 (0.015)	-0.126*** (0.026)	0.009 (0.011)	-0.071 (0.057)	0.029*** (0.007)	0.033*** (0.006)
Spouse's Education Level	0.022* (0.013)	0.022** (0.010)	0.006 (0.020)	-0.016* (0.010)	0.041 (0.054)	-0.040*** (0.006)	-0.043*** (0.005)
N	1075	910	1021	1020	425	1267	1252
r ²	0.336	0.357	0.417	0.381	0.692	0.362	0.409

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ Standard errors in parentheses

Note: The dependent variables reflect traditional cultural norms and family dynamics. Standard errors, clustered at the district level, are reported in parentheses. All regressions include district-fixed effects and cohort-fixed effects. Regressions contain all Taiwan-born female samples that provided answers to the correspondent survey questions. Column 4 doesn't contain samples that had never entered the workforce, Column 5 contains only families that have both male and female offsprings.

Table 6: OLS Estimation Results for Family Dynamics and Gender Norm Outcomes by Migrant Exposure: Using Conley Standard Error to Correct for Spatial Correlation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Marriage Satisfaction	Traditional Household Labour Division	Quit After Marriage	Relationship with Daughters	Girl Vs. Boys in Education Attainment	Bargaining Power Expensive Goods	Bargaining Power Housing
Log Exposure 5KM	0.676** (0.298)	-0.736** (0.345)	-0.215 (0.212)	0.577** (0.228)	-0.957*** (0.338)	0.319** (0.134)	0.277** (0.130)
Sex Ratio	-0.021** (0.009)	0.010 (0.011)	0.007 (0.005)	-0.003 (0.006)	0.010 (0.024)	0.004 (0.003)	0.003 (0.003)
Husband's Income (Std)	-0.054* (0.030)	-0.014 (0.034)	0.033** (0.014)	-0.010 (0.020)	0.081 (0.067)	-0.004 (0.013)	-0.003 (0.013)
Education Level	0.010 (0.013)	-0.126*** (0.021)	0.008 (0.009)	0.013 (0.012)	-0.071* (0.038)	0.029*** (0.006)	0.033*** (0.005)
Spouse's Education Level	0.025** (0.011)	0.006 (0.016)	-0.017** (0.008)	0.025*** (0.009)	0.043 (0.038)	-0.040*** (0.005)	-0.043*** (0.005)
N	1075	1021	1020	921	425	1267	1252
R ²	0.341	0.417	0.375	0.371	0.692	0.363	0.409

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ Standard errors in parentheses

Note: The dependent variables reflect traditional cultural norms and family dynamics. These results uses the Conley standard errors to correct for spatial correlation. Regressions contain all Taiwan-born female samples that provided answers to the correspondent survey questions. Column 4 doesn't contain samples that had never entered the workforce, Column 5 contains only families that have both male and female offsprings.

Table 7: OLS Estimation Results for Family Dynamics and Gender Norm Outcomes by Migrant Exposure: Falsification Test Using The Male Sample

	(1) Support for Son Preference Norms	(2) Marriage Satisfaction	(3) Traditional Household Labour Division	(4) Relationship with Daughters	(5) Quit After Marriage
Log Exposure 5KM	0.470 (0.666)	0.217 (0.282)	0.433 (0.577)	1.015 (1.150)	-0.166 (0.104)
Wife's Income (STD)	0.030** (0.015)	-0.069*** (0.004)	0.027*** (0.010)	0.002 (0.016)	-0.001 (0.002)
Spouse's Education Level	-0.014 (0.019)	0.028** (0.012)	0.012 (0.015)	0.046 (0.039)	-0.001 (0.006)
Education Level	-0.043** (0.022)	-0.004 (0.013)	-0.085*** (0.015)	-0.110*** (0.036)	-0.005 (0.005)
N	1072	860	1072	860	870
R ²	0.280	0.375	0.340	0.343	0.348

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ Standard errors in parentheses

Note: The dependent variables reflect traditional cultural norms and family dynamics. Standard errors, clustered at the district level, are reported in parentheses. All regressions include district-fixed effects and cohort-fixed effects. Regressions contain all Taiwan-born male sample that provided answers to the correspondent survey questions. Column 5 contains only sample that ever entered the workforce.

8 Appendix

8.1 The Migrants Composition

The “Waishengren” group was diverse and consisted of people from different origins and backgrounds.⁷ To illustrate this, I present a breakdown of migrants’ origins over time. As can be seen in Figure 13, migrants coming from different parts of mainland China arrive at various times. The Eastern Regions include Shanghai, Jiangsu and Zhejiang. It saw a steadily increasing migration population from the beginning of the migration period to the end. The migrants from Fukien consisted a large proportion towards the start of the migration period, right after the Japanese surrender. This was because many Fukienese believed that moving to Taiwan would bring entrepreneurial opportunities, given the similar cultural background and language they shared with the locals. However, moving closer to the mass retreat in 1949, more and more servicemen retreated as the KMT lost its advantage on the battlefield. Therefore, more shares of the migrants leaned towards the northern population and became the majority. After 1949, the proportion of migrants from the southern regions rose, mainly due to many people from the Canton area migrating to Taiwan via a detour through Hong Kong.

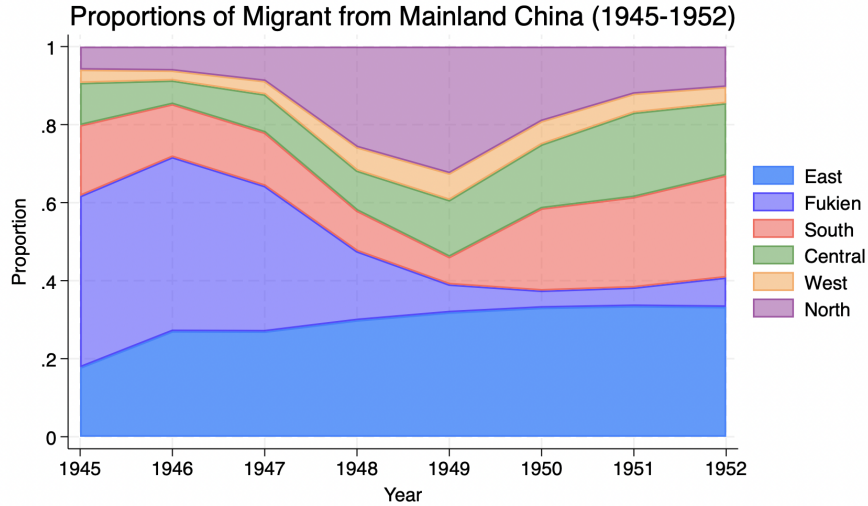


Figure 13: The Origin of Chinese Migrants Over Time

⁷This data was sourced from the 1956 and 1970 Taiwan Census ([Executive Yuan, 1956](#); [Executive Yuan, 1972](#)).

Figure 14 provides a clear visualisation of the proportions of migrants by origin. Fukienese accounted for only 12.5% of the total migrant population, while those from northern and eastern regions made up over 60%. This figure highlights the diverse origins of the migrants, who exhibit distinct characteristics compared to the local Taiwanese residents.

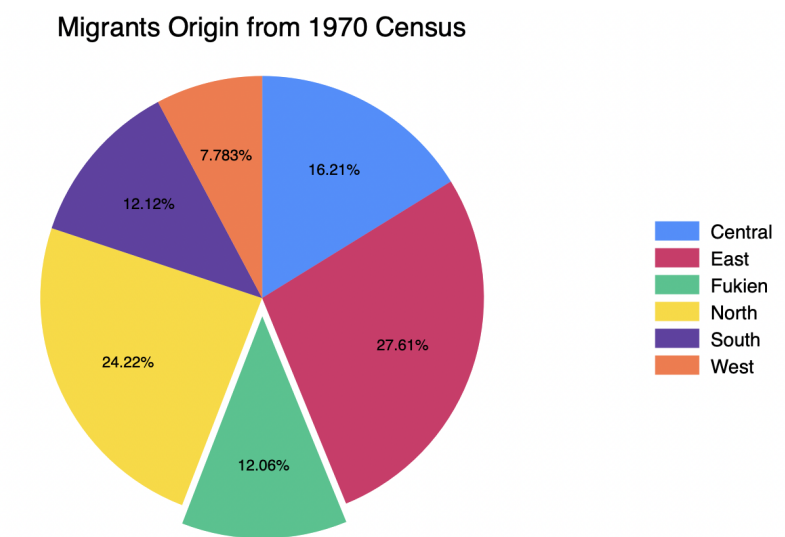


Figure 14: The Origin of Chinese Migrants

8.2 Distribution of Juancuns Across Time

As introduced in Section 2, Juancun as temporary housing option for the refugees, was built across a long period of times. In this section I show you the temporal distribution of Juancuns across time.

Temporal Distribution of Juancuns Across Taiwan

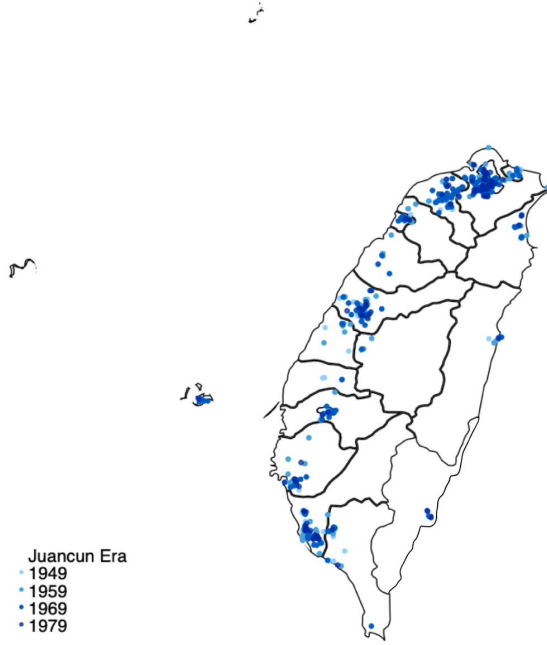


Figure 15: Temporal Distribution of Juancun

Figure 15 illustrates the temporal and spatial distribution of Juancuns (military-dependent villages) across Taiwan over several decades. This figure shows the distribution of Juancuns by the end of year 1949, 1959, 1969, and 1979. Juancuns stopped being built in the mid-1980s. The construction process of Juancuns demonstrates a clear trend of expansion and diversification over time. In the early years of KMT's retreat (before 1949), Juancuns were concentrated in big port cities, like Taipei, Kaohsiung and Taoyuan, where the migrants first landed. This is likely reflecting the immediate need for housing military personnel and their families after the retreat. More Juancuns were constructed as time progressed, with noticeable growth by 1959. This expansion reflects the increasing demand for settlements as the influx of military dependents stabilised and new communities were integrated. By 1969, the distribution of Juancuns became more dispersed, reaching regions that had not been previously developed, including rural areas. This indicates efforts to accommodate population growth and provide housing in less urbanised areas. The temporal variation in the construction dates of Juancuns enables me to define the treatment variable and align it with the ages of the individuals in the sample. Overall, the construction process of Juancuns shows a gradual shift from concentrated settlements in the early years to a more evenly distributed pattern across Taiwan. The treatment

variable, migrant exposure is also

8.3 Original Juancun Data

國軍眷村一覽表

國軍列管眷村一覽表										
項次	眷村村名	地址	興建年代	興建單位	建築材料	興建戶數	戶數	列管單位	改建後名稱	特色及簡明村史
1	自立二村	台北市內湖區陽光街68巷109弄一號	58.7.1	陸總部	二樓 磚牆	35	35	陸軍後勤司令部	通航聯隊基地 (健安新城)	係民國58年6月遷建現址，民國62年移由陸軍後勤司令部列管，本村住戶皆為大陸撤退來台官兵、士、眷舍均為磚造二層房舍。
2	西松新村	台北市松山區三民路36號	41.2.1	陸總部	二樓 磚牆	15	12	陸軍後勤司令部	通航聯隊基地 (健安新城)	原為民國43年由裝甲兵第四中隊之克難辦公室，改建為原眷戶，原名自立二村，民國45年因部分土地歸還百姓，大部分眷戶遷往內湖後，改名西松新村，本村住戶皆為大陸撤退來台官兵、士、眷舍均為鋼筋混凝土房舍。
3	梅林新村	台北市士林區至善路一段138巷3弄8號	46.5.1	陸總部	磚牆 瓦房	20	17	陸軍後勤司令部	懷仁新村 改建基地	係民國49年興建，本村住戶皆為大陸撤退來台官兵、士、眷舍均為磚造房舍。村名由來為：當時通信署長爭取到建村，且署長出生於12月，為梅花盛開期，故村名命名為梅林新村。
4	明德新村	台北市華齡街1巷4號4樓	59	陸總部	四樓RC	88	87	陸軍後勤司令部	慈光五村 改建基地	原住民權西路，因地屬台銀管有，55年核定單獨遷建，59年遷建劍潭協群、新都公寓現址。陸總部於63.1.1興建，共88戶樓舍。
5	中心新村	台北市北投區新民路46巷27弄13樓	51.7.16	陸總部	磚牆 瓦房	74	75	陸軍後勤司令部	政校後勤區 改建基地	係民國51年興建，本村住戶皆為大陸撤退來台官兵、士、眷舍均為磚造房舍。因原村位於台北縣北投鎮中心位置，因此命名為「中心新村」。
6	光華新村	台北市南港區向陽路248巷11號	48.1.1	陸總部	磚牆 瓦房	64	53	陸軍後勤司令部	千城一村 凌雲五村國宅	民國38年時原為工兵學校營舍 (43戶)，後來因人數過多於民國45年時擴建 (40戶)，後因成功橋興建需徵地拆除30戶。本村住戶皆為大陸撤退來台官兵、士、眷舍均為單層瓦頂式房舍。
7	千城一村	台北市內湖區康寧路一段257巷6號	50.4.1	婦聯會	磚牆 瓦房	100	83	陸軍後勤司令部	千城一村 千城新城	係民國51年興建，期間經過一次社區改建 (併清白新城改建案)，因眷戶意見分歧而未成；後經歷二次道路拓寬工程，使原本為103戶之眷村，縮減至83戶 (其中有5戶為全拆戶，但仍保有承購眷舍之權利) 另本村於民國90年已全數拆除，本村住戶皆為大陸撤退來台官兵、士、眷舍均為單層瓦頂式房舍。村名有保國衛民，保家衛國之意。

38

Figure 16: Example of the Original Juancun Data

As can be seen, Figure 16 above shows the original data of Juancuns sourced from Kuo (2005). This dataset provides valuable historical insights into the development and administration of Juancuns, their role in post-war Taiwan, and the living conditions of their residents. The first column contains the serial number and village name of each Juancun, which serves to identify the Juancun in the record. The second column provides the location of the Juancun, including the district and street address in Taiwan. The third column shows the year and sometimes the exact date when the village was established. The fourth column refers to the government or military unit establishing the village. The fifth column describes the materials or type of buildings in Juancun, such as “brick houses,” “tile houses,” or “RC (reinforced concrete)”. The next column lists the total number of residential households in the village, which also indicates the size of the Juancuns. The more households there are, the larger the Juancun is. The next column indicates the organisation responsible for the administration and management of the village after construction. The last column notes the historical significance, the

purpose of the Juancun, and any changes or renovations made over time. This section also includes brief narratives on the village's role in housing military families or refugees after the KMT retreated to Taiwan.

8.4 Examples of Juancun

As can be seen in Figure 17, which is an example of a Juancun that is small in size (?). This Juancun in the centre of Hsinchu city, which only contains 9 registered households. The households share a short ally.



Figure 17: Juancun with a Small Size

Figure 18 is an example of large Juancun that also located in the outer suburb of Hsinchu city. It has more than 900 registered households. This Juancun might be affiliated to a larger government sector.



Figure 18: Juancun with a Large Size

References

- Abramitzky, R. and Boustan, L. (2017). Immigration in american economic history. *J. Econ. Lit.*, 55(4):1311–1345.
- Abramitzky, R., Boustan, L. P., and Eriksson, K. (2014). A nation of immigrants: Assimilation and economic outcomes in the age of mass migration. *J. Polit. Econ.*, 122(3):467–506.
- Alesina, A. and Tabellini, M. (2024). The political effects of immigration: Culture or economics? *J. Econ. Lit.*, 62(1):5–46.
- Andrade, T. (2003). How taiwan became chinese: Dutch, spanish, and han colonization in the seventeenth century.
- Association for Local Literature Studies (1985). *Summary of Chinese Local Document Societies and Associations*. Chinese Association for Local Literature Studies.
- Baranov, V., De Haas, R., and Grosjean, P. (2023). Men. male-biased sex ratios and masculinity norms: evidence from australia’s colonial past. *J. Econ. Growth (Boston)*, 28(3):1–58.
- Bisin, A., Patacchini, E., Verdier, T., and Zenou, Y. (2011). Formation and persistence of oppositional identities. *Eur. Econ. Rev.*, 55(8):1046–1071.
- Booth, B., Falk, W. W., Segal, D. R., and Segal, M. W. (2000). The impact of military presence in local labor markets on the employment of women. *Gend. Soc.*, 14(2):318–332.
- Boucher, V., Del Bello, C. L., Panebianco, F., Verdier, T., and Zenou, Y. (2023). Education transmission and network formation. *J. Labor Econ.*, 41(1):129–173.
- Chang, S., Kan, K., and Zhang, X. (2021). Too many men, Too-Short lives: The effect of the Male-Biased sex ratio on mortality. *J. Hum. Resour.*
- Conley, T. G. (1999). GMM estimation with cross sectional dependence. *J. Econom.*, 92(1):1–45.
- Dickson, B. J. (1993). The lessons of defeat: The reorganization of the kuomintang on taiwan, 1950–52. *China Q.*, 133:56–84.
- Dustmann, C. and Glitz, A. (2011). Migration and education. In *Handbook of The Economics of Education*, volume 4 of *Handbook of the economics of education*, pages 327–439. Elsevier.
- Excutive Yuan (1956). Sample census of population and housing taiwan fukien area republic of china general report / .
- Executive Yuan (1972). Sample census of population and housing taiwan fukien area republic of china general report / .

- Francis, A. M. (2011). Sex ratios and the red dragon: using the chinese communist revolution to explore the effect of the sex ratio on women and children in taiwan. *J. Popul. Econ.*, 24(3):813–837.
- Goldin, C. D. (1991). The role of world war II in the rise of women’s employment. *Am. Econ. Rev.*, 81(4):741–756.
- Grosjean, P. and Khattar, R. (2018). It’s raining men! hallelujah? the Long-Run consequences of Male-Biased sex ratios. *Rev. Econ. Stud.*, 86(2):723–754.
- Ho, S. P.-S. (1968). Agricultural transformation under colonialism: The case of taiwan. *J. Econ. Hist.*, 28(3):313–340.
- Hu, F. (2015). Taiwanese homes, japanese schools:han taiwanese girls’ primary education under japanese rule, 1895-1945. *Doctoral Dissertation*, 86(2):723–754.
- Hu, F. (2018). Post-war taiwan’s ’decolonization’ strategy of cultural return to china and its practical evaluation. *Literature, History and Philosophy*.
- Hu, F. (2024). *“Good Wife, Wise Mother”: Assimilating Han Taiwanese Under Japanese Rule*. University of Washington Press.
- Kung, J. K.-S. and Ma, C. (2014). Can cultural norms reduce conflicts? confucianism and peasant rebellions in qing china. *J. Dev. Econ.*, 111:132–149.
- Kuo, G.-L. (2005). *From Bamboo Fence to Mansion: A history of Armed Forces Military Dependent Quarters*. Department of Defence of Taiwan, Taipei, Taiwan.
- Lee, K. (2015). The historical formation and social differences of chuan-tsuan in taiwan: A comparison of registered and self-supported military communes. pages 129–172.
- Lee, K. (2021). A preliminary study of the residence types of mainlander soldiers after applying for household registration (1959-1968). *Taiwanese Sociology*, (42).
- Lin, G. (2003). The evolution of a taiwanese national identity. *Asia Program Special Report*.
- Lin, T. (2009). *1949– The Great Retret.* .
- Murard, E. (2023). Long-term effects of the 1923 mass refugee inflow on social cohesion in greece. *World Dev.*, 170(106311):106311.
- Murard, E. and Sakalli, S. O. (2018). Mass refugee inflow and long-run prosperity: Lessons from the greek population resettlement. *SSRN Electron. J.*
- Qian, N. (2008). Missing women and the price of tea in china: The effect of sex-specific earnings on sex imbalance*. *Q. J. Econ.*, 123(3):1251–1285.
- Teso, E. (2018). The Long-Term effect of demographic shocks on the evolution of gender roles: Evidence from the transatlantic slave trade. *J. Eur. Econ. Assoc.*, 17(2):497–534.

- Tsay, W.-J. (2006). The educational attainment of second-generation mainland chinese immigrants in taiwan. *J. Popul. Econ.*, 19(4):749–767.
- Walker, S., Grosjean, P., Cristia, A., and Delavande, A. (2024). HeforShe: Bargaining power, parental beliefs, and parental investments.
- Wang, P. C. (2015). A bastion created, a regime reformed, an economy reengineered, 1949-1970. *Taiwan: A new history*.
- Yang, D. M.-H. (2020). *The Great Exodus from China: Trauma, Memory, and Identity in Modern Taiwan*. Cambridge University Press.
- You, J. (1988). *Women’s education in Taiwan during the Japanese occupation period*. Institute of Historical Research at the National Normal University.
- You, J. (1990). The women’s movement after the reorganization of the chinese nationalist party (kuomintang). *Institute of Historical Research at the National Normal University*, 06(18):343–398.