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Inequality, Ethnicity, and Status in a Ranked Society: Intermarriage in Mindanao, the Philippines

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Abstract

A tension exists between the normative aspiration for greater equality between ethnic and religious groups in society and the empirical reality that ascendant groups benefit from the unequal social order. I explore how this tension manifests in the social sphere by examining how ethnic inequality shapes the formation of interethnic ties in an ethnically-ranked society. I examine intermarriages in Mindanao, a deeply-divided and ethnically-ranked society in the Global South. I find ethnic inequality is associated with both integrative and distancing forces. When ethnic inequality is low, individuals from high-ranked groups tend to inmarry, but low-ranked groups to outmarry. I suggest this divergence reflects the importance of status hierarchies. Intermarriages represent status mobility for subordinate groups but status threat for dominant groups. Ingroup preference intensifies for high-ranked groups because they are anxious to preserve the distinctiveness of group boundaries and their status superiority. I establish these findings using census micro-data on over two million marriages.

Keywords

Inequality, Intermarriage, Ethnicity, Status, Philippines

There has been growing recognition in both policy discourse and scholarly research of the importance of inequality, not just between individuals and households, but also between social groups. Reducing disparities between ethnic, racial, and religious groups has, for instance, become one of the targets of the United Nations' Sustainable Development Goals (SDGs). The prominence of the issue reflects not only a normative aspiration for greater fairness in society. Mounting empirical evidence also demonstrates the adverse effects of inequality between groups. Research has evinced ethnic inequality's links with economic underdevelopment (Alesina, Michalopoulos, & Papaioannou, 2016), civil wars (Cederman, Weidmann, & Gleditsch, 2011; Gubler & Selway, 2012), democratic breakdown (Huber & Suryanarayan, 2015), and poor public good provision (Baldwin & Huber, 2010). The rationale for reducing inequality between groups in society then appears clear.

Contrary to this growing consensus, however, I suggest the empirical case for a more equal distribution of societal resources is not unequivocal in an ethnically-stratified society. I consider ethnic inequality's relationship with another normatively-desirable objective: social integration. I posit lower ethnic inequality is associated with both integrative *and* distancing forces in an ethnically-ranked system. I identify these distinct forces by purposely examining how inequality affects the behaviour of advantaged ethnic groups separately from disadvantaged groups and contend that ascendant groups will behave differently because they benefit from the unequal social order and may resist redistribution that would alter it.

Specifically, I consider marriage behavior across ethnic boundaries in a society with well-established socio-economic disparities between ethnic groups. Intermarriages are widely-seen as a positive force for integration in ethnically diverse societies (Alba & Nee, 2003; Gordon, 1964; Kalmijn, 1998; Marcson, 1950). As such they are a useful barometer of the quality of intergroup relations. I posit that when ethnic inequality is low in a locality, individuals from the lower-ranked group will tend to outmarry. Outmarriage represents an integrative force in society. However, members of the higher-ranked group will tend to inmarry. Inmarriage is a distancing force in society. Ingroup preference will intensify then for superordinate groups; but weaken for subordinate groups. Their behaviours will diverge.

This divergence, I argue, reflects the importance of status hierarchies. In contexts where the inequality between ethnic groups is low, I posit superordinate group members will feel anxiety for the proximate status of the subordinate group and seek to maintain the distinctiveness of their status superiority by marrying their coethnics. Inmarriage protects group boundaries, and in consequently contributes to social distance. In contrast, members of low-ranked groups will aspire to improve their status by up-marrying into the higher-ranked group when ethnic inequality is low. Outmarriage becomes a form of social mobility, and consequently facilitates social integration.

These findings underscore the complexity of redistributive forces in ethnically-stratified systems. In deeply-ranked societies, equalizing or redistributive forces that alter the social hierarchy may have both positive and negative consequences for intergroup relations. The recognition of the possibility of downside effects to inequality reduction has implications for several other literatures. First, research on civil conflicts has focused predominantly on the motivation of excluded or disadvantaged groups to rebel (Ballentine & Sherman, 2003). While the grievances of subordinate groups are causally important, these findings suggest the threat to the superordinate group's position should also be an integral part of theorization on civil wars. Redressing a subordinate group's grievance risks generating a new grievance within the superordinate group. Second, the logic of status threat may also be relevant to theories of voting behaviour in ranked societies. Research has suggested that even poor members of high-ranked groups may vote against parties that promise redistribution because they fear the upward mobility of otherwise low-ranked groups and resent the resources redirected in their favour (Suryanarayan, forthcoming). The anxiety to preserve the existing and unequal social order is so powerful that individuals may even vote against their own economic self-interest.

The evidence for these findings comes from the study of a deeply-divided society in the Global South. Mindanao, in the southern Philippines, comprises three ethno-religious groups whose differences in socio-economic status present an effective illustration of an ethnically-ranked system with a clear social hierarchy. Christian settlers sit at the apex, followed by the native Muslim Moro; and lastly the Lumad, the region's other indigenous grouping. The integration of these groups has proved a challenge and Mindanao has been the location of a long-running insurgency waged by rebel groups, drawn from the native Muslim Moro population, resentful of their minoritization and dispossession by Christian settlers from outside the region. The study examines over two million marriages both within and between these three ranked groups, drawing on census micro-data released, unusually, for the entire population for the years 2000 and 2010.

The article is structured as follows. Section one frames the study theoretically; section two describes the research design including the case selection of Mindanao, and the data and techniques used; section three presents the results; and section four discusses the findings and presents conclusions.

Section 1 Theoretical framework

Ethnic inequality

The proposition that inequalities between groups matter as much, if not more, than inequalities between individuals and households underpins several distinct areas of empirical inquiry that have developed independently each of other. The limited links between these literatures, however, have resulted in the emergence of several terms to describe essentially the same concept. Horizontal inequalities, ethnic inequalities, group-based inequalities, and ethnic inequalities have all entered the social science lexicon. In the interests of consistency, I adopt the term ethnic inequality here.

Ethnic inequality's impact has been examined in relation to multiple phenomena and its effects found to be overwhelmingly adverse. Research on civil wars has documented, in an expanding number of studies, a robust relationship between horizontal inequality and conflict onset (Cederman et al., 2011; Gubler & Selway, 2012; Murshed & Gates, 2005; Østby, 2008; Stewart, 2010). Scholars have interpreted this as support for the causal importance of group grievances. Other work has examined ethnic inequality's role in underdevelopment and public good provision (Alesina et al., 2016; Baldwin & Huber, 2010; Stewart, 2002). Alesina et al. (2016) showed in a cross-national study that ethnic inequality has a strong, negative relationship with contemporary development levels. Baldwin and Huber (2010) challenged the consensus that ethnic diversity undermines public goods provision by showing ethnic inequality better explains the outcome. Yet other work has found ethnic inequality to affect unfavourably democratic stability (Huber & Suryanarayan, 2015) and the quality of government (Kyriacou, 2013).

In contrast with the mounting evidence of ethnic inequality's adverse political and economic effects, there has been comparatively little research examining how it operates in the *social* sphere. How exactly does inequality between groups affect the social interaction between them? In considering what influences interethnic relations, research has focused primarily on the impact of ethnic diversity rather than ethnic inequality. Putnam's (2010) well-known argument that higher ethnic diversity lowers trust not only between ethnic groups, but in society in general causing people to 'hunker down', has profoundly shaped debate in the public sphere on the merits of diversity. Yet some scholars have questioned this claim and suggested that, at least in the context of the United States, deep and persistent racial inequalities may lie behind low levels of societal trust (Hero, 2003; Portes, 1998). Empirical work has explicitly examined the relationship between racial income inequality and social capital and found trust to decline in the context of greater inequality (Alesina & La Ferrara, 2002; Tesei, 2017). However, while trust is an important dimension of interethnic relations, little research has looked at how inequality affects the formation of concrete social ties across group boundaries.

Interethnic marriage and integration

Yet interethnic ties are important. In ethnically diverse societies, the social ties between ethnic groups are widely-viewed as an indicator of social integration. In ethnically-divided societies, where group boundaries may be deeply-inscribed by violence, these ties are seen also a source of social stability. Several prominent theories of intergroup conflict emphasise cross-ethnic ties as conducive to co-existence. Laitin and Fearon (1996) well-known game-theoretic model of intergroup cooperation implies that as interethnic interactions increase, the incentive for social stability grows. Peace is maintained because a 'defection' by an outgroup member would require an indiscriminate and costly reprisal by all ingroup members against all outgroup members given the former's inability to identify and punish the defector. Varshney (2001) identified pre-existing interethnic associational ties as the reason why, following the destruction of the Babri Masjid in 1992, certain Indian cities resisted violence, but others with weaker Hindu-Muslim ties did not. The cross-group ties countervailed the in-group ties that would otherwise bring and bind individuals together in an isolating and exclusionary form of solidarity. Putnam (2000) expanded his concept of social capital to distinguish between 'bonding' and 'bridging' varieties. Bridging social capital, resulting from ties across groups, builds trust and strengthens social cohesion and has led to the claim it may also reduce violent conflict (World Bank, Colletta, & Cullen, 2000).

Ethnic intermarriage represents a particular strong and durable form of cross-ethnic tie. Such marriages bring together not only two individuals but also, potentially, two social networks that may otherwise rarely interact (Qian & Lichter, 2007). Furthermore, the children from mixed marriages may weaken identity boundaries and help preserve the integrative potential of the union for the next generation (Stephan & Stephan, 1989). A large body of sociological research has argued for intermarriage's integrative potential through the process of assimilation (Alba & Nee, 2003; Gordon, 1964). While recent research has suggested its integrative effect may be over-stated (Okun & Khait-Marelly, 2010; Song, 2009), assimilation theory, along with empirical work in conflict studies, generally views intermarriage as a positive force to be promoted in society.

In explaining their formation, existing theory has conceptualized intermarriages in terms of both preferences and opportunities to establish ties across group boundaries. Two well-known explanations of intermarriage, assortative mating and status exchange theory, both implicitly emphasize preferences. Positive assortative mating draws on the logic of homophily: individuals tend to associate with individuals similar to themselves. Endogamy (marriage within one's ethnic group) and educational homogamy (marriage to someone with similar educational status) are two empirically robust patterns of positive assortative mating (Blossfeld, 2009). Interethnic marriages may arise then when education becomes a more desirable life-partner characteristic than ethnicity in

society. In modern, advanced economies, educational homogamy is more likely to dominate ethnic endogamy, in turn making intermarriage more likely.

Status exchange theory emphasizes the preference to trade personal for group status. Merton (1941) first hypothesized that high status "Blacks" in the US may marry low status "Whites". Status exchange has since been tested in a variety of contexts outside of the United States and evidence adduced that highly-educated individuals from low-ranked groups do marry lesser-educated individuals from high-ranked groups (Choi, Tienda, Cobb-Clark, & Sinning, 2012; Guetto & Azzolini, 2015). Status exchange remains, however, a contested hypothesis as disagreement persists over the methodologically appropriate way to evaluate it (Gullickson & Fu, 2010; Kalmijn, 2010; Rosenfeld, 2005).

While assortative mating and status exchange emphasize preferences, the opportunity to marry across group boundaries is also consequential. Kalmijn (1998) synthesized both preferences and opportunities into a comprehensive enumeration of the factors driving intermarriage. He theorized intermarriage as a function of individual preferences, typically for socioeconomic and cultural resources in a partner, and the preferences of influential third parties, typically manifested in norms and expectations set by the family, Church, or state. These preferences are in turn expressed through the structural opportunities and constraints of the marriage market (Becker, 1973), commonly defined by the size and geography of the groups.

Status and ethnically-ranked systems

In theorizing then how a factor such as ethnic inequality may affect the formation of social ties across ethnic boundaries, both preference and opportunity channels merit consideration. Blau (1977) first theorized that the coincidence of a nominal parameter (such as ethnicity or religion) with a ranked or graduated parameter (such as socio-economic status) in society will create a structural constraint on the macrosocial integration of groups. The imbalance in the number of individuals of similar rank between groups will reduce the opportunity for intermarriage. As the socio-economic distance increases between groups, there will logically be fewer individuals of similar socio-economic status to oneself in the other group with whom to associate. Blau's view on the operation of inequality through an opportunity channel reflects his broader belief in the importance of relative group size.

In contrast, other work has also argued for the importance of a preference-based channel. Rytina, Blau, Blum, and Schwartz (1988) have argued that increased inequality intensifies individual sensitivity to status differences in society. The preference to marry someone of similar socio-economic status grows stronger when inequality is high. These opportunity and preference-

based channels both point to the expectation of fewer intermarriages where ethnic inequality is high. Conversely, as the socio-economic status between groups equalizes, we would expect intermarriages to increase.

The theoretical logic of the preference-based channel, however, is incomplete. It does not consider the preferences of each partner to the marriage separately. Yet this is likely to be important in ethnically-ranked societies where group boundaries are highly salient. Anti-miscegenation laws in ranked societies such as pre-civil rights United States and apartheid South Africa reflect the importance to dominant groups of maintaining status boundaries. Members of high-ranked groups are likely then to have different preferences to low-ranked group members. These preferences may manifest in the choices they make regarding the ties they establish: in what neighbourhood to live, with whom to do business, which political party to support, and indeed whom to choose as a life partner.

Ranked systems imply the existence of an established social order or status hierarchy. I conceptualize status as multidimensional by adapting Weber's (1978) notion of inequality which sets out three bases for graduated differentiation or stratification in society: resources in the economic sphere; power in the political sphere; and prestige, esteem, or worth in the social sphere. These dimensions can and often do coincide and taken together they define a group's overall position in the social hierarchy. However, they are independent and distinct forces (Ridgeway 2014) and variation in one dimension can alter the group's overall position in the social hierarchy even if the other dimensions remain unchanged. Social prestige for instance, often the historical legacy of colonial, imperialist, feudal, caste- or slave-based societies (Horowitz, 1985), typically endures longer than material differences based on income, wealth, education, or even state control. Thus a group's position in the social order will alter when its resources and power change, even if its social prestige does not.

Theories of ranked systems emphasize shifts in a group's relative position in the social order as a powerful motivational force. When a symbolic threat such as a perceived change in the status hierarchy intensifies, it creates anxiety within the high-ranked group and strengthens ingroup feelings such as loyalty, solidarity, and favoritism. This anxiety may even motivate ethnic conflict (Horowitz, 1985). Experimental work in social psychology also confirms support for inequality from high-ranked groups increases when status threats intensify (Morrison, Fast, & Ybarra, 2009). I hypothesize such status threats also drive decisions over whether to establish ties within or outside of one's ethnic group in an ethnically-ranked society. In communities where the socio-economic distance between low- and high-ranked members is small, that is ethnic inequality is low, members of high-ranked groups feel anxiety for the proximate status of the lower-ranked group. They

respond by seeking to maintain the distinctiveness of the group boundary and the group's status superiority by choosing to inmarry.

H1. Where ethnic inequality is low and the socio-economic distance small between groups, the chances of individuals from high-ranked groups inmarrying increase.

In contrast, members of low-ranked groups feel less constrained by the existing social order and aspire to take advantage of the opportunity to marry up by choosing a partner from the higher-ranked group.

H2.Where ethnic inequality is low and the socio-economic distance small between groups, the chances of individuals from low-ranked groups outmarrying increase.

Section II Research design

Case selection: Mindanao, Philippines

I examine these hypotheses in the context of Mindanao, the southernmost of the three main island groups that make up the Philippines. Three ethno-religious cleavages dominate and divide its 22 million inhabitants into three groupings: Christian settlers; native Muslim Moro; and the Lumad, Mindanao's other indigenous peoples who do not identify as Moro. These groups are also ranked. Christian settlers from the two northern island groups, Visayas and Luzon, hold the highest status. Their dominant position is derived in large part from Spanish colonial conquest which established a Catholic majority in the archipelago that would become strongly associated with the Filipino national identity. As the nation's core 'ethnie' (Smith, 1986) its elite class achieved dominance in state institutions and control of much of the national economy. In contrast, the Muslim Moro and Lumad occupy subordinate positions in the social hierarchy (Gutierrez & Borras, 2004; Rodil, 1993). They represent numerical minorities unassimilated to the Filipino national identity. The Moro possess an intermediate rank having successfully resisted Spanish colonization, assured themselves representation in local political institutions, and established a relatively stable position in the local economy. The Lumad occupy the bottom rank with the weakest political organization and representation, lowest socio-economic status, and least social prestige of the three groups. Figure 1 summarizes the ranking of these three groups in each of Weber's status dimensions. It is worth noting important sub-ethnic divisions exist within each group, most prominently the Muslim tribes, whose patterns of endogamy and exogamy merit analysis in their own right.

Notwithstanding intra-group dynamics and the fluid and constructed significance of the identities, Moro, Lumad, and Christian settlers remain the three most salient political and social boundaries in Mindanao.

Figure 3 here

Although Mindanao may be unfamiliar to many social scientists in Europe and North America, it is nonetheless a valuable case to study for three reasons. First, it is an example of ethnic divisions arising within the Global South. Most of the world's ethnic diversity is concentrated in countries within this bloc, the result partly of colonial-era border-fixing and rising South-to-South migration. The latter now exceeds South-to-North flows (International Organization for Migration, 2015). An important gap exists in our understanding of the forces shaping ethnic integration in countries within the Global South. Second, there are evident disparities in status across the three principal ethno-religious groups in Mindanao. Its social hierarchy is clearly defined. Thirdly, Mindanao's ethnic divisions are deep, having been inscribed by organized conflict and ongoing violence along ethno-religious boundaries. It represents then a particularly difficult integration challenge and the forces that drive intermarriage will need to be powerful to overcome the forces that separate Mindanao's ethnic groups.

Early contact with Islam in the 15th century provided Mindanao with a historical trajectory and regional identity distinct from those of the two northern island groups, Luzon and Visayas, which in contrast encountered Christianity in the 16th century as a result of Spanish colonial conquest (Majul, 1973). Islamic influence manifested itself through the conversion of much, though not all, of the indigenous population and through the establishment of sultanates, most notably those of Sulu, Maguindanao, and Buayan. Spanish attempts to annex the region were forcibly resisted by the Moro and their Sultanates remained outside of Spanish control for nearly 300 years. Following Spain's loss of the colony to the United States in 1898, a period of relative stability ensued in large part through accommodations reached between prominent local Muslim elites and the new American colonial administration (Abinales, 2010). However, resistance re-surfaced after independence in 1946 in the face of attempts to incorporate Mindanao into a modern Filipino nation-state. Unlike the Moro, however, the Lumad as a smaller, less-cohesive minority, did not engage in armed rebellion.

At the root of the post-independence conflict lay the mass migration of Filipino Christian settlers from Luzon and Visayas to Mindanao. The resettlement program, initiated under American rule and expanded after independence, contributed to the minoritization and dispossession of the native population. Mindanao's Muslim population, today numbering nearly 5 million, dwindled

between 1903 and 2010 from 76 to 22 percent. The Lumad, who presently count over 3 million individuals, experienced an even greater diminution in demographic significance. The transfer of much ancestral land into foreign, often settler, hands as a result of the American policy of mandatory land registration compounded the sense of dispossession among Mindanao's native population. Their marginalization is reflected in some of the lowest education, health, and poverty scores for all of the Philippines in the provinces and municipalities where Moro and Lumad are concentrated (McDoom, Reyes, Mina, & Asis, 2018; McKenna, 1998).

The historical injustice and contemporary disadvantage of the indigenous population inspired several armed Moro separatist movements after independence. The Moro National Liberation Front (MNLF) waged an insurgency seeking an independent Bangsamoro (Moro Land). The war, peaking between 1972-76, claimed, by one estimate, 50-100,000 lives and displaced a million more (Kaufman, 2011). The conflict has since then been characterized by episodes of violence and periodic ceasefires. An initial agreement to create the Autonomous Region of Muslim Mindanao (ARMM) in 1991 was rejected by the MNLF's principal breakaway rival, the Moro Islamic Liberation Front (MILF) who continued to fight. A later peace treaty with the MILF, in 2014, to replace ARMM with the 'Bangsamoro Political Entity,' in turn angered members of the MNLF who launched an armed attack again in 2015. More recently, two minor insurgent groups, having affiliated themselves with the trans-national militant organization Islamic State of Iraq and the Levant (ISIL), seized control of an important sub-region, Marawi City, in Mindanao in 2017. ISIL subsequently declared this territory to be part of its proto-state Caliphate. At the time of writing, a comprehensive peace deal involving the various factions remains elusive.

Data sources

I draw on micro-data from the 2000 and 2010 population censuses for the Philippines. Unusually for a national census, the Philippines National Statistics Office released individual-level records for all households in Mindanao providing an extraordinarily rich source of information. The 2000 and 2010 datasets contain detailed information on 18.3 and 21.9 million individuals respectively. Reliance on the population rather than on a sample eliminated the risk of under-sampling potentially rare events such as intermarriages. As there had been administrative boundary changes in the ten-year interval, I realigned the 2010 data to make them comparable with the 2000 data. The Philippines' territorial organization comprises four administrative levels and in 2000 Mindanao was composed of 6 regions, 25 provinces, 430 municipalities, and 10,019 barangays.

Empirical strategy

I employ two techniques both to probe and to test the hypotheses. First, as exploratory probes I report simple descriptive statistics and conduct t-tests comparing the means of the independent variables for endogamously and exogamously-married individuals. I also calculate odds ratios for cross-group unions. Odds ratios, commonly reported in intermarriage studies, indicate the odds of inmarrying (or cohabiting) relative to the odds of outmarrying. They have a distinct advantage over other descriptive statistics as they take into account the relative sizes of the groups. This is important as members of minority groups, faced with a smaller within-group marriage market, would be more likely to have to outmarry. These intermarriages would appear larger in proportional terms for the smaller group than for the larger group reflecting more different opportunities between groups than different preferences. Odds ratios are calculated as follows:

$$\text{Odds Ratio} = \left[\left(\frac{p_1}{1-p_1}\right) / \left(\frac{p_2}{1-p_2}\right) \right]$$

where p_1 is the probability of an individual from $group_1$ outmarrying and p_2 is the probability of an individual from $group_2$ outmarrying. An odds ratio of 1 indicates members of the group are as likely to inmarry as to outmarry. Odds ratios above 1 indicate the extent of endogamy within the group.

Second, to test the hypotheses while controlling for other potential influences on intermarriage rates, I use logistic regression with an outcome variable of whether a married individual partnered with someone from their own group or not. The decision to employ logit models represents a departure from much of the previous research on intermarriage where log-linear models have been more commonplace (Qian, 1997). Log-linear models take the marriage itself as the unit of analysis and their principal advantage is the ability to control for differences in the marginal distributions of variables of interest such as gender, ethnicity, and education. However, I purposely take the individual as the unit of analysis in order to examine the forces and motivations driving each partner to the marriage separately as I hypothesize that low and high-ranked group members will each behave differently. Logit models can, moreover, be specified to control for differences in the overall number of men, women, ethnic group members, and educated/uneducated individuals in the marriage market. Individual-level analysis has been a longstanding gap in existing empirical work on intermarriage (Kalmijn, 1998) and to that end I constructed six separate individual-level datasets for married males and females of each of the three ethnic groups.

Logit models offer three further benefits worth considering in the methodological trade-off with log-linear models: (i) they allow for the specification of a larger number of co-variates without

any sacrifice of interpretability, as well as for the inclusion of continuous and categorical variables; (ii) they allow for the estimation of the relative substantive and statistical significance of each co-variate individually; and (iii) they allow for the marriage market to be defined at different levels of locality. It is unrealistic, particularly in developing countries where geographic mobility is limited, to assume the marriage market is always nation-wide. Moreover, individuals most commonly meet their life-partners in school, in the workplace, or in the neighborhood i.e. social spaces usually close to their residence. Logit models allow for the construction of explanatory variables at different spatial or administrative levels to account for the possibility of localized marriage markets. To allow meaningful comparison of the relative substantive importance of each explanatory variable both within and across regression models, I report results both without and with standardized dependent and independent variables (Tables 3 and 4).

Dependent variable

The dependent variable indicates whether a married individual has married within (0) or outside (1) of his or her ethno-religious group. As community-level determinants of intermarriage are constructed for the year 2000, to ensure they are temporally antecedent in their effect I examine only those marriages contracted between 2000 and 2010. The census micro-data do not indicate the year of union, so I follow a common practice in studies of intermarriage and examine married individuals from a particular age cohort. In this case I examined individuals aged 15-34 years old in the year 2010 given that the median age of first marriage in the Philippines in 2011 was 25.3 years for women and 28.0 for men.

Independent variables

Ethnic inequality

To capture the extent to which groups differ in socio-economic status, I construct a measure of ethnic inequality at the community level for the year 2000. I use the Group-weighted Coefficient of Variation (GCOV) given its straightforward interpretation and its suitability for use as an explanatory variable (Mancini, Stewart, & Brown, 2008). It compares the difference between each group's mean with the population mean on the quantity of interest and takes into account the size of each group in each locality. It is given by the following formula.

$$\text{Ethnic Inequality (GCOV)} = \left(\sum_r^R p_r((\bar{y}_r - \bar{y})^2) \right)^{\frac{1}{2}}$$

where y is the quantity of the variable of interest (education level here); $\bar{y}_r$ is the mean value of y for group$_r$; $\bar{y}$ is the mean value of y for the population, R is the number of groups; and p_r is group$_r$'s population share. The measure is scaled from 0 to 1 where 0 represents perfect equality between groups. To facilitate a cleaner interpretation I construct separate GCOV measures for each ethnic group rather than rely on a single measure of aggregate inequality between all groups.

Education is a powerful marker of socio-economic status and I focus on educational inequality in the analysis. I build a simple five-point variable from the census categories to capture an individual's educational level. The scale was chosen to reflect meaningful differences in educational levels and broadly correspond to: (i) no education; (ii) some or completed primary education; (iii) some or completed secondary education; (iv) some or completed post-secondary or vocational education; (v) some or completed college education or higher academic degree.

Control Variables

(i) Opportunities in the marriage market

Becker (1973) introduced the concept of a marriage market in which individuals compete to maximize their utility consistent with their preferences. I construct three variables to capture the characteristics of the marriage market that would affect the structural opportunity for intermarriage. First, to capture the size of the pool of available life partners from different groups, I use the number of adults who do not belong to the individual's group as a proportion of all adults in the community in the year 2000: the larger the proportion, the greater the opportunity to out-marry. Second, to capture the importance of geography in the marriage market I construct a measure of social segregation in the year 2000. Specifically, I use the index of dissimilarity commonly used in studies of racial segregation in U.S. cities (Massey & Denton, 1988). Conceptually, it is the percentage of one group who would have to change their geographic sub-division (Filipino *barangay*) in order to create an even distribution throughout the larger geographical unit (Filipino municipality). It is given by the formula:

$$\text{Segregation (dissimilarity)} = \sum_{i=1}^{n} [t_i|p_i - P|/2TP(1-P)]$$

where t_i and p_i are the total population and group proportion of the geographic sub-division (barangay), *i*, and T and P are the population size and group proportion of the larger geographical unit (municipality) under comparison. The index is scaled from 0 to 1 where a higher score indicates a higher level of segregation.

As settlement patterns, which define opportunities in the marriage market, may also reflect the preferences of individuals to live with their coethnics or in places where intermarriage is common, I also control for in-migration. I construct a binary variable from the census data indicating whether the individual had migrated into a community within the last five years or not. Although not a perfect means of disentangling opportunity from preference, it goes some way to isolating the distinctive effects of each. Third, I calculate the population density in each locality given the theoretical logic that as the micro-spatial distances between individuals decline, the likelihood of micro-social interaction increases. More densely-populated areas may signify more opportunity for cross-cultural contact.

(ii) Other controls

I also include in the model specification an individual's age, educational level, the age difference with their partner measured in years, and a binary variable indicating the household's poverty status based on the Philippines National Household Poverty Survey where 1 indicates a household in poverty.

Robustness checks

I construct several alternate variables and run 36 alternate model specifications in the regression analysis for inclusion in an online appendix. First, given the potential sensitivity of analytical results to the level of spatial analysis (McDoom & Gisselquist, 2016), I built and tested aggregate variables on ethnic inequality and opportunities on the marriage market at both the municipality and barangay levels (Table 5). Second, to ensure the ethnic inequality variable is insensitive to the choice of scale, I also built and tested a 10-point as well as 5-point educational variable (Table 6). Third, I report the models with clustered and unclustered standard errors given the possibility of individual-level correlation within municipalities (Table 7). Fourth, I constructed an alternate variable to capture spatial segregation (Table 8). Fifth, given the possibility that the 15-34 year old marriage cohort has distinctive characteristics and also that some cohort members may have married before 2000, I also run the models for marriages of all age cohorts together (Table 9). Lastly, I check for collinearity between the predictor variables using variance inflation factors that

measure how much the variance of an estimated regression coefficient is inflated relative to the situation where it is not linearly related to other predictor variables (Table 10).

Section III Results

(i) Overall Marriage Patterns

Unions between Muslim Moro, Christian Settlers, and the Lumad are rare events in Mindanao. Table 1 provides descriptive statistics on marriages and cohabitations in 2010. Only 2.7% of all marriages were across ethno-religious boundaries. Insofar as such intermarriage indicates social integration, Mindanao is clearly a deeply-divided society. However, there is important variation. First, there is a significant difference between marriages and cohabitations. Individuals are unsurprisingly far more likely to cohabit with a partner from a different group than they are to marry one. For all three groups, the endogamy odds ratios, which take into account the relative size of groups, are lower for marriages than for cohabitations. One evident interpretation of this difference is that marriages are more likely to involve the approval of third parties such as families, communities, and religious establishments because they are socially significant institutions. Cohabitations, in contrast, are more private arrangements likely to engage only the two individuals concerned. The difference then is likely indicative of social forces, either norms or sanctions, that govern partner decisions in Mindanao.

Table 1 here

Second, there is significant variation in endogamy between the three groups. Muslim Moro are by far the most socially-closed group. 3.0% of Muslim Moro male have outmarried; their endogamy odds ratios is high at 5733. By contrast, the Lumad are by far the most socially-open group. 14.3% of adult Lumad have outmarried and the odds ratio is 212. Christian settlers fall in between the two groups with 4.0% having outmarried and with an odds ratio of 336. Why do the Lumad and Muslim Moro, who are both marginalized and similarly-sized minority groups in Mindanao, behave so differently in their partner decisions? One possible interpretation is the role of religious institutions in marriage decisions. The Muslim Moro have a single and more formalized set of religious institutions. Their religious leadership (*ulama*), religious establishments (mosques), and religious schools (*madrassahs*) all represent powerful forces that operate to control or otherwise socialize group members. Muslim marriages (*nikah*) are religiously solemnized. In Mindanao, Islam is also overwhelmingly Sunni, of the Shafi'i school of jurisprudence (*fiqh*), with

very few adherents of other denominations such as Shia or Ahmadiyya. By contrast, the Lumad have a more diverse set of religions and consequently religious institutions. They identify as Christians, Muslims, and also with tribal religions. Furthermore, Christian Lumad come from a wide variety of denominations, both Catholic and numerous Protestant sub-denominations. Lumad who practise tribal beliefs also lack the more formal set of religious institutions common to Christianity and Islam. The difference in socializing powers of Moro and Lumad is also reflected in the within-group differences between marriage and cohabitation. The endogamy odds ratio for Muslim Moro marriages within the 15-34 year old cohort is far higher (3878) than the endogamy odds ratio for Muslim Moro cohabitations (54). In contrast, the marriage (176) and cohabitation (60) odds ratios for the Lumad are much closer in magnitude. It makes little difference whether a Lumad marries or cohabits with a non-Lumad because the socializing effect of group membership is much weaker.

Third, there is variation in endogamy between men and women across the three groups. Gender matters to differing degrees in each group. Muslim Moro women (2.2%) are less likely to marry or cohabit outside of their group than Moro men (3.2%); Christian settler women (3.7%) are about as likely to do so as their male counterparts (4.2%); Lumad females (18.5%), interestingly, are more likely than Lumad males (14.8%) to do so. The choice of life partners of a group's women-folk is of high importance because it is perceived as tied to the survival and preservation of the group's identity. Women are sexually policed to different degrees between groups reflecting the extent to which social forces dominate individual choice within these groups.

(ii) Hypotheses 1 and 2: Ethnic Inequality

Ethnic inequality is a powerful and robust determinant of marriage outside of the group. Consistent with the hypothesized status anxiety logic, the effect is contingent on the social rank of the ethnic group: high-ranked members tend to inmarry when the distance in the socioeconomic status between low and high-ranked groups is low in the community (hypothesis 1); low-ranked members tend to outmarry (hypothesis 2). Table 2 reports t-test comparisons of the means of predictor variables. The mean ethnic inequality score is higher for Christian settlers for outmarry than those who inmarry; and *lower* for Muslim Moro and Lumad who outmarry than those who inmarry. These differences are all statistically significant in all cases.

Table 2 here

The multivariate logit models (Table 3) confirm this difference is substantively and statistically significant even when controlling for other factors. The marginal change in ethnic inequality increases the probability of outmarriage for Moro and Lumad males by 15% and 40% respectively; whereas it decreases the probability of outmarriage for Christian settler males by 11%.[1] These findings also hold whether ethnic inequality is measured at the municipality or at the barangay levels, though are weaker at the barangay level implying that the marriage market is not highly-localized. An interpretation based on the logic of status threat would attribute this divergence to the anxiety felt by a high-rank group member for the distinctiveness of their status superiority and to the aspiration by a lower-ranked group member for upward mobility through outmarriage. In terms of gender, the effect is larger for Christian settler and Muslim Moro men than women suggesting men feel the status threat more acutely; Lumad women, in contrast, appear to enjoy about the same autonomy as Lumad men.

Table 3 here

(iii) Opportunity variables

In order to increase the confidence of a preference-based interpretation of ethnic equality effects, I specified three conceptually distinct variables to control for the role of opportunity in the marriage market in determining whether individuals married within or outside of their ethnic group. First, increasing the size of the pool of available candidates from outside of one's group predictably increased the chances of out-marriage for all three ethnic groups. The marginal change in the pool of outmarriage partners increased the probability of outmarriage for Moro, Lumad, and Christian males by 9%, 3%, and 7% respectively. Its substantive importance relative to ethnic inequality is varies across ethnic groups. While its effect is larger for Christian and Muslims, it is smaller for Lumad. For Christian men, a one standard deviation increase in the proportion of non-coethnics increases the odds of outmarriage by 0.13 standard deviations compared with only a 0.08 standard deviation increase for ethnic inequality. In contrast, for Lumad men, the standard deviations increases are 0.04 and 0.21 for group size and ethnic inequality respectively.

Second, ethnic settlement patterns, as measured by spatial segregation, were also a strong predictor of outmarriage. When the three ethnic groups lived in closer proximity to each other, the likelihood of marrying across ethnic boundaries again increased. The marginal change in spatial segregation increases the probability of outmarriage for Moro, Lumad, and Christian males by 7%,

[1] All marginal effects are calculated using representative values for discrete variables, specifically individuals from poor households who did not migrate into the community, and mean values for continuous variables.

16%, and 12% respectively. Lastly, I considered population density relying on the conceptual logic that as the micro-spatial distances between individuals decreased, micro-social interactions would increase. Contrary to this logic, however, I found that in areas where population density was high, outmarriages were low. In interpreting this counterintuitive finding, it is worth noting the population density variable lacks an essential piece of information: it does not tell us whether those individuals who lived in close proximity to others were of the same or of different ethnicity as their neighbours. If the population in a locality was ethnically homogenous, for instance, this would account for the negative relationship with intermarriage observed.

Section IV Discussion and Conclusion

This article has sought to extend our understanding of ethnic inequality beyond the economic and political spheres by examining its relationship with social integration and specifically how it affects the formation of marital ties across group boundaries. It makes a novel and important conceptual decision to analyse the marital choices of high status groups separately from those of low status groups. It does so because it posits and finds these groups will have opposing preferences: high-ranked groups will tend to inmarry when ethnic inequality is low; low-ranked groups to outmarry. Importantly, these findings hold whilst controlling for the opportunity to marry outside of the group – including the relative sizes of groups - and thus underscore a preference-based interpretation of the divergence in marital behaviors.

In explaining why this divergence will arise, I have argued for the importance of social hierarchies and the power of status anxiety in ranked systems. Ingroup preference intensifies for the high-status group when the social distance to the low-status group is small because its members are anxious to preserve the distinctiveness of the group boundaries that define the social order in which their position is dominant. In contrast, members of low-status groups outmarry when the social distance is small because outmarriage represents an opportunity for upward social mobility. Ethnic inequality then has both integrative and distancing effects. This finding highlights the tension between the normative aspiration for greater equality in society and the empirical reality that certain advantaged groups have reason to preserve an unequal social order and to feel threatened by redistribution that would alter it.

These findings may have implications for several other literatures. Ethnic inequality is a well-established force in ethnic civil wars, for example (Cederman et al., 2011; Østby, 2008). The disparity breeds resentment and creates grievances that motivate subordinate groups to rebel. This article, however, highlights the importance of considering the calculus of both subordinate (low-status) *and* superordinate (high-status) groups. Ethnic conflicts, at their core, typically concern

redistribution in either one or two of Weber's dimensions of inequality: economic resources and/or political power. Redistributive conflicts then risk altering the existing social order and status hierarchy. This article has found threats to the status hierarchy strengthen ingroup preference within dominant (high-status) groups. Psycho-social theory has documented the concomitant increases in group identification, loyalty, and solidarity that such ingroup biases generate (Brewer & Kramer, 1985). One theoretical implication then is for conflict duration. The magnitude of the status threat may affect the strength of a dominant group's motivation – and thus the resources it is willing to invest in combatting a rebellion - to protect its privileged position. This logic is consistent with psycho-social theories of ethnic conflict that emphasize the importance of symbolic threats to the relative group ranking (Horowitz, 1985).

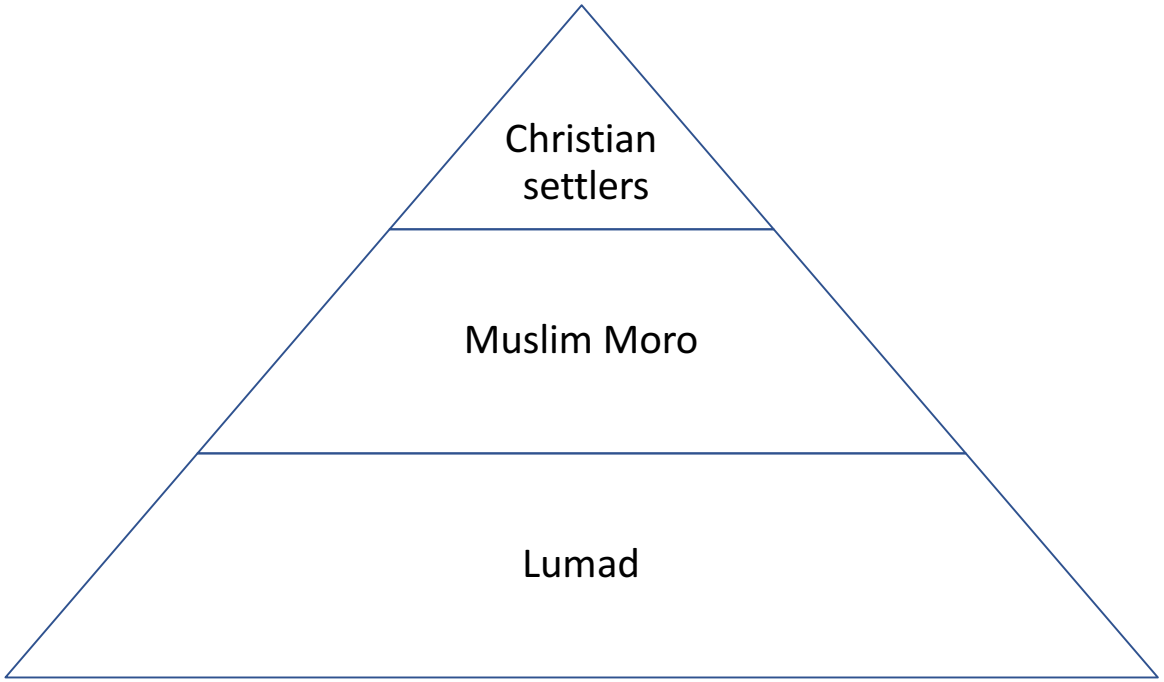
The findings on the importance of social hierarchy and status may also help deepen our understanding of how ethnic inequality shapes social movements and electoral politics in ranked societies. In response to the rising status of subordinate (low-status) groups, dominant (high-status) groups may organize themselves in opposition to this threat to a social order in which they are ascendant. This behaviour is visible, for instance, when migrant inflows motivate nativist or nationalist sentiments that lead to movements to preserve or return to the *status quo ex ante*. Migrants should not attain higher status than natives. Policies that promote or privilege non-core groups generally, such as affirmative action programs in employment and education or multiculturalist-inspired minority rights, also generate resentment from high-status groups. They perceive preferences and rights for disadvantaged groups as an opportunity for social mobility and the bestowment of protections denied to themselves (Brown, Langer, & Stewart, 2012). Concerns for the social order and status may also underlie opposition from dominant groups to political parties that promise redistribution or otherwise seek to improve the position of disadvantaged groups. So strong is the anxiety to preserve the asymmetric nature of the social structure that even poor members of dominant groups, who would benefit from redistribution, may vote against such parties.

The salience of status points to an important scope condition for these findings: the ethnic groups in question must exist in a ranked system. We would expect then to find similar results in places with disadvantaged ethnic and religious groups such as the Malay in Singapore, the Rohingya in Myanmar, and the Hazara in Afghanistan. It remains to be investigated whether unranked groups such as the Sinhalese and Tamils in Sri Lanka, the Yoruba, Hausa, and Ibo in Nigeria, or the Creoles and East Indians in Guyana would behave similarly. But the importance of status also invites the question of how a ranked system is defined. Rank or status is conventionally thought of in terms of the constituent dimensions in which it is measured and in this article Weber's tripartite classification of resources, power, and esteem has been adopted. However, status or rank

may also be measured in a fourth dimension: time. Intuitively, the duration of inequality in society may embed expectations in respect of change among both subordinate and superordinate groups. Persistent inequality, which implies a deeply-entrenched social order, would generate the strongest response from dominant groups to attempts to alter it. Furthermore, societies are not always clearly ranked or unranked; degrees of ranking may matter and ranking is better conceptualized as a continuous as well as a longitudinal variable (Gisselquist, 2013).

These findings, however, also have several important qualifications. First, the claims in respect of inequality are predictive, not causal. The techniques and data used simply observe an association between ethnic inequality on the one hand and intermarriage on the other. Reliance on temporally antecedent determinants help establish the causal direction – inequality, for instance, is measured in year 2000 - and theory helps make observed associations more causally credible. However, it remains possible untheorized, unobserved factors are driving these findings and that ethnic inequality is itself endogenous to intermarriage. The absence of ties across ethnic boundaries may entrench existing socio-economic disparities between ethnic groups. Second, the status anxiety mechanism I suggest is not tested empirically, but instead implied theoretically. A different interpretation of the observed marriage patterns is conceivable. Furthermore, although the article suggests status concerns account for the divergence, it does not claim status is the only characteristic other than ethnicity or religion individuals value in life-partners. The findings simply indicate the marital decisions men and women from different ethnic groups make *on average*. Individuals may privilege other characteristics - character, physique, intelligence, moral values, and political beliefs, *inter alia* – over status in their partner. Logically, this must happen as if dominant groups always inmarried there would be no-one to marry subordinate group members. Third, it remains an evident question whether these findings hold in contexts where violence has not inscribed ethnic and religious divisions in society. In theory, the difference with a violently-divided society should be a matter of degree rather than of kind. The social forces separating groups will simply be stronger and the status anxieties deeper. However, it remains an unanswered question until more empirical work engages the individual rather than the marriage as the unit of analysis in studies of marriage-driven integration. The methodological approach pursued here - analyzing men, women, and ethnic groups separately - is regrettably rare.

Figure 1. Group rank or status as a multidimensional concept in Mindanao



	Resources	Power	Social prestige
Christian settlers	1	1	1
Muslim Moro	2	2	1
Lumad	3	3	2

Table 1. Descriptive statistics on marriages and cohabitations in Mindanao in 2010

Group	Christian Settler Male	Christian Settler Female	Muslim Moro Male	Muslim Moro Female	Lumad Male	Lumad Female
Frequencies						
Number of adults	4,772,515	4,597,727	1,383,880	1,419,941	936,674	882,579
All unions	2,489,247	2,474,619	759,549	751,630	492,787	515,534
All exogamous unions	104,939	90,311	24,161	16,242	72,722	95,469
All exogamous marriages	90,570	79,713	22,297	14,700	63,507	82,158
All exogamous cohabitations	14,369	10,598	1,864	1,542	9,215	13,311
Exogamous unions (15-34 yrs)	49,225	41,594	11,976	7,686	32,940	44,943
Exogamous marriages (15-34 yrs)	38,883	34,050	10,667	6,634	26,366	35,313
Exogamous cohabitations (15-34 yrs)	10,342	7,544	1,309	1,052	6,574	9,630
Percentages						
Percentage of all unions of that gender	66.5	66.1	20.3	20.1	13.2	13.8
Exogamous unions as percentage of all unions within grp.	4.2	3.7	3.2	2.2	14.8	18.5
Exogamous marriages as percentage of all marriages within grp.	4.0	3.5	3.0	2.0	14.3	17.8
Exogamous cohabitations as percentage of all cohabs. within grp.	6.5	4.9	71.5	67.4	18.4	24.6
Exog. unions as percentage of all unions within grp. (15-34 yrs)	2.0	1.7	1.6	1.0	6.7	8.7
Exog. marriages as percentage of all marriages within grp. (15-34 yrs)	1.7	1.5	1.4	0.9	6.0	7.7
Exog. cohabitations as percentage of all cohabs. within grp. (15-34 yrs)	4.7	3.5	50.2	46.0	13.1	17.8
Odds Ratios (higher number signifies higher endogamy)						
Endogamous odds ratio for all unions	291	291	5255	5255	189	189
Endogamous odds ratio for all marriages	336	336	5733	5733	212	212
Endogamous odds ratio for all cohabitations	56	56	64	64	69	69
Endogamous odds ratio for unions (15-34 yrs)	208	208	3562	3562	147	147
Endogamous odds ratio for marriages (15-34 yrs)	254	254	3878	3878	176	176
Endogamous odds ratio for cohabitations (15-34 yrs)	49	49	54	54	60	60

Table 2. T-test comparisons of means

	Christian settler male		Christian settler female		Muslim Moro male		Muslim Moro female		Lumad male		Lumad female	
	Inmarry	Outmarry	Inmarry	Outmarry	Inmarry	Outmarry	Inmarry	Outmarry	Inmarry	Outmarry	Inmarry	Outmarry
Between group inequality	0.08	0.11***	0.08	0.10***	0.07	0.05***	0.07	0.05***	0.14	0.10***	0.14	0.11***
Proportion noncoethnics	0.14	0.22***	0.14	0.22***	0.31	0.80***	0.31	0.79***	0.71	0.82***	0.71	0.81***
Spatial segregation	0.09	0.16***	0.09	0.15***	0.18	0.60***	0.17	0.60***	0.49	0.61***	0.49	0.59***
Population density	309.63	234.51***	308.04	258.59***	638.28	338.84***	645.3	337.35***	159.34	227.66***	160.19	218.39***
Age	28.73	28.80**	27.43	27.31***	28.27	28.16*	27.46	27.02***	27.75	28.77***	26.18	27.30***
Educational status	2.68	2.36***	2.85	2.70***	2.1	2.64***	2.15	2.61***	1.66	2.25***	1.79	2.35***
Household poverty	0.29	0.38***	0.28	0.35***	0.43	0.34***	0.42	0.35***	0.63	0.39***	0.61	0.38***
Partner's age	1.52	1.95***	-4.21	-4.14*	1.44	1.64***	-3.4	-4.32***	2.14	1.58***	-4.46	-4.93***
Migrant status	0.04	0.04	0.04	0.05***	0.01	0.04***	0.01	0.04***	0.02	0.05***	0.02	0.04***

Statistical significance * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Inequality, population density, proportion of noncoethnics, and segregation all measured at municipality level. Means reported for 15-34 yr old age cohort.

Table 3. Logistic regression models reporting determinants (unstandardized coefficients) of individual marriage decisions in Mindanao (15-34 yrs. cohort)

	(1) Christian Settler Males	(2) Christian Settler Females	(3) Muslim Moro Males	(4) Muslim Moro Females	(5) Lumad Males	(6) Lumad Females
Ethnic inequality	2.68***	0.75*	-6.30***	-5.91***	-5.26***	-4.20***
	(0.40)	(0.37)	(0.70)	(0.65)	(0.36)	(0.33)
Proportion of non-coethnics	1.65***	1.98***	3.50***	3.26***	0.37**	0.33**
	(0.12)	(0.11)	(0.08)	(0.09)	(0.14)	(0.13)
Spatial segregation	-3.03***	-3.16***	-2.73***	-3.66***	-2.09***	-2.16***
	(0.14)	(0.12)	(0.18)	(0.19)	(0.28)	(0.26)
Population density	-0.10***	-0.07***	-0.09***	-0.11***	-0.02	-0.02
	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)
Age	-0.04***	-0.05***	-0.12***	-0.10***	-0.02***	-0.01***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Educational status	-0.21***	-0.13***	0.20***	0.12***	0.23***	0.23***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)
Household poverty	0.04	0.01	-0.37***	-0.37***	-0.71***	-0.75***
	(0.02)	(0.02)	(0.04)	(0.05)	(0.03)	(0.03)
Partner's age	0.02***	0.02***	0.02***	0.01**	-0.01***	-0.01***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Migrant status	0.00	0.11**	0.18*	0.01	0.61***	0.51***
	(0.04)	(0.04)	(0.08)	(0.09)	(0.06)	(0.05)
Pseudo-R^2 (McKelvey & Zavoina)	0.121	0.101	0.524	0.568	0.161	0.143
N	629,640	811,053	199,454	253,234	157,093	212,075

Dependent variable 0=inmarried, 1=outmarried; unexponentiated coefficients reported; clustered robust standard errors reported in parentheses
Statistical significance * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Inequality, population density, proportion of noncoethnics, and segregation all measured at municipality level

References

Abinales, P. N. (2010). *Orthodoxy and history in the Muslim-Mindanao narrative*. Philippines: Ateneo de Manila University Press.

Alba, R. D., & Nee, V. (2003). *Remaking the American mainstream : assimilation and contemporary immigration*. Cambridge, MA: Harvard University Press.

Alesina, A., & La Ferrara, E. (2002). Who trusts others? *Journal of Public Economics, 85*(2), 207-234. doi:http://doi.org/10.1016/S0047-2727(01)00084-6

Alesina, A., Michalopoulos, S., & Papaioannou, E. (2016). Ethnic Inequality. *Journal of Political Economy, 124*(2), 428-488. doi:10.1086/685300

Baldwin, K., & Huber, J. D. (2010). Economic versus Cultural Differences: Forms of Ethnic Diversity and Public Goods Provision. *American Political Science Review, 104*(4), 644-662. doi:10.1017/S0003055410000419

Ballentine, K., & Sherman, J. (2003). *The political economy of armed conflict : beyond greed and grievance*. Boulder, Co.: Lynne Rienner Publishers.

Becker, G. S. (1973). A Theory of Marriage: Part I. *Journal of Political Economy, 81*(4), 813-846. doi:10.2307/1831130

Blau, P. M. (1977). A Macrosociological Theory of Social Structure. *American Journal of Sociology, 83*(1), 26-54.

Blossfeld, H.-P. (2009). Educational Assortative Marriage in Comparative Perspective. *Annual Review of Sociology, 35*(1), 513-530. doi:10.1146/annurev-soc-070308-115913

Brewer, M. B., & Kramer, R. M. (1985). The Psychology of Intergroup Attitudes and Behavior. *Annual Review of Psychology, 36*(1), 219-243. doi:doi:10.1146/annurev.ps.36.020185.001251

Brown, G., Langer, A., & Stewart, F. (2012). *Affirmative action in plural societies: international experiences*: Palgrave Macmillan.

Cederman, L.-E., Weidmann, N. B., & Gleditsch, K. S. (2011). Horizontal Inequalities and Ethnonationalist Civil War: A Global Comparison. *American Political Science Review, 105*(03), 478-495. doi:doi:10.1017/S0003055411000207

Choi, K. H., Tienda, M., Cobb-Clark, D., & Sinning, M. (2012). Immigration and status exchange in Australia and the United States. *Research in Social Stratification and Mobility, 30*(1), 49-62. doi:https://doi.org/10.1016/j.rssm.2011.08.002

Gisselquist, R. M. (2013). Ethnic Politics in Ranked and Unranked Systems: An Exploratory Analysis. *Nationalism and Ethnic Politics, 19*(4), 381-402. doi:10.1080/13537113.2013.847598

Gordon, M. M. (1964). *Assimilation in American life : the role of race, religion and national origins*. New York: Oxford University Press.

Gubler, J. R., & Selway, J. S. (2012). Horizontal inequality, crosscutting cleavages, and civil war. *Journal of Conflict Resolution, 56*(2), 206-232.

Guetto, R., & Azzolini, D. (2015). An Empirical Study of Status Exchange through Migrant/Native Marriages in Italy. *Journal of Ethnic and Migration Studies, 41*(13), 2149-2172. doi:10.1080/1369183X.2015.1037725

Gullickson, A., & Fu, Vincent K. (2010). Comment: An Endorsement of Exchange Theory in Mate Selection. *American Journal of Sociology, 115*(4), 1243-1251. doi:10.1086/649049

Gutierrez, E., & Borras, S., Jr. (2004). The Moro Conflict: Landlessness and Misdirected State Policies. *Policy Studies*(8), I,VII,VIII,IX,X,XI,1-47,49-55,59-62,67-69,73.

Hero, R. E. (2003). Social Capital and Racial Inequality in America. *Perspectives on Politics, 1*(1), 113-122.

Horowitz, D. L. (1985). *Ethnic groups in conflict*. Berkeley: University of California Press.

Huber, J. D., & Suryanarayan, P. (2015). Ethnic Inequality and the Ethnification of Political Parties: Evidence from India. *World Politics, 68*(1), 149-188. doi:10.1017/S0043887115000349

International Organization for Migration. (2015). *Global Migration Factsheet*. Retrieved from Berlin:

Kalmijn, M. (1998). Intermarriage and Homogamy: Causes, Patterns, Trends. *Annual Review of Sociology, 24*(1), 395-421. doi:doi:10.1146/annurev.soc.24.1.395

Kalmijn, M. (2010). EDUCATIONAL INEQUALITY, HOMOGAMY, AND STATUS EXCHANGE IN BLACK-WHITE INTERMARRIAGE: A COMMENT ON ROSENFELD. *American Journal of Sociology, 115*(4), 1252-1263.

Kaufman, S. J. (2011). Symbols, Frames, and Violence: Studying Ethnic War in the Philippines. *International Studies Quarterly, 55*(4), 937-958. doi:10.1111/j.1468-2478.2011.00689.x

Kyriacou, A. P. (2013). Ethnic Group Inequalities and Governance: Evidence from Developing Countries. *Kyklos, 66*(1), 78-101. doi:10.1111/kykl.12012

Laitin, D., & Fearon, J. D. (1996). Explaining interethnic cooperation. *American Political Science Review, 90*, 715-735.

Majul, C. A. (1973). *Muslims in the Philippines* (2d ed.). Quezon City: Published for the Asian Center by the University of the Philippines Press.

Mancini, L., Stewart, F., & Brown, G. K. (2008). Approaches to the Measurement of Horizontal Inequalities. In F. Stewart (Ed.), *Horizontal inequalities and conflict : understanding group violence in multiethnic societies* (pp. xxi, 364 p.). Basingstoke ; New York: Palgrave Macmillan.

Marcson, S. (1950). A THEORY OF INTERMARRIAGE AND ASSIMILATION. *Social Forces, 29*(1), 75-78.

Massey, D. S., & Denton, N. A. (1988). The Dimensions of Residential Segregation. *Social Forces, 67*(2), 281-315. doi:10.1093/sf/67.2.281

McDoom, O. S., & Gisselquist, R. M. (2016). The Measurement of Ethnic and Religious Divisions: Spatial, Temporal, and Categorical Dimensions with Evidence from Mindanao, the Philippines. *Social indicators research, 129*(2), 863-891. doi:10.1007/s11205-015-1145-9

McDoom, O. S., Reyes, C., Mina, C., & Asis, N. (2018). Inequality Between Whom? Patterns, Trends, and Implications of Horizontal Inequalities in the Philippines. *Social indicators research*.

McKenna, T. M. (1998). *Muslim rulers and rebels : everyday politics and armed separatism in the southern Philippines*. Berkeley: University of California Press.

Merton, R. K. (1941). Intermarriage and the Social Structure. *Psychiatry, 4*(3), 361-374. doi:10.1080/00332747.1941.11022354

Morrison, K. R., Fast, N. J., & Ybarra, O. (2009). Group status, perceptions of threat, and support for social inequality. *Journal of experimental social psychology, 45*(1), 204-210. doi:https://doi.org/10.1016/j.jesp.2008.09.004

Murshed, S. M., & Gates, S. (2005). Spatial–Horizontal Inequality and the Maoist Insurgency in Nepal. *Review of Development Economics, 9*(1), 121-134. doi:10.1111/j.1467-9361.2005.00267.x

Okun, B. S., & Khait-Marelly, O. (2010). The impact of intermarriage on ethnic stratification: Jews in Israel. *Research in Social Stratification and Mobility, 28*(4), 375-394. doi:http://dx.doi.org/10.1016/j.rssm.2010.07.003

Østby, G. (2008). Polarization, Horizontal Inequalities and Violent Civil Conflict. *Journal of Peace Research, 45*(2), 143-162. doi:10.1177/0022343307087169

Portes, A. (1998). Social Capital: Its Origins and Applications in Modern Sociology. *Annual Review of Sociology, 24*, 1-24. doi:doi:10.1146/annurev.soc.24.1.1

Putnam, R. D. (2000). *Bowling alone : the collapse and revival of American community*. New York: Simon & Schuster.

Qian, Z. (1997). Breaking the racial barriers: Variations in interracial marriage between 1980 and 1990. *Demography, 34*(2), 263-276. doi:10.2307/2061704

Qian, Z., & Lichter, D. T. (2007). Social Boundaries and Marital Assimilation: Interpreting Trends in Racial and Ethnic Intermarriage. *American Sociological Review, 72*(1), 68-94. doi:10.1177/000312240707200104

Rodil, B. (1993). *The Lumad and Moro of Mindanao. Minority Rights Group International Report 93/2*: ERIC.

Rosenfeld, M. J. (2005). A Critique of Exchange Theory in Mate Selection. *American Journal of Sociology, 110*(5), 1284-1325. doi:10.1086/428441

Rytina, S., Blau, P. M., Blum, T., & Schwartz, J. (1988). Inequality and Intermarriage: A Paradox of Motive and Constraint. *Social Forces, 66*(3), 645-675. doi:10.2307/2579570

Smith, A. D. (1986). *The ethnic origins of nations*. Oxford: Basil Blackwell.

Song, M. (2009). Is Intermarriage a Good Indicator of Integration? *Journal of Ethnic and Migration Studies, 35*(2), 331-348. doi:10.1080/13691830802586476

Stephan, C. W., & Stephan, W. G. (1989). After Intermarriage: Ethnic Identity among Mixed-Heritage Japanese-Americans and Hispanics. *Journal of Marriage & Family, 51*(2), 507-519.

Stewart, F. (2002). Horizontal Inequalities: A Neglected Dimension of Development. *Queen Elizabeth House Working Paper Series*.

Stewart, F. (2010). Horizontal Inequalities as a Cause of Conflict. *World Development Report Background Paper*.

Suryanarayan, P. (forthcoming). When do the poor vote for the right-wing and why: Hierarchy and vote choice in the Indian states. *Comparative Political Studies*.

Tesei, A. (2017). Trust and Racial Income Inequality: Evidence from the U.S (unpublished mimeo).

Varshney, A. (2001). Ethnic conflict and civil society - India and beyond. *World Politics, 53*, 362-398.

Weber, M. (Ed.) (1978). *Economy and society : an outline of interpretive sociology*. Berkeley: University of California Press.

World Bank, D. R. G., Colletta, N. J., & Cullen, M. L. (2000). *Violent conflict and the transformation of social capital: Lessons from Cambodia, Rwanda, Guatemala, and Somalia* (Vol. 795). Washington DC: World Bank Publications.