

**'Til Work Do Us Part':
Globalization and the Context of Labor as determinants of Non-Cohabiting
Marriages**

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ABSTRACT

Demographers and other social scientists have focused considerable attention on the nature of marriages and households. In this paper, we focus on the understudied phenomenon of non-cohabiting marriages. While the knowledge base of such marriages has been developed in the US context, processes of globalization in recent decades are reconfiguring labor and occupations with potentially important implications for co-residence among marital partners. Equally important, human capital may be an important driver and contingency given its role in shaping the nature of careers within occupations. In this paper, we use data from the IPUMS – International program to conduct a broad multinational, multi-panel assessment of the role of work in non-cohabiting marriages. Key findings include a) important age and gender differentials; b) important independent effects of occupation, education, and macro-level economic conditions; and c) strong contingencies that give unique meaning to the role of work based on personal capitals and macro-economic conditions. Implications for theory and research are discussed.

The idea that marriages bestow a wide array of benefits, personally and socially, has a long history in demography. From one perspective, marriage galvanizes people around common goals and leads to the collective pursuit of pro social ideas (Putnam 1995). From another perspective, marriage forges social bonds between individuals that results in shared responsibilities and the pooling of resources (DiPrete and McManus 2000). A key component of this is that co-residence facilitates the transfer of resources accrued by those that are economically productive to those that are non-productive (e.g., mothers looking after children, children). At the same time, co-residence or cohabitation for the most part, has been a focal point of demographic inquiry only so much as it represents a competing state to marriage (Rindfuss and VandenHeuvel 1990). At the same time, the significance of non-cohabiting marriages appears in disparate places in the demographic literature, notably in studies of migration and remittances (Semyonov and Gorodzeisky. 2005), studies of the consequences of incarceration (Massoglia, Remster, and King 2011), and in research on the implications of military service (Call and Teachman 1996). . Yet, as Rindfuss and Stephen (1990) note, there are numerous reasons why married couples would be living apart, yet we have very little information, particularly information from the global arena, about the dynamics of non-cohabiting marriages.

Importantly, explanations for non-cohabiting marriages are relatively few and typically reference aspects of paid employment which drive couples apart. Rindfuss and Stephen (1990) for example emphasize the roles of employment in general and of military employment as key drivers. Add to this the issue of incarceration, and theories of non-cohabiting marriages have a strong framing in the role of total institutions in separating husbands and wives (e.g., Massoglia, Remster, and King 2011). The fact that this such dynamics are strongly gendered, reflecting the circumstances of husbands rather than wives, cements the locus of how formal work separates couples. At the same time, such a view seems rather limited in understanding the impact of work and occupations on co-residence of couples and fails to develop or test theory.

In this research we extend consideration of the role of work in shaping co-residential marriage to the global arena. Importantly, most of our understanding of employment and co-residence comes from research on the United States. This both narrows the scope of inquiry to OECD type, or perhaps even an atypical OECD type, context and limits consideration of macro-level processes in shaping the meaning of work of marital relationships. In particular, the broad processes of globalization, which have transformed traditional barriers of time and space (Harvey 1995), have had particularly profound impact upon the organization of labor (Sassen 1998). Here, some claim that work is increasingly disassociated from place and has generated a more global and transitory work force. Others however emphasize the fluidity of capital and the ability to produce total work environments in low(er) cost contexts (e.g., factory or plant communities). Equally important, there are important questions about the role of human capital in shaping positions and hierarchies within occupations and firms and how the globalized world influences this process (Marin and Verdier 2003). We attempt to integrate such issues to provide a more unified perspective on joint dynamics of globalization, human capital, and work in the structuring of coresidence among couples.

To this end, we use data from the Integrated Public Use Micro-data Series – International (IPUMS-I) to answer four questions. First, how does the prevalence of non-cohabiting marriages vary across time and across space? Uneven development and variation in the pace of globalization raise important questions about the macro-level contextual influences on non-cohabiting marriages. Second, how does age and sex influence the likelihood of having a

non-cohabiting marriage? Age and sex are important determinants of both the external determinants of occupations, as well as the internal dimensions of careers within occupations. As such, they are an important consideration. Third, we examine the additional issues of nativity to capture the independent and conjoint role of migration for non-cohabiting marriages. Finally, we estimate a random-effects linear probability where we examine interactive role of employment, occupation, educational attainment, and macro-level economics (i.e., GDP per capita). In doing so, we assess a multilevel model that considers broader globalization effects associated with economic contexts and their role in shaping the social meaning of occupations for non-cohabiting marriages. To facilitate interpretation, we produce the specific effects implied by the cross-level interactions to show the conditional effects of occupation given economic context and human capital attainment.

(A Brief) Literature Review

There are very few studies that have considered the demographic dynamics of non-cohabiting marriages and the majority of existing work has focused on the United States and targeted cohorts born in the post-war period. In general, there is a consistent body of research that shows high rates of non-cohabiting marriages among those in the military, particularly for males (Boulding 1950; Hunter 1982; Rindfuss and Stephen 1990). There is a parallel body of research that shows the significance of incarceration for marriages and marital disruption (Massoglia, Remster and King 2011; Morris 1965; Rinfuss and Stephen 1990). In the realm of occupations and employment, a small body of work focuses on dual career couples and the difficulties of combining work and family, including co-residence (Gerstel and Gross 1982; Macklin 1980).

Arguably the most thorough treatment of the issue is Rindfuss and Stephen's (1990) study of data from the US Census and from the National Longitudinal Study of the High School Class of 1972. In addition to reinforcing the role of military occupations and incarceration for non-cohabitation, Rindfuss and Stephen report several other interesting dimensions. First, the weight of the evidence suggests that prevalence of non-cohabiting marriages *decreased* over time. Out of 12 groups defined by age, sex, and race, only young black males saw significant increases (from 14 to 20 percent) between 1960 and 1980; all other groups showed stable rates or modest declines.¹ Second, the role of total institutions for non-cohabiting marriages is less impressive than one might expect. Here, the proportion of people in non-cohabiting marriage that is accounted for by living in group quarters *typically accounted for less than half* of non-cohabiting marriages, which highlights the role of dynamics other than the military, incarceration, and schooling as key drivers. This is reinforced by the fact that between one-half and three-quarters of respondents whose spouse was absent from the household reported that the male partner's main activity was working or looking for work outside of the military. There is also the additional issue of it being men in group quarters that appears to produce non-cohabiting marriages in that rates for women living in group quarters never exceed 15 percent.² There is also evidence that the overall importance of group quarters

¹ Although speculative, it seems likely that the incarceration boom in the US after 1970s that was particularly harsh for young black males may account for the anomalous character of non-cohabiting marriages for this group.

² There are also important gender distinctions in that women are overwhelmingly found in the "other" category of group quarters, which includes "hospitals, psychiatric institutions, convalescent homes, convents, halfway houses, and communes."

declined significantly over time for all groups except for black males and thus highlights the increasing importance of factors other than military work, incarceration, and schooling for non-cohabiting marriages. Taken in the aggregate, these findings suggest dynamics intrinsic to paid employment that are increasingly shaping non-cohabiting marriage.

Limitations

Against this backdrop, we note four key limitations. First, the geographic and historical scope of work is relatively narrow. The vast majority of research has focused on the United States and there is little research that considers non-cohabiting marriages in the contemporary, post-industrial era. It seems necessary to broaden the scope of inquiry to both evaluate the nature of the phenomena and test the generality of theoretical accounts.

Second, the literature is clear in highlighting the significance of the military and incarceration, but these too are explanations that have unique resonance in the American context. The US for example has one of the largest militaries in the world, second only to China yet with a much larger per capita representation. Similarly, the US has the highest incarceration rate in the world, exceeding by several magnitudes its closest OECD neighbor (Poland). At the same time, the literature alludes, but does not examine, the broader role of occupation and jobs in fostering non-cohabiting marriages. This seems all the more crucial given the important transformations of labor that have accompanied globalization in recent decades.

Third, the limited scope of inquiry has prevented consideration of macro-level factors in shaping cross-national and over-time variation in non-cohabiting marriages. Here, globalization has been associated with a variety of technological and cultural changes that have altered the organization of labor and the nature of paid employment. One key issue is the degree to which there are collateral implications for the social context of labor and the degree to which labor is organized in ways that facilitate co-residence among couples.

Last, the literature has paid limited attention to the role of human capital in shaping co-residence among couples. There exists a rich literature that spans economics, demography, and sociology that focuses on the role of human capital, particularly educational attainment, in fostering more stable and more effective unions. Human capital is important, at least in part, because it allows for entry into higher status occupations that provide greater compensation that facilitates the establishment and running of households. In this respect, educational attainment may be important in and of itself or may be important in providing an indicator of careers or status within occupations that give better insight into their meaning. While one might hypothesize that greater educational attainment would generically increase the likelihood of cohabitation in marriages, the situation may have become more complicated in the globalization era. Here, labor is deemed to be increasingly mobile and human capital is one of the primary engines of mobility (Sassen 1998). Given this, one might expect important, as yet unexplored, contingencies in the relationship between education and co-residence in marriages, depending on extent of globalization in a given country.

In the analyses below, we use census data from a large number of countries spanning the period from 1960 to 2010 to examine the social dynamics surrounding non-cohabiting marriages with specific attention to the joint processes of employment and occupation and globalization in shaping such dynamics.

Data and Measures

In this study we use data from the IPUMS - International collection, which includes harmonized census microdata for 42 countries. Of these, we are able to make comparisons of the prevalence of non-cohabiting marriages on 39 countries, representative of four out of five continents, with a total of 101 different samples. The time span ranges from 1960 to 2010, depending on the country. The sample of interest consists of almost 4,5 million person-records, representing about 1% of total censuses samples.

Our dependent variable is being married without sharing the same dwelling and it has been constructed on the basis of two questions: the marital status of the respondent and location of the spouse. Thus, people in a non-cohabiting marriage (hereafter NCM) are those who are married whose spouse does not live in the same household.

We will use several covariates that account for the individual level variation of the phenomenon as well as macro dimensions in order to capture country level heterogeneities. These include age, gender, and educational attainment.

Our focal independent variable is the respondent's occupation based on the International ISCO code classification. This classification scheme differentiates respondents who are "legislators, officials and managers (reference category)" "professionals," "technicians and associate professionals," "clerks," "service workers and shop and market sellers," "skilled agricultural and fishery workers," "crafts and related trades workers," "plant and machine operators and assemblers," "elementary occupations," "armed forces," and unspecified "other occupations."

Concerning macro variables, we include KOF index of globalization –measuring economic, social and political dimensions of globalization-, GDP per capita, and a dummy variable accounting of whether polygamy is legal in each of the observed countries.

[Table 1 about here]

Results

We begin our analyses focusing on the micro-level discriminators of NCM, followed by some macro-level analyses and then some more analytic multilevel regression models. We begin by simply noting some important features of the demographic distribution of the prevalence of non-cohabiting marriages (see table 1). First, the overall prevalence of NCM is just over 5% with rates of 4.6% for males and 5.7% for females. Interestingly, these rates are quite similar to those reported by Rindfuss and Stephens (1990) for the US between 1960 and 1980. At the same time, there is evidence that the prevalence of non-cohabiting marriages has increased over time. For males, the prevalence rate increased from 3.5% to 5.66% between the 1960s and the 2000s. For females, the corresponding increase over time was from 3.1% to 7.4%.

There are also sharp decreases in the prevalence of NCM across cohorts. Averaging over all time periods, the prevalence of NCM for males decreases from 6.8% for those under the age of 35 to 3.7% for those 55 years of age and older. For females, declines are less sharp but still evident, from 7.0% for the youngest cohort to 5.9% for the oldest cohort. Moreover, there is

evidence that this pattern has exacerbated over time. In the 1960s, the prevalence of NCM decreased from 4.6% to 3.3%; in the 2000s, prevalence declined from 9.5% to 4%. In general, the age-grading for females is more complicated and less defined. In the 1960s for example, prevalence of NCM actually increased, at least slightly across cohorts. In contrast, age-grading in the 2000s was strongly negative, from 9.8% to 6.8%.

Nativity is also a key stratification point. For all decades and for both males and females, those foreign born have significantly higher prevalence of NCM. Again averaging over all decades, rate differentials for males are almost 6.5% (4.2% versus 10.6%) and half a percent for females (5.7% versus .6.1%). Interestingly, the overall prevalence increased over time, but the aggregate difference between native and foreign does not appear to have changed, particularly for males. The difference in prevalence in the 1960s for males was 6.2 percent based on rates of 2.9% and 9.2%; in the 2000s, the difference was 6.5 percent based on rates of 5.2% and 11.8%. For females, there may be some evidence of convergence, but the magnitude of differences is much smaller. In the 1960s for example there was an approximately one percent difference between native- and foreign-born women. By the 2000s, this had shrunk to about .2 percent.

There is also clear evidence of human capital effects and these are very consistent across gender and time. In all cases, low levels of educational attainment are associated with higher prevalence of NCM. In general, the differences between the least and most educated varied from 1.7% for males to 2.8% for females. Moreover, while rates for all education groups increased over time, educational differentials widened considerably for females. In the 1960s, the gap between the least and most educated was approximately .9 percent (3.3% versus 2.4%). By the 2000s, the gap had increased to almost five percent and had reversed direction (9.0% versus 4.1%).

As a final micro-level analysis, we explicitly examine employment and occupation. In the case of the former, employment in general fosters co-residence in marriages. For all ten sex-decade groupings, prevalence rates of NCM are substantially higher for those unemployed or inactive versus those in paid labor. For example, in general, 8.7% of males and 6.5% of females who were unemployed were in NCMs. At the same time, 6.3% of inactive males and 5.4% of inactive females were in NCM. The corresponding prevalence for those in paid labor was 4% and 6% for males and females, respectively. It is also worth noting that prevalence of NCM among those unemployed increased sharply over time and this is true of both males and females.

[Figure 1 about here]

[Figure 2 about here]

When considering distributions across occupations, there are several noteworthy features. First, there is clear evidence of an armed forces effect in that prevalence for those in the military is higher than that of any other occupational group in 7 of 10 instances and the three exceptions all involve comparisons with unspecified "other occupations." At the same time, there is considerable variation across occupation types. In general, prevalence is lowest among legislators and senior official (2.2% and 3.6% for males and females, respectively). Prevalence is slightly higher among professionals, technicians and associate professionals, clerks, and plant and machine operators with each averaging around 3-4% and being

reasonably similar across sexes. For service workers, prevalence is somewhat greater still with larger differences seen for women (6.6%) rather than men (4.6%). As similar pattern is seen with respect to craft and related trade workers with 3.8% and 7% of males and females in NCMs, respectively). Larger gender differences appear among skilled agricultural workers with males having comparative low prevalence (3.8%) and women having comparative high prevalence (8.8%). In contrast, overall prevalence is greater but gender differences somewhat smaller for those in elementary occupations or unspecified “other” occupations. As a final issue, there is considerable evidence of uneven growth over time with some occupations showing much greater increases in the prevalence of NCM in the 1990s and 2000s (e.g., female skilled agricultural workers).

We next consider the macro-level dynamics of NCM with a focus first on the overall Figure 1 depicts the prevalence of non-cohabiting marriages across countries: they represent on average about 4% of all marriages, but their distribution is very heterogeneous. African countries show highest prevalence of married couples living apart, with about one fourth in Senegal, Sudan and Sierra Leone. On the contrary, frequencies of non-cohabiting marriages are generally very low and below the average in many European and Latin American countries.

Figure 2 shows time trends of non-cohabiting marriages separately for each continent. In most of the countries for which data is available for more than one census, prevalence of non-cohabiting marriages decreased over time or remained at about the same levels (39 countries out of 48). In only 9 countries (Rwanda, Senegal, Bolivia, Ecuador, United States, Israel, Thailand, Spain, and Switzerland) we observe a significant increase over time of the phenomenon of interest, with African and Latin American countries showing the biggest differences.

[Figure 3 about here]

We provide some more precision to the analysis by specifically investigating the relationship between prevalence of NCM and GDP per capita, with the latter being a reasonable catchall indicator of broad processes of globalization. We plot the bivariate association by decade in figure 3. Although interpretation is complicated by the variation in range across decades, conclusions seem relatively straightforward. In every decade, there is a negative relationship between prevalence NCM and GDP per capita. At the same time, there is evidence of curvature in the association. In the 1970s and 2000s, a one-unit change in logged GDP per capita is associated with a (quite strong) 20 percent change in NCM. In contrast, the corresponding slopes for the 1980s and 1990s are closer to a 25 percent change. Still, this could simply be a function of changes in the sample composition in the IPUMS-I data.

We bring together the multi-level dynamics that we have highlighted through the estimation of a multilevel random-intercept model with coefficients shown in table 2. For purposes of clarity, we estimate several models in a step-wise fashion with the final model including cross-level interactions between educational attainment, occupation, and macro-level economic conditions. There are several key findings. To start, there are statistically significant differences by year, age, and sex with positive associations for year and age and higher prevalence among males. Still, the effects are not particularly large and tests of significance lose meaning when sample sizes are as large as ours. For example, the aggregate difference between males and females is only about 1 percent. Turning to occupation effects, there are significant differences across 9 of 10 categories with the largest effects seen for

armed service occupations (+ 5%). Negative associations are seen for clerks, skilled agricultural workers, craft and related trade workers, and plant and machine operators (- 1 percent). In contrast, small positive effects are seen for professionals, technicians, and service workers (< 1%) and larger positive effects are seen for elementary and other occupations. ($\approx 1\%$).

Model 4 includes three macro-level variables. The two indicators of globalization, the globalization index and GDP per capita, have positive associations with NCM. Consideration of scaling (i.e., both have small increments for one-unit changes) indicates that they have large effects on the probability of NCM. We also include an indicator of whether the country (and time period) allows for polygamous relationships. Not surprisingly, such countries have significantly higher NCM ($b = .05, p < .01$).

Model 5 includes cross-level three-way interactions between educational attainment, occupation, and extent of globalization, as well as all necessary lower order components. Again, the large sample size can compromise interpretation, so we calculated the relevant BIC statistics for each of the models and found support for the cross-level interaction model. In this model, there are statistically significant three-way interactions for “technicians and associates,” “clerks,” “service workers,” “skilled agricultural workers,” those in “elementary occupations,” and those in the “armed forces.”

[Table 2 about here]

As interpretation of n-way interactions can be quite complicated, we calculated the implied effects for each occupation at each education level with further stratification at -1 standard deviations, the sample mean, and +1 standard deviations for GDP per capita. These results are shown in figure 4. To start, there are some occupations that neither show substantial effects on the likelihood of NCM nor any significant variation by either educational attainment or extent of globalization.³ These include professionals, technicians and associate professionals, craft and related trade workers, and plant and machine operators. A second set of occupations show increased educational heterogeneity with increased globalization. For example, at low levels of globalization, there are no substantive differences by education and the general effects are quite small ($b \cong .01, ns$). Yet, with increasing globalization, the effects increase in magnitude and in variance by education. Here, those with high educational attainment are 7 percent more likely to be a NCM, while those with low educational attainment are almost 5 percent less likely to be a NCM. For those with moderate educational attainment, likelihood is about 1 percent. Although less dramatic, clerks show a similar pattern.

For those in unclassified occupations, there is a similar increase in heterogeneity with increased globalization, but this exacerbates existing differences rather than produces heterogeneity. For example, at low levels of globalization, the difference in the likelihood of NCM between those with high educational attainment is about 12 percent (+ 10 percent for the highly educated and - 2 percent for those with low educational attainment). In contrast, the differential is closer to 20 percent at high levels of globalization (+ 11 percent for the highly educated and -9 percent for those with low levels of educational attainment).

³ While somewhat arbitrary, we define occupations as such when the estimated effects fall within plus or minus 1.5 percent.

A fourth pattern of effects involves changes in education gradients with increased globalization. Among skilled agricultural workers, increased globalization is associated with substantial declines in the probability of a NCM for those with high educational attainment (from 4.5 percent to - 1.2 percent). In contrast, likelihood of NCM for skilled agricultural workers with low levels of educational attainment increases substantially (from - 4.5 percent to 2.5 percent). In contrast, those in the armed services show an opposite pattern of change with respect to globalization. Here, high educational attainment is associated with substantial increases in likelihood of a NCM with increased globalization, from - 4 percent to almost 13 percent. At the same time, those with low educational attainment in the armed services see a decrease in the likelihood of a NCM with greater globalization, from 12 percent to 6 percent. Although more muted, a similar pattern is seen with respect to service workers. In general, the findings indicate significant contingencies in the consequences of occupation type for risk of NCMs by human capital and macro-level extent of globalization.

[Figure 4 about here]

Discussion

There is little question that increased globalization in recent decades has had important transformative effects on nature of work. In this paper, we examine collateral consequences with respect to household and families. Specifically, we examine extents, trends, and distributions of non-cohabiting marriages with explicit attention to possible contingencies by human capital and extent of globalization. Importantly, we do so using a large, diverse, and high quality sample of censuses that allow us to explore heterogeneity in effects of work on likelihood of NCM and this allows us to test both conventional wisdom on the determinants of NCMs and explore new ideas given the greater diversity of our samples.

Our multicountry analysis provides further support for the unique role of military service in producing NCMs. In several different analyses, military service was associated with significantly higher likelihood of not living with one's spouse. At the same time, further investigation shows that this is dependent upon both individual human capital and macro-level context. Both educational attainment and extent of globalization are key factors in determining just how significant military service is. At the same time, these factors are only consequential in the degree to which they exacerbate the military effects: in all cases, those in the military have significantly higher likelihoods of a NCM than those in other occupations.

Beyond this, our analyses highlight several dimensions of population processes that are connected to the likelihood of NCMs. To start, there is important age-grading to NCM with likelihood decreasing with advancing age, particularly among males. At the same time, migrants are substantially more likely to be in NCM than those native born. Greater educational attainment is also associated with lower likelihoods of NCMs. Finally, likelihood in general has increased over time and differences based age, migration, and educational attainment have increased in magnitude over time. The multivariate analyses provide further evidence that such factors matter for NCM because they influence the types of jobs that people have. In the cases of both age, fairly robust negative association is positive with the introduction of occupation. In results not shown (and not visible because of the scale factor on our measures), occupation accounts for 40 to 80 percent of the effects of age, sex, educational attainment and nativity on likelihood of NCM.

In terms of the broader landscape of occupational effects, there are important elements of variation. We selected “legislators, officials, and managers” as a reference category because such jobs seem to have a well-defined in-situ geographic character. In contrast to such jobs, the range of occupations both increase and decrease the likelihood of NCM. While a number of contrast yield differences of only one to two percent, this translates in the IPUMS-I data into millions of cases and hundreds of millions of individuals. It is also worth noting that differences in sign can produce contrast upward of four percent. Again, this translates into hundreds of millions of NCMs.

Turning to specifics, there is a clear set of occupations that reduce likelihood of NCM. These include service workers, skilled agricultural workers, craft and related trade workers, and plant and machine operators. One might argue that all of these occupations have a “factory” model to them that requires a physical infrastructure. Such occupations may provide jobs for multiple family members or may actually be community based and a migratory draw for people in ways that allows for easier cohabitation among partners. In contrast, there are also occupations that increase the likelihood of NCM and these include technicians, elementary occupations, other occupations, and the armed forces. With the exception of the latter, which likely has its own dynamics, the occupation may share the quality that they are more “piece-meal” forms of labor that more ephemeral, less stable, and less geographically rooted. Such occupations may be, on average, more likely to dislocate husbands from wives and wives from husbands.

That stated, the contingencies that we observe are equally important. Globalization has clearly re-tooled the social meaning of work for couples and families and done so in ways that reflect both human capital within occupations and work conditions and contexts across occupations. To our knowledge, we are the first to formally document this and to elaborate its implications for family life. One important message is that the pattern of multilevel effects is not linear. Depending upon human capital and extent of globalization, high status occupations convey benefits or deficits. The same is true of low status occupations. Such findings echo the ongoing debates about the implication of globalization for work and the emerging consensus that globalization has contradictory effects that belie traditional expectations of social stratification.

In the end, this research has both reinforced the importance of occupation and its important connection to both micro-facets of human capital and macro-dynamics of globalization in the production of family life. In doing so, we highlight important and understudied elements of stratification in family dynamics and show the complex, multilevel contingencies that shape the joint implications of education and occupation for social context of family life. At the same time, our work is largely exploratory and we hope that this work will motivate future research to expand understanding and refine explanation.

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Tables and figures

Table 1: Prevalence of non-cohabiting marriages by decade of census and sex

	Total		Total	1960s		1970s		1980s		1990s		2000s	
	M	F		M	F	M	F	M	F	M	F	M	F
Age													
<35	6,8	7,0	6,9	4,6	3,3	5,9	5,2	4,6	5,2	6,0	6,5	9,5	9,8
35-55	3,6	4,4	4,0	3,0	2,4	3,4	3,9	2,4	3,3	3,3	4,1	4,5	5,5
55+	3,7	5,9	4,7	3,3	4,1	3,7	6,0	3,2	4,7	3,5	5,6	4,0	6,8
Nativity Status													
Native-born	4,2	5,7	4,9	2,9	3,0	4,0	4,8	2,9	4,3	3,7	5,3	5,2	7,2
Foreign-born	10,6	6,1	8,4	9,2	4,0	10,0	4,2	9,9	4,8	10,0	5,9	11,8	7,4
Education													
Low	4,9	6,6	5,8	3,9	3,3	4,7	5,4	3,6	5,1	4,4	6,1	6,5	9,0
Medium	4,2	4,1	4,1	2,6	2,4	3,3	3,1	2,8	2,3	3,8	3,7	5,1	5,2
High	3,2	3,8	3,5	2,1	2,4	2,5	3,0	2,1	1,9	3,2	3,9	3,8	4,1
Occupation													
Legislators, officials and managers	2,2	3,6	2,6	1,3	3,7	2,0	6,2	1,4	2,5	2,3	3,5	2,9	3,5
Professionals	3,2	3,7	3,4	1,9	3,9	2,3	3,5	2,5	2,4	3,0	3,8	4,0	4,0
Technicians and associate professionals	3,2	4,2	3,6	2,0	4,3	2,1	5,1	2,1	3,9	3,2	4,3	4,1	4,2
Clerks	3,5	3,5	3,5	2,1	3,2	3,0	3,9	3,1	2,8	3,3	3,3	4,6	3,8
Service workers, shop and market sellers	4,6	6,6	5,5	2,5	5,9	4,5	6,9	4,0	4,3	4,4	5,7	5,6	7,9
Skilled agricultural workers	3,2	8,8	4,7	1,3	1,9	2,8	4,5	2,2	5,3	3,1	8,4	5,2	15,4
Crafts and related trade workers	3,8	7,0	4,2	1,8	3,5	3,6	7,4	2,9	5,4	3,5	6,1	4,9	9,4
Plant and machine operators	4,0	4,1	4,1	4,0	4,7	4,6	4,3	3,0	2,5	3,6	3,9	4,7	4,9
Elementary occupations	6,8	9,8	7,8	5,5	4,9	7,4	10,0	4,0	5,2	6,2	7,8	8,6	13,7
Armed forces	10,8	15,8	11,0	13,5	30,8	12,9	15,6	9,1	19,6	10,8	12,8	8,0	16,2
Other occupations	6,2	9,6	7,3	2,3	6,4	6,8	22,1	3,6	5,6	5,2	8,0	12,6	14,4
Employed	4,0	6,0	4,6	2,9	4,2	3,8	5,5	2,8	4,1	3,7	5,5	5,2	7,3
Unemployed	8,7	6,5	7,5	5,5	6,8	6,6	8,7	8,8	2,6	7,4	7,4	10,3	11,7
Inactive	6,3	5,4	5,6	7,4	2,6	7,6	4,4	5,2	4,7	5,2	5,0	6,8	7,3
Total	4,6	5,7	5,1	3,5	3,1	4,2	4,7	3,3	4,3	4,1	5,2	5,7	7,4

Table 2: Country level random intercept models on the probability of non-cohabiting marriages

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z
Year of census	0,00	ns	0,00	***	0,00	***	0,00	***	0,00	***	0,00	**
Age			0,00	***	0,00	***	0,00	***	0,00	***	0,00	***
Sex (Ref: Males)			0,01	***	0,01	***	0,01	***	0,01	***	0,02	***
Education (Ref: Low)					-0,01	***	-0,01	***	-0,01	***	0,01	**
Professionals (Ref: Legislators, officials and managers)							0,00	***	0,00	***	0,02	**
Technicians and associates							0,00	**	0,00	**	0,04	***
Clerks							-0,01	***	-0,01	***	0,02	**
Service workers, shop and market sellers							0,00	***	0,00	***	0,04	***
Skilled agricultural workers							-0,02	***	-0,02	***	-0,08	***
Crafts and related trade workers							-0,01	***	-0,01	***	0,00	ns
Plant and machine operators							-0,01	***	-0,01	***	-0,02	**
Elementary occupations							0,01	***	0,00	ns	0,02	**
Armed forces							0,05	***	0,05	***	0,16	***
Other occupations							0,01	***	0,01	**	-0,05	***
Globalization Index									0,00	***	0,00	**
Polygamy									0,09	***	0,08	***
GDP per capita									0,00	***	0,00	***

Table 2 (continued): Country level random intercept models on the probability of non-cohabiting marriages

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z
Glob.index*education											0,00	**
Glob.index*Professionals (ref:Legislators, officials and managers)											0,00	ns
Glob.index*Technicians and associates											0,00	***
Glob.index*Clerks											0,00	*
Glob.index*Service workers, shop and market sellers											0,00	***
Glob.index*Skilled agricultural workers											0,00	***
Glob.index*Crafts and related trade workers											0,00	ns
Glob.index*Plant and machine operators											0,00	***
Glob.index*Elementary occupations											0,00	ns
Glob.index*Armed forces											0,00	***
Glob.index*Other occupations											0,00	***
Professionals (ref:Legislators, officials and managers)*education											-0,01	*
Technicians and associates*education											-0,04	***
Clerks*education											-0,02	**
Service workers, shop and market sellers*education											-0,03	**
Skilled agricultural workers*education											0,07	***
Crafts and related trade workers*education											0,00	ns
Plant and machine operators*education											0,00	ns
Elementary occupations*education											-0,04	**
Armed forces*education											-0,03	ns
Other occupations*education											-0,03	ns
Glob.index*Professionals (ref:Legislators, officials and managers)*education											0,00	ns
Glob.index*Technicians and associates*education											0,00	***
Glob.index*Clerks*education											0,00	*
Glob.index*Service workers, shop and market sellers*education											0,00	**
Glob.index*Skilled agricultural workers*education											0,00	***
Glob.index*Crafts and related trade workers*education											0,00	ns
Glob.index*Plant and machine operators*education											0,00	ns
Glob.index*Elementary occupations*education											0,00	***
Glob.index*Armed forces*education											0,00	**
Glob.index*Other occupations*education											0,00	ns
Constant	0,04	ns	-0,05	ns	-0,18	***	-0,17	***	1,36	***	0,51	***

Figure 2: Prevalence of non-cohabiting marriages by continent and decade

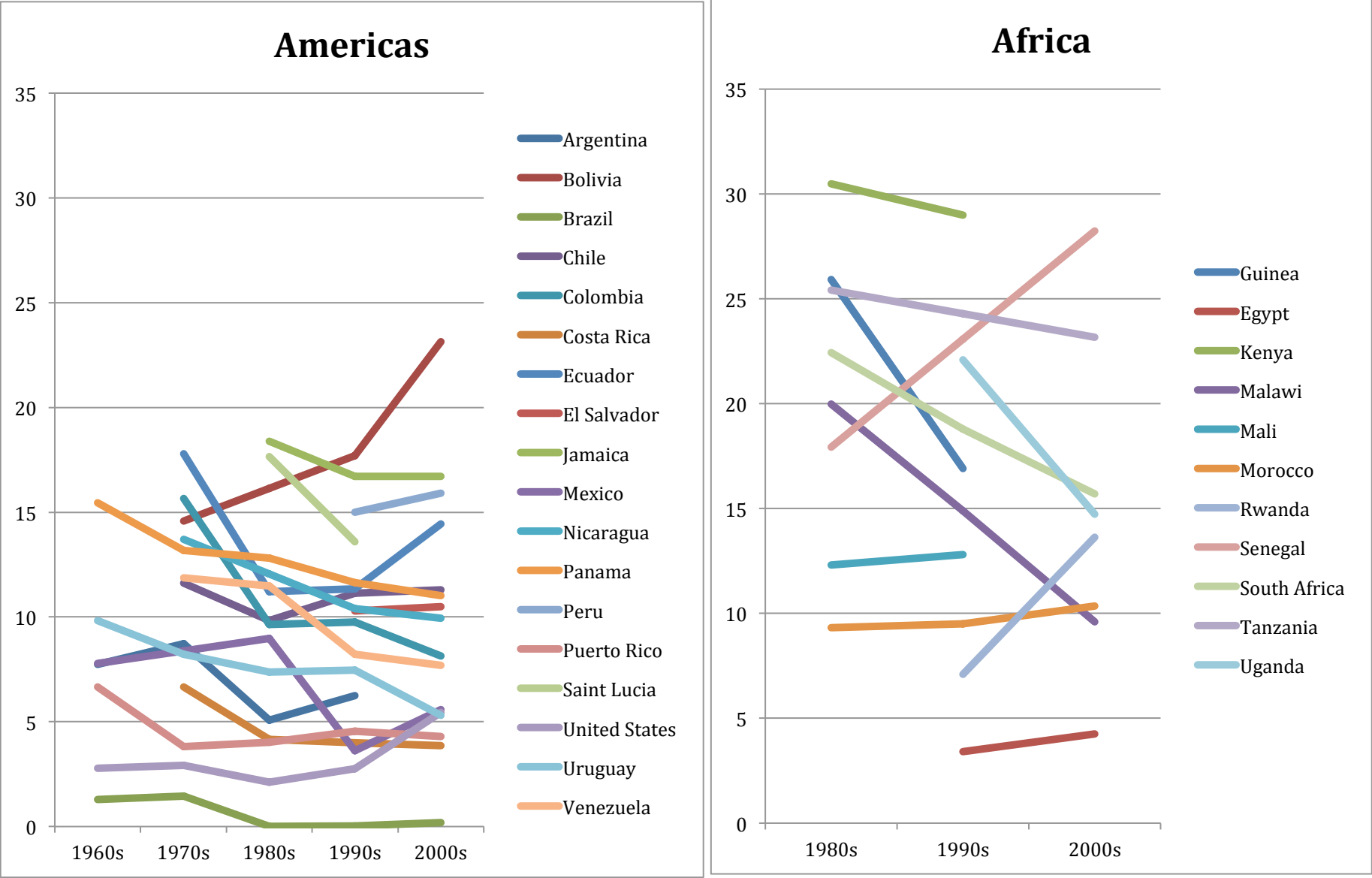


Figure 2 (continued): Prevalence of non-cohabiting marriages by continent and decade of census

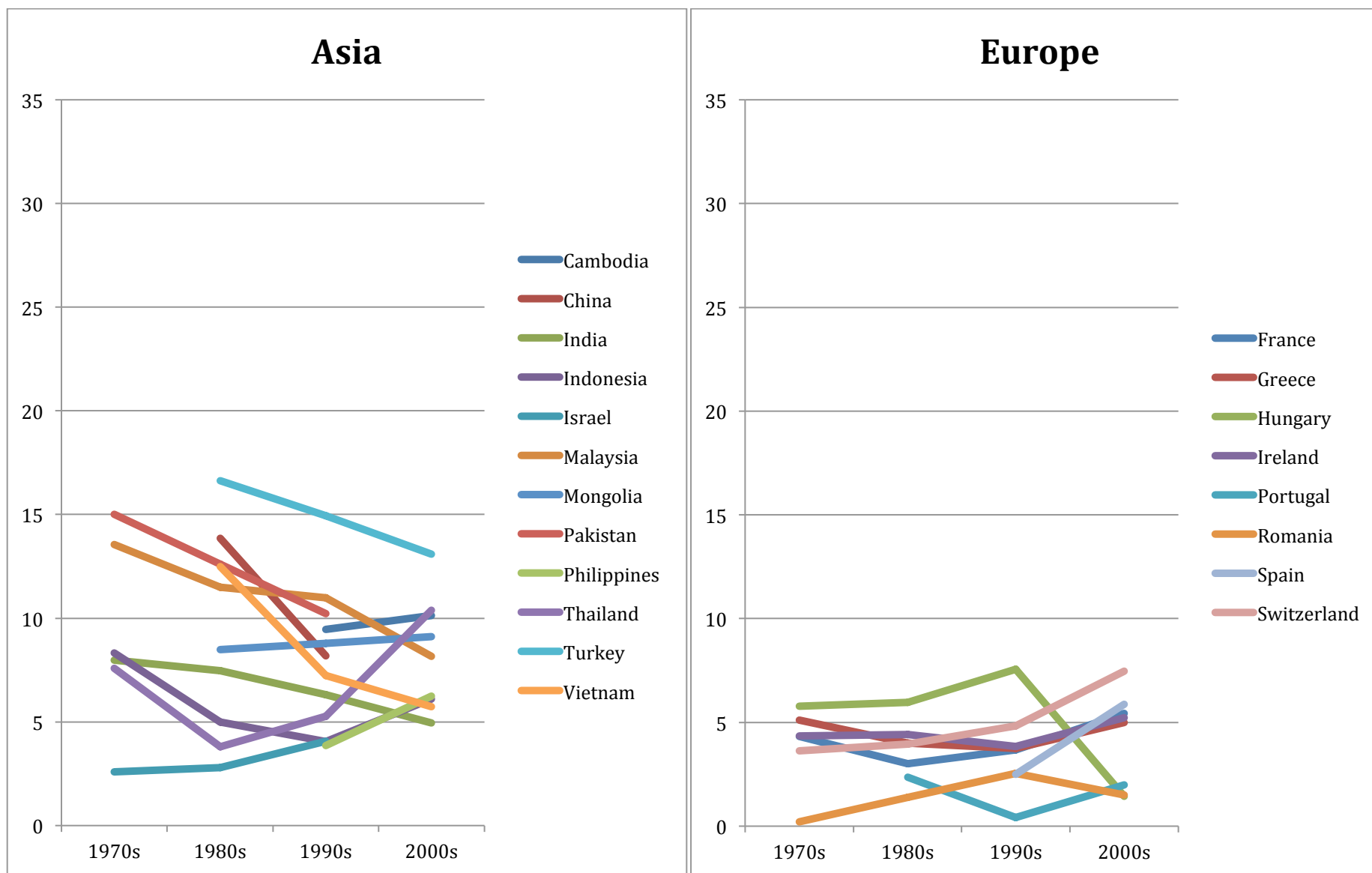


Figure 3: Relationship between GDP per capita and prevalence of non-cohabiting marriages by decade of census

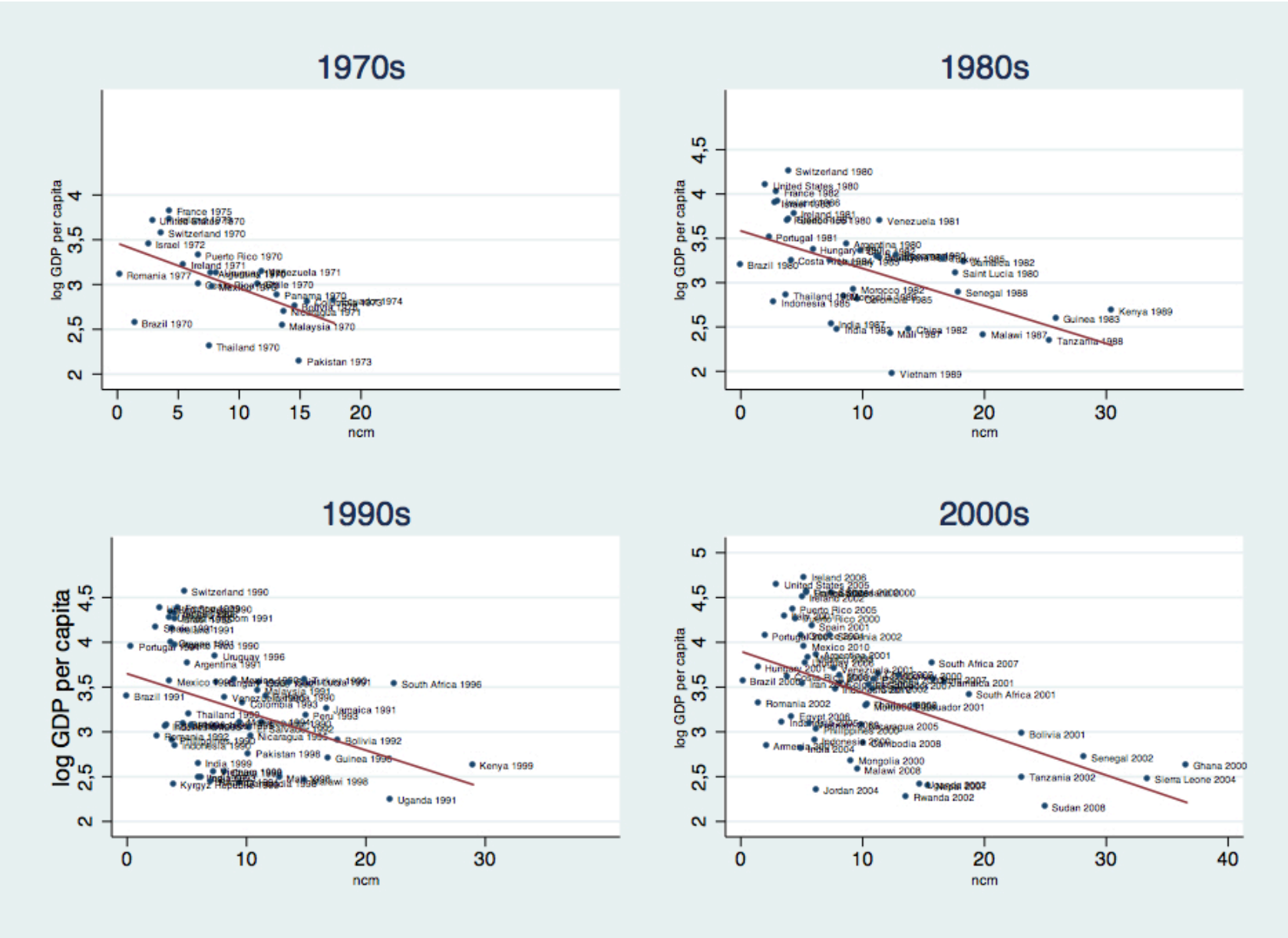
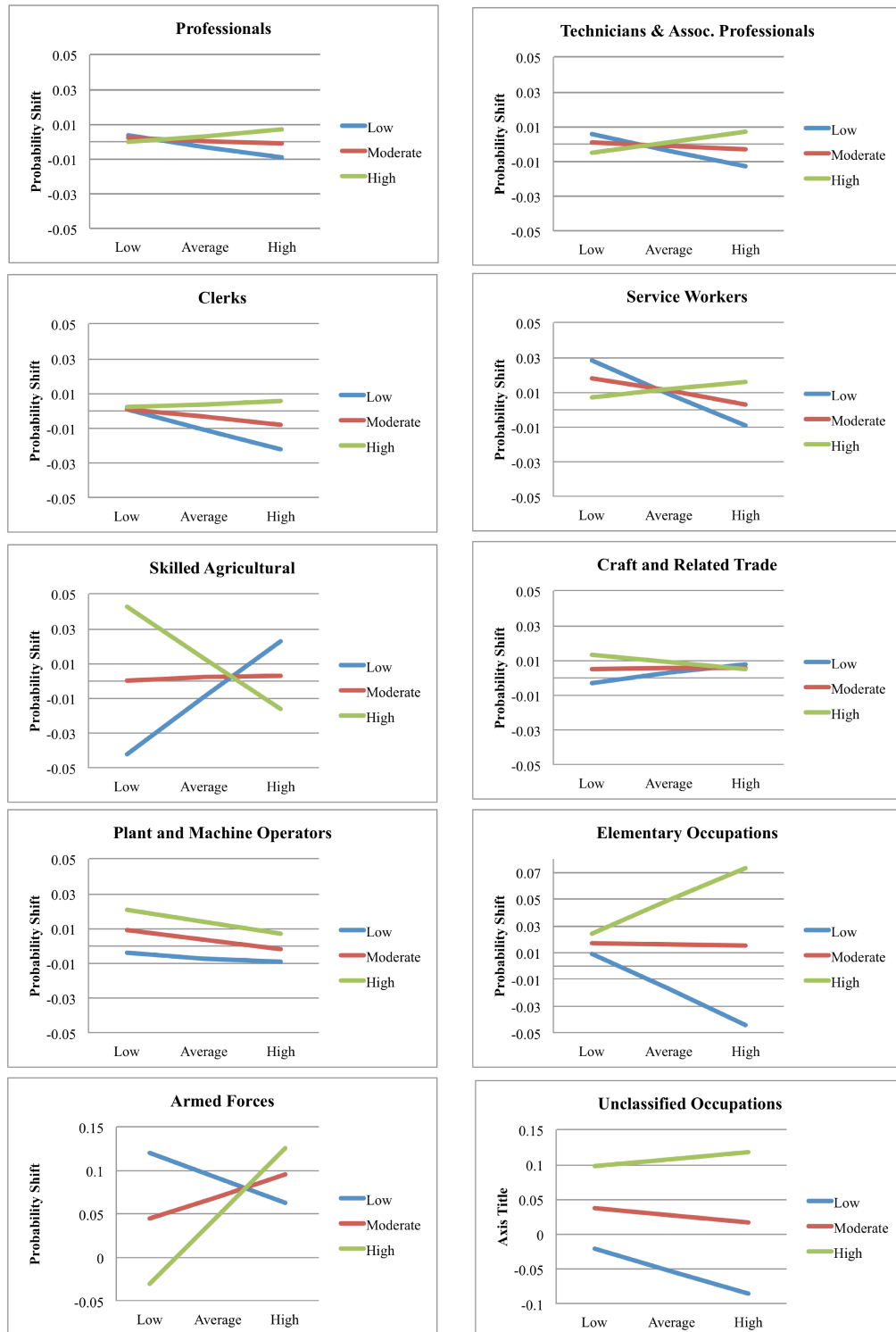


Figure 4. Estimated Effect of Occupation on Probability of NCM by Educational Attainment and Extent of Globalization.



Note. The horizontal axis demarks extent of globalization at -1 SD, the sample mean, and +1 SD on the index. Dark lines are for high educational attainment and the lightest lines are for the lowest level of educational attainment.